SUPPORT FOR NEURODIVERGENCE in PRISONS

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BOOKLET 2

OVERVIEW

The full set of BOOKLETS comprises

1. **Introduction and Resources**
2. **Overview**
3. **Principles of Support**
4. **Support for English/Literacy and Maths/Numeracy**
5. **Support for ICT and Virtual Campus**
6. **Support for Foreign Nationals who may be Neurodivergent**
7. **Neurodivergence in the contexts of Disability / Equality / Diversity / Accessibility**
8. **Work Preparation and Resettlement**

The Resource covers Dyslexia, Dyspraxia, Attention Deficit Hyperactivity Disorder, Dyscalculia and Autism without co-occurring intellectual disability

ALL 8 BOOKLETS are available on www.dyslexia-malvern.co.uk

OVERVIEW

1. Getting to Grips with Terminology

2. Characteristics of key Neurodivergent Conditions / Accommodations

3. The Overlapping Nature of Neurodivergence

4. Young People with Neurodivergence

5. CHART: Impact and Implications of Neurodivergence

1. Getting to Grips with Terminology

Terminology is a complicated area which is always evolving, often leaving the internal world of prisons behind. Until relatively recently, confusion arose due to inconsistent use of the terms '*Learning Difficulties'* and '*Learning Disabilities',* both of which are commonly regarded as indicating some degree of intellectual impairment. For this reason, the word '*specific*' in Specific Learning Difficulties was helpful, indicating that *specific* areas of functioning are affected, leading to a characteristic uneven or 'spiky' profile of strengths and weaknesses. This typifies the family of conditions covered in these BOOKLETs, namely Dyslexia, Dyspraxia, Attention Deficit Hyperactivity Disorder and Dyscalculia.

Some resources refer to '*hidden disability'*, for example in the screening tool the *Hidden Disabilities Questionnaire*, developed by Dyslexia Action and used in a number of prisons and the research project quoted in BOOKLET 1. Many disabilities could be described as 'hidden', so the intended user is unclear.

Terminology moved on to '*Neurodiversity*' which originated within the autistic community in the United States (people who are not '*neuro-diverse'* are described as '*neuro-typical'*). A further development is '*Neurodivergence'*, which conveys a divergence from the usual ways of thinking, leading to people describing themselves as '*neurodivergent*'. This usage was felt to be more positive by people with Dyslexia, Dyspraxia, ADHD, Dyscalculia and Autism is now established, and is often shortened to 'ND'.

The chart below indicates recommended terminology for ND Adults, as opposed to terms used in schools or in the medical context.

UNACCEPTABLE USAGE	ACCEPTABLE USAGE
• mental age	• competent / lacking competency
• Special Educational Needs (SEN) is only used for children in education • special needs	• someone 'with (additional) learning needs'
• a dyslexic	• someone with dyslexia
• a dyspraxia / dyspraxic **diagnosis**	• a dyspraxia assessment
• dyscalculia **symptoms**	• characteristics of dyscalculia

2. Features of key Neurodivergent Conditions

These BOOKLETs relate to a family of conditions within the umbrella of neurodivergence. This comprises the following:

a) Dyslexia – the most well-known of the group

b) Dyspraxia - known in medical settings as Developmental Co-ordination Disorder

c) Attention Deficit Hyperactivity Disorder - this can exist without **Hyperactivity**

d) Dyscalculia – an inherent difficulty with all aspects of number

All these conditions are on a continuum and often overlap with each other – and with **e) Autism**

Another consideration is **f) Visual Stress**

Impaired '**executive function'** is a common feature of neurodivergence, affecting the following areas:

- Organisational and planning abilities
- Working memory (the capacity to hold information in your head whilst working on a task)
- Self-reflection and self-monitoring
- Time management and determining priorities
- Flexibility in choosing strategies
- Difficulty shifting attention OR following a change in the discourse

It is important to stress that the areas of ability and disability vary from person to person. An assessment of individual strengths and weaknesses is therefore a prerequisite to offering targeted support to those who come into education, training and work preparation programmes. It will also assist Offender Managers, key workers and commissioners.

An overview is presented in KIWIs, a resource for staff across the CJS, where

K = Key Facts
I = Impact
W = Ways of Working
I = Information & Links



www.dyslexia-malvern.co.uk/docs/justice/Resources for justice sector staff - Kiwis.pdf

There is also a version for staff working with young people: www.dyslexia-malvern.co.uk/docs/justice/Resources for justice sector staff - Kiwis for young people.pdf

In order to address the needs of ND prisoners, accommodations and 'reasonable adjustments' may be appropriate.

The following sections highlight features of each condition and propose suitable accommodations. BOOKLET 7 explores disability issues and legal requirements.

a) Features of DYSLEXIA

- Educational under-achievement.
- Slow reading; even if reading is mastered it is hard to retain content.
- Difficulties with spelling and expressing thoughts in writing.
- Weak listening skills e.g. problems following an argument; inattention.
- Weak speaking skills e.g. poor word retrieval, going off at a tangent.
- Short-term and working memory problems. *SEE Chart at end of this BOOKLET*
- Organisation and time-management are usually affected.
- Poor sequencing skills; everyday sequences never become automatic.
- May suffer from Visual Stress. *SEE section (f) and BOOKLET 7 on 'Accessibility'*
- A short attention span; failure to engage if the matter is not of personal interest.

Possible Accommodations for Dyslexia

- When giving information, follow up with questions to check important points such as "So what do you need to do now?" *NOT* "Do you understand?".
- Written materials/notices should conform to good practice in minimising Visual Stress
- Aim to provide reminders in spoken and written form.
- During interviews/questioning stick to chronological order. Ask single questions rather than compound ones.
- Be aware that inconsistency in supplying routine information may be due to dyslexia. Sequencing and references to left/right may be inaccurate.
- In general terms, people with dyslexia find it helpful to be presented with an overview, before going into details.
- Never ask someone who might have dyslexia to read aloud.

Dyslexia is independent of intelligence, race and social background. However the nature of the home language will be a factor in how it manifests itself: for example, a language with a largely irregular spelling system (such as English) will cause more literacy problems than a regular language like Spanish.

Skills associated with dyslexia include an enhanced ability to visualise; innovative thinking and creativity; lateral problem-solving skills; an intuitive understanding of how things work and an ability to see the bigger picture together with an awareness of unexpected links, associations and applications.

It is very important to check for **Visual Stress** – an umbrella term described in section (f) - which frequently co-exists with dyslexia and dyspraxia. Visual Stress can undermine the acquisition of literacy and the gaining of fluent reading skills.

b) Features of DYSPRAXIA / Developmental Co-ordination Disorder

Dyspraxia, also known as Developmental Co-ordination Disorder, affects co-ordination, organisation and information processing. People with dyspraxia may be clumsy, get lost easily, have trouble following diagrams or maps and sometimes seem abrupt or tactless.

Key areas of difficulty experienced by people with dyspraxia are as follows:

Social skills: They can find it hard to relate well to others, especially within groups, and may misread social cues, ignoring body language.

Manual and practical work: lacking dexterity, they may find it difficult to handle keyboards, tools and equipment safely and easily.

Speech & Language: Speech may be unclear with poor articulation. They may lack control over volume and tone of speech, appearing brusque or rude.

Concentration and short-term memory: They may take a long time to complete a task, be easily distracted and find it hard to retain information.

Writing: They tend to write slowly and untidily or illegibly (giving a misleading impression of their level of education/intelligence). Accurate copying can be difficult and word-processing is often laborious.

Organisation and time management: People with dyspraxia may operate in a muddled way, having little sense of time and lacking organisation. This can result in missed appointments and forgetting or misplacing items.

Flexibility: There is difficulty managing change and new routines, together with anxiety in unfamiliar situations.

All the above can lead to **Emotional Problems**, causing feelings of depression, anger, frustration and anxiety. These difficulties will become more apparent in times of stress. People with dyspraxia also tend to be erratic and have 'good and bad days' without apparent cause; this is a common aspect of neurodivergence.

Possible Accommodations for Dyspraxia

- Many of the Accommodations for DYSLEXIA apply, but reading is usually less problematic.
- Would they prefer to dictate information for forms, due to awkward handwriting?
- May struggle with over-sensitivity to light and noise. Can low watt bulbs be used in cell?
- Easily distracted, breaks may be needed during any sessions.
- Great difficulty with navigation and finding their way around. Information about venues should contain landmarks as well as directions. It may help to talk through the route or, ideally, accompany them, pointing out landmarks.

c) Features of Attention Deficit Hyperactivity Disorder: ADHD

Like all forms of neurodivergence, Attention Deficit Disorder – with or without hyperactivity - is on a continuum of mild to severe. An 'attention deficit' means an inability to focus attention: whilst many people with ADHD seem not to pay attention, they are, in fact, becoming distracted by directing their attention to everything going on around them.

There are three major aspects to ADHD:

1. Inattention

This is typified by poor listening skills, difficulties staying on task, switching tasks or seeing a project through to completion. People with Attention Deficit Disorder can appear 'spaced out' or daydreaming; becoming easily distracted by external stimuli or their own thoughts.

2. Impulsivity

Characteristic signs include lack of inhibition, attention seeking, failure to take account of the consequences of one's actions or benefit from feedback, and little sense of danger. Self-regulation is difficult, leading to the blurting out of inappropriate remarks, interrupting others and poor turn-taking.

3. Hyperactivity

This is hard to ignore and can cause annoyance to others and difficulty becoming engaged. Typical signs include, difficulty remaining seated, tapping feet or fingers, fidgeting, restlessness - being 'on the go' at all times - and disorganisation.
They may tend to do things to excess e.g. driving too fast, drinking too much.

Although some people develop coping strategies, many continue to live in total chaos and frustration. Some people with ADHD are perfectionists with obsessive tendencies. Others will tend to repeat certain actions unnecessarily because they cannot remember if they have done a task or not.

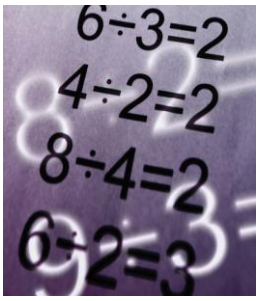
Possible Accommodations for ADHD

- Allow for regular breaks to restore concentration. Ask him/her to let you know when it is no longer possible to maintain attention.
- Distractibility might lessen if s/he is allowed to doodle or jot while working or during formal interactions.
- Try and provide an environment with minimal distractions. Seat the individual away from windows and doors.
- Do not be put off by fidgeting and signs of restlessness. S/he may manage to communicate better if allowed to move around.
- When providing information, 'chunk' it into smaller/shorter sections.
- Provide immediate feedback.
- Medication can help with excessive hyperactivity – an appointment should be made with Healthcare to explore possibilities.

d

d) Features of DYSCALCULIA

Many ND people have difficulties with numeracy (60% is the figure often quoted) but there are a small number of learners whose difficulties are only in this area and seem unable to gain number skills.



Three key challenges have been identified:

- difficulty in processing numerical / mathematical information
- an inability to internalise mathematical concepts
- no grasp of the relative size and value of numbers.

Dyscalculia effects many areas of everyday life, these include:

- time telling
- handling money and using pin numbers
- remembering personal dates (such as date of birth, date of marriage)
- recalling personal numbers such as phone numbers, pin numbers, postal code
- travel - mistakes with bus, platform or road numbers
- following a recipe, weighing and measuring, DIY
- writing down appointment times and dates correctly
- activities (such as games) involving dice or counting.

Possible Accommodations for Dyscalculia

- Where possible words should be used in place of numbers eg 9/3/19 shown as 9th March 2019. Cards should be provided showing the number as a word next to corresponding digit, from 1-20, then 30,40 etc. up to 100 and 1,000.

- Times should be written as am/pm NOT as 24 hour clock, and accompanied by drawing of clock face showing the corresponding time.

- A wall calendar is helpful, with key appointments entered in.

- Help is required to ‘decode’ timetables and other number-based listings.

TUTORS

- Work with concrete materials before tackling paper-based tasks.

- Associate the name of the number with the symbol, practice identifying relative size of numbers. Clarify the language of maths e.g. ‘*plus’, ‘add’, ‘more than’* all mean a number becomes larger.

- Develop 'numerosity' by simple number sequencing activities, e.g. identifying the *fifth* item on a till receipt.

- Link coins with numbers, then sequence them according to value.

e) Features of Autism without co-occurring intellectual disability

Autism is included throughout, because of its frequent overlap with Dyspraxia & Dyslexia.

Three key aspects of autism are usually present:

1. Poor communication skills, leading to difficulty understanding instructions or retelling an incident; taking words or phrases literally
2. Impaired social skills: difficulty understanding socially acceptable behaviour and taking account of the needs of others; failure to foresee consequences; inability to 'read' body language
3. Inflexible thinking: difficulty following procedures and coping with unplanned change, over-reliance on routines

Some people on the autistic spectrum are highly intelligent and very able in particular areas of functioning but, due to the overall imbalance in skills, they can still be regarded as having a disability.

The following features are common:

- Although they may have learned to partially or largely conceal their problems, social interaction remains challenging
- Speed of information processing is slow despite adequate or high intelligence. Due to their highly literal approach, they cannot cope with communications which appear to be ambiguous. Their responses seem strange, based on their idiosyncratic understanding of the world, but are usually logical
- High IQ does not correlate with social and emotional intelligence – this leads to misinterpreting the way others respond and can lead to charges of harassment or stalking
- There may be obsessive interests in a limited range of areas and unusual behaviours – these are the two areas which are most likely to get them into trouble
- They live with high levels of stress and anxiety so reach 'overload' very quickly; their stress or panic reaction may include verbal or physical 'meltdown'.
- Personal space is important. They may show unusual 'comfort' behaviours
- They may have hypersensitive sensory perception, affecting their sense of touch, smell, vision, hearing, balance or body posture and causing discomfort
- They may find it hard to maintain eye contact

Possible Accommodations

- Always inform the individual of changes to routines or changes of plan

- Formal interviews are easier to manage if questions are written and submitted in advance. Answers can then be considered and written down.

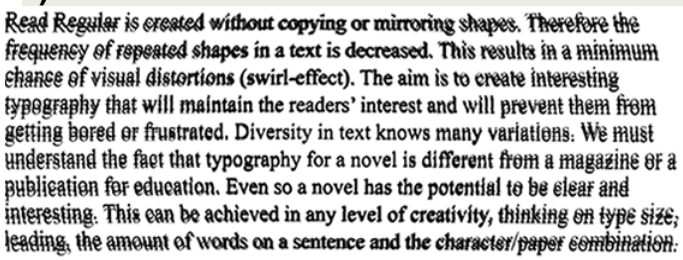
- Ask specific questions rather than open questions. Avoid abstract concepts, metaphor and nuances. Allow 'time out' to recover during any sessions.

- Provide a set of rules, carefully explaining any exceptions.

- In restorative processes, take into account that showing empathy and seeing things from someone else's point of view may not be possible.

- Take steps to accommodate any hyper-sensitivity.

f) VISUAL STRESS


Read Regular is created without copying or mirroring shapes. Therefore the frequency of repeated shapes in a text is decreased. This results in a minimum chance of visual distortions (swirl-effect). The aim is to create interesting typography that will maintain the readers' interest and will prevent them from getting bored or frustrated. Diversity in text knows many variations. We must understand the fact that typography for a novel is different from a magazine or a publication for education. Even so a novel has the potential to be clear and interesting. This can be achieved in any level of creativity, thinking on type size, leading, the amount of words on a sentence and the character/paper combination.

Example of Visual Stress

Visual Stress makes reading very challenging.

It is also associated with migraines and epilepsy.

Symptoms of Visual Stress include the following:

- losing the place, especially when transferring to the next line
- headaches and sore eyes when reading
- missing out and misreading words
- a glare from white paper
- perceived blurring or moving of text.

There are associated problems reading from a screen.

Further information, together with a checklist for poor readers with Visual Stress, is available at www.dyslexia-malvern.co.uk/visualstress

Ways Forward

An optician's appointment to check whether reading glasses are needed.
The problem may not be Visual Stress but simply the need for reading glasses.

Does a coloured overlay help? These should be available from the Education Department.

Crossbow (tinted) reading rulers help to keep the place www.crossboweducation.com

The brightness of a computer screen can be dimmed and the background colour changed to a more 'comfortable' shade.

Forms, notices, digital systems should be designed with suitable adaptations to make them more 'accessible'.

The above are usually only partial solutions since specialist optometrists are not available in custodial settings.

Once released, individuals experiencing Visual Stress should be directed to an optometrist specialising in this area. They are listed, county by county, on www.ceriumvistech.com

BOOKLET 7: section on **Improving Accessibility** includes measures which will help to minimise Visual Stress.

3. The overlapping nature of Neurodivergence

Various reports and studies point to the overlapping nature of neurodivergence. Two well-respected pieces of work have underlined this finding.

1) *Identification and Implication of Specific Learning Difficulties in a Prison Population, Smith and Kirby, Dyscovery Centre, 2006*

'There is now sufficient research to recognise that these conditions are not compartmentalised, and the needs of the individual need to be addressed, rather than simply looking at labels alone.
Future research specifically in forensic settings, is needed to identify levels of specific learning difficulties in all sectors of the prison and the implications of these findings. This is essential in order for appropriate rehabilitation packages to be designed and their outcomes measured.'
SEE ALSO https://www.crimeandjustice.org.uk/sites/default/files/PSJ Neurodevelopmental disorders.pdf

2) *Neurodiverse Voices: Opening Doors to Employment; the report of the Westminster AchieveAbility Commission on Recruitment and Dyslexia/ND, 2018*
http://www.dyslexia-malvern.co.uk/docs/dan/Opening Doors to Employment.pdf

Overlapping Neurodiversity *(research findings underlying the Report)*
'Individuals were more likely to identify two or more ND labels than one. The extent of overlapping ND explains why….when challenging discrimination, it is productive to think in terms of 'neurodivergence' rather than single out single categories'.

An example, taken from the Report, is reproduced below.

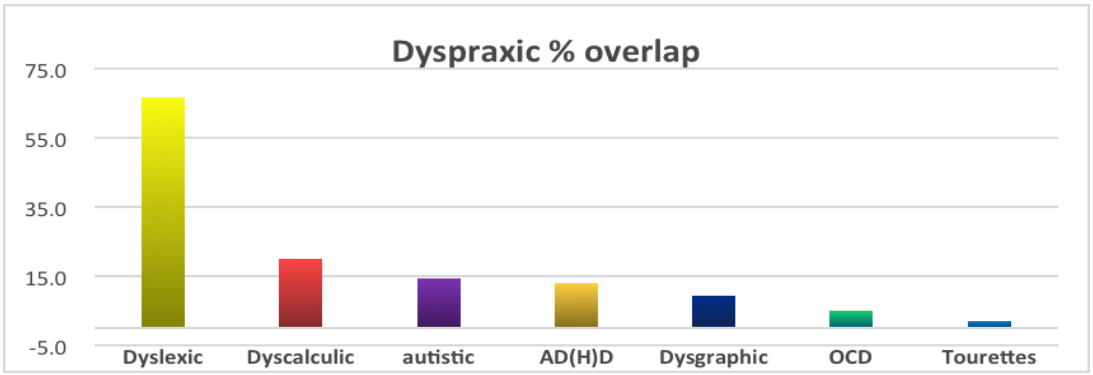


Image from *Neurodiverse Voices* showing conditions co-occurring with Dyspraxia

The CASE STUDY at the end of BOOKLET 3 provides an example of this overlap.

4. Young People with Neurodivergence in the CJS

Two groups of young people are repeatedly highlighted in offending statistics:
(1) 'Looked after children' (or those who have recently left care) and (2) children who were excluded from school. Of course some young people fall into both groups. It is beyond comprehension why resources to reduce offending cannot be better re-directed to these populations, taking particular care at important transition stages such as leaving care and leaving school.

Another consideration is the escalation from 'getting into trouble' to a custodial sentence. Neurodivergent children are more likely than their peers to find school challenging and, if no support is forthcoming may end up truanting rather than continue to face the humiliation of failure. Eventually truanting may lead to further trouble of one sort or another. When police investigate, a key criterion is 'getting the story straight' but many of these young people find it difficult to remember the sequence of events or what happened when / where, so the information they provide seems inconsistent and unreliable. It is possible that this is more likely to lead to prosecutions. The chart at the end of this BOOKLET on the Implications of neurodivergence within the Criminal Justice System, shows how people with these problems can be disadvantaged.

The **Transition to Adulthood** (T2A) **Alliance** continues to promote, in their own words: *the need for a distinct and radically different approach to young adults in the criminal justice system; an approach that is proportionate to their maturity and responsive to their specific needs*. www.t2a.org.uk

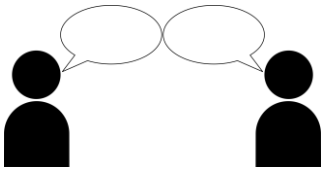
Another initiative, **Intensive Alternatives to Custody** (IAC) programmes offered an alternative to young adults on the verge of a custodial sentence, thus diverting them from entering the prison system. Instead they received help (such as mentoring) in a way which was tailored to their needs from a number of support services. Collaboration involving statutory, private, and Third Sector organisations was seen as the key to success, enabling strategic joint working across sectors, and between youth and adult services. This multi-agency approach should be revisited.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/289369/updated-analysis-impact-of-intensive-alternatives-to-custody-pilots-on-re-offending-rates.pdf

One result of a focus on the varying needs of this age group is that magistrates have been encouraged to take into account a young adult's **maturity** when deciding how to prosecute, in a number of offences. Professor Nathan Hughes, whose work focuses on this area, maintains that those parts of the brain influencing maturity that are the last to develop. He explored these issues in some detail in *Nobody Made the Connection: Neurodisability in the youth justice system (2012),* published by the Office of the Children's Commissioner for England. This report compares the rates of specific neurodevelopmental disorders and level of maturity amongst young people in custodial institutions with the general youth population. In doing so, Hughes and his colleagues demonstrated a disproportionate prevalence of a range of disorders amongst young people in custody.
https://assets.childrenscommissioner.gov.uk/wpuploads/2017/07/Nobody-made-the-connection.pdf

5. Possible Impact and Implications of Neurodivergence in Prison Settings

Difficulties associated with neurodivergence have a wide-ranging impact – this is how those affected have described their problems:

- a build up of stress until we cannot function at all
- coping with strangers and 'reading people' in unfamiliar settings
- processing what we are being told - and retaining what has been said
- problems maintaining concentration and focus
- feelings of sensory overload - from bright lights and loud noises etc.
- difficulty providing consistent information when questioned
- struggling to put our point across and find the right words
- maintaining eye contact during conversations
- problems reading accurately or writing clearly
- anxiety about getting lost and remembering *where* we have to be *when.*



This is relevant in everyday prison life & in processes such as adjudications.

How well people cope depends on several factors:

(1) the severity of their symptoms

(2) the level of underlying intelligence

(3) the ability to deploy coping strategies

(4) stress levels.

Where screening flags up problem areas, staff are directed to seek an assessment for the prisoner to gain further information on any additional needs, such as dyslexia. It is better to use a tool that takes account of the profile of difficulties and abilities in the widest sense, rather than focusing on a single factor, due to the overlapping issues that affect this population.

One such tool is the **Do-IT Profiler** described as follows:

The Profiler is a sophisticated modular computerised assessment, providing guidance and tracking systems. It has been developed for different settings, such as prisons, to give contextualised information, presented in different formats to suit both the individual who is being assessed and the organisation. It collates information from multiple sources in order to identify hidden challenges such as specific learning difficulties, mental health factors, educational and employability barriers. A range of support materials is also available.
www.doitprofiler.com

This chart summarises the impact and implications of a range of difficulties

DIFFICULTIES LINKED TO ND ► ► ►	POSSIBLE IMPLICATIONS
• poor reading skills • reading aggravated by 'visual stress'	Underachievement in literacy areas. Struggles to cope with official letters and form filling. OBPs can be challenging. Does not heed notices and written advice. Avoids education & training opportunities.
• weak / erratic spelling • awkward handwriting	May not respond to written communications. Anxious about form-filling. Appears uneducated (this may not be the case).
• poor short term and working memory	Forgets information conveyed orally. Cannot retain learning without using strategies. Struggles to hold on to information whilst undertaking a task or during verbal interaction.
• poor speaking and listening skills	Misunderstandings arise, leading to trouble. May appear evasive and uncooperative. Will need thinking time before responding. Frustration/anger when can't communicate.
• poor organisation	Fails to turn up at the right place, at the right time with the right papers on the right day Loses documentation. Compliance issues.
• high levels of distractibility	Distracted by sounds, thoughts. Probably distracts and annoys others. May also be restless and fidgety.
• short attention span	Cannot sustain attention. Becomes overloaded and 'switches off'.
• poor time management	Misses appointments. Compliance issues. Incapable of prioritisation and estimating how long things take.
• left / right confusion and disorientation	Trouble locating venues, easily becomes lost. Makes mistakes referring to L & R in interviews.
• misinterpreting situations / instructions / body language	Mis-reads situations. Gets into trouble easily. Exacerbates awkward situations. Fails to take account of unspoken rules.
• poor spatial skills	Cannot get meaning from maps, charts, timetables.
• clumsiness	Told off for knocking things over or bumping into others. Antagonises people, leading to trouble.
• lack of numeracy	Cannot organise financial affairs. Gets into debt without realising. Mistakes with dates/times recorded numerically Does not retain pin and prisoner numbers.
• stress and anxiety	Difficulty functioning. Coping skills undermined. May appear angry and/or incompetent.
• low self esteem • lack of confidence	Inability to acquire new skills and benefit from new opportunities. Easily influenced, likely to be bullying target.

PLEASE NOTE

- Challenging behaviour may mask a neurodivergence.
- People with these conditions may also have a mental health problem and have already been picked up by Healthcare – good communication between sectors is essential.
- Substance misuse and head injury, will also affect behaviour and memory.