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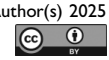
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'It's my brain why don't they get that my brain is different?': The needs of neurodivergent probation service users and what neuro-informed best practice for criminal justice social workers looks like

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Abstract

Having a neuro-disability or neurodivergent condition can impact a person's vulnerability to involvement with the criminal justice system, as well as increase their vulnerability to harm as a result of ignorant and punitive practices from others. With data showing that rates of neuro-disability can be as high as 89% in some justice settings, it is imperative that criminal justice social workers become trained and informed in best neuro-informed practice for probation service users involved in justice. This article seeks to explore neuro-disabilities and neuro-informed practice in the criminal justice system. It considers both the perspectives of disabled people, and criminal social work practitioners. It offers best practice ideas regarding the challenges faced by people who have neurodivergent conditions and interact with criminal justice. The article explores practices that empower and accommodate rather than punish. It concludes that with training and awareness of disability and the challenges faced by neurodivergent clients, criminal justice workers can accommodate and help neurodivergent clients manage their encounters with the criminal justice system.

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Introduction

Over the last few decades there has been a growing awareness of how having a neuro-disability or neurodivergent condition, for example, acquired brain injury, foetal alcohol spectrum disorder (FASD), autism or attention deficit hyperactivity disorder (ADHD), can impact a person's vulnerability to involvement with the criminal justice system, as well as, increase their vulnerability to harm as a result of ignorant and punitive practices from others, including state agents like police, social workers, corrections staff and court officials (Bartels, 2023; Bower et al., 2018; Gibbs, 2022; Whanaketia, 2024). With data showing that rates of neuro-disability can be as high as 89% in some justice settings, it is imperative that criminal justice social workers wherever they are located become trained and informed in best neuro-informed practice for service users involved in justice (Bower et al., 2018; Brown et al., 2024). Due to a lack of research and service provision the vast majority of probation service users remain unscreened, misdiagnosed, or 'hidden' from a diagnosis (Flannigan et al., 2025; Gibbs, 2021; Hughes et al., 2012). This means they are misunderstood, and likely to be blamed and punished for behaviours that are actually symptoms of different brain functioning or impairment of cognitive processes. This article seeks to explore neuro-disabilities and neuro-informed practice in the criminal justice system, from both the perspectives of probation service users in terms of their needs, and from a criminal social work practitioner perspective in terms of their need to understand critical disability frameworks, and practices that empower and accommodate rather than punish. I will also draw on my lived experience as a caregiver of three children living with neurodivergence and also experienced with justice systems as service users and professionals, and as a criminal justice social work practitioner, over three decades in the United Kingdom (UK) and Aotearoa New Zealand (Gibbs, 2021, 2022, 2024).

Definitions/key terms

The terms neurodiversity, neurodivergent and neuro-disability are often used interchangeably and overlap but they are important to distinguish. Language truly matters in this space and for far too long medical deficit-thinking and terminology have constructed the dialogue around people who both 'think' and 'do' differently. Scholars such as Nick Walker, Robert Chapman, Dan Goodley, Katherine Runswick-Cole, Havi Carel and others have, in the neurodiversity space, challenged our thinking around and responses to those who live and move in different cognitive, communication and action spaces and at different paces. Walker (2022) for example, has established that neurodiversity is the overarching paradigm or umbrella term to denote natural variation in human thinking, or cognition. Neurodiversity represents the full spectrum of neuro-abilities and differences within humanity – indeed, we are all neurodiverse.

Within neurodiversity, which is often a preferred term used by autistic communities but less so other communities, we see the terms neurodivergent and neurotypical being used (Rosqvist et al., 2020; Walker, 2022). Neurodivergent refers to an individual or collective of people who are different from so-called neurotypical people in terms of the 'norm expectations' for neurocognitive functioning – these people are neurodivergent, often in a neurominority, and will often describe themselves as neurodiverse, neurodivergent or as autistic, or ADHD or other specific term (Chapman and Carel, 2022; Rosqvist et al., 2020; Walker, 2022). Goodley and Runswick-Cole (2016). Chapman and Carel (2022), also use terms like *Dis/Abled* – to help people disrupt their ableist thinking and positioning around disability, and to call for people to recognise their own neuro-privilege and take action to relinquish this. These authors aim to de-pathologise how we view neurodivergent conditions and to empower those with different neurodivergent identities to be viewed as experts and educators, that is, draw on living experience narratives.

Neuro-disability is a preferred term I use in practice as a registered social worker in Aotearoa. This term is helpful to understand the clinical challenges and strengths of those with a particular diagnosis, for example, FASD. But it is also to ensure that people with a neuro-disability gain their entitlements and accommodations, for example, that they have received the correct funded supports, benefits, and health care to be able to live their best lives. Using the term neuro-disability recognises primary impairments where people might need assistance to live their best lives but also ensures that disabled people are empowered to use their disability rights as well as access disability services (Gibbs, 2024). It is not meant to be a negative term; I view it as a way for people to access what they need and to have resources to implement their goals and flourish. Many people with a range of neurodivergent identities will however not consider themselves neuro-disabled.

Three areas where neurodivergence intersects and interacts in costly and clinically significant ways with justice, are the neurodivergent conditions of FASD, Autism and ADHD. For specific neuro-disabilities, ADHD can be viewed as a disorder in a person who presents with: *hyperactive, impulsive, and/or inattentive behaviours beginning in early childhood* (Young et al., 2015: 247). The so-called 'symptoms' of ADHD can have adverse lifelong impacts on a person's day-to-day functioning (Lane et al., 2024). Autism is viewed, in medical-deficit terms, to refer to a developmental disability that can cause significant social, communication challenges and restricted repetitive behaviours, but, from autistic people themselves, autism is defined as an identity where experience of the social world is different from 'typical' individuals (Bettin, 2019; Gerry et al., 2021). FASD is

> a lifelong disability that affects the brain and body of people who were exposed to alcohol in the womb. Each person with FASD has both strengths and challenges and will need special supports to help them succeed with many different parts of their daily lives. (Can-FASD, n.d.)

With FASD, there are both significant physical impairments alongside the primary cognitive ones (Novick-Brown et al., 2024; Popova et al., 2023).

There are lots of other neurodivergent conditions, including acquired brain injury, Tourette syndrome, borderline personality disorder, obsessive-compulsive disorder, dyslexia, dyspraxia and many more – all of these have their own characteristics, challenges and strengths. Most of these will remain unidentified in probation service users until criminal justice and probation services routinely screen clients for neurodivergence. Concepts and definitions of neurodivergence do vary across contexts and locations, so in some countries borderline personality disorder might be located only within mental health paradigms rather than being viewed as part of the neurodiversity paradigm.

In Aotearoa New Zealand the Indigenous population, historically did not use any terms for disability prior to colonisation. Māori have now developed their own definitions for neurodiversity focused on positive or strengths components of disability. Hence, for autism, Māori use takiwātanga meaning 'in their own time and space', arorereting for ADHD meaning 'attention goes to many things', and pīwakawaka, the word for the fantail bird, is used as a metaphor for the liveliness, courage and curiosity of ADHD behaviour (Opai, 2022; Rangiwai, 2024). For FASD, the term Māori use is Te Iho Tātai-ā-Rongo, to convey a disability with impacts on brain and body, and creativity and courage (Te Iho Tātai-ā-Rongo, n.d.). Māori have been proactive in challenging Eurocentric and stigmatising definitions of neurodiversity to pave the way for more inclusive practices, alongside recognition of overrepresented Indigenous people with neurodivergent identities in the criminal justice system.

Primary impairments, secondary challenges

Streissguth et al. (1997) played a vital role in helping us understand the disability FASD and argued that it was important to distinguish *primary impairments* from *secondary challenges*. Primary impairments are the lifelong fixed physical, cognitive, emotional, and behavioural needs that impact the everyday functioning of people. Secondary disabilities or challenges are the adverse, systemic, and traumatic experiences, post-birth, that cause multiple issues throughout the life course. Secondary challenges that people with neurodivergence face are disproportionate to those faced by the neurotypical population. Hence, significantly higher rates of mental health problems, substance misuse, interactions with the justice system, being in the formal Care system, unfulfilled academic attainment, victimisation, suicidality, employment and accommodation issues (Freckleton, 2024; Lane et al., 2024; Popova et al., 2023; Streissguth et al., 1997).

For those born with a neurodivergent identity or disability the so-called primary impairments should not in themselves lead to outcomes that severely disadvantage them. Unfortunately, it is apparent that

> the interactions between a person's primary impairments and the social, educational and cultural environments they engage with often lead to stigma, misunderstanding, negative reactions and a lack of accommodations, exclusion, rejection, distress and chaos. (Gibbs, 2021: 361)

Sadly, adverse outcomes are extremely likely for those with neurodivergent conditions who interact with the justice system (Bartels, 2024; Bowden et al., 2022; Gerry et al., 2021; Lane et al., 2024; McCausland and Baldry, 2023).

For most of the neuro-disabilities there are specifics required for a medical diagnosis and a great deal of crossover between some of the neuro-disabilities, such that experts often miss a specific condition (Novick-Brown et al., 2024; Young et al., 2024). Indeed, ADHD is often given instead of FASD, as professionals are unaware of the pre-natal alcohol exposure history of a person. However, notable primary impairments for FASD, autism and ADHD may include clinically significant challenges in domains of executive functioning, social functioning, and adaptive functioning. A person with a neuro-disability might struggle in any of the following areas: poor day-to-day living, social, regulation and communication skills; memory, cognitive processing, attention and concentration issues, including impulsivity; having difficulties understanding abstraction, cause and effect, cognitive rigidity, and being likely to have sensory issues, either under or stimulated or hypo or hyper sensitive (Lane et al., 2024; Vinter et al., 2023; Young et al., 2015).

While these brain-based challenges or differences can make a young person or adult with a neuro-disability vulnerable to criminal justice involvement (see the later section on red flags/vulnerabilities), it is not a given that having a neurodivergent identity will lead to adversity. The research on risk and protective factors is quite clear that being provided with a stable, nurturing home, avoiding being a victim of violence, early recognition of and funded intervention support for the disability, avoiding substance misuse, staying as long as possible in education, and avoiding being in Care and other adverse circumstances, will reduce the chances of justice involvement and other poor outcomes (Lambie, 2020; McCausland and Baldry, 2023; Popova et al., 2023; Streissguth et al., 1997).

Prevalence and criminalisation of neuro-disabilities in criminal justice

Historically, neurodivergent identities have been unidentified and ignored within criminal justice, although large numbers of people identifying as neurodivergent have gone through formalised Care and justice systems (Abuse in Care, 2024; Bartels, 2024). In New Zealand's recent extensive Abuse in Care Inquiry, 49% of survivors of abuse in care who had registered as disabled, identified as neurodivergent, and many of these had criminal justice experiences, including suffering severe abuse and neglect from criminal justice services (Whanaketia, 2024). It is against this backdrop of abuse and neglect that we need accurate and up-to-date information about the prevalence of neuro-disabilities in criminal justice.

Hughes and colleagues overviewed the prevalence of neuro-disabilities in the youth criminal justice population (Hughes et al., 2012). This was the first review in the UK to highlight prevalence rates and included information that Foetal Alcohol Syndrome rates were 10.9–11.7%; Autism rates were 15%; and ADHD rates were 12%. In New

Zealand, Lynch (2016) noted 50% of the prison population had dyslexia, and that between 60 and 90% of young offenders likely lived with a neuro-disability. Bower et al. (2018) confirmed, in a case ascertainment study in Western Australia, that 89% of young offenders did indeed have at least one neuro-disability, with 65% having 3 or more domains that could be classed as neuro-impairments (Bower et al., 2018).

For ADHD in criminal justice, Young et al. (2015) noted prevalence rates of 30% for those in youth prisons and 26% for adults in prison. In New Zealand, one study of a large birth cohort showed that half of young adults with ADHD had interacted with the criminal justice system by the age of 25 years (Anns et al., 2023). For FASD, Novick-Brown, Greenspan and Steele, and Popova et al. (2023) noted rates of neuro-disabilities ranging from 14.7% to 30% in the adult correctional population, and 36% in the youth justice population (Bower et al., 2018).

For autism, there are mixed studies indicating the prevalence of autistic people in contact with the criminal justice system is not more likely compared to those who are non-autistic, yet also showing that when autistic people do end up in Court for more serious offences, that they are sentenced disproportionately harshly to imprisonment (Bartels, 2024; Blackmore et al., 2022; Bowden et al., 2022; Gerry et al., 2021). Overall, the care to prison pipeline is very much alive for the neurodivergent population, with disproportionate rates of those with neurodivergence being in Care and then more likely to end up within justice (Abuse in Care, 2022; Bartels, 2024; McCausland and Baldry, 2023; Whanaketia, 2024).

With high rates of neuro-disabilities 'hidden' within vulnerable populations, especially Indigenous populations, it is vital to recognise and acknowledge the big-picture context of brain-based disabilities (Bartels, 2024; Bower et al., 2018; Gibbs, 2022; Lane et al., 2024; McCausland and Baldry, 2023). The big-picture context recognises that those interacting with criminal justice processes have likely experienced systemic abuse, social deprivation, oppression, colonisation, intergenerational trauma, and racialised practices (Bartels, 2024; Bower et al., 2018; McCausland and Baldry, 2023; Whanaketia, 2024). At every stage of interactions with police, criminal justice officials, proceedings, sentencing and interventions, people with neuro-disabilities are subject to over-surveillance, punishment and their neuro-disabilities are criminalised (Bartels, 2024; McCausland and Baldry, 2023). All authors therefore suggest it is vital that key criminal justice system stakeholders, including criminal justice social workers or probation staff understand the red flags for neurodivergence (next section) and alongside these have a recognition of the social determinants of justice.

The social determinants' approach to criminalisation essentially tells us more of the why and how people become criminalised, and how they become entrenched in a cycle of intersecting disadvantage. McCausland and Baldry (2023: 44), identify eight social determinants of criminalisation for those with mental and cognitive disabilities. These are: having been in *out-of-home care,* having a *poor school education,* being *Indigenous,* having *early contact with police,* having *unsupported mental health and cognitive disabilities,* struggling with problematic *alcohol and other drug use,* experiencing *homelessness and unstable housing,* and coming from or living in a *disadvantaged location*. McCausland and Baldry go on to suggest that these determinants are amplified and

made possible because, of structural racism and discrimination, a failure to respond to abuse, violence and trauma, systemic abuse, the entrenchment of poverty and resource inequity, and the unfavourable operation of the criminal justice system towards those with neuro-disabilities (McCausland and Baldry, 2023; Whanaketia, 2024).

Indigenous researchers and practitioners are highlighting that the overrepresentation of Indigenous and ethnic minority people with neurodivergence in criminal justice settings, reveals a complex picture of racism and other systems of oppression, alongside impacts of colonisation and inadequate and biased systems of assessment and diagnosis (Rockhold et al., 2024).

Red flags/vulnerabilities for criminal justice involvement

Brown et al. (2024) outline a range of environmental, physical, cognitive, and behavioural 'red flags' that might indicate FASD and other neurodivergent identities are present, when attempting to understand individuals' interactions with and experiences within the criminal justice system. The environmental factors are the same as those already mentioned earlier as the determinants of criminalisation for example, being raised by non-biological relatives, leaving education early, living in poverty; being neglected or abused, struggling with substance misuse, and repetitive offending, to name a few.

Physical indicators might include speech and language issues, assorted physical health issues like sight or hearing problems, frequent medical problems, for FASD, some specific facial features (only in 10% of cases), often co-occurring with intellectual or learning disabilities, unusual sleep patterns and sometimes motor skill issues. It is therefore vital that people who are neurodivergent are screened for physical indicators alongside the more obvious cognitive and behavioural indicators.

The cognitive and behavioural indicators include a range of sensory, adaptive, reasoning skills issues, executive challenges, disinhibition/attention issues, self-regulation and impulsivity problems, repetitive behaviours, perseveration or cognitive rigidity, an inability to cope with frustration or negative emotions, appearing to be of a much younger age and being easily manipulated (Brown et al., 2024; Freckleton, 2024; Gerry et al., 2021; Novick-Brown et al., 2024). Not all neurodivergent people involved in justice will show all of these characteristics and often they will show many positive factors (see section on Strengths and lived experience). How each of these challenges influence a persons' criminal justice interactions is unique to each individual and their vulnerabilities, but some consistent issues need to be understood by criminal justice professionals. These issues include executive functioning problems, social reasoning, confabulation, emotional dysregulation and 'day-to-day' living issues.

The major area of executive functioning means that some people with neurodivergent challenges will have a real struggle with judgement, planning, problem-solving, completion of tasks, decision-making capacity, and understanding of consequences (Novick-Brown et al., 2024). This can lead to ongoing compliance with bail or probation or parole orders and conditions. Often failure to attend appointments or comply with a condition is down to executive functioning capacity. A failure to repeatedly not comply might lead to others assuming a person is not able to follow rules and sometimes

probation clients appear to be so rigid or concrete in their thinking that they cannot be reasoned with and may not even believe they have failed a condition. It is vital professionals working in this space understand the brain and memory functioning of their clients.

Another executive functioning skill is that of social reasoning, if this is delayed or impaired a probation service user will struggle to understand or weigh up cause, effect, or consequences (Brown et al., 2024; Freckleton, 2024). They also might not discern safe or unsafe situations or people. Their dysmaturity (behaving at a much younger age than peers) will put them at risk of exploitation and victimisation; they also might appear to take extra risks or behave inappropriately around others. When reasoning is impacted, it is also likely that the ability to empathise or understand when they may have upset someone else will be compromised. Alternatively, they may be able to apologise and recognise they might have hurt someone but express that differently to neurotypical people.

Confabulation, which is a classic 'red flag' for those with neurodivergence, links to fundamental memory issues, communication issues, being eager to please, struggling to understand legal process, and dysmaturity (Gilbert et al., 2023). It might be that the probation service user is genuinely filling in gaps because of memory loss. Gilbert et al. (2023) work on the topic of FASD and suggestibility notes the vulnerability of this group to filling in gaps and making stuff up, and they are consequently at high risk of false confessions and miscarriages of justice.

Novick-Brown, Greenspan and Steele recently published a seminal work on Nikolas Cruz, a young man with FASD and ADHD who killed 34 school community members in Parkland, Florida, USA in 2018 (Novick-Brown et al., 2024). They noted all the 'red flags' and missed opportunities to help Cruz throughout his life before the mass shooting. They argued that because of a range of issues, Cruz had diminished culpability and therefore should not receive the death penalty (he was given imprisonment without the possibility of parole). They argued that Cruz had not been diagnosed correctly from a young age, and therefore, Cruz failed to receive a lifetime of potential treatment and support. They also argued that his FASD disability was on a par with an intellectual disability. Cruz was impulsive and failed to self-control, or weigh up the full consequences before taking action, throughout his life because of his neuro-disability. Similarly, authors on autism and ADHD have argued that diminished culpability or lower levels of criminal responsibility must be considered for defendants with autism and ADHD (Freckleton, 2024; Gerry et al., 2021).

Emotional dysregulation and aggression are a 'red flag' for many with neurodivergence and must be managed within the context of a brain-based neuro-disability (Brown et al., 2024; Freckleton, 2024). Dysregulation is linked to anxiety, confusion, fear, flight or fight responses, living in survival mode and a general inability to cope with or meet the expectations of others. To manage emotional dysregulation a range of sensory modulation strategies, calming activities, co-regulation, and simple, soothing communication messages from professionals can be considered.

Finally, living in chaos and having constant challenges with day-to-day functioning can be a 'red flag' (Gibbs, 2021). Probation service users may have problems managing

their finances, their relationships, their employment, their running of accommodation/homes, their capacity to safely use medications and other substances, and their capacity to cook or clean or care for themselves, children, or animals. Ultimately, many neurodivergent probation service users have a range of needs that only good quality neuro-informed disability services can assist with. Trying to 'fix' or make clients change their neuro-disabilities is counter to their disability rights.

Strengths and lived experienced

Notwithstanding a very long list of potential 'red flags' that might assist a criminal justice social worker to screen and identify that a neuro-disability is present, increasingly the strengths and skills that neurodivergent clients have are being noticed either via research or through the sharing of lived experiences. The voice of the neurodivergent service user has been very limited in correction settings, but a few studies have noted a range of strengths from kindness to resilience to being artistic, having practical skills and being good at sports, having hope and being courageous (Cox, 2023; Currie et al., 2016; Flannigan et al., 2025; Pei et al., 2016). Such studies also conclude that early identification, supervision, and support all make a positive difference to people interacting with justice systems. Reframing how people with neuro-disabilities are viewed can make a huge difference in appreciating the positives that clients offer (Cox, 2023; Currie et al., 2016; Flannigan et al., 2025).

Vinter et al. (2023) recently interviewed autistic prisoners who were able to detail how prison life impacted them and that they felt their autism was not always understood by staff or other prisoners. When their autism was understood however, they felt supported. Prisoners with autism felt they were more sociable in prison, as the environment forced them to interact more with others overall, although they noted they did not like sudden changes in routine, or the general noisy prison environment. They would have preferred less noise and more quiet areas to retreat to when stressed. They also noted that having a job in prison and being kept busy was a positive, especially if the work drew on their skills or interests.

In recent years, neurodivergent people with criminal justice experiences are telling their stories via online webinars or at conferences and offering advice and training to criminal justice stakeholders. My own adult son has undertaken many such activities to present short talks and webinar contributions to highlight how professionals should understand people like him and approach helping him (FASD-Can, n.d.a). Support organisations like New Zealand's FASD-Can and Canada's FASD Network produce helpful advice to justice professionals and cards to give out if arrested (FASD Network, n.d.). All of these include the voice of the person with FASD as they intersect with justice officials.

One advice card given to police by people with FASD notes the following advice (FASD-Can, n.d.b):

> PLEASE UNDERSTAND … I am not trying to be rude or un-cooperative. I am probably having difficulty mentally processing and dealing with what is happening to me. My FASD means: My disability is invisible. It is brain-based. It affects the way I understand and interact with the

> world. My developmental age is much younger than my chronological age. This means I am likely to be socially and emotionally immature. My behaviour can be unpredictable. I can be impulsive and not understand or even think about cause and effect until it is too late. I can experience fixated thinking. It is difficult for me to learn from past mistakes or experiences due to my brain damage. My short-term memory is not very good. I forget things easily. Please write down important information for me. Please use short sentences and simple specific words when talking to me. Only give one instruction at a time.

By taking account of the 'red flags' or indicators of neurodivergence, alongside the strengths and skills of the probation client, we can begin to implement neuro-informed criminal justice social work practice. The following section illustrates core neuro-informed concepts and practice, and the final section in this article explores a best practice example of a probation officer working in a neuro-informed way with a neurodivergent client.

Neuro-Informed practice by criminal justice social workers

Criminal justice social workers would benefit from basic training in neuro-informed practice, and there are courses and workshops emerging (Gibbs, 2024) which offer insights and knowledge exploring critical disability frameworks, and practices and skills that empower and accommodate, rather than punish. Such training that focuses on the neurodiversity paradigm enables social workers and probation staff to understand that behaviours are the symptoms of different brain functioning, and they can act accordingly. Importantly, criminal justice social workers can then be translators to other criminal justice stakeholders, like police or prison colleagues. Through pre-sentence or other reports probation staff can attempt to explain the offending behaviour of their clients as either a brain-injury, acquired pre or post birth, and its impact on cognitive, social and day-to-day functioning, or, as a natural brain-based difference or neurodivergent condition, and worthy of special consideration in terms of culpability, suggestibility and mitigating factors (Brown et al., 2024; Freckleton, 2024; Gerry et al., 2021; Gilbert et al., 2023; Novick-Brown et al., 2024).

Good neuro-informed practice involves, firstly, listening carefully to and building a relationship with the person who is neurodivergent; then, looking for 'red flags', and screening for specific neuro-disabilities. In our case study, next, the probation officer prioritises these activities. In the absence of funding to request detailed assessments criminal justice social workers would be wise to proceed as if the client might have a neurodisability. From a good practice perspective, any assessment completed by probation staff should involve others like close family members, support organisations, and reading of previous reports undertaken by health, education, justice or welfare professionals. In certain situations, a brief or screening assessment for a neuro-disability is better than no assessment, especially as we know costs for full multidisciplinary assessments are astronomical (Gibbs, 2022).

Wherever possible social workers need to: spend time with the probation service user and their key people, in both the office and the home; find out how they 'tic'k or function in different environments; and try to bring key people together if they do have other

professionals involved, to share important information about the strengths and difficulties of the person with the neuro-disability. It might also be that for report writing processes that the person may need a communication assistant who would then also assist them at court and compile easy-to-read reports and sentence plans in accessible formats for the person. Lowering the expectations or reducing the lists of instructions, and using simple, concrete language to helping, will go a long way to ensuring someone with neurodivergences know what is expected of them. In our case study, Tim, the 8 magic keys model is applied to implement simple instructions and concrete language (Wiens et al., 2019).

Strategies / practice models

In terms of day-to-day supervision practice, a model that caregivers and others use to help their young people have successful days is the '8 magic keys' model developed by Deb Evenson and Jan Lutke (Wiens et al., 2019). This model, not surprisingly, puts *trusting relationships* at the centre of success, followed by eight other magic keys – the need for *structure*, *supervision* to encourage predictability and interdependence, *consistency*, the benefits of *routine* and *repetition*, the need for *concrete* and *specific* terms and instructions, and *simplicity*, also known as KISS (*keep it short and sweet*). Using these 8 keys every day with probation service users recognise their struggles and their abilities and enables them to achieve what is realistically expected of them. The case study in the next section shows how probation staff can apply this model.

Another model proposed by Brown et al. (2024), known as the DEAR model, specifically for working with service users who have FASD alongside other likely diagnoses. D stands for *direct language*, as people with neuro-disabilities are highly likely to struggle with comprehension and communication challenges or communicate better with communication aids or supports. E stands for *engage support systems*, which might mean advocating to get disability or mental health supports in place. A is vital for *accommodating needs,* recognising the full range of sensory, cognitive, spiritual, intellectual, communication, educational, behavioural, physical and wellbeing needs a person might have. And R is for *remaining calm*.

Remaining calm is vital because probation service users with neuro-disabilities can become easily dysregulated, show aggression and have meltdowns, sometimes in the probation offices. These outbursts are likely connected to emotional regulation issues, but also because clients do not understand what is being asked of them, or they are overwhelmed by sensory stimuli, or they are feeling under threat or feeling judged because their brain and functioning are different. This is where caregivers would often use mantras like '*connection before correction'*, or '*brain not blame'*, or '*lower the expectations'*, to remind criminal justice professionals that it is important to see the reason behind the outbursts, and that de-escalation actions must be focused on the regulation of emotions first, in the context of a safe and trusting relationship, before any discussion of consequences, or mistakes made, can be undertaken. In our case study, Tim, we see excellent practice by the probation officer to respect and include family members who know the client well in the supervision process. Also, criminal justice social workers should not take aggression from clients personally; even though it might seem like it is, they need

to remember that outbursts often reflect huge anxiety and stress from the neurodivergent client because the client's needs are not being met in the wider community.

A concept explored by Chapman and Carel (2022) – is the concept of neurotypical humility, or neuro-humility, that those who are neurotypical can incorporate into their interactions with people living with neurodivergence. Application of neurotypical humility would ensure not using deficit views of neuro-difference, embracing the neurodiversity paradigm as it focuses on the rights, strengths, and flourishing capacities of neurodivergent people, and importantly recognising and accepting that those living with neuro-disabilities are not doomed to lower wellbeing. It also means recognition that their thriving and interests can look very different from neurotypical thriving and interests. Ensuring humility in this way is then likely to lead to more advocacy for better systems and services, bespoke to the needs of those with neuro-disabilities. Throughout their interactions with Tim, we see in our case study that the probation officer is using neuro-typical humility.

Alongside humility, more advocacy-based case management, active liaison with disability service providers, and developing criminal justice social work disability specialists who can advise staff, train them, and offer to access disability supports and also then advocate at higher management level to see the development of neurodiversity policy and action plans would be considered good practice. This big picture activism is vital for criminal justice social workers to engage in, and regardless of which disability, the call to demand better in terms of improved policy, screening, access to assessment and interventions that are disability focused, is echoed by many researchers of autism, ADHD and FASD (Bartels, 2024; Lane et al., 2024; Young et al., 2024).

We can also look to Indigenous models of neurodiversity (Cox, 2023; McLachlan et al., 2023; Rangiwai, 2024), where the authors challenge and deconstruct 'western' colonizing thinking, and prefer to use more holistic understandings of people, their cultural and genealogical stories, their alternative approaches to healing, and their recognition that neuro-disabilities are a full body, full spirit experience. Cox calls this practice 'two-eyed' seeing, whereby traditional and scientific approaches can be valued together. Such models emphasise strengths-based all-of-family supports, balance, restorative relationships, and opportunities for interdependence for neurodivergent people, as opposed to the expectation of independence for all, as our case study will now show.

Case study – neuro-informed practice

This case study to illustrate neuro-informed practice is a composite from my own practice as a criminal justice social worker, and from observed social work practice during criminal justice processes for friends and relatives over many years.

Tim has ADHD and FASD. He is now 21 years old. He was diagnosed with ADHD at 8 years, and with FASD at 14 years, after multiple interactions with police and several court appearances. Tim was permanently fostered from the age of two. His foster parents initially did not know that he was exposed to prenatal alcohol. Child services had recorded that the birth mother was struggling with alcohol consumption issues but this was not shared with the foster carers. Tim struggled to fit in at school but he enjoyed

sports and art, both of which he was good at. Unfortunately, once Tim started high school, he could not cope with the daily anxiety and sensory overload of high school relationships and activities. His foster parents could not get extra support for him, in spite of his obvious inattentiveness, impulsivity and hyperactivity, and having been diagnosed with ADHD. He refused to go to school and he drifted towards peers who were also not in school and started committing petty crimes. Eventually, this led to regular arrests for theft and burglary, and he appeared in court and was sentenced on one occasion to a youth imprisonment sentence of six months. Once he was released, sadly he re-offended quite quickly, and he also became unable to resist the over-consumption of alcohol and other substances, which impacted his health and landed him in yet more trouble. His most recent offending led to a probation order and a curfew order that was electronically monitored (EM).

Fortunately for Tim, his probation officer had recently completed a 13-week university-based introductory course on neurodiversity, neurodivergence and managing neuro-disabilities across education, health, and justice sectors (Gibbs, 2024; Lewis, 2022). The probation officer felt equipped to manage Tim's situation because she had acquired some good knowledge whilst undertaking the course. However, she also had a sister with a son who was diagnosed with autism. She drew on this personal knowledge, as well as her training. She described herself as being neuro-informed to Tim when they first met, during preparation for his court report prior to sentencing (FASD Network, n.d.). Tim expressed great joy when his probation officer told him she understood the way he ticked. He noted that so many people that he had come into contact with in the last few years had really just given up on him, including lots of criminal justice professionals. They thought he was stupid, a loser, and someone who would never learn to change. But he said to the probation officer: *It's my brain why don't they get that my brain is different?* As a 21-year-old, Tim was beginning to recognise his cognitive differences, and he was beginning to understand that some things he could control and other things he really struggled with, for example, saying no, or jumping straight into poor decision-making straight away, without reflecting on the consequences of actions.

Tim and his probation officer were able to establish an extremely positive working relationship because, at the outset, the probation officer clearly conveyed validity and affirmation to Tim's acknowledgement of his neurodivergent conditions and how these might impact his offending. Tim's probation officer was using strength-based and inclusive definitions of neurodiversity, and neuro-humility as noted by Chapman and Carel (2022).

The probation officer's neuro-informed practice started from the first meeting. At that first meeting which Tim had invited his foster mum to, they chatted a great deal about what his ADHD and FASD looked like; they explored how these neurodivergent conditions negatively impacted Tim but also produced his artistic and sporting strengths, and his generally different way of viewing the world and living his life (Currie et al., 2016). The probation officer, while having to focus somewhat on the offending, attempted to really contextualise that offending in the light of Tim's neurodivergence. She was able to write a report unpacking some of Tim's cognitive challenges and decision-making processes and behaviours around the offending. The Judge noted in court that it was helpful

to have this level of detail. The probation officer understood aspects of Tim's neurodivergence and made recommendations in the court report for referrals to be made to disability organisations, so that Tim could have additional mentors and advocates who could help him access the disability supports that had been lacking in his life to date.

The probation officer knew that a raft of disability-based accommodations would be needed for Tim to be able to be managed well on a probation order, especially the EM monitoring. Once the orders were in place the probation officer organised for a speech language specialist to present the probation and EM orders to Tim in two easy-read documents, with pictures of instructions, in both hard copy format to post up near his front door and keep copies of, and in e-format, sent to him so he could have them on his phone (Brown et al., 2024). His mum was given copies of these so that she could help him with reminders around conditions and appointments. Tim was given easy-read information how to contact his probation officer or the staff monitoring his conditions, and his probation officer explained many times (the magic key of repetition) how to access help, or how Tim could contact probation staff should he have an emergency if he was not able to make an appointment (FASD Network, n.d.; Wiens et al., 2019).

Tim's probation officer operated a very flexible process during the probation and EM orders and proactively involved Tim's mum in verifying when Tim had issues complying with the conditions. Through the probation order, Tim was able to access more disability support and this led to him joining a weekly art collective, where he undertook a range of artistic endeavours and started to make some new friends, non-offending friends, some of whom also had ADHD. This gave him hope of trying to do something more positive with his life than he had done in the previous five or six years. Tim concluded his order without further re-offending.

Conclusion

This article has overviewed the needs of neurodivergent probation service users and considered many areas for best practice by criminal justice social workers. There is scope for a more in-depth exploration of best practice across different domains of probation and criminal social work practice when working with neurodivergent clients, notably the community work and transition from imprisonment areas but as knowledge in this area moves forward, and staff are trained to become neuro-informed I hope the future may offer more kindness, tolerance and disability accommodations for a large proportion of those currently being given custodial and non-custodial sentences.

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