

Neurodisability in the youth justice system: recognising and responding to the criminalisation of neurodevelopmental impairment

Dr Nathan Hughes

Senior Lecturer, School of Social Policy,
University of Birmingham
Research Fellow, Centre for Adolescent Health,
Murdoch Childrens Research Institute, Melbourne

**Anniversary Conference
of the Centre for Crime,
Justice and Policing,
June 2017.**

Definitions

Childhood neurodevelopmental impairment: physical, mental or sensory functional difficulties caused by disruption in the development of the nervous system, such as:

- cognitive or executive functioning deficits;
- specific learning difficulties
- communication difficulties;
- difficulties in regulating and expressing emotions, or understanding the emotions of others.

Definitions

Neurodevelopmental disorders: ‘a group of conditions... [which] typically manifest early in development, often before the child enters grade school, and are characterized by developmental deficits that produce impairments of personal, social, academic, or occupational functioning.’
(APA, 2013)

Such disorders include:

- intellectual / learning disability;
- specific learning disorders, e.g. dyslexia;
- communication disorders;
- attention-deficit / hyperactivity disorder;
- autism spectrum disorder;
- fetal alcohol spectrum disorder.

Nobody made the connection:



The prevalence of neurodisability in young people who offend

Lead Authors:

Dr Nathan Hughes (Senior Lecturer in Social Policy, University of Birmingham)

Prof Huw Williams (Director of the Centre for Clinical Neuropsychology Research, University of Exeter)

Dr Prathiba Chitsabesan (Consultant Child and Adolescent Psychiatrist, Pennine Care NHS Foundation Trust)

UNIVERSITY OF
BIRMINGHAM

UNIVERSITY OF
EXETER

MANCHESTER
1824
The University of Manchester

Prevalence of neurodevelopmental disorders (Hughes et al, 2012)

Neurodevelopmental disorder	Definition (based on APA, 2013)	Prevalence among young people in general population	Prevalence among young people in custody
Learning / Intellectual Disability	Deficits in: cognitive capacity (measured by an IQ score of less than 70); and adaptive functioning (significant difficulties with everyday tasks)	2 - 4%	23 - 32%
Communication Disorders	Problems with speech, language or hearing that significantly impact upon an individual's academic achievement or day-to-day social interactions.	5 - 7%	60 - 90%
Attention-Deficit / Hyperactivity Disorder	Persistence in multiple symptoms of inattention, hyperactivity and/or impulsivity	1.7 – 9%	12%
Autistic Spectrum Disorder	Qualitative abnormalities in reciprocal social interactions and communication, and markedly restricted repetitive and stereotyped patterns of behaviour and interests	0.6 – 1.2%	15%



J Head Trauma Rehabil

Vol. 30, No. 2, pp. 94–105

Copyright © 2015 Wolters Kluwer Health, Inc. All rights reserved.

The Prevalence of Traumatic Brain Injury Among Young Offenders in Custody: A Systematic Review

*Nathan Hughes, PhD; W. H. Williams, PhD; Prathiba Chitsabesan, MRCPsych;
Rebecca C. Walesby, PhD; Luke T. A. Mounce, PhD; Betony Clasby*

Prevalence of traumatic brain injury (Hughes et al, 2015)

Nature of TBI	Prevalence among young people in general population	Prevalence among young people in custody
Any head injury	24 – 42%	49 – 72%
Head injury resulting in loss of consciousness	5 - 24%	32 - 49.7%
Head injury resulting in loss of consciousness for 20 minutes or more	5%	18.3%
More than one head injury	9.2 – 12%	45 – 55%

Understanding pathways into custody

Neurodevelopmental impairments influence offending in three distinct ways:

1. Symptoms and expressions may increase propensity to antisocial behavioural traits in certain situations
2. Such deficits may interact with social and environmental factors to heighten the effect of impairment and / or increase exposure to further risk factors for offending
3. Criminal justice processes and practices may *disable and criminalise* young people

Policy and practice responses need to address all three of these effects

1. Symptoms and expressions of neurodevelopmental impairment associated with antisocial or aggressive behaviour

Symptoms and experiences related to neurodevelopmental impairment

Poor theory of mind

Executive functioning deficits

Social communication difficulties

Poor emotional literacy

Difficulties with abstract reasoning

Poor emotional regulation

High arousal

Impulsivity

Poor cognitive empathy

Bullying and victimization

Failure to recognize consequences of action

Heightened susceptibility to peer influence

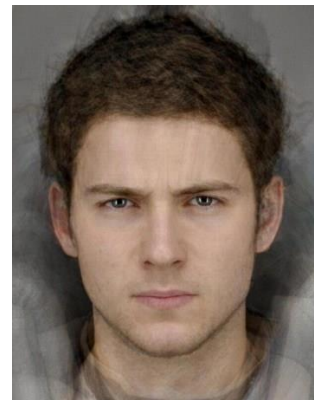
Reactive aggression

Impairments associated with antisocial behaviour

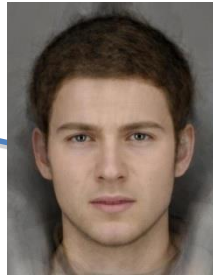
- **Deficits in executive functioning** reduce inhibition, prevent the self-regulation of contextually appropriate behaviour, or impair the ability to anticipate consequences.
- **Impulsivity** leads to impatience, sensation-seeking and difficulties in restraining emotional reactions, particularly in response to conflict.
- **Heightened stress response mechanisms** can inhibit the appropriate assessment of emotional social cues, potentially leading to 'hot-headed' behaviour, such as reactive aggression.
- **Communication problems** may result in difficulties understanding and expressing emotions, the use of inappropriate non-verbal communication to express feelings, and difficulties in understanding others' perspective.

Bristol Expression Recognition Task

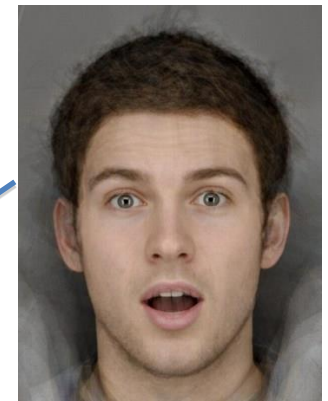
Penton-Voak & Mufano, 2012



ANGER



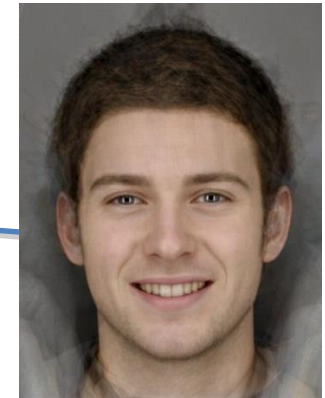
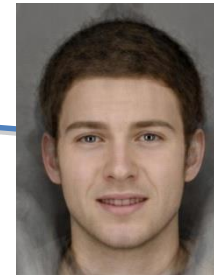
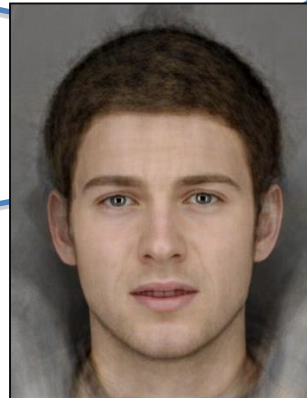
Prototype
(closest to
neutral)



SURPRISE



DISGUST



HAPPINESS



FEAR



Facial stimuli portrayed emotive
expressions across a continuum
of expressivity



SADNESS

Facial Expression Recognition Following TBI

Sample:

- 27 community based young offenders
- 18 male, 9 female.
- Average age: 16.
- Excluded if language hearing impairment.

Measures:

- Neuropsychological assessments
- TBI Screen
- Demographics and offending history.
- Expression Recognition Task.

Design: Between-group (TBI vs nonTBI), cross-sectional design

- 17 young people had sustained head injury with LoC (63%)
- 7 (26%) young people had sustained 'severe' TBI (LoC > 60mins)
- TBI group, n = 11 (41%), nonTBI, n = 16 (59%)

Results:

Young offenders with substantial TBI were **significantly impaired** on the expression recognition task.
 $t(25) = 2.46, p = .001, r = .44$

This impairment was more apparent in the moderate-severe TBI group

It remained significant after controlling for cognitive performance and age

2. The influence of social and environmental factors on the experience of impairment and risk of offending

Increased exposure to social and environmental risk

- **Parenting difficulties** – e.g. the challenges of parenting in this context can lead to a lack of positive parenting approaches / authoritarian approaches
- **Negative peer group influences** – e.g. a heightened desire to be accepted; susceptibility to bullying and peer pressure
- **Educational difficulties and disengagement** – e.g. inhibits ‘school readiness’; cumulative difficulties, including at age 8 and in transition to secondary school; disruptive behaviour due to disengagement

Behavioural problem or 'skill deficit'?

- Young people with neurodevelopmental impairments are prone to diagnosis of behavioural problems rather than cognitive impairments:

‘What manifests in the classroom as a ‘behaviour problem’ (e.g. failure to negotiate appropriately with other children around access to equipment) may in fact be more appropriately described as a *skill deficit*, i.e. an inadequate repertoire of socially sanctioned linguistic skills to enable prosocial engagement with others and attainment of goals.’

(Law et al, 2013)

3. Experiences of disability and discrimination can criminalise young people with neurodevelopmental impairment

Barriers to engagement in legal processes

- A failure of criminal justice agencies to identify and appropriately support young people with neurodevelopmental impairments
- Terminology and conceptual language can be particularly difficult for young people with a neurodevelopmental impairment to understand (Sanger et al, 2001; Wszalek and Turkstra, 2015)
- Forensic interviewing techniques pose barriers to those with difficulties in narrative language skills (Wszalek and Turkstra, 2015)
- Communication difficulties can lead to ‘monosyllabic, poorly elaborated and non-specific responses’, ‘poor eye-contact and occasional shrugs of the shoulders’, which may be misinterpreted as ‘deliberate rudeness’ and ‘willful non-compliance’ (Snow and Powell, 2012)

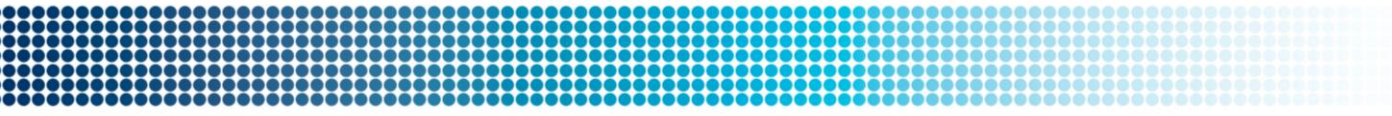
Inappropriate interventions

- A lack of awareness of neurodevelopmental impairment inevitably leads to a lack of understanding of / response to the causes and contexts of behaviour
- Interventions are often highly verbal or seek to ‘tap important metacognitive skills, that is, ‘thinking about one’s own thinking’, so that unhelpful beliefs can be identified and modified.’ (Snow and Powell, 2012: 4)
- There is typically limited specialist services or responsive provision, despite evidence for the effectiveness of particular approaches

Criminalising disability?

This is inherently tautological: the failings of the system to effectively support these young people so as to prevent re-offending reinforce their involvement with the system and its continued failure to do so, resulting in a higher subsequent risk of eventual custodial intervention.

Hughes, N. & Chitsabesan, P. (2016) 'Justice Matters: for young people with neurodevelopmental impairments',
Centre for Criminal Justice Studies, London: CCJS.



Conclusion: Implications for policy and practice

Implications : *preventing justice involvement*

- Shifting resources away from expensive custodial interventions so as to invest in family support, and specialist health and educational services
- Train practitioners working in education, family support, social services and primary care settings to recognize and understand issues related to neurodevelopmental impairment
- Earlier identification of neurodevelopmental impairments through routine assessment in the education system following early signs of difficulty
- Greater support and information to parents and families to enable them to maintain an effective and consistent level of care to their child

Implications: *reforming justice processes*

- Assess for specific functional difficulties that might help understand the basis of offending behaviour by adopting screening tools that criminal justice professionals can use
- Develop specialist, responsive and preventative interventions for young people known to be affected by neurodevelopmental impairments
- Develop generic policing and youth justice procedures, practices and interventions that do not assume cognitive and communicative competence or understanding of procedures

“Communicating with young people with neurodisability”

(Hughes and Jensen, forthcoming... possibly?)

- Speak slowly and carefully. Use simple, everyday language. Avoid technical terms or abstract concepts. Check that the young person understands your meaning. Use the young person’s own words.
- Keep questions simple. Avoid complex sentences with multiple clauses.
- If asking the young person to recall events, support them to tell the story chronologically. Do not jump back and forward in the timeline of events.
- Give the young person time to process your question. Avoid interrupting the young person if they pause during their reply.
- Maintain eye contact and ensure body language is neutral.
- Consider the use of visual aids (such as prompt cards, photos, and dolls) and appropriately trained intermediaries (such as speech pathologists).

Contact details:

Email: n.j.hughes@bham.ac.uk

Web: bham.academia.edu/NathanHughes/

Google: nathan hughes academia