

Acquired Brain Injury Justice Network

ACQUIRED BRAIN INJURY JUSTICE NETWORK BRIEFING

OCTOBER 2025

SUMMARY

Evidence consistently suggests that around half of adults in prison have an Acquired Brain Injury (ABI). The prevalence is even higher amongst children in youth justice settings, and women in prison. ABI is an umbrella term referring to any injury to the brain which happens after birth. Common causes of ABI include infection, illness, brain tumours, oxygen deprivation (such as in non-fatal strangulation), fights, falls, sporting accidents, domestic abuse, and road traffic accidents. People with ABI are more likely to have poorer outcomes in prison and on probation, and people with ABI are also more vulnerable to mental health difficulties (including self-harm and suicidality in prisons). Evidence suggests that criminal justice staff often have a poor understanding of ABI and its consequences.

Addressing these outcomes requires improvements across three key areas: identifying brain injury (Ask), building knowledge and confidence among justice professionals (Understand), and adapting everyday practice to meet needs (Adapt).

ASK

Screening tools across the justice system must include clear, evidence-based questions on brain injury that are asked consistently.

The ABI Justice Network recommend changes to the head injury questions used in OASys (and the upcoming Assessment of Risks and Needs (ARN), which will replace it), police custody vulnerability assessments, and prison health screenings. Where screening indicates an ABI, clear processes should be established for a comprehensive assessment.

NHS England should monitor the health and wellbeing outcomes of individuals affected.

UNDERSTAND

All professionals across the justice system must receive training to recognise and respond appropriately to ABI.

The Ask Understand Adapt training module developed by Brainkind, and already freely available via the e-learning hub, should be mandated for all justice professionals.

In addition, core and refresher training should also be introduced for specialist roles such as Neurodiversity Support Managers, Health and Justice Co-ordinators, and Prison and Probation Psychology teams. Probation officers and youth offending teams should receive training to identify and take account of ABI within pre-sentencing reports, and all HMPPS staff should have access to psychoeducation resources from organisations such as Headway or Brainkind.

ADAPT

HMPPS staff must be supported to confidently adapt their practice to meet the needs of people with brain injury and engage specialist services when required.

Universal adaptations - such as allowing extra time to respond, giving information when calm, and providing written reminders - should be embedded into everyday practice.

The Brain Injury Linkworker
Service provided by Brainkind
should be expanded, and
a Community Sentence
Treatment Requirement for ABI
rehabilitation should be piloted
within the Mental Health stream.

INTRODUCTION

People with Acquired Brain Injury (ABI) are over-represented in the criminal justice system, and have poorer outcomes for rehabilitation.

However, ABI has been described as a 'silent epidemic' in the criminal justice system, because needs associated with brain injury often go unrecognised and unsupported.

What is Acquired Brain Injury?

Acquired Brain Injury is an umbrella term, which describes any injury to the brain which happens after birth. This includes injury to the brain caused by infection and illness (like meningitis or encephalitis), brain tumours, stroke, or oxygen deprivation in the brain (e.g., through non-fatal strangulation, often seen in the context of domestic abuse).

It also includes traumatic brain injuries, which happen when there is a blow to the head, face, or neck causing the brain to move in the skull. Common causes of these include violence or assaults, road traffic accidents, sporting accidents, and falls.

Over-representation in the Criminal Justice System

Evidence consistently shows a high prevalence of acquired brain injury (ABI) among people in contact with the criminal justice system. A meta-analysis of 20 studies by Shiroma et al. (2010) found that around 60% of adults in prison had experienced a brain injury. More recently, Hunter et al. (2023) combined findings from 64 studies, involving over 52,000 participants, and estimated the overall prevalence of brain injury among adults in contact with the justice system to be 46%.

"Prevalence of acquired brain amongst those in contact with the criminal justice system is reported to be 46-60% overall, up to 78% amongst women and between 50-87% amongst children under the age of 18."

Among children and young people under the age of 18, prevalence estimates are even higher. Bickle et al. (2024) reported that between 50% and 87% of children in the criminal justice system have an acquired brain injury.

For justice-involved women, the prevalence is particularly high due to the strong association between brain injury and domestic abuse victimisation. McMillan et al. (2021) estimated that 78% of women in prison had sustained a significant head injury - a figure that may be an under-estimate, as the study did not assess the prevalence of non-fatal strangulation.

Our recent economic analysis indicated that ABI costs the criminal justice system an average of £600 million per year.

Outcomes in the Criminal Justice System

Once inside the criminal justice system, outcomes for people with ABI are poor. For example, prisoners with brain injury are particularly vulnerable to poor mental health and substance use difficulties (O'Rourke et al., 2016). There are strong known associations between brain injury and suicide in the general population (Madsen et al., 2018), and emerging evidence that these associations also exist in criminal justice settings (Kent et al., 2024). Addressing brain injury in prisons could therefore help to reduce deaths in custody. Indeed, Boglo et al. (2023) found that low mood and anxiety significantly improved following intervention from the Brain Injury Linkworker service.

People with ABI also experience poorer outcomes while serving sentences and under supervision in the community. They have lower rates of successful completion of probation and higher rates of reoffending compared to those without ABI (Gorgens et al., 2021). As O'Rourke and colleagues (2018) note, this may be linked to a lack of identification of ABI and unmet support needs, as well as limited awareness among probation staff.

Inside prison, individuals with ABI are more likely to receive disciplinary charges, often for

violence or possession of contraband. Matheson and colleagues (2020) found that one-third of adults with an ABI had a serious disciplinary charge in prison, and that the risk of incurring such a charge was 39% higher for people with a history of ABI compared to those with no ABI. They suggested that this is because ABI makes it difficult for people to adjust to life in prison, and that they are not provided with enough support to adapt.

Amongst children in prison, those with ABI are significantly more likely to have a mental health problem, to have experienced psychological distress, and to have been victimised through bullying (Moore et al., 2014).

WHAT WOULD HELP?

ASK

IDENTIFICATION OF BRAIN INJURY

All assessment tools should include good quality questions on brain injury, which are asked consistently and recorded reliably

The ABI Justice Network should be formally consulted on the design of head injury questions in key assessment tools, including the OASys (or ARN) needs assessment, the police custody suite vulnerability questions, and the health induction screening in prison

NHS England should monitor compliance among commissioned health services in prison to ensure brain injury screening is completed at induction and within the first seven days of custody.

UNDERSTAND

BUILDING KNOWLEDGE EMBEDDING SUPPORT **AND AWARENESS**

All justice professionals must complete training to understand what a brain injury is and how it can affect behaviour, communication, and engagement

ADAPT

AND SPECIALIST **PROVISION**

Day to day practice should be adapted, with specialist pathways available for those who need it

The 'Ask Understand Adapt' e-learning module, developed by Brainkind and available to all staff with a justice.gov.uk email address, should be mandated across the justice system.

Core and refresher training on brain injury should be introduced for specialist roles such as Neurodiversity Support Managers, Health and Justice Co-ordinators, and Prison and Probation Psychology teams, supported through reflective practice opportunities.

HMPPS staff should have awareness of and access to psychoeducation resources available via charities such as Headway or Brainkind.

Probation officers and youth offending teams should receive **training** to identify and record acquired brain injury in pre-sentencing reports

Following training, HMPPS staff should feel confident in adapting their practice to support people with brain injury - for example, helping individuals remember medication or mealtimes, and engaging specialist brain injury services when required.

HMPPS staff should apply simple, universal adaptations to support people with brain injury for example, allowing extra time to respond, giving key information when calm, and providing written reminders.

Provision of the Brain Injury Linkworker Service, delivered by Brainkind, should be expanded to ensure consistent access across the prison estate and into the community.

A Community Sentence Treatment Requirement for ABI rehabilitation should be piloted within the Mental Health stream, with a view to wider implementation if effective.



he first challenge in addressing brain injury within the criminal justice system is identifying it. Screening tools across the system must include clear, evidence-based questions that accurately identify a history of brain injury - including non-fatal strangulation - and that are asked consistently across settings.

OASys (the Offender Assessment System), used by the probation service to assess needs in the community and in prisons, includes one question on brain injury in the 'emotional wellbeing' section: 'Were any of the following reported: History of severe head injuries, fits, periods of unconsciousness?'. In 2023, we successfully advocated for this question to not be marked as 'optional'. However, it remains insufficient to capture ABI due to the ambiguous wording of 'severe head injuries' and the absence of reference to non-fatal strangulation. The OASys is due to be replaced with the Assessment of Risks and Needs (ARN) in 2027, and it is essential that the ABI Justice Network is consulted on the design of ABI questions in this tool.

Commissioned health services in prisons are required to complete vulnerability screening questions at prisoner health inductions, in the first 7 days in prison. Where this works well, additional questions about brain injury are asked and people entering prison are identified as needing further support. However, the consistency and extent of the questions asked across different establishments is not clear. A consistent approach to this across all commissioned health services in prison would provide critical information regarding the prevalence of ABI for people in prison.

UNDERSTAND

Il justice professionals should complete training to recognise and understand what a brain injury is and the potential impact it can have. Free e-learning developed by Brainkind is already available on the MOJ mandatory training portal and can be accessed - free of charge - by all staff with a justice.gov.uk email address. This training should be mandated for all frontline justice professionals.

Understanding brain injury is essential to improving outcomes.

Evidence shows that a lack of understanding about brain injury from justice professionals can contribute to poorer outcomes, as the individuals' needs are not met (O'Rourke et al., 2018). The nature of difficulties following a brain injury are such that they can be frequently misattributed; for example, a person not following instructions or repeating questions may be misinterpreted as rudeness or non-compliance rather than recognised as the result of memory or processing difficulties following an

ABI. Training staff to have a deeper understanding of the difficulties an individual is experiencing helps to increase compassionate responses and a greater depth of empathy, which is in turn associated with less emotional burnout for staff (Gallavan & Newman, 2013). Day to day interactions could become much less frustrating for staff with this greater level of understanding.

In addition, it is essential that Neurodiversity Support Managers, Health and Justice Co-ordinators, and Prison and Probation Psychology teams receive enhanced training on ABI, as staff in these roles often need to develop support plans for individuals, or disseminate advice and information throughout staff in the settings they are working in. Currently, Brainkind offer advanced brain injury awareness training to these groups, which has been very well received and should be expanded to ensure these professionals can confidently adapt their practice to support engagement and rehabilitation. Supporting engagement is key, as Piccolino and Solberg (2014) showed that people with ABI are more likely to use prison physical and mental health services, but less likely to complete treatment.

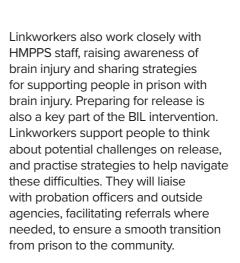
In addition, there is a gap in training and awareness for professionals at other stages in the criminal justice pathway. With the latest sentencing reforms, there is an opportunity to work on further resources and training on brain injury to help inform sentencing decisions, particularly for community sentencing which is on the rise. Charities including Brainkind and Headway could work closely with practitioners to develop resources that can support courts and probation officers to develop sentencing requirements that are appropriate for someone with a history indicative of brain injury, leading to more positive rehabilitation outcomes.



ay-to-day practice must be adapted to be universally accessible, with specialist provision available for those who need it.

Where a brain injury is identified it is essential that appropriate resources and pathways are available. Many people within justice systems may not have presented to hospital at the time of their injury or have been lost to hospital follow up. As a result, they may understand very little about their brain injury and the difficulties they experience as a result. Access to a detailed assessment of brain injury, informed support from the wider system and specialist brain injury interventions (where indicated) is likely improve long-term outcomes for people in the justice system. Effective specialist interventions include psychoeducation about brain injury and ABI focussed interventions, which have shown to have a positive impact in criminal justice populations (De Geus et al., 2021).

Another effective intervention is the Brain Injury Linkworker (BIL) Service, provided by Brainkind (Ramos et al., 2018). Linkworkers offer specialist assessment and one-to-one interventions to people in prison who are identified as having experienced a brain injury. Their work focuses on supporting the person to understand their brain injury, communicate their difficulties to others, and develop strategies to manage everyday difficulties. For example, a person in prison might frequently forget to attend mealtimes, or complete their canteen leading to frustration and disciplinary incidents. Linkworkers collaborate with people in prison to develop strategies for managing such difficulties. Reductions in incidents and improvements in engagement with the prison regime are often observed following BIL interventions (Brainkind, 2025).



As argued by Turner and Hughes (2022), in the context of children in contact with the criminal justice system, adopting universally more accessible practices is the most effective way of meeting the needs of individuals with cognitive and communication difficulties, who may or may not have their needs identified. Given the very high prevalence of all neurodisability - including ABI but also autism, ADHD, and foetal alcohol spectrum disorders - in criminal justice settings (Borschmann et al., 2020), implementing these practices across all stages of the criminal justice system would represent a major step towards fairness and accessibility.

Where reasonable adjustments are not made, people with ABI may be denied equal access to

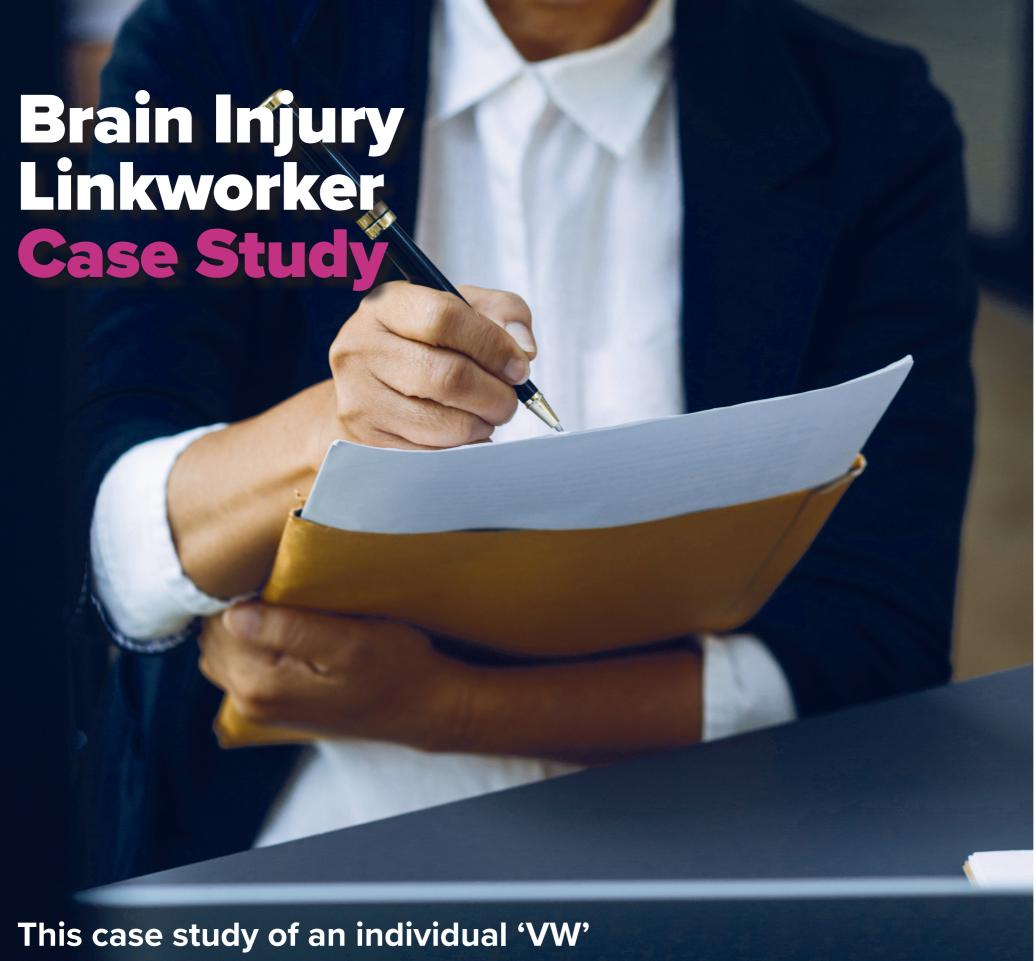


example, in a court setting, complex language may prevent an individual from understanding proceedings, providing appropriate consents, or actively participating in their trial (Brookbanks et al., 2022).

Brain injury is associated with greater mental health problems, with higher rates of depression, self-harm, and suicidality frequently observed (Howlett et al., 2022). Additionally, people with brain injury will often struggle to access standard mental health interventions without adaptation increasing the likelihood of poor engagement and failure to complete treatment. Understanding the prevalence and impact of brain injury in this context is therefore key to 'unlocking' more effective mental health interventions for people in contact with the criminal justice system.

Based on the evidence emerging in this area, future developments could include the piloting of a Mental **Health Treatment Requirement** (MHTR) adapted for ABI as part of the wider suite of Community Sentence Treatment Requirements. The aim would be to reduce reoffending through integrating specialist neurobehavioral support into the tailored support offered to individual through these existing pathways.





This case study of an individual 'VW' illustrates a successful intervention through the Brain Injury Linkworker Service, and is taken from Ramos et al. (2018).

W left school with no qualifications but attended a college where he trained as a bricklayer. He lived independently in a rented flat and was unemployed. Prior to his head injury, he had a diagnosis of attention deficit hyperactivity disorder (ADHD) and was prescribed methylphenidate. He reported a forensic history prior to his injury, including incidents of criminal damage, such as kicking fences. In 2013, VW was remanded in custody in relation to a violent offence. On remand, he completed the Brain Injury Screening Index (BISI) and was identified as having sustained a Traumatic Brain Injury 2 years prior as a result of an alleged assault. Examination of clinical records revealed that VW had been admitted to hospital in 2010 following an unprovoked assault and that he had received 4 months of in-patient rehabilitation before being discharged to his mother's care. On assessment, he was found to have below average memory, often forgetting names or appointments. He frequently misunderstood information that was given to him. He had a left-sided weakness rendering him unable to dress independently or to carry a tray. His cell mate helped him with these activities.

The Linkworker worked with VW for 6 months, helping him to use strategies to enable him to interpret correctly information given to him. He was encouraged to ask others to explain what they meant when he did not understand and to keep a journal of conversations (for example, with his solicitor, family, nurses, and prison staff). The Linkworker advised family members and professionals to provide information in small chunks, to be concrete, to ask VW to write information down, to confirm his understanding, and to explain further if he had misinterpreted information. The Linkworker referred VW to the Prison Physiotherapy Team, but due to his specific needs, they were unable to help. The Linkworker then liaised with the Community physiotherapy Team to ensure VW received a new splint and threemonthly botulinum toxin injections for his left arm.

Before VW's sentencing hearing, the Linkworker contacted the Community Social Work Team and the Specialist Continuing Care Team to present VW's needs and to request funding for intensive brain injury rehabilitation. The Linkworker arranged for VW to be assessed by the consultant neuropsychologist at the local neurobehavioural rehabilitation centre, and this assessment of VW's needs and recommendations was presented to the Court. VW was given an 18-month suspended sentence on condition that he received intensive rehabilitation at the local neurobehavioural brain injury rehabilitation centre. The Judge stated that he believed VW would not receive the support he required if he were returned to prison.

At the rehabilitation centre, VW made good progress and was able to move on to a step-down, transitional living facility affiliated to the rehabilitation centre. There. he was responsible for making all meals, completing domestic activities, maintaining his own safety within the independent environment, and structuring his daily schedule. He joined a local gym and enjoyed building up his fitness and strength. He started learning to drive an adapted car, and served on an interviewing committee to select candidates for Linkworker posts. After 6 months of intensive support, VW was able to live independently in a flat with minimal initial support from a physiotherapist, social worker, the Brainkind Community Services, a probation officer, and his family.

Currently, VW continues to live independently, without formal support, and is able to dress, cook, and clean for himself and takes responsibility for his own finances. He has learned to use strategies to overcome his memory difficulties, he has a girlfriend, gained his driving licence, and his confidence in social situations has much improved. He sees his probation officer monthly and has help from his mother to do his shopping but no longer receives any other support.

REFERENCES

Bickle, A., Al Shammaa, T., Musa, E., Arya, P., & Khalifa, N. (2024). Traumatic brain injury in criminal justice systems: a systematic literature review. *The Journal of Forensic Psychiatry & Psychology,* 1-23. https://doi.org/10.1080/14789949.2024.2313451

Boglo, E., Jones, R., da Silva Ramos, S., & Burns, A. (2023). A service evaluation on the impact of brain injury linkworker (BIL) interventions on the anxiety and depression of men in prison and on probation. *J Men Health*, 19(11), 41-50.

Borschmann, R., Janca, E., Carter, A., Willoughby, M., Hughes, N., Snow, K., Stockings, E., Hill, N. T., Hocking, J., & Love, A. (2020). The health of adolescents in detention: a global scoping review. *The Lancet Public Health*, 5(2), e114-e126.

Brainkind. (2025). *Tailored Support Improves Outcomes for People with Acquired Brain Injuries in the Criminal Justice System*. https://brainkind.org/news/tailored-support-improves-outcomes-for-people-with-acquired-brain-injuries-in-the-criminal-justice-system/

Brookbanks, W., McGinn, V., & Chu, J. T. W. (2022). Unfitness to stand trial and fetal alcohol spectrum disorder: Understanding and responding to FASD within the criminal justice system in New Zealand. *Behav Sci Law*, 40(1), 159-169. https://doi.org/10.1002/bsl.2555

De Geus, E. Q., Milders, M. V., Van Horn, J. E., Jonker, F. A., Fassaert, T., Hutten, J. C., Kuipers, F., Grimbergen, C., & Noordermeer, S. D. (2021). Acquired brain injury and interventions in the offender population: a systematic review. *Frontiers in psychiatry*, 12, 658328.

Gallavan, D. B., & Newman, J. L. (2013). Predictors of burnout among correctional mental health professionals. *Psychological services*, 10(1), 115.

Gorgens, K. A., Meyer, L., Dettmer, J., Standeven, M., Goodwin, E., Marchi, C., & Lyman, H. (2021). Traumatic brain injury in community corrections: Prevalence and differences in compliance and long-term outcomes among men and women on probation. *Criminal Justice and Behavior*, 48(12), 1679-1693.

Howlett, J. R., Nelson, L. D., & Stein, M. B. (2022). Mental Health Consequences of Traumatic Brain Injury. *Biol Psychiatry*, 91(5), 413-420. https://doi.org/10.1016/j.biopsych.2021.09.024

Hughes, N., Sheahan, F., Williams, W. H., & Chitsabesan, P. (2020). Ensuring the rights of children with neurodevelopmental disabilities within child justice systems. *The Lancet Child & Adolescent Health*, 4(2), 163-166.

Hunter, S., Kois, L. E., Peck, A. T., Elbogen, E. B., & LaDuke, C. (2023). The prevalence of traumatic brain injury (TBI) among people impacted by the criminal legal system: An updated meta-analysis and subgroup analyses. *Law and human behavior*, 47(5), 539.

Kent, H., Kirby, A., Leckie, G., Cornish, R., Hogarth, L., & Williams, W. H. (2023). Looked after children in prison as adults: life adversity and neurodisability. *International Journal of Prisoner Health*, 19(4), 512-523.

Kent, H., Magner-Parsons, B., Leckie, G., Dulgar, T., Lusiandari, A., Hogarth, L., Williams, H., & Kirby, A. (2024). Profiles of vulnerability for suicide and self-harm in UK prisoners: Neurodisability, mood disturbance, substance use, and bullying. *PLoS One*, 19(1), e0296078.

Madsen, T., Erlangsen, A., Orlovska, S., Mofaddy, R., Nordentoft, M., & Benros, M. E. (2018). Association between traumatic brain injury and risk of suicide. *Jama*, *320*(6), 580-588.

Matheson, F. I., McIsaac, K. E., Fung, K., Stewart, L. A., Wilton, G., Keown, L. A., Nathens, A. B., Colantonio, A., & Moineddin, R. (2020). Association between traumatic brain injury and prison charges: a population-based cohort study. *Brain Injury, 34*(6), 757-765. https://doi.org/10.1080/02699052.2020.1753114

McMillan, T. M., Aslam, H., Crowe, E., Seddon, E., & Barry, S. J. (2021). Associations between significant head

injury and persisting disability and violent crime in women in prison in Scotland, UK: a cross-sectional study. *The Lancet Psychiatry*, 8(6), 512-520.

Moore, E., Indig, D., & Haysom, L. (2014). Traumatic brain injury, mental health, substance use, and offending among incarcerated young people. *J Head Trauma Rehabil*, 29(3), 239-247. https://doi.org/10.1097/HTR.0b013e31828f9876

O'Rourke, C., Linden, M. A., & Lohan, M. (2018). Misconceptions about traumatic brain injury among probation services. *Disability and rehabilitation*, 40(10), 1119-1126.

O'Rourke, C., Linden, M. A., Lohan, M., & Bates-Gaston, J. (2016). Traumatic brain injury and co-occurring problems in prison populations: A systematic review. *Brain Injury*, 30(7), 839-854.

Piccolino, A. L., & Solberg, K. B. (2014). The impact of traumatic brain injury on prison health services and offender management. *Journal of correctional health care*, 20(3), 203-212.

Ramos, S. D., Oddy, M., Liddement, J., & Fortescue, D. (2018). Brain injury and offending: the development and field testing of a linkworker intervention. *International journal of offender therapy and comparative criminology, 62*(7), 1854-1868.

Shiroma, E. J., Ferguson, P. L., & Pickelsimer, E. E. (2010). Prevalence of traumatic brain injury in an offender population: A meta-analysis. *Journal of correctional health care*, 16(2), 147-159.

Turner, K., & Hughes, N. (2022). Supporting young people's cognition and communication in the courtroom: A scoping review of current practices. *Criminal Behaviour and Mental Health, 32*(3), 175-196.



For more information about the ABI Justice

Network's resources and links to other

ABI organisations, please scan the QR code below.



