



# MAKING THE LINK

Female Offending  
and Brain Injury

# MAKING THE LINK

In the first study of its kind, The Disabilities Trust provided a dedicated service to support the identification and rehabilitation of female offenders with a history of brain injury, in HMP/YOI Drake Hall.

Comprising staff training, the screening of prisoners and provision of 1:1 support; through a Brain Injury Linkworker (BIL), the service took place between 2016 - 2018. This report includes the findings from an independent evaluation of the service conducted by Royal Holloway, University of London, prevalence data collected by the Brain Injury Linkworker and service evaluation statistics. The Disabilities Trust would like to thank all the women who shared their experiences with us, the staff at HMP/YOI Drake Hall and our funders, the Barrow Cadbury Trust and The Pilgrim Trust.

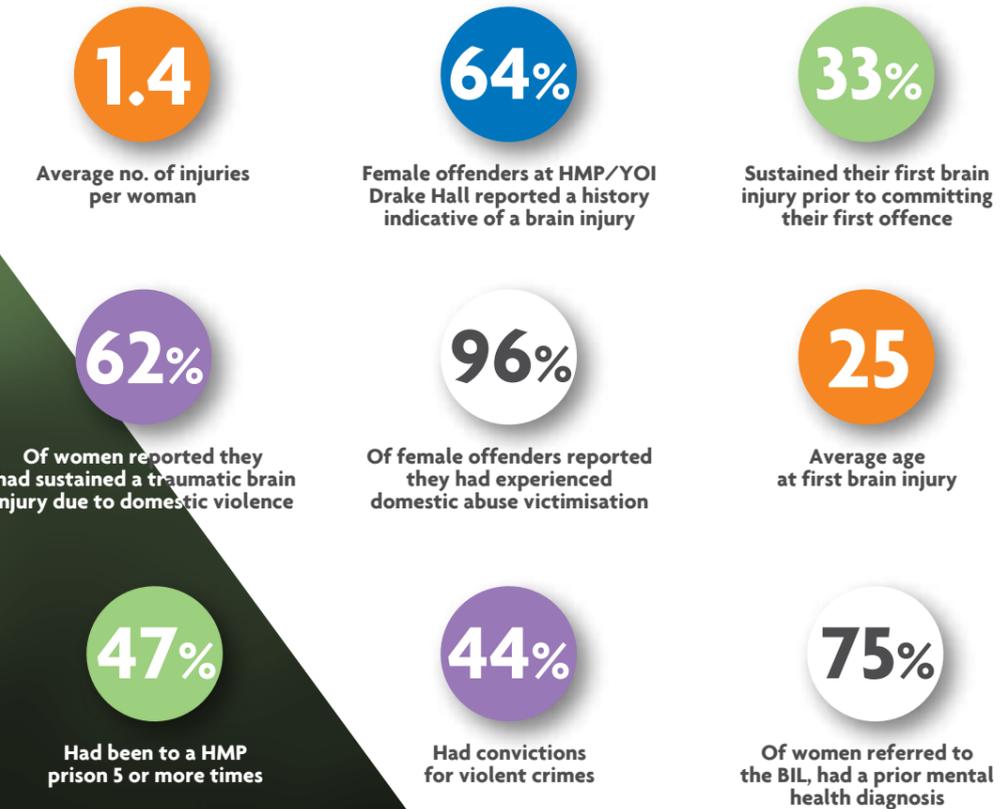


## THE DISABILITIES TRUST CALLS FOR:

- The inclusion of brain injury screening as a routine part of the induction health assessment on entry to prison or probation services
- All prison and probation staff to receive basic brain injury awareness training
- The provision of brain injury support; similar to the Brain Injury Linkworker, in prisons and probation settings
- Assurance that brain injury support would be aligned with gender-informed practice
- Further research to be conducted to examine the potential effect of brain injury on re-offending behaviour, how effective neurorehabilitation can contribute towards the reduction of recidivism and the role of early intervention approaches.

BRAIN INJURIES CAN CAUSE A WIDE RANGE OF COGNITIVE, BEHAVIOURAL AND EMOTIONAL DIFFICULTIES, INCLUDING: LOSS OF MEMORY, CONCENTRATION, CONFUSION AND INCREASED AGGRESSION.

## KEY FINDINGS FROM THE STUDY:



Despite being a minority within the criminal justice system (CJS), women are some of the most vulnerable<sup>[1]</sup>.

In addition, a significant number may struggle with the consequences of undiagnosed brain injuries, which cause a wide range of cognitive, behavioural and emotional difficulties that affect them every day. Women with undiagnosed brain injuries, without the provision of specialised and informed support, may struggle to engage in rehabilitation programmes necessary to reduce recidivism, resulting in a higher risk of reoffending.

The Disabilities Trust recognises that many of the milder symptoms of brain injuries can be 'masked', but nevertheless do cause behaviours that can be perceived as 'challenging' and 'difficult' by the CJS.

For example, a female offender with a brain injury might:

- Frequently miss appointments - seen as the individual being avoidant or irresponsible, this may be due to poor memory as a result of a brain injury
- Repeating the same thing over and over again - potentially seen as the individual being rude, this may be due to poor self-awareness
- Say they will do something and yet never get around to it - this may be seen as the individual being manipulative or lazy when this may in fact be due to poor initiation<sup>+</sup> as caused by a brain injury.

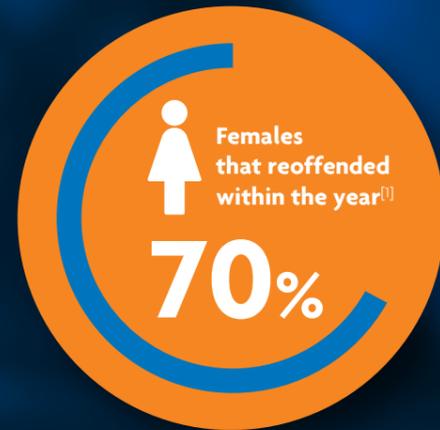
<sup>+</sup>Poor initiation is one of the possible consequences of brain injury, wherein a person may experience difficulty starting tasks unless prompted or assisted.

## FEMALE OFFENDERS ARE SOME OF THE MOST VULNERABLE IN THE CRIMINAL JUSTICE SYSTEM<sup>[1]</sup>.

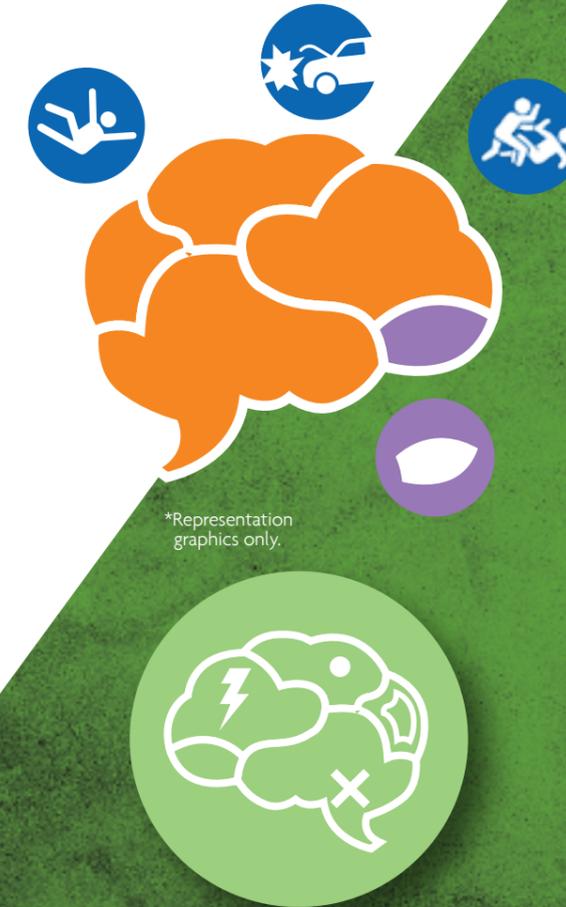
### OFFENDING BEHAVIOURS

Previous research has shown that a significant number of female offenders experience chaotic lifestyles<sup>[1]</sup>; with histories of poor mental health, alcohol and drug misuse, approximately half report having been victims of physical, sexual or domestic abuse<sup>[2]</sup>. These factors are important in understanding an individual's vulnerability to engaging in offending behaviour.

Recidivism rates are known to be high for those women who receive short custodial sentences (compared to community orders); 70% of women released from April to June in 2016, following a short custodial sentence (of less than 12 months) re-offended within one year<sup>[1]</sup>. Female offending is already a challenging and complex setting and very little work has been done to date to explore the hidden impact of brain injuries, which further exacerbates offending behaviour.



## WHAT ARE BRAIN INJURIES?



BRAIN INJURIES (BI) ARE ACQUIRED EITHER BY SUSTAINING A BLOW TO THE HEAD (TRAUMATIC BRAIN INJURIES OR TBI) OR BY HAVING AN ILLNESS WHICH CAUSES INJURY TO THE BRAIN.

#### Causes of TBI include:

- Road Traffic Accidents
- Assaults
- Falls

#### Other causes of brain injury include:

- Encephalitis
- Strokes (cerebrovascular accident or CVA), including brain haemorrhage
- Brain tumour
- Loss of oxygen to the brain (anoxia), often caused by cardiac arrest

Research has shown that Traumatic Brain Injuries (TBI), in particular those to the front of the head (frontal lobe), can cause a wide range of cognitive and behavioural problems, including:

- Poor memory (e.g. frequently missing appointments)
- Lack of concentration, inability to multi-task (becoming distracted during activities and restless)
- Slowness to process information or to make decisions (talking about the same thing over and over)
- Poor impulse control (making inappropriate remarks)
- Emotion dysregulation (inability to control anger, aggression)
- Problems sleeping
- Anxiety and depression
- Lack of insight, so the person doesn't realise they have a problem

## WHO ARE THE WOMEN WHO OFFEND?

Despite only representing 5% of the prison population, females make up 1/4 of first-time offenders<sup>[3]</sup>



The rate of self-harm in female offenders is nearly 5x higher than males<sup>[1]</sup>



Nearly 2/5 of women in prison said their offending had been driven by the 'need to support their children'<sup>[2]</sup>



2/3rds of imprisoned women are also mothers to children younger than 18 years<sup>[5]</sup>



Almost 1/2 of female offenders have attempted suicide and between 1/2 and 2/3rds have depression.<sup>[2]</sup>



## BRAIN INJURY PREVALENCE AMONGST FEMALE OFFENDERS

Compared to male offenders, there is limited research investigating the prevalence and impact of brain injuries amongst female offenders. Within this limited research, estimates of the prevalence of brain injury vary significantly from 6% to 88%<sup>[5]</sup>. The Disabilities Trust examined the prevalence of brain injury within HMP/YOI Drake Hall and found that of the 173 female offenders screened, 64% reported a history indicative of a brain injury and of those, 96% reported a history indicative of a traumatic brain injury\*.



HMP/YOI Drake Hall is a closed female prison, located in Eccleshall (Stafford) with an operational capacity of 340.

“THERE IS LIMITED RESEARCH INVESTIGATING THE PREVALENCE OF BRAIN INJURY AMONGST FEMALE OFFENDERS.”

\*95% CI [56%-70%]

## THE BRAIN INJURY LINKWORKER SERVICE AT HMP/YOI DRAKE HALL

Despite the findings that 64% of women at HMP/YOI Drake Hall reported a history indicative of a brain injury, there is currently no mandatory routine screening for brain injury, basic awareness training for staff or dedicated brain injury support within UK prisons. In the first study of its kind, The Disabilities Trust identified and supported women with a history of brain injury at HMP/YOI Drake Hall with the provision of a dedicated Brain Injury Linkworker (BIL). Within this study, women with a history of brain injury were identified using the Brain Injury Screening Index (BISI)\*, staff received basic brain injury awareness training and the BIL provided specialised and bespoke support, tailored to women's individual needs and goals.

\*The Brain Injury Screening Index (BISI®) is a screening tool developed and validated by The Disabilities Trust to help identify people with a history of brain injury.

\*\*Executive functioning, also known as executive control or cognitive control, refers to the mental processes involved in day-to-day tasks, such as: planning, flexible thinking, multi-tasking, self-awareness, learning new rules, making decisions and motivation.

“I WAS BECOMING VERY ANXIOUS ABOUT THESE PROBLEMS THAT I WAS SEEING ...NOT REMEMBERING THE NAMES OF THE PEOPLE I'D SPOKEN TO OR NOT BEING ABLE TO EXPRESS MYSELF PROPERLY 'CAUSE I'M FORGETTING WHAT I'M SAYING.” (Sarah<sup>[6]</sup>)

“WHEN I WAS COUNTING SCREWS UP IN [WORK AREA], I HAD TO COUNT THEM LIKE THREE TIMES... IT GETS ME VERY STRESSED CAUSE LIKE WHEN PEOPLE TELL ME SAY 'OH HELEN, GO TELL THIS PERSON' TWO WEEKS LATER I'M LIKE... FORGETTING IT...” (Helen<sup>[6]</sup>)

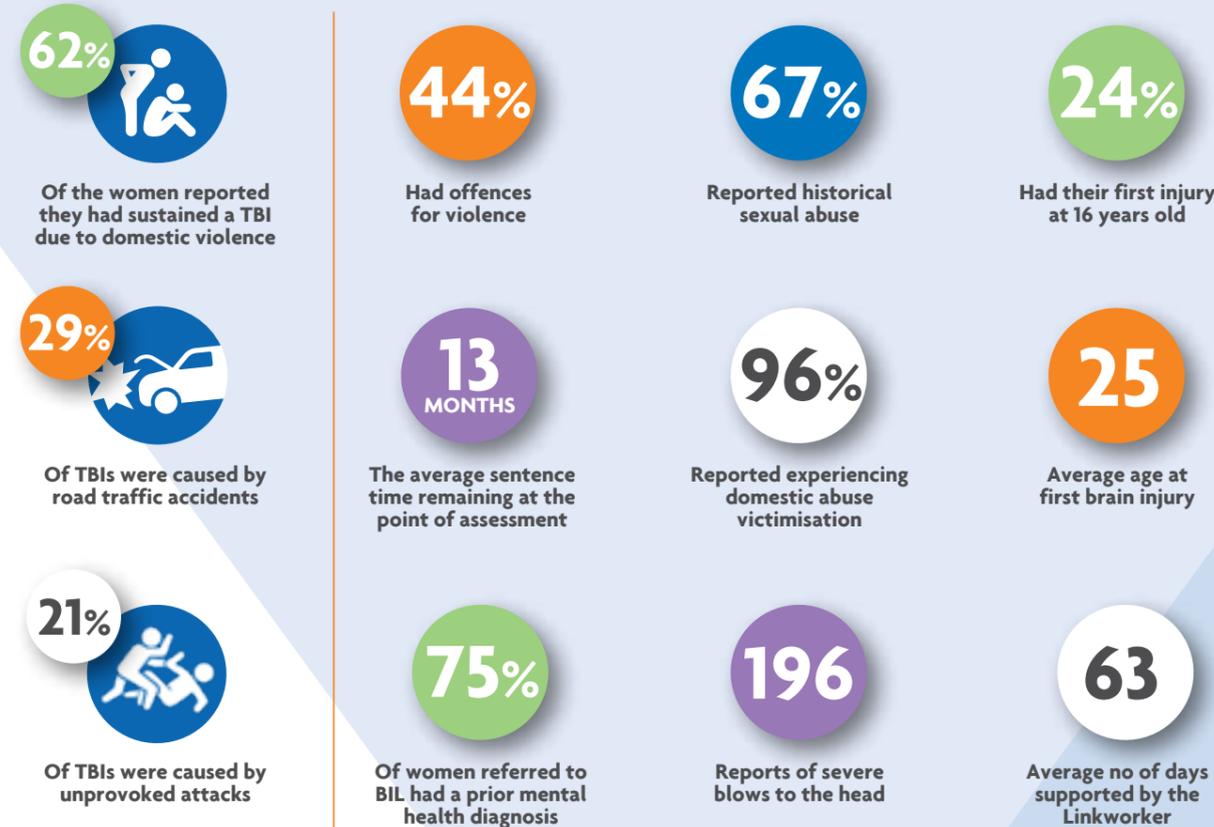
Following the identification of an individual with a brain injury, personalised and therapeutic interventions to manage the health, cognitive, behavioural and emotional consequences of brain injury were offered by a BIL. The core team comprised of a Consultant Clinical Neuropsychologist, a Project Manager and a BIL who provided one-to-one support. The interventions included:

- Education about brain injury and its effects
- Cognitive strategies involving functional compensatory aids (e.g. a diary to support memory difficulties and structured planners to support problems with executive functioning\*\*)
- Behavioural management plans and guidelines
- Support provided with psychological approaches to better manage emotional regulation

As part of a wider remit, the BIL also provided information and supported referrals to other services for further assessment or treatment.

## DURING THE DELIVERY OF THE BRAIN INJURY LINKWORKER SERVICE (FROM 2016 – 2018) WE FOUND:

OF 100 WOMEN WHO REPORTED 137 INCIDENTS OF TBI:



“I WAS IN A [RELATIONSHIP INVOLVING] DOMESTIC ABUSE FOR FOUR YEARS. HE BEAT ME BAD, BAD BAD... MY HEAD'S GOT... IT'S LIKE A PATCHWORK QUILT UNDER ALL THERE - AND I WAS JUST KNOCKED OUT UNCONSCIOUS LOADS OF TIMES, SO MANY TIMES...” (Wendy<sup>[6]</sup>)

Incidents of severe anxiety dropped from:



Severe and moderately severe depression dropped from:



## THE LINKWORKER DIFFERENCE

The findings of the Royal Holloway, University London, independent evaluation<sup>[7]</sup> detail how the support of the BIL improved the women's mood and self esteem, as well as enhancing their confidence and positivity. The evaluation also found that the service seemed to support women's engagement in their sentence plan, offered practical guidance for staff working with women with a brain injury, and alleviated pressure from other service provisions (e.g. mental health).

“SHE'S CHANGED MY LIFE IN HERE. THIS SENTENCE HAS BEEN A LOT EASIER CAUSE OF [THE LINKWORKER] ...I WAS SEEING HER... ONCE A WEEK AND IT WAS LIKE MY LIFELINE. SOMETIMES I COULDN'T WAIT TO SEE HER ...YOU'VE JUST A WAY OF TALKING TO SOMEONE THAT BELIEVES YOU FOR STARTERS AND SOMEONE THAT WANTS TO LISTEN TO YOU CAUSE YOU DON'T GET THAT IN PRISON YOU TALK TO AN OFFICER WHO THINK YOU'RE JUST A NUMBER, BUT SHE WAS MY LIFELINE ...BY THE TIME IT GOT TO ME SEEING HER I WAS A WRECK, BUT THEN AN HOUR WITH HER AND SHE'D SORT OF BRINGS ME BACK DOWN ...EVERYTIME I SEE HER NOW, I'M JUST ALWAYS SO PLEASED.” (Wendy<sup>[6]</sup>)

“SHE SHOWED ME WAYS OF REMEMBERING THINGS LIKE WRITING THINGS DOWN, HAVING A NOTEPAD ALL THE TIME...” (Eve<sup>[6]</sup>)

“I DID GET ALOT OF HELP AND I DID START FEELING BETTER ...AND I WAS MANAGING TO COPE A BIT MORE ...I FELT MORE CONFIDENT AFTER SEEING HER, AND MORE POSITIVE.” (Sarah<sup>[6]</sup>)

“SHE HELPED ME TO CREATE A WEEKLY CHART TO REMEMBER MY APPOINTMENTS AND WHEN TO CALL HOME TO SPEAK TO MY MUM...” (Olivia<sup>[6]</sup>)

Prison staff at HMP/YOI Drake Hall were provided with basic brain injury awareness training to better understand the cognitive, behavioural and emotional consequences of brain injury and how it can affect those women affected. Parts of this training included the BIL providing simple and practical advice, to better engage and support those individuals affected, such as reducing the amount of information being provided in any one moment or holding a conversation in an environment without too many distractions. These strategies are effective in helping women to better understand and remember what is being said. In addition, a range of compensatory strategies were recommended, such as the use of diaries providing written reminders to assist with memory problems.

“[THE LINKWORKER] GAVE ME ...A LETTER FOR WHAT SHE SENT AROUND TO ALL THE ...STAFF ...THEY ALL KNOW NOW SO, THEY'RE LOADS BETTER WITH ME.” (Daisy<sup>[6]</sup>)

Although basic brain injury training was well received, staff did report the need for more in-depth training:

“I BELIEVE SO BECAUSE IT ENLIGHTENS, WE'RE NOT EXPERTS IN ANY OF THIS ...WE'RE NOT MEDICALLY TRAINED...WHEREAS [THE LINKWORKER] KNOWS WHAT TO LOOK FOR. WE DON'T. WE HAVE MENTAL AWARENESS, WE HAVE DEMENTIA AWARENESS, WE HAVE TRAUMA INFORMED AWARENESS, WE HAVE BRAIN INJURY 'AWARENESS', WE HAVE LOTS OF AWARENESSES'S' – BUT WE'RE NOT TRAINED IN ANY OF THEM AND THAT MAKES IT DIFFICULT TO IDENTIFY UNLESS THE LADY TELLS US.” (Hannah<sup>[6]</sup>)

## MALE OFFENDERS AND TRAUMATIC BRAIN INJURY



**% of males at HMP Leeds that reported a history of traumatic brain injury.**

The Disabilities Trust has previously conducted research with male offenders, directly working with adult male prisoners and young offenders in HMP Leeds, HMP/YOI Wetherby and HMP/YOI Hindley between 2012 and 2016.

In the largest study in the UK examining the prevalence of TBI in adult male prisoners, The Disabilities Trust found that 47% of 613 male prisoners screened at HMP Leeds reported a significant history indicative of a brain injury <sup>[8]</sup>. In a second study, the neuropsychological test results of 139 prisoners with a history of brain injury were compared with a group of 50 prisoners without a history of brain injury.

Those prisoners with a history of brain injury showed higher rates of:

- aggression
- apathy
- memory problems
- disinhibition and higher levels of anxiety and depression
- alongside their reduced executive functioning

These studies have further demonstrated the significant prevalence of brain injury within the CJS and the resulting emotional, behavioural and

cognitive sequelae of such neuro-disabilities. These deficits may impact upon an individual's ability to engage in offence-related rehabilitation programmes and as such contribute to patterns of re-offending.



**Male prisoners reported a TBI before their first offence**



**Had experience of more than 1 TBI**



**Had experience of more than 5 TBI's**



**Average age for the onset of first brain injury**



**Males been in prison on 5 or more occasions**



**Reported to have committed a violent crime**

## CONCLUSIONS

Female offenders are some of the most vulnerable individuals within the criminal justice system. Compared to male prisoners, they are twice as likely to report anxiety and depression, with heightened incidences of self-harm, histories of domestic violence and abuse. Within this already disadvantaged group, the need to proactively identify and support women who have a history of brain injury becomes evident. Despite this, awareness and treatment for brain injury is not routinely available within UK prisons and female offenders continue to struggle with the often-unknown emotional, behaviour and cognitive consequences of brain injury, all of which may contribute to reoffending behaviour and difficulty with engaging in offence-focused rehabilitation programmes.

Within the Female Offenders Strategy (2018), the Government emphasised the need for specialised, gender-informed services to assist in supporting women to lead fulfilling lives outside of prison. The BIL service aims to promote the physical and mental health well-being of prisoners across the CJS and to ensure the needs of those with brain injuries are recognised and their voices heard.

“I THINK IT DEFINITELY RAISED AWARENESS... THAT THERE ARE WOMEN IN HERE WITH BRAIN INJURIES ...NOBODY KNEW ABOUT IT BEFORE ...NOBODY KNEW WHAT THEY MEANT FOR A WOMAN AND WHAT KIND OF THINGS THEY NEED, SO I DEFINITELY THINK THAT HAVING SOMEBODY IN HERE HELPED US ALOT AND PUT AN AWARENESS OUT THERE REALLY.” (Jennifer<sup>[6]</sup>)

## REFERENCES

- [1] Ministry of Justice. (2018). *Female Offender Strategy*. Available at: <https://www.gov.uk/government/publications/female-offender-strategy>
- [2] The Prison Reform Trust. (2018). *Leading change: the role of local authorities in supporting women with multiple needs*. Available at: <http://www.prisonreformtrust.org.uk/Publications>
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- [4] The Prison Reform Trust. (2015). *Sentencing of mothers: improving the sentencing process and outcomes for women with dependent children*. Available at: <http://www.prisonreformtrust.org.uk/Publications>
- [5] Epstein, R. (2012). Mothers in prison: *The sentencing of mothers and the rights of the child*. Coventry Law Journal.
- [6] The names of the women featured in the quotes in this document, are not their real names and are taken from the independent evaluation conducted by Royal Holloway, University of London.
- [7] Glorney, E., Jablonska, A., Wright, S., Meek, R., Hardwick, N., & Williams, H. W. (2018). *Brain injury linkworker service evaluation study: technical report*. Royal Holloway, University of London (as the publisher).
- [8] The Disabilities Trust. (2014). *The association between neuropsychological performance and self-reported traumatic brain injury in a sample of adult male prisoners in the UK*. Available at: [https://www.thedtgroup.org/media/4061/prison\\_research\\_briefing\\_paper\\_16022015.pdf](https://www.thedtgroup.org/media/4061/prison_research_briefing_paper_16022015.pdf)



The Disabilities Trust is a leading national charity, providing innovative services, rehabilitation and support solutions for people with profound physical impairments, acquired brain injury and learning disabilities as well as children and adults with autism. The Foundation is the division within the Trust that aims to make a difference to the lives of those who are unable to access our core services. The Foundation enables the Trust to share its expertise and knowledge through research and the piloting of new ideas. Our project work is designed to initiate and enhance good practice and direct or influence policy within our areas of expertise - brain injury, learning disabilities, autism and physical disabilities.

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