

# Effects of Traumatic Brain Injury in Offenders: Pre and Post Offense

Molly F. Kapel, B.S. & Kristine M. Jacquin, Ph.D.  
Fielding Graduate University



## ABSTRACT

- Traumatic Brain Injury (TBI), a leading cause of mortality among youth and children, is often considered a silent epidemic due to the nature of post-injury physical, emotional, and psychological detriments going unnoticed by professionals in both health care and social roles (Rusnak, 2013).
- A TBI is a blow to the brain from a force such as a fall, automobile accident or assault (Bigler, 2007).
- Traumatic Brain Injury may increase the risk of crime due to development of personality issues and cognitive deficits (Beaver et al., 2017).
- Traumatic Brain Injury both pre and post-offense leads to higher proclivity rates towards violence, more frequent and subsequent convictions, and earlier age of incarceration. Crucial areas of the brain responsible for adequate functioning in a social setting such as empathy and impulse control are compromised in those with a lifetime prevalence of TBI (Williams et al., 2018).



## PRE-OFFENSE

- Neuropsychological effects from a TBI often manifest in executive functioning disorders (e.g. attention, concentration, planning, and poor memory). Emotional regulation can also be impacted, providing the victim with higher levels of impulsiveness and poor social judgment (Wall et al., 2006).
- Harm occurring in the frontal lobe can lead to decreased judgement in making decisions, inability to control behavior in social settings, and increased risk of impulsive aggression (Brower et al., 2001).
- Theories regarding antisocial behavior argue difficult temperaments and neuropsychological deficits are a contributing factor in an individual's pathway to crime (Hirschi et al., 2000; Jolliffe et al., 2004; Moffett et al., 2002).

## POST-OFFENSE

- In youth offender populations, TBI is noted to be a prominent factor in reconviction rates, apathetic response to treatments and infractions while in custody (Williams et al., 2010).
- Williams and colleagues (2010) interviewed 197 young offenders. From this population, 60% gave an account of a head injury, with 46% of that sample stating there had been a loss of consciousness (Williams et al., 2010).
- TBI was linked to a greater prevalence of cannabis use, increased mental health issues, and higher rates of subsequent convictions in this sample (Davies et al., 2012).

## POST-OFFENSE CONT.

- Occurrence of Traumatic Brain Injury was assessed in a sample of convicted adults measured against a community sample. Research indicated that the incarcerated adult sample demonstrated TBI at a significantly higher rate than the general population (Farrer et al., 2011).
- Perkes and colleagues (2011) measured 200 incarcerated men versus 200 non-convicted men with a similar age and background. The research revealed that TBI was more common among the prisoner sample with 82% stating a history of injury.
- The offender sample demonstrated increased rates of neuropsychological deficits (e.g., problems with memory, anger, and headaches) which demonstrate physical brain changes and decreased function resulting from the TBI (Perkes et al., 2011).

## IMPLICATIONS

- Williams and colleagues (2018) suggested that assessment and management of Traumatic Brain Injury may help to create a reduction in crime and show more active engagement from offenders in psychotherapeutic forensic rehabilitation. Four measures were determined to be useful for a reduction in criminal activity.
- Increase neurorehabilitation after a TBI has occurred to help offset trajectory towards criminal activity (León-Carrión, 2003).

## IMPLICATIONS CONT.

- Increase communication between school systems, mental health services, emergency departments, and general practitioners, leading to proper management of TBI and early identification in the youth population. Increased communication would result in reduction of social isolation and school exclusion (Williams et al., 2018).
  - Routine TBI screening and the opportunity for treatment should be administered when an individual enters the judicial system, no matter the level (Williams et al., 2018).
  - Provision of brain injury screening and assessment to current prisoners should be provided to support those with TBI as well as training and support for prison staff members (Chitsabesan et al., 2015).
- The action of the previously stated initiatives would enhance forensic rehabilitation and encourage interventions for behavioral and cognitive issues developing from Traumatic Brain Injury.

## CONCLUSION

Neuropsychological deficits from a TBI increase the number of prison infractions, reveal lower gains in treatment, and higher reconviction rates for offenders. After release from prison, offenders can still suffer from a higher proclivity towards substance abuse, and ongoing mental-health concerns (Williams et al., 2018). Bringing to light the neuropsychological dysfunctions caused by Traumatic Brain Injury offers a means not only to reduce crime rates, but to improve the lives and well-being of offenders in need of treatment (Williams et al., 2018).