

Introduction

- ❖ There is a need for better understanding of the association between pre-existing Traumatic Brain Injury (TBI) and future offending and aggression.
- ❖ This would allow for better determination of the causality of offenses perpetrated by defendants suffering from TBI, and aid in the public utility of TBI treatment for crime prevention.

TBI and Offending

- ❖ Nearly two-thirds of young offenders (Shiroma et al., 2010) and one-third of juvenile offenders have TBI (Farrer et al., 2012). TBI is pervasive among both male and female offender populations (Durand et al., 2017).
- ❖ TBI is associated with pre and post offending behavior (Durand et al., 2017; Shiroma et al., 2010; Vaughn et al., 2014).
- ❖ For individuals with pre-existing aggressive behavior or certain temperamental dispositions, successive TBIs can lead to increased violence (Williams et al., 2010), and frequency of aggressive behavior (Coccaro & Mosti, 2018).
- ❖ TBI is also linked to higher impulsivity and negative emotionality, which is associated with offending (Vaughn et al., 2014).

Gaps in Current Research

- ❖ Prior research has not necessarily controlled for other pre-existing conditions associated with future offending and aggressive behavior, independent of pre-existing TBI.
- ❖ It is not clear if pre-existing TBI alone is predictive of future offending or aggressive behavior.

Discussion

Other Related Causes of Offending Behavior

- ❖ Guberman et al. (2018) demonstrated that when controlling for family social status and childhood predictors of criminality, there is not a causal relationship between prior juvenile TBI and future offending in young adults.
- ❖ Prior research indicated that TBI occurring prior to age 18 was not associated with greater likelihood of offending in young adults, after accounting for childhood predictors of criminality and family social status (Guberman, 2018).
- ❖ There are other conditions that influence likelihood of future offending, or TBI occurrence. Individuals who have birth complications and experienced disruptive bonding with a caregiver are three times as probable to become offenders who are violent (Raine et al., 1994).

What Comes First?

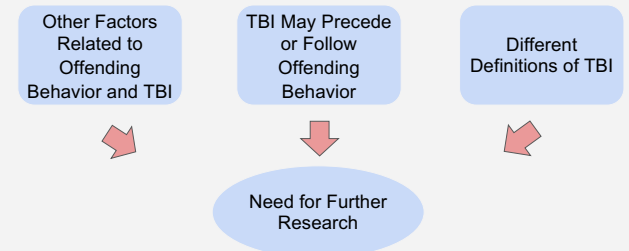
- ❖ It is not always clear whether offending or TBI occur first. TBI occurs more often in individuals with pre-existing impulsive temperament and negative emotionality, which is associated with a higher exposure to violent encounters (Vaughn et al., 2014)

Conflicting Definitions of TBI

- ❖ Different definitions and ranges of severity of TBI exist, and their relationship to offending needs to be better understood.
- ❖ There are multiple definitions of what constitutes a TBI (Frost et al., 2013; Shiroma et al., 2010).

Future Research

- ❖ Future research should explore the relationship between pre-existing TBI and future offending and aggression while controlling for factors that are also known to be associated with either offending or aggression or both.
- ❖ These factors include childhood disruptors and predictors of crime and family social status (Guberman et al., 2018), pre-existing impulsive temperament and negative emotionality (Vaughn et al., 2014), birth complications and disruptive pair bonding (Raine et al., 1994), and pre-existing aggressive behavior (Williams et al., 2010).
- ❖ Furthermore, accounting for different variations and severities of TBI and their behavioral consequences would prove useful.



Implications

- ❖ If pre-existing TBI is predictive of offending, then perpetrators may have less control of their criminal or aggressive behavior than currently thought. This is relevant to determining the degree of culpability in criminal proceedings.
- ❖ Additionally, increased availability of treatment for those with TBI may also have the public benefit of reducing occurrences of aggressive and criminal behavior.