

# Cultural Considerations in Individuals with Traumatic Brain Injury and Criminality

Ashley K. Dorsey, M.S., & Kristine M. Jacquin, Ph.D.

## INTRODUCTION

- ❖ Traumatic Brain Injury (TBI) is categorized as deterioration that impacts the functionality of the brain and is a significant reason for death and impairment in the United States (The Centers for Disease Control and Prevention, 2020).
- ❖ TBI deaths in the United States account for 61,000 deaths yearly, which accounts for approximately 161 deaths per day (CDC, 2020).
- ❖ In 2019, there were approximately 45,000 suicides, which accounts for 1 death every 11 minutes (CDC, 2021).
- ❖ Some groups, such as ethnic minorities, with TBIs are more prone to chronic disability, increased comorbidities and death (CDC, 2020).
- ❖ Brown et al. (2004) found that African American and Latinx individuals with TBIs reported increased health challenges and decreased physical functioning in comparison to European American counterparts with general trauma.
- ❖ Additionally, individuals with TBIs are more likely to have a history of anger, aggression, and criminality (Jansen, 2020).
- ❖ Currently, there is no streamlined evaluative tool that can account for causative factors that influence the link between TBI, cultural influences, and criminality (Schultz, 2018).
- ❖ Evaluative processes require forensic psychologists to use an integrated assessment method through use of multiple professionals across various disciplines to account for the totality of the individual's cognitive impairment.

## FORENSIC IMPLICATIONS

- ❖ Perceptions and impact of function are contingent on cultural acceptability and understanding of the presentation of illness (Brown et al., 2004).
- ❖ Furthermore, forensic psychologists are responsible for assessing the degree of impact of TBI on criminality and there are ethical concerns in assessing these cases due to inconsistent diagnosis, accessibility to treatment, and cultural considerations.
- ❖ To determine causality in TBI, cultural factors, and criminality, forensic assessments must be multifaceted to ensure validity and accuracy (Schultz et al., 2018).
- ❖ A comprehensive assessment, underscoring the connection between TBI, cultural considerations, and criminality, requires a multidisciplinary approach where an individual is evaluated by multiple professionals across various disciplines (Spiegel et al., 2009).
- ❖ Forensic psychologists are on the frontline of these efforts due to (a) increased need for advocacy, (b) high rates of TBI, (c) need for valid diagnosis and treatment, and (d) court appointment due to increased criminality.

## FUTURE RESEARCH

- ❖ The primary course of treatment for TBI involves addressing the neurological deficit instead of promoting social and vocational adjustment and rehabilitation of the individual (Jansen, 2020).
- ❖ Reducing the occurrence of TBIs ultimately decreases crime rates, however, addressing these issues is challenging due to limitations in providing an assessment that accounts for cultural factors that influence a presentation of TBI (Schofield et al., 2015).
- ❖ Currently, programs such as *HEADS UP* use an education campaign tailored to educate high risk populations of the importance of guarding against behaviors that may lead to TBIs (Waltzman et al., 2020).
- ❖ Additionally, the *HEADS UP* program has been shown to reduce the occurrence of TBI and increase concussion prevention (Waltzman et al., 2020).
- ❖ The primary components of success in TBI prevention programs are that high risk groups are identified, such as ethnic minorities, and educational materials are tailored to address the unique needs of the population.
- ❖ Future research should include using collaborative efforts in areas of diagnosis, assessment, and preventative care to underscore the link between cultural considerations, TBI, and criminality.

## CONCLUSION

- ❖ The validity and accuracy of forensic assessment increases when the relationship between TBIs and criminality is explored through a multidisciplinary approach (Schultz et al., 2018).
- ❖ TBIs affect ethnic minorities more profoundly, which severely impacts functioning (Brown et al., 2004).
- ❖ Forensic evaluations should assess and underscore cultural factors that influence the relationship between TBIs and criminality.
- ❖ Furthermore, integrative measures should include preventive care directed at at-risk populations such as ethnic minorities, and these evidence-based educational programs should address risk factors and promote advocacy efforts to decrease the rates of TBI and criminality.

## REFERENCES

- Centers for Disease Control and Prevention. (2020). Traumatic brain injury and concussion. <https://www.cdc.gov/traumaticbraininjury/index.html>
- Brown, S. A., McCauley, S. R., Levin, H. S., Contant, C., & Boake, C. (2004). Perception of health and quality of life in minorities after mild-to-moderate traumatic brain injury. *Applied Neuropsychology*, 11(1), 54-64. [https://doi.org/10.1207/s15324826an1101\\_7](https://doi.org/10.1207/s15324826an1101_7)
- Jansen, J. (2020). Traumatic brain injury and its relationship to previous convictions, aggression, and psychological functioning in Dutch detainees. *Journal of Forensic Psychology Research and Practice*, 20(5), 395-412. <https://doi.org/10.1080/24732850.2020.1755923>
- Schofield, P. W., Malacova, E., Preen, D. B., Catherine D'Este, Tate, R., Reekie, J., . . . Butler, T. (2015). Does traumatic brain injury lead to criminality? A whole-population retrospective cohort study using linked data. *PLoS One*, 10(7), 1-12. <https://doi.org/10.1371/journal.pone.0132558>
- Schultz, I. Z., Sepehry, A. A., & Greer, S. (2018). Beyond traumatic brain injury: Advancing forensic neuropsychological assessment. *Psychological Injury and Law*, 11(2), 105-107. <https://doi.org/10.1007/s12207-018-9323-0>
- Spiegel, E. P., & Belanger, H. (2009). Comprehensive neuropsychiatric assessment of traumatic brain injury: A wide-angle snapshot. *Journal of Clinical and Experimental Neuropsychology*, 31(5), 635-636. <https://doi.org/10.1080/13803390802487006>
- Waltzman, D., Hoffman, R., Donnell, Z., Bell, E., & Sarmiento, K. (2020). US Centers for Disease Control and Prevention's HEADS UP branding and evaluation process. *Health Education Journal*, 79(2), 180-194. <https://doi.org/10.1177/0017896919873931>