

# Examining TBI (Traumatic Brain Injury) Types and their Impact on Subsequent Reincarceration Risk



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## Abstract

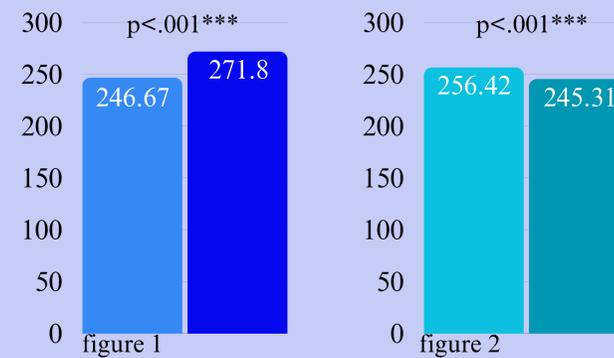
Traumatic brain injury (TBI) has been recognized as a risk factor that contributes to various forms of future criminal justice contact, including incarceration. TBIs occur in different contexts, which may introduce additional risk factors that further increase or decrease the likelihood of subsequent criminal justice contact. Despite this possibility, previous research has yet to examine the potential role of this context empirically. Relying on data from a total jail cohort comprised of all individuals incarcerated in a large midwestern county between February and September 2017 (N = 4,713), this study examines mental health problems, reentry difficulties, and the average time to reincarceration among justice involved individuals who have previously sustained a TBI from varying sources including car accidents, falls, and victimization events. The findings indicate that those individuals who sustained a TBI from a victimization event experienced more mental health problems and reentry difficulties but were not reincarcerated more quickly compared to those who sustained a TBI from another source and those who had not previously sustained a TBI. These findings underscore the need for heightened awareness and consideration of the context in which TBIs occur among incarcerated individuals. The findings from the current study also demonstrate the necessity for specially tailored interventions aimed at addressing the unique challenges faced by individuals with TBIs stemming from victimization, aiming to enhance their prospects for successful reentry into society following incarceration.

## Methodology

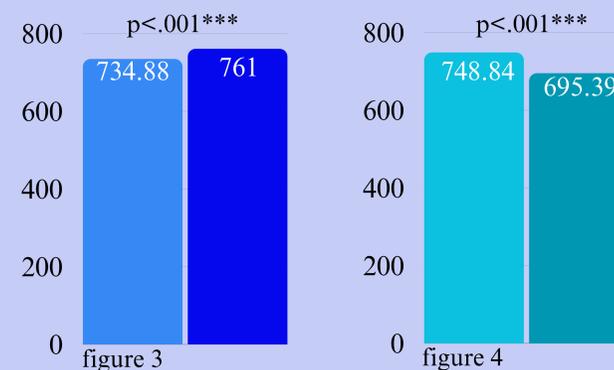
- The study examines a total jail cohort comprised of all individuals incarcerated in a large midwestern county between February and September 2017 (N = 4,713).
- The study was conducted within a jail population who were surveyed on their past instances of attaining TBIs.
- The study measured for presence of TBI and the cause of the most recently sustained TBI including car accidents, falls, and victimization events including intimate partner violence. Following release from the current incarceration spell, additionally, the amount of time until reincarceration was measured using official record data.
- The analysis compared the mean number of posttraumatic stress disorder symptoms, reentry difficulties, and days to reincarceration between varying subgroups of individuals who sustained TBIs from different sources.

## Results

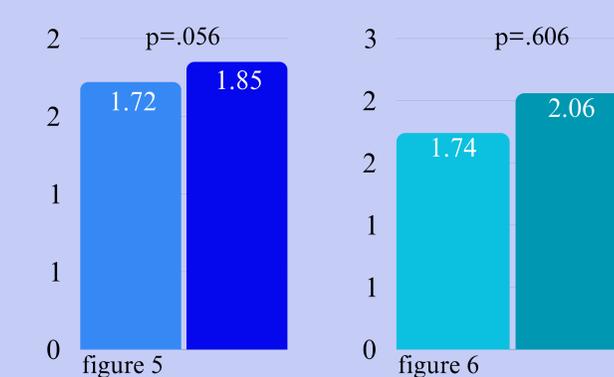
### PTSD Score



### Days to Re-admission



### Barriers to Re-Entry

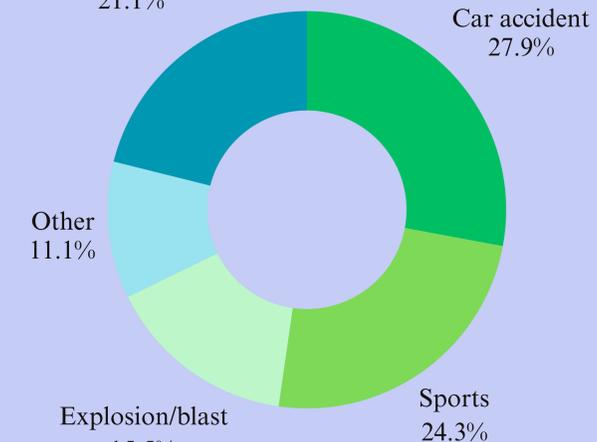


Any TBI No TBI No Victimization TBI Victimization TBI

Significance

\*=p<.05 \*\*=p<.01 \*\*\*=p<.001

### Victimization Event



## References

Schwartz, J. A., Wright, E. M., Spohn, R., Campagna, M. F., Steiner, B., & Epinger, E. (2022). Changes in Jail Admissions Before and After Traumatic Brain Injury. *Journal of Quantitative Criminology*, 38(4), 1033-1056.

## Conclusion

In conclusion, this study examines the potential impact of traumatic brain injuries (TBIs) resulting from victimization events on various factors affecting incarcerated individuals, including post-traumatic stress disorder (PTSD) scores, barriers to reentry, and days to reincarceration. While these findings do not establish causality, they provide a foundation for further investigation into the relationship between TBIs and outcomes in incarcerated populations. The observed correlations between TBIs from victimization events, PTSD scores, and barriers to reentry, suggests a complex relationship that requires additional attention. Importantly, the results also highlight the need for targeted interventions and support services for individuals with TBIs especially those resulting from victimization events, as they appear to face heightened risks of PTSD and greater reentry challenges compared to those without TBIs or TBIs sustained from other sources. Understanding the dynamic between these factors is key for designing effective strategies to address the explicit needs of incarcerated individuals with TBIs and mitigate their risk of recidivism.

## Acknowledgements

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