

A Demographic and Historical Portrait of Individuals with Traumatic Brain Injuries Involved in the Colorado Justice System

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BACKGROUND

Research indicates that traumatic brain injury (TBI) is related to poor impulse control, aggression, poor attention, and higher risk for psychiatric and substance use disorders (Timonen et al., 2002). Those symptoms can impact the behaviors of justice-involved individuals, which may increase recidivism rates and contribute to other problems (Williams et al., 2010). Therefore, it is important to establish base rates of injury history as well as psychiatric and substance abuse histories among justice-involved persons.

PARTICIPANTS

The TBI Implementation Grant database, DU IRB Protocol #674894-2, was used for this study. The database includes data from adult and juvenile probationers and persons incarcerated in any one of four county jails.

Individuals were screened by jail and probation staff using the Ohio State University Traumatic Brain Injury Identification Method (OSU-TBI- ID, Corrigan & Bogner, 2007, 2009). Those indicating a positive history of traumatic brain injury then participated in a neuropsychological screening battery, including effort tests and a clinical interview (Gorgens, 2010).

CONCLUSION

Key Findings

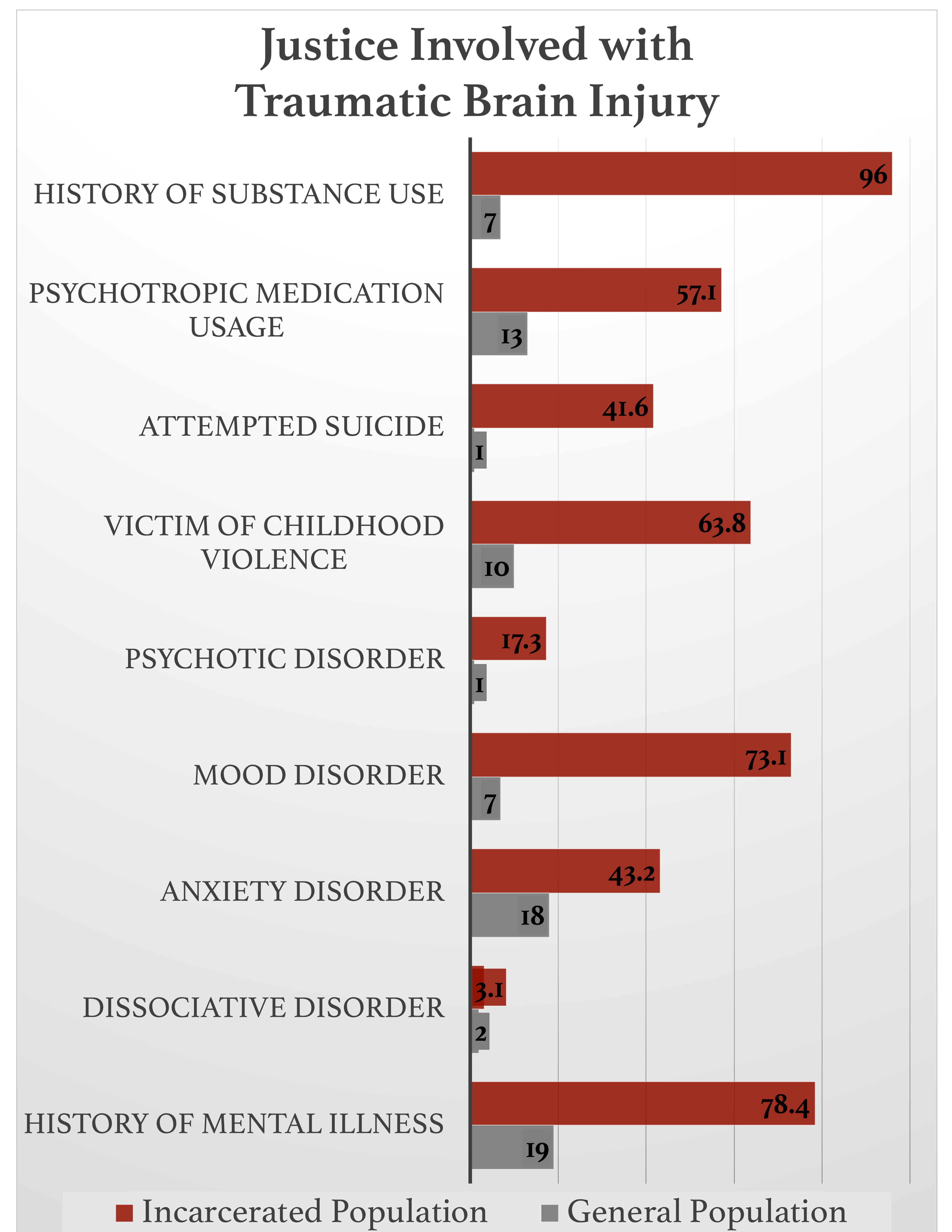
Our results indicate that individuals with a positive history of traumatic brain injury have a higher likelihood than the general population of having:

- a history of substance abuse
- psychotropic medication usage
- attempted suicide
- been a victim of childhood violence
- history of mental illness

RESULTS

Demographics

This population was 55.2% White, 21.5% Hispanic, 11.7% Black, 3.7% Native American, and .4% Native Hawaiian/Pacific Islander. This is more diverse and differs from the general Colorado population according to Census data (2017): 87% White, 22% Hispanic, 5% Black, 2% Native American, <1% Native Hawaiian/Pacific Islander.



REFERENCES

- Corrigan, J.D., Bogner, J.A. (2007). Initial reliability and validity of the OSU TBI Identification Method. *Journal of Head Trauma Rehabilitation*, 22 (6), p. 318-329.
- Crosby, A. E., Han, B., Ortega, L. A. G., Parks, S. E., Gfroerer, J. (2011). Suicidal thoughts and behaviors among adults aged 18 years - United States 2008-2009. *Center for disease Control and Prevention Morbidity and Mortality Weekly Report*. Vol. 60. No 13. Retrieved from: <http://www.cdc.gov/mmwr/pdf/ss/ss6013.pdf>
- Bogner, J.A., Corrigan, J.D. (2009). Reliability and validity of the OSU TBI Identification Method with Prisoners. *Journal of Head Trauma Rehabilitation*, 24 (6), 279-291.
- Gorgens, K. (2010). Clinical interview. In B. Caplan, J. DeLuca & J.S. Kreutzer (Eds.) *Encyclopedia of Clinical Neuropsychology*. New York, NY: Springer Publishing.
- Mayo Clinic. (2013). Nearly 7 in 10 Americans take prescription drugs, Mayo Clinic, Olmsted Medical Center find. Retrieved from <https://newsnetwork.mayoclinic.org>. Accessed on 29 November, 2015
- National Alliance on Mental Illness (2015). *Mental Health By the Numbers*. Retrieved from <https://www.nami.org/Learn-More/Mental-Health-By-the-Numbers.aspx>. Accessed on 29 November 2015
- Reeves, D., Winter, K., Bleiberg, J., & Kane, R. (2007). ANAM Genogram: Historical perspectives, description, and current endeavors. *Archives of Clinical Neuropsychology*, 22S, p. S15-S37.
- Stern, R.A. & White, T. (2003). *NAB Administration, Scoring, and Interpretation Manual*. Lutz, FL: Psychological Assessment Resources.
- Silver J.M., Kramer R., Greenwald S., Weissman M. (2001) The association between head injuries and psychiatric disorders: findings from the New Haven NIMH Epidemiologic Catchment Area Study. *Brain Injury*; 15:935-45
- Timonen, M., Miettunen, J., Hakko, H., Zitting, P., Veijola, J., von Wendt, L., & Räsänen, P. (2002). The association of preceding traumatic brain injury with mental disorders, alcoholism and criminality: The Northern Finland 1966 Birth Cohort study. *Psychiatry Research*, 113(3), 217-226. doi:10.1016/S0165-1781(02)00269-X
- US Census Bureau (2017) *Colorado Quick Facts*. Retrieved from <https://www.census.gov/quickfacts/fact/table/co/PST040217#viewtop>. Accessed on 27 Nov. 2018
- Williams, W. H., Mewse, A. J., Tonks, J., Mills, S., Burgess, C. W. & Cordan, G. (2010). Traumatic brain injury in a prison population: Prevalence and risk for re-offending. *Brain Injury*, 24(10), 1184-1188. doi:10.3109/02699052.2010.495697

