

Mental Illness, Substance Use, Comorbidity, and Recidivism Among Adult Offenders in State Prisons

Alexander Shibata, MSW
Department of Social Work

Capstone Research Advisor
Dr. Grace Yi, PhD, MSW

ABSTRACT

- Mass incarceration in the United States has continued as a social problem spanning over decades. Prison intends to rehabilitate and deter individuals from engaging in crime, but research indicates that offenders who enter the prison are likely to return. There is evidence that individuals with mental health conditions are more likely to enter the prison system and return upon release than individuals without a mental health condition.
- The criminalization hypothesis posits that institutional systems, such as politics and law enforcement, criminalize the mentally ill and suggests that our systems handle the seriously mentally ill more punitively than those without a mental illness (Abrahamson, 1972).
- This study conducted secondary data analysis of the 2004 Survey of inmates in State Correctional Facilities (SISCF) to examine the relationship between mental illness (MI), substance use (SUD), comorbidity (COM), and no disorder (NDO) and recidivism patterns among adult offenders. This study utilized chi-squared to examine disorder type and impact on recidivism. Moreover, a Kruskal-Wallis H-Test was performed to examine lifetime incarcerations by disorder type. Chi-squared test revealed a statistically significant relationship in that SUD and COM had greater impact on recidivism compared to MI and NDO. Lastly, Kruskal-Wallis H-Test found statistically significant relationship and determined that SUD experienced more lifetime incarcerations than MI.

INTRODUCTION

Significance of the Study

- In 2018, 44% of prisoners reentered the penal system within a year of release (Alper et al., 2018).
- Approximately 56% of state prisoners reported having some mental health problem while 55% of state prisoners reported a history of substance use or dependency (James & Glaze, 2006).
- Among prisons with a mental health condition, 74.1% of prisoners had a history of drug or alcohol dependence or abuse (James & Glaze, 2006).

The purpose of this study

- The study intended to test the criminalization hypothesis and examine the impact of mental illness, substance use, and comorbid substance use and mental illness on recidivism rates among adult offenders in state prisons.

Research Question

- What is the association of mental illness, substance use, and comorbid mental illness and substance use on recidivism among incarcerated adults in state prisons?
- Is there a difference between mental illness, substance use, and comorbid status on the total number of incarceration episodes the offender experiences in their lifetime, respectively?

Hypothesis

- Those with mental illness only will experience significant recidivism rates.
- Substance use only is not associated with an increased level of recidivism.
- Comorbidity will experience greatest recidivism rates and lifetime incarcerations.

LITERATURE REVIEW

- Previous research has yielded mixed results.
- Some studies have indicated that mental illness alone is not directly related to increased recidivism rates (Baillargeon et al., 2009a; Wilson et al., 2011; Zgoba et al., 2020)
- Some evidence indicates that individuals with substance abuse disorders are more susceptible to returning to jail than mentally ill offenders or offenders without a disorder (Bennet et al., 2008; Wilson et al., 2011; Zegoba et al., 2020).
- Comorbid substance use and mental illness present as the group with the most significant recidivism risk compared to having either condition alone (Balyakina et al., 2013; Baillargeon et al., 2009b; Houser et al., 2019; Matejkowski & Ostermann, 2015).

METHODOLOGY

Research Design

- This study is a secondary data analysis of the 2004 Survey of Inmates in State Correctional Facilities (SISCF). The SISCF was a cross-sectional survey that gathered inmate information at one point in time through in person interviews from inmates in state correction facilities in the United States.

Sample

- The interviewers utilized computer software to select inmates to participate in the study randomly.
- The current study utilized the entirety of the original sample (N=14,499).

Measures

Independent Variables: Disorder Type

- Mental Illness (MI): Self-report question that asked if offenders have been told they have at least one mental health condition illness (Y/N).
- Disorder (SUD): Self-report question that asked if offenders experienced symptoms of substance dependency or behavior of drug abuse (Y/N).
- Comorbidity (COM): Offenders that met the answered 'yes' for both a mental health condition and substance use disorder were recoded into the comorbid category (Y/N).
- No Disorder (NDO): Offenders who answered 'no' to both mental health condition and substance use were recoded into the no disorder category (Y/N).

Dependent Variables: Criminal History

- Recidivist: Self-report question where offenders identified whether they were a first-time offender or a recidivist (Yes/No).
- Number of incarcerations in adulthood: Self-reported number of prior incarcerations that they experienced in adulthood.

Chi Squared Analysis

- A chi-square test was performed analyze the independent variables of mental illness, substance use disorder, comorbidity, and no disorder type and the impact on recidivism among offenders.
- The test identified a statistically significant relationship ($\chi^2(3)=477.19 p<.01$), with a Cramer's V. of .183, suggesting a weak association between variables. SUD and COM were statistically different in comparison to individuals with MI and NDO.

Figure 1. Differences in incarceration condition type

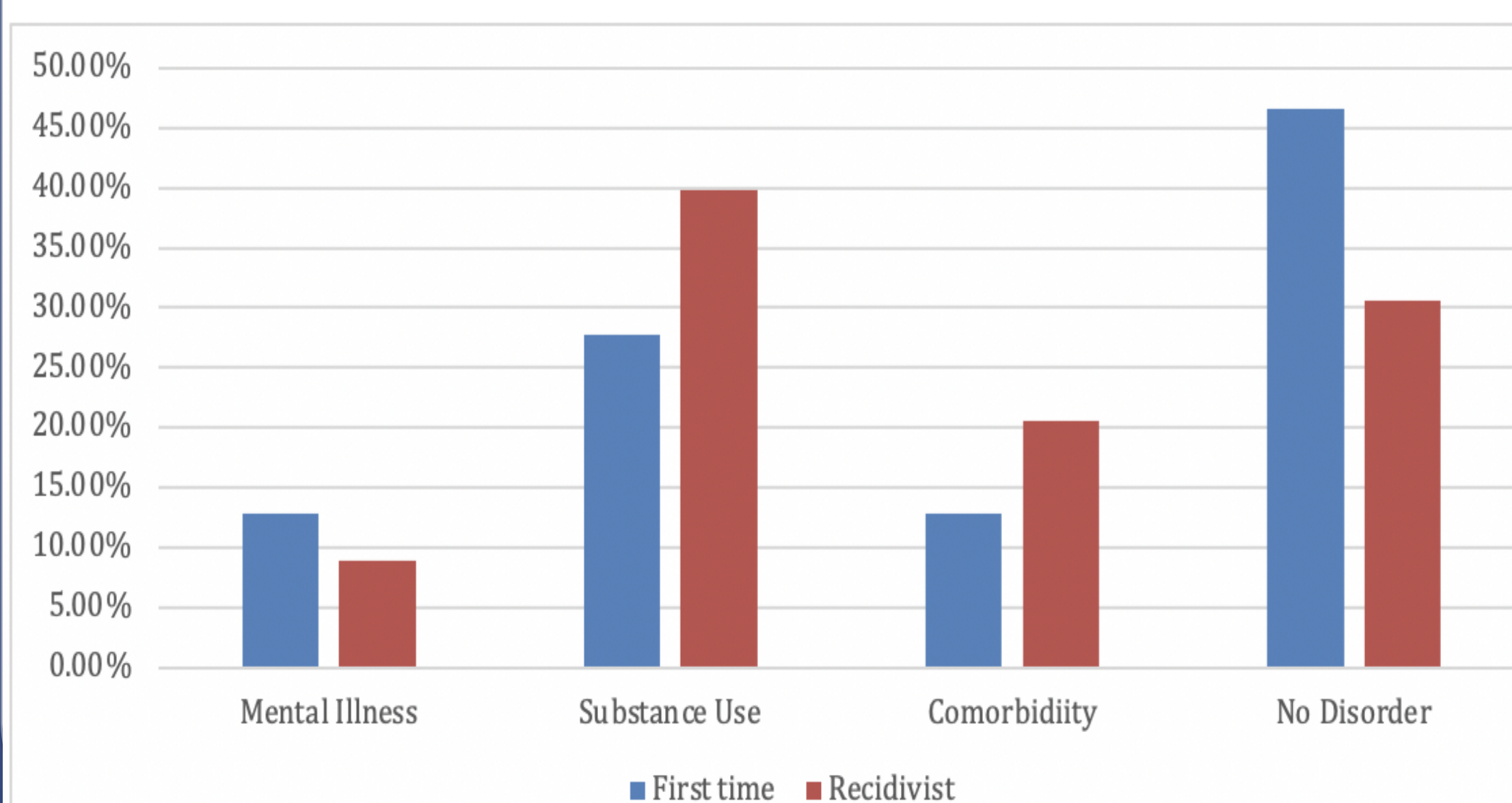


Table 1

| Demographics | f | % |
|------------------------|---------|------|
| Race | | |
| White | 7197 | 49.6 |
| Black/African American | 6174 | 42.6 |
| Native American | 771 | 5.3 |
| Asian | 131 | .7 |
| Pacific Islander | 108 | .7 |
| Other | 627 | 4.3 |
| Gender | | |
| Male | 11569 | 79.8 |
| Female | 2930 | 20.2 |
| Age | 35years | |

Table 2

Descriptive Statistics of Study Variables (N=14,499)

| Variables | n | % |
|--------------------------------|----------|-----------|
| Offender condition type | | |
| Non-disordered (NDO) | 5092 | 35.5 |
| Mental illness (MI) | 1446 | 10.1 |
| Substance use disorder (SUD) | 5186 | 36.1 |
| Comorbidity (COM) | 2628 | 18.3 |
| Criminal history | | |
| Recidivist | 10109 | 70 |
| First timer | 4327 | 30 |
| | <i>m</i> | <i>SD</i> |
| Criminal history | | |
| Prior incarcerations as adult | 1.2 | 2.61 |

RESULTS

Kruskal-Wallis H-Test

- A Kruskal-Wallis H test was performed to examine the dependent variable of lifetime incarcerations experienced in adulthood compared by the independent variables of disorder type.
- A statistically significant relationship was found ($H(3)= 396.11, p=.000$) suggesting that there was a significant difference in the number of prior incarcerations among four different types of disorders.
- Further analysis revealed that offenders with SUD (*Mean Rank= 7739.23*) and COM (*Mean Rank=7755.50*) experienced more prior adulthood incarcerations in comparison to MI (*Mean Rank= 6643.01*) and NDO (*Mean Rank= 6456.05*)

Table 1

Difference in Adult Incarceration by Disorder Type

| Condition Type | N | Mean Rank | df | H | p |
|---------------------|------|-----------|----|--------|------|
| Mental Illness (MI) | 1446 | 6643.01 | 3 | 396.11 | .000 |
| Substance Use (SUD) | 5186 | 7739.23 | | | |
| Comorbid (COM) | 2628 | 7755.50 | | | |
| No Disorder (NDO) | 5092 | 6456.05 | | | |

DISCUSSION

Summary of Findings

- The findings of this study did not support the criminalization hypothesis. Mental illness alone in this study was not an indicator of increased recidivism rates.
- Substance use (SUD) in this study was an indicator for both increased rates of recidivism and lifetime incarcerations.
- SUD was stronger indicator for recidivism compared to comorbidity. However, comorbid individuals experienced increased levels of lifetimes incarcerations.

Strengths

- Large sample size because it provides more reliable results in determining the effect of disorder type.
- Among condition type, this study ensured that participants were placed in independent categories to ensure that accurate reporting

Limitations

- Weak association among independent variable of disorder type and recidivism
- This data set relied heavily on inmate self-reporting, which challenges the reliability of this proposed study.
- There have been significant policy and program implementations in the United States since the original dataset collection; this study may not reflect current prison trends among individuals with substance use disorders or mental illness.

Implications for Research and Practice

- The results of this study may help spark future research that can delve deeper into substance use disorders and investigate the phenomena of increasing incarceration rates.
- Examining this relationship may provide a crucial understanding of the offender population and lead to future policy and program changes geared toward substance use and comorbid substance use conditions in the community and prison systems.

References

- Abrahamson, M. F. (1972). The criminalization of mentally disordered behavior: Possible side effect of a new mental health law. *Hospital and Community Psychiatry, 23*(4), 101-107
- Alper, M., Durose, M., & Markman, J. (2018). 2018 update on prisoner recidivism: A 9-year follow-up period (2005-2014). Bureau of Justice Statistics. <https://www.bjs.gov/content/pub/pdf/18upr9fup0514.pdf>
- Baillargeon, J., Binswanger, I. A., Penn, J. V., Williams, B. A., & Murray, O. J. (2009a). Psychiatric disorders and repeat incarcerations: The revolving prison door. *The American Journal of Psychiatry, 166*(1), 103-109. <https://doi.org/10.1176/appi.ajp.2008.08030416>
- Baillargeon, J., Williams, B. A., Mellow, J., Harzke, A. J., Hoge, S. K., Baillargeon, G., & Greifinger, R. B. (2009b). Parole revocation among prison inmates with psychiatric and substance use disorders. *Psychiatric Services, 60*(11), 1516-1521. <https://doi.org/10.1176/appi.ps.60.11.1516>
- Balyakina, E., Mann, C., Ellison, M., Sivernell, R., Fulda, K., Sarai, S., & Cardelli, R. (2013). Risk of future offense among probationers with co-occurring substance use and mental health disorders. *Community Mental Health Journal, 50*(3), 288-295. <https://doi.org/10.1007/s10597-013-9624-4>
- Bennett, T., Holloway, K., & Farrington, D. (2008). The statistical association between drug misuse and crime: A meta-analysis. *Aggression and Violent Behavior, 13*(2), 107-118. <https://doi.org/10.1016/j.avb.2008.02.001>
- Houser, K. A., Saum, C. A., & Hiller, M. L. (2019). Mental health, substance abuse, co-occurring disorders, and 3-year recidivism of felony parolees. *Criminal Justice and Behavior, 46*(9), 1237-1254. <https://doi.org/10.1177/0093854819856924>
- James, D., & Glaze, L. (2006). Mental Health Problems of Prison and Jail Inmates. Bureau of Justice Statistics. <https://www.bjs.gov/content/pub/pdf/mhppji.pdf>
- Matejkowski, J. & Ostermann, M. (2015). Serious mental illness, criminal risk, parole supervision, and testing of conditional effects. *Law and Human Behavior, 39*(1), 75-86. DOI: 10.1037/lhb0000094
- Wilson, A. B., Draine, J., Hadley, T., Metraux, S., & Evans, A. (2011). Examining the impact of mental illness and substance use on recidivism in a county jail. *International Journal of Law and Psychiatry, 34*(4), 264-268. <https://doi.org/10.1016/j.ijlp.2011.07.004>
- Zgoba, K. M., Reeves, R., Tamburello, A., & DeBilio, L. (2020). Criminal recidivism in inmates with mental illness and substance use disorders. *The Journal of the American Academy of Psychiatry and the Law, 48*(2), 209-215. <https://doi.org/10.29158/JAAPL.003913-20>

Acknowledgements

Dr Yi, thank you for your continual support and positive encouragement. To my friends, family, and Jessica, thank you for believing in me. Thank you, as without you all, none of this would have been possible.