



Uncovering Substance Use Dynamics: A Study of Incarcerated Youth

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Background

- Substance use is a serious issue, leading to overdose, delinquency, health problems, arrests, and substance use disorders (SUDs).
- Juvenile-justice (JJ) involved youth are nine times more likely to have a substance use disorder (SUD), increasing their risk of recidivism and need for treatment.
- This study examines substance use patterns among incarcerated youth, the most problematic substances, and post-release changes.
- Based on prior research, high rates of alcohol and marijuana use were expected.

Methods

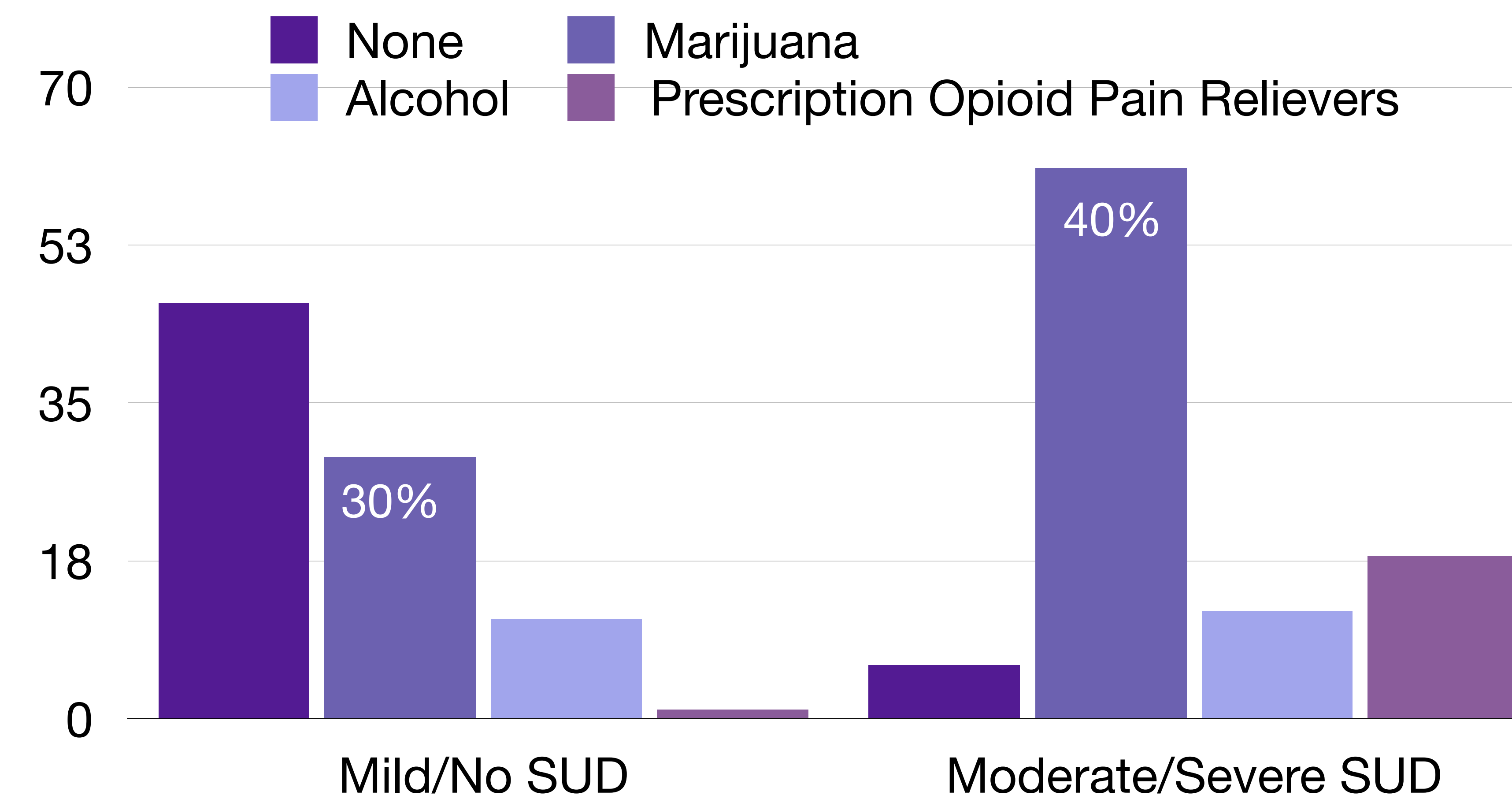
- Data were analyzed from the Leveraging Safe Adults (LeSA) project, a 5-year longitudinal study evaluating the effectiveness of Trust-based Relational Intervention® (TBRI®) in reducing opioid use among youth after release from JJ facilities.
- Participants included 250 youth aged 15 to 18 ($M = 16.2$, $SD = 1.06$) from 12 secure residential JJ facilities in Texas ($n = 7$) and Illinois ($n = 5$). 83% were male ($n = 207$), and 17% were female ($n = 43$). Racial/ethnic distributions were as follows: 42% Hispanic ($n = 104$), 29% Black ($n = 72$), 18% White ($n = 45$), 8% more than one race ($n = 21$), 3% other ($n = 8$).
- All participants randomly assigned into a control group or intervention group (condition).
- The primary instrument was the TCU Drug Screen 5 (TCU-DS 5), an evidence-based self-report that assesses SUDs. Certain items (i.e. item 13) were analyzed in more depth based on the study's objectives.
- The survey was conducted at 3 time points: baseline or T1 ($N = 250$), a 3-month follow up or T2 ($n = 94$), and a 6-month follow up or T3 ($n = 53$). Baseline took place 3 months before the youth's release date, the 2nd follow up took place 1 month after their release, and the 3rd follow up took place 4 months after their release.
- Frequencies, cross-tabulations, and ANCOVAs were used to analyze most used and most problematic substances, SUDs, and change in use over time.

Results

Descriptive Statistics — Frequencies of Substance Use at Baseline

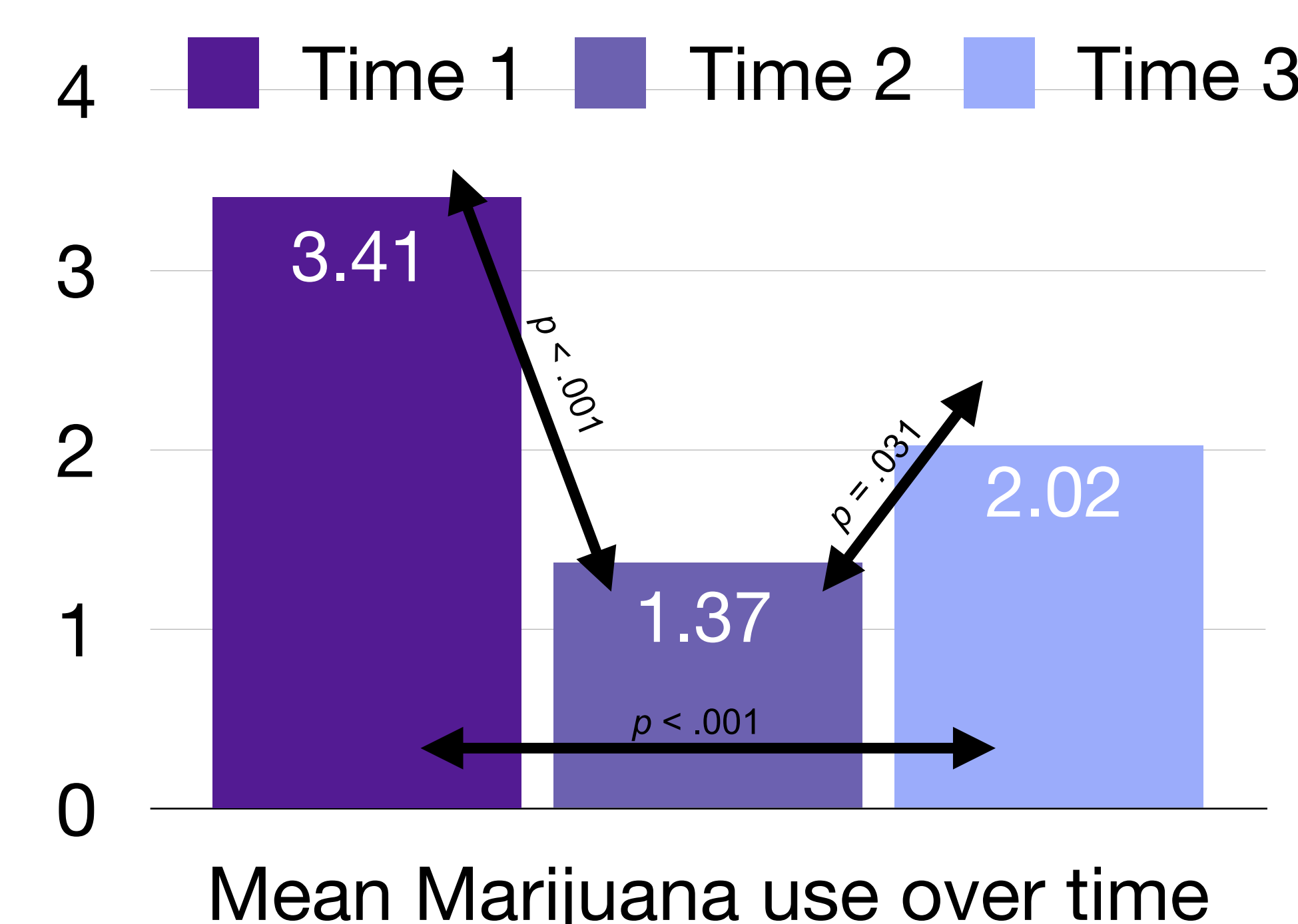
Substance	Never	1-3x/month	Daily
Marijuana ($n = 248$)	12%	7.6%	56.8%
Alcohol ($n = 247$)	26%	20.4%	6.8%
Prescription Opioid Pain Relievers ($n = 240$)	62%	7.6%	8.8%
Prescription Depressants ($n = 242$)	73.6%	5.2%	8.4%
Cocaine ($n = 244$)	71.2%	6.4%	4.4%

Crosstabulations — Most Problematic Substances at Baseline



* 61.9% of the youth met criteria for a moderate or severe SUD.

Analysis of Covariance (ANCOVA)



- Pairwise comparisons ($n = 51$) showed significant differences between all three time points. Marijuana use dropped from T1 to T2 ($p < .001$), then increased from T2 to T3 ($p = .031$), though T3 remained lower than T1.
- A within-subject analysis confirmed a significant effect of time on marijuana use ($p = .047$), but no significant interaction with condition ($p = .391$), meaning condition did not influence change over time. The covariate being controlled for was the intervention condition vs. control group.

Discussion

- Outcomes showed that youth reported a decrease in marijuana use 1 month after their release compared to baseline, but they began to show more cannabis use after being in their communities for 4 months.
- The high percentage of youth with moderate to severe SUDs underscores the importance of effective substance use treatment during and after incarceration.
- Given that marijuana was the most frequently reported problematic substance, targeted interventions for marijuana use should be prioritized.
- This study highlights the importance of targeted interventions that can prevent relapse and improve long-term outcomes for these youth.

Limitations & Future Directions

- This study relies on self-reported surveys, preventing causality and introducing potential biases.
- The sample includes only justice-involved youth from two states, limiting generalizability both within and outside the JJ system.
- The short follow-up periods of 1 and 4 months after release do not capture long-term outcomes for the youth, and those samples were small ($n = 51$).
- Future research should include longer follow-ups and examine how treatment interventions, environmental factors, and re-incarceration rates influence marijuana use.

Acknowledgements



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