



Introduction & Literature Review

- 85% of individuals 18 and older reported alcohol use at some point in their lifetime. 25.8% of individuals 18 and older engaged in binge drinking during the past month. 6.3% of individuals reported heavy alcohol use in the past month (U.S. Department of Health and Human Services, 2021).
- The majority of incarcerated inmates are charged with drug-related offenses (46.1% of inmates, 67,011 total) (Federal Bureau of Prisons, 2021).
- On average, around 40% of criminals who were incarcerated for violent offenses were under the influence of alcohol during their arrest (Miles et al., 2020).
- Prior research has associated recidivism with alcohol use, mental health, and co-occurrence (Craig et al., 2019). The risk of recidivism increases when the individual is actively using alcohol and other drugs, such as cannabis, amphetamines, and opioids (De Andrade et al., 2018).

Objectives

Purpose

Study is to increase knowledge and awareness regarding alcohol use among the criminal population and the impact of alcohol on recidivism.

Research Question

What is the relationship between alcohol use and repeated incarceration among criminals.

Hypothesis

Predicts that as alcohol consumption increases, as will the number of arrests.

Significance

Increasing understanding about substance use among criminals and the impact it has on their convictions. Results can also aid in illustrating how to create more effective prevention and treatment programs for alcohol use among the criminal population. Implications for social work and social welfare include increased information about criminal justice clients and risk factors leading to recidivism.

Variables

Alcohol Use

Measures included use over the past 30 days and past 12 months. Variables included a continuous measure of frequency of use over the past year. Dichotomous categorical indicator variables (yes/no) were also constructed for any alcohol use, recent alcohol use, binge alcohol use, heavy alcohol use, alcohol dependence, and alcohol abuse. Additionally, a categorical indicator variable was constructed combining heavy and binge drinking behavior.

Arrests and Incarcerations

Possible arrests and bookings included dichotomous responses for 13 different types of criminal behavior, including motor/vehicle theft, larceny/theft, burglary/breaking & entering, serious violence offense, other assault, robbery, arson, driving under the influence, public drunkenness, possession/sale of drugs, sexual offense, fraud/stolen good, and some other offense. A cumulative scale variable was created to total all the positive endorsements to each type of criminal behavior. Additional dichotomous variables collected responses on whether respondents were on parole or probation.

Demographic Variables

The study contained demographic variables related to age, gender, ethnicity, marital status, education background, employment status, and respondents' income.

Methods

Research Design

Using data from the NSDUH, the current sample size consisted of 7,653 study participants. The variables being studied include alcohol use (i.e., past month, frequency, binge drinking, heavy drinking, dependence, and abuse), the number of times incarcerated, type of incarceration (e.g., theft, arson, or fraud), and demographic variables.

Sample and Sampling Method

The NSDUH sample consisted of respondents from all 50 states in the United States (CBHSQ, 2016). The study used an independent, multistage area probability sample for their sampling method. The present study utilized the sample collected from the NSDUH. However, a large portion of the participants were excluded based on their criminal experience. The current study only is focused on participants who have had at least one incarceration during their lifetime. Additionally, all participants 12-17 years old were excluded.

Data Collection Procedures

The NSDUH data was collected by the Research Triangle Institute, Research Triangle Park in North Carolina (CBHSQ, 2016). Letters introducing the survey were sent to sampled addresses and followed by an interview visit. Utilizing a handheld computer, the field instructor completed a short screening procedure. The survey was available in both English and Spanish. Following completion of the screener, the NSDUH questionnaire was administered in a private area of the household. The interview averaged about 1 hour in length and included a combination of computer-assisted personal interviewing and audio computer-assisted self-interviewing. Random samples of the completed responses were screened for verification.

Human Subjects

Participation in the NSDUH survey was completely voluntary (CBHSQ, 2016). All participants were provided with informed consent stressing that all written and oral communications would be kept confidential. Participants who completed the survey were given \$30 as an incentive. The original study was reviewed and approved by the Research Triangle Institute Institutional Review Board.

Statistical Analysis

All statistical analyses were conducted utilizing the Statistical Package for the Social Sciences, version 27.0. Descriptive statistical analyses were utilized to describe the study sample. Inferential statistics, including Pearson's correlation, and independent t and chi-square tests, were conducted to assess relationships between variables.

Results

Spearman's rho Correlation

The results indicated a positive and statistically significant association between frequency of alcohol use and number of bookings and arrests, $r_s(7,651) = .044, p < .001$. The strength of the correlation was weak. Higher frequency of alcohol use was associated with more bookings and arrests.

Independent t Test

A significant difference was found ($t(7,651) = 3.89, p < .001$). The mean arrest and bookings total among respondents who used alcohol in the past year ($M = 0.26, SD = 0.65$) was significantly different from the mean arrest and bookings total among respondents who did not use alcohol in the past year ($M = 0.19, SD = 0.56$). Additionally, a significant difference was found ($t(7,651) = 17.03, p < .001$). The mean arrest and booking total among respondents who had been diagnosed with alcohol abuse or dependence ($M = 0.51, SD = 0.88$) was significantly different from the mean arrest and booking total among respondents who have not been diagnosed with alcohol abuse or dependence ($M = 0.19, SD = 0.55$).

One-way ANOVA

A significant difference was found among levels of alcohol use ($F(3, 7,649) = 21.47, p < .001$). Bonferroni's post hoc test was used to determine the nature of the difference between levels of alcohol use. This analysis revealed the study respondents with heavy alcohol use had significantly higher rates of arrest and bookings ($M = 0.33, SD = 0.74$) than study respondents with binge alcohol use ($M = 0.26, SD = 0.65, p = .007$), past month use ($M = 0.15, SD = 0.45, p < .001$), and no past month use ($M = 0.25, SD = 0.66, p = .003$). Study respondents with binge use had significantly higher rates of arrest and bookings than study respondents with past month use ($p < .001$). Study respondents with no past month use had significantly higher rates of arrest and bookings than respondents with past month use ($p < .001$).

Arrest and Bookings Total and Alcohol Variables

Comparisons made using independent-samples t-test

Arrest and Bookings Total	Mean (SD)		t	p-value
	Yes	No		
Past Year Alcohol Use	0.26 (0.65)	0.19 (0.56)	3.89	< .001
Alcohol Abuse or Dependence	0.51 (0.88)	0.19 (0.55)	17.03	< .001

Conclusion

Significance of the Findings

The hypothesis was supported. A positive correlation was shown between alcohol use and the number of arrests, indicating that, as alcohol consumption increased, the number of arrests also increased.

Strengths and Limitations

- The strengths of the current study include the sample size (7,653 individuals), a wide variety of questions relating to alcohol and substance use, and variety of age groups, education levels, and income levels.
- The limitations of the current study include a disproportionate number of male respondents (67.9%) compared to female respondents (32.1%), disproportionate number of White respondents (63.9%) than other ethnic/racial groups, and use of self-reported measures.

Implications

- Futures studies can work to prioritize a more diverse sample concerning gender and ethnicity/race. More research should be conducted in this area to further knowledge, continue to observe trends and track possible changes in outcomes.
- With the increase in knowledge of the correlation between alcohol use and recidivism, social work professionals can aim for interventions to address the issue and help clients avoid unhealthy alcohol use that may lead to incarceration. Suggestions for social work practice include:
 - Providing psychoeducation about the correlation between alcohol and recidivism among individuals who have been previously incarcerated
 - Increased relapse prevention training among individuals with substance abuse issues to avoid repeated incarceration
 - Outreach to currently incarcerated individuals to spread awareness to help prevent recidivism.

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