Alcohol, Marijuana and Blackouts

Marijuana, gender, and health-related harms: Disentangling marijuana's contribution to risk in a college 'party' context.

Weiss, Karen G. and Dilks, Lisa M..

Sociological Spectrum, Vol 35(3), May, 2015. pp. 254-270.

Abstract:

This study examines marijuana's contribution to 'risky partying' and the health-related harms experienced by college students in a 'party' context. Data from a self-report survey of 787 undergraduate students at a large residential university show that marijuana users are more likely than non-users to drink excessively, use other drugs and, in turn, experience health-related harms (illness, blackouts, injury from accidents, and injury from fights). But it is primarily the frequent and heavy use of alcohol by marijuana users, and additional drugs for men, that contribute to these harms. Within a party context, students who use alcohol, marijuana and other drugs (AMD users) experience the most harms, and female AMD users experience more harms than men, despite using less. But even as marijuana use increases women's harms (specifically, blackouts and injuries from accidents), marijuana has no contributory effect on men. Implications for future research are discussed.

The importance of substance-related sexual victimization: Impact on substance use and risk perception in female college students.

Eshelman, Lee R., et.al.

Journal of Interpersonal Violence, Vol 30(15), Sep, 2015. pp. 2616-2635.

Abstract:

Data on risk perception, sexual victimization, and substance use were obtained via surveys from 496 female college students to determine what factors influence risk perception using a written vignette in which participants make a hypothetical decision to leave a potentially risky situation. Experiences of substance-related (SR) victimization, rather than forcible victimization, were associated with significantly delayed risk perception. SR victimization victims reported feeling uncomfortable significantly later and leaving the scenario significantly later than non-victims. SR victimization victims also had significantly higher scores on heavy episodic drinking (HED), marijuana use, alcohol-related tolerance, and blackouts. Both substance use (HED and marijuana use) and alcohol-related problems (tolerance and blackouts) mediated the link between SR victimization and risk perception in the form of behavioral leave response. In contrast, only HED and tolerance mediated the link between SR victimization and risk recognition. Findings suggest the importance of differentiating types of victimization in predicting risk perception and of addressing substance use in sexual victimization risk reduction interventions.

Predictors of patterns of alcohol-related blackouts over time in youth from the Collaborative Study of the Genetics of Alcoholism: The roles of genetics and cannabis.

Schuckit, Marc A., et.al.

Journal of Studies on Alcohol and Drugs, Vol 78(1), Jan, 2017. pp. 39-48.

Abstract:

Objective: Alcohol-related blackouts (ARBs) are anterograde amnesias related to heavy alcohol intake seen in about 50% of drinkers. Although a major determinant of ARBs relates to blood alcohol concentrations, additional contributions come from genetic vulnerabilities and possible impacts of cannabis use disorders (CUDs). We evaluated relationships of genetics and cannabis use to latent class trajectories of ARBs in 829 subjects from the Collaborative Study of the Genetics of Alcoholism (COGA). Method: The number of ARBs experienced every 2 years from subjects with average ages of 18 to 25 were entered into a latent class growth analysis in Mplus, and resulting class membership was evaluated in light of baseline characteristics, including CUDs. Correlations of number of ARBs across assessments were also compared for sibling pairs versus unrelated subjects. Results: Latent class growth analysis identified ARB-based Classes 1 (consistent low = 42.5%), 2 (moderate low = 28.3%), 3 (moderate high = 22.9%), and 4 (consistent high = 6.3%). A multinomial logistic regression analysis within latent class growth analysis revealed that baseline

CUDs related most closely to Classes 3 and 4. The number of ARBs across time correlated .23 for sibling pairs and -.10 for unrelated subjects. Conclusions: Baseline CUDs related to the most severe latent ARB course over time, even when considered along with other trajectory predictors, including baseline alcohol use disorders and maximum number of drinks. Data indicated significant roles for genetic factors for alcohol use disorder patterns over time. Future research is needed to improve understanding of how cannabis adds to the ARB risk and to find genes that contribute to risks for ARBs among drinkers.

When alcohol is only part of the problem: An event-level analysis of negative consequences related to alcohol and other substance use.

Mallett, Kimberly A., et.al.

Psychology of Addictive Behaviors, Vol 31(3), May, 2017. pp. 307-314.

Abstract:

While alcohol remains the drug of choice for most college students, national data show that 40% of college students also use other substances (e.g., marijuana, cocaine, etc.). Longitudinal studies indicate that students who report use of both alcohol and other substances experience more consequences (e.g., blackout, arrests). The current study expands upon this research by using a multilevel approach to examine average and event-level alcohol combined with other substance use (ALC+) and its role on consequences experienced. In addition, the research examined which substance combined with alcohol posed the most risk. A total of 461 students reported on alcohol use, substance use, and consequences experienced (e.g., Young Adult Alcohol Consequences Questionnaire [YAACQ]) on 12 weekend nights (Thursday, Friday, Saturday) across 4 weekends in an academic year. Multilevel model analyses revealed a positive association between both average and event-level ALC+ use and the number of consequences experienced. A significant cross-level interaction was also revealed indicating students who typically combine alcohol and other substances experienced more consequences on occasions when they use more substances relative to students who typically use alcohol only. Finally, alcohol plus nicotine, or marijuana, or attention-deficit/hyperactivity disorder (ADHD) medications, or cocaine were all significantly positively related to increased consequences. These findings provide consistent evidence that ALC+ use is a highly prevalent behavior among college students that increases risk of problematic consequences.

Blackouts among male and female youth seeking emergency department care.

Voloshyna, Diana M., et.al.

The American Journal of Drug and Alcohol Abuse, Vol 44(1), Jan, 2018. pp. 129-139.

Abstract:

Background: Alcohol-related blackouts are a common consequence of heavy drinking, and these blackouts pose risk for injury and other adverse health outcomes. Objective: To examine the prevalence and correlates of blackouts among underage drinkers. Methods: Youth (ages 14–20) presenting to a suburban Emergency Department (ED) completed screening surveys. Among those reporting past-year alcohol consumption, we examined past 3-month blackouts in relation to: background characteristics (e.g., demographics, fraternity/sorority involvement), substance use, sexual risk behaviors and incapacitated sexual assault (unaware/unable to consent due to alcohol/drugs), forced sexual assault, positive depression screening, and reason for ED visit (injury vs. medical). Results: In total, 2,300 past-year drinkers participated: 58% female, 75% Caucasian, and mean age = 18.4. Regarding past 3-month blackouts, 72.7% reported none, 19.3% reported monthly or less, and 8% reported monthly or more. Multivariate cumulative logit regression indicated that blackout frequency was positively associated with: college involvement in Greek life, alcohol use severity, prescription drug misuse, marijuana, screening positive for depression, incapacitated sexual assault, and a gender by alcohol use severity interaction. Conclusion: With one-quarter of this clinical sample reporting recent blackouts, as well as the association between blackout frequency and health risk behaviors and other outcomes, findings underscore the need for programs focusing on substance use, depression, and preventing sexual assault. Interventions should also address poly-substance use and drinking motives. Although findings highlight how

college students in Greek life may be at high risk for blackouts, many participants not in college also reported blackouts, suggesting that interventions in other settings are also needed.

Problem profiles among conjoint alcohol and marijuana users in college.

Cummings, Courtenay.

Dissertation Abstracts International: Section B: The Sciences and Engineering, Vol 79(10-B)(E), 2018.

Abstract:

This study contributes to new literature on patterns of conjoint alcohol and marijuana use within a college population. In addition to examining patterns of use in college and subsequent consequences, this paper will also help identify substance-specific consequences. Participants included 473 entering freshmen at a Bay Area university who reported prior initiation of alcohol and/or marijuana and who completed a survey during their first academic quarter. Data for this study was collected during the spring follow-up time point of the larger study. Participants were asked to complete brief questionnaires regarding demographics, alcohol and marijuana use over the previous months, alcohol-related consequences and marijuana-related consequences. A primary objective of this study was to determine whether there are differences in demographics, use and consequences as a function of alcohol-marijuana use. As such, three groups were created: 1) conjoint users, 2) SAM users, and 3) alcohol-only. Overall alcohol use was operationalized using a modified quantity frequency index (QFI: Callahan & Cisin, 1968). Chi-square tests were used to identify demographic risk factors by group and a one-way ANCOVA was used to evaluate group-wise differences in total number of alcohol-related problems by class membership. A one-way MANCOVA was used to examine differences on domains of more severe problems (i.e., sexual and legal), and differences in alcohol-related blackouts and DUIs were examined using chi-square tests. Results indicate that males are more at risk of becoming conjoint alcohol-marijuana users and SAM users compared to the alcohol-only category. Furthermore, significant differences were indicated in total number of alcohol-related problems by class membership. When evaluating group-wise differences in specific alcohol-related problems as well as specific marijuana-related consequences by class membership, it was found that blackout risk was significantly different between all groups, as well as DUI incidents and academic problems. This data suggests that conjoint use of alcohol and marijuana, whether sequential or SAM, is associated with more negative consequences relative to students who limit their substance use to alcohol. Overall, findings provide a clear empirical basis for measuring conjoint use with more sophisticated measures that disentangle event-level timings of each substance's use, as SAM use appears to have more deleterious effects than conjoint use patterns that do not produce interacting pharmacological effects.

Is the sum greater than its parts? Variations in substance-related consequences by conjoint alcohol-marijuana use patterns.

Cummings, Courtenay, et.al.

Journal of Psychoactive Drugs, Apr 20, 2019.

Abstract:

Alcohol and marijuana are the most commonly used substances for college-attending young adults. This study evaluated differences in substance-specific consequence attribution by alcohol-marijuana use patterns (concurrent alcohol and marijuana [CAM; use of both substances, not at same time] and simultaneous [SAM; use of both, at same time]) as well as alcohol-only (AO). First-year college students with prior alcohol use (N = 610, 50.9% women, 71% White, Mage = 18) completed an online assessment of past-three-month substance use, including SAM, and related consequences. Results indicated that polydrug (SAM and CAM) users reported greater alcohol involvement and earlier alcohol initiation than AO, and polydrug use was associated with more alcohol-related problems, including sexual risk taking and alcohol-related blackouts. When restricted to SAM/CAM users, logistic regressions indicated that SAM users reported an increased incidence in two marijuana-related problems relative to CAM (driving after using and academic difficulties), but lower rates of social problems. SAM users were also less likely to attribute substance-related social problems to alcohol. Overall, findings highlight variations that exist within

alcohol-marijuana polydrug users and show areas to consider for intervention development and future research.

Event-level correlates of drinking events characterized by alcohol-induced blackouts.
Merrill, Jennifer E., et.al.
Abstract:

Background: Prior research identifies a range of potential predictors of blackouts and suggests that blackouts increase risk for additional negative consequences. However, these studies are based on epidemiological work that allows us to draw conclusions about groups of people but not within-person processes. The present study examined within-person, event-level correlates of blackouts. Methods: Ninety-six heavy drinking college students (52% female) completed 28 days of daily reports of alcohol use and consequences, including blackouts. Thirty-three participants reported 56 blackouts. Hierarchical linear modeling compared morning reports of drinking events on which participants did versus did not report a blackout, controlling for total drinks at the event. Results: Blackout likelihood increased as a function of total drinks consumed and of crossing thresholds for heavy episodic drinking (4+/5+ drinks for women/men) and high-intensity drinking (8+/ 10+). Participants reported a higher total number of additional negative consequences on blackout events. Specific consequences that were more likely included embarrassing oneself and hangover. Blackouts were associated with morning ratings of less positive mood and a less favorable drinking event. Motives for drinking and simultaneous use of marijuana were not associated with blackouts. Conclusions: Event-level findings of this study document that events leading to alcohol-induced memory loss are associated with other adverse experiences relative to drinking events that do not result in blackout, and offer potentially motivational levers for preventive interventions.

Consequences of alcohol and marijuana use among college students: Prevalence rates and attributions to substance-specific versus simultaneous use.
Jackson, Kristina M., et.al.
Psychology of Addictive Behaviors, Vol 34(2), Mar, 2020. pp. 370-381.
Abstract:

College students who use alcohol and marijuana often use them simultaneously, so that their effects overlap. The present study examined whether negative consequences experienced by simultaneous alcohol and marijuana (SAM) users vary from those experienced by individuals who use alcohol and marijuana concurrently but not simultaneously (CAM) or single-substance users. We considered 9 types of consequences: cognitive, blackout, vomiting, academic/occupational, social, self-care, physical dependence, risky behaviors, and driving under the influence (DUI). Further, we examined whether consequences experienced by SAM users are attributed to using alcohol, marijuana, or both simultaneously. The sample included past-year alcohol and marijuana users age 18–24 (N = 1,390; 62% female; 69% White; 12% Hispanic) recruited from 3 U.S. college campuses. SAM users experienced a greater overall number of consequences than CAM or alcohol-only users, even controlling for frequency and intensity of alcohol and marijuana use and potentially confounding psychosocial and sociodemographic factors. Experiencing specific consequences differed between simultaneous and concurrent users, but after adjusting for consumption and other covariates, only blackouts differed. In contrast, SAM users were more likely to experience each consequence than alcohol-only users, with strongest effects for DUI, blackouts, and cognitive consequences. Among SAM users, consequences were most likely to be attributed to alcohol and were rarely attributed to simultaneous use. Being a user of both alcohol and marijuana and using alcohol and marijuana together so that their effects overlap each contribute to risk, suggesting there is value in targeting the mechanisms underlying type of user as well as those underlying type of use.