

Library Watch on colleges

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fall 2009

Peer effects and alcohol use among college students.
Kremer M; Levy D. *Journal of Economic Perspectives* 22(3): 189-206, 2008. (28 refs.)

This paper estimates peer effects in the context of a large state university that uses a lottery system to assign roommates. This use of the lottery makes it possible to isolate the effect of peers. The results suggest that males who were assigned roommates who drank alcohol prior to college obtained on average a lower grade point average than those assigned to nondrinking roommates. In contrast, no effect of roommates' academic or socioeconomic background on grade point average was found. Copyright 2008, American Economic Association.

A randomized trial of a parent-based intervention on drinking behavior among incoming college freshmen.

Ichiyama MA; Fairlie AM; Wood MD; Turrisi R; Francis DP; Ray AE et al. *Journal of Studies on Alcohol and Drugs Supplement* 16: 67-76, 2009. (53 refs.)

Objective: Despite research suggesting that parental involvement can affect alcohol involvement among adolescents, few studies have focused on parent-based alcohol prevention strategies among college undergraduates. We report the results of a randomized trial of a parent-based intervention (PBI) in a sample of college freshmen. Method: Across two cohorts, 724 incoming freshman-parent dyads completed baseline assessments and were randomly assigned to PBI or intervention as usual (an alcohol fact sheet for parents). Student follow-up assessments were completed at 4 and 8 months. Results: Two-part latent growth curve modeling was used to test hypothesized intervention effects. Outcome variables were drinks per week (past month), heavy episodic drinking (past 2 weeks), and alcohol-related problems (past 3 months). Over the 8-month follow-up period, PBI had a significant effect on drinks per week but not heavy episodic drinking or alcohol-related problems. Specifically, compared with students in the intervention-as-usual condition, students receiving the PBI were significantly less likely to transition from nondrinker to drinker status and showed less growth in drinking over the freshman year. However, the direct

PBI effect on growth was qualified by a PBI x Gender interaction, with probes indicating that the effect applied to women but not men in the PBI condition. Conclusions: This study extends previous research by demonstrating the potential utility for PBIs to decrease the likelihood of transitioning into drinker status and, at least for women, for slowing growth in drinking over the freshman year. Copyright 2009, Alcohol Research Documentation Center.

A randomized clinical trial evaluating a combined alcohol intervention for high-risk college students.
Turrisi R; Larimer ME; Mallett KA; Kilmer JR; Ray AE; Mastroleo NR et al. *Journal of Studies on Alcohol and Drugs* 70(4): 555-567, 2009. (88 refs.)

Objective: The current study is a multisite randomized alcohol prevention trial to evaluate the efficacy of both a parenting handbook intervention and the Brief Alcohol Screening and Intervention for College Students (BASICS) intervention, alone and in combination, in reducing alcohol use and consequences among a high-risk population of matriculating college students (i.e., former high school athletes). Method: Students (n = 1,275) completed a series of Web-administered measures at baseline (in the summer before starting college) and follow-up (after 10 months). Students were randomized to one of four conditions: parent intervention only, BASICS only, combined (parent and BASICS), and assessment-only control. Intervention efficacy was tested on a number of outcome measures, including peak blood alcohol concentration, weekly and weekend, drinking, and negative consequences. Hypothesized mediators and moderators of intervention effect were tested. Results: The overall results revealed that the combined-intervention group had significantly lower alcohol consumption, high-risk drinking, and consequences at 10-month follow-up, compared with the control group, with changes in descriptive and injunctive peer norms mediating intervention effects. Conclusions: The findings of the present study suggest that the parent intervention delivered to students before they begin college serves to enhance the efficacy of the BASICS intervention, potentially priming students to respond to the subsequent BASICS

session. Copyright 2009, Alcohol Research Documentation Center.

Acute alcohol tolerance on subjective intoxication and simulated driving performance in binge drinkers.

Marczinski CA; Fillmore MT. *Psychology of Addictive Behaviors* 23(2): 238-247, 2009. (57 refs.)

High rates of binge drinking and alcohol-related problems, including drinking and driving, occur among college students. Underlying reasons for the heightened impaired driving rates in this demographic group are not known. The authors, hypothesized that acute tolerance to the interoceptive cues of intoxication may contribute to these maladaptive decisions to drive in binge drinkers. Groups of binge-drinking and non-binge-drinking college students (N = 28) attended sessions during which they received a moderate dose of alcohol (0.65 g/kg) or a placebo. The development of acute tolerance to subjective ratings of intoxication and simulated driving performance was assessed by comparing measures taken during the ascending phase and descending phases of the blood alcohol curve. Compared with placebo, alcohol increased ratings of intoxication and impaired multiple aspects of simulated driving performance in both binge and non-binge drinkers. During the descending phase of the blood alcohol curve, binge drinkers showed acute tolerance to alcohol's effect on subjective intoxication, and this effect was accompanied by an increased rating of willingness to drive. By contrast, non-binge drinkers showed no acute tolerance. Copyright 2009, Educational Publishing Foundation.

Alcohol poisoning among college students turning 21: Do they recognize the symptoms and how do they help?

Oster-Aaland L; Lewis MA; Neighbors C; Vangsness J; Larimer ME. *Journal of Studies on Alcohol and Drugs* Supplement 16: 122-130, 2009. (40 refs.)

Objective: The aims of this study were to (1) determine recognition of and self-reported concern regarding alcohol poisoning symptoms versus other alcohol-related behaviors among students turning 21 years old (2) assess the frequency of helping behavior among Students in situations where peers display alcohol poisoning symptoms, (3) assess sources from which students seek help, and (4) consider reasons why students report reluctance to seek help. Method: Students (N = 306; 50% male) completed a Web-based self-report assessment during the week before their 21st birthday focusing on drinking behavior, alcohol-related consequences, concern for symptoms of alcohol poisoning, and observations of and experience

with helping behavior. Results: Results indicated most students report having helped another student with symptoms of alcohol poisoning and show concern about the symptoms. Students most often seek help from other students and parents. When students do not help their peers, it is most often because of the perception that help is not needed. Heavier drinkers report a greater likelihood to help a peer showing symptoms of alcohol poisoning. Conclusions: Prevention professionals should incorporate students, friends, and parents in interventions that provide knowledge and helping strategies for alcohol poisoning symptoms. In addition, prevention efforts regarding alcohol poisoning should focus on heavy drinkers, as they are most likely to be in situations requiring help. Finally, administrators implementing medical amnesty policies should couple those policies with educational strategies aimed at recognition of alcohol poisoning symptoms. Copyright 2009, Alcohol Research Documentation Center.

Alcohol use, eating patterns, and weight behaviors in a university population.

Nelson MC; Lust K; Story M; Ehlinger E. *American Journal of Health Behavior* 33(3): 227-237, 2009. (37 refs.)

Objective: To explore associations between alcohol, alcohol-related eating, and weight-related health indicators. Methods: Cross-sectional, multivariate regression of weight behaviors, binge drinking, and alcohol-related eating, using self-reported student survey data (n=3206 undergraduates/graduates). Results: Binge drinking was associated with poor diets, unhealthy weight control, body dissatisfaction, and sedentary behavior. Neither year in school nor age modified these relationships. Alcohol-related eating was associated with increased risk of overweight/obesity. Conclusions: Binge drinking was associated with an array of adverse behaviors. These associations did not differ between undergraduate and graduate students. Initiatives are needed to assist students in overcoming campus norms promoting unhealthy alcohol and dietary patterns. Copyright 2009, PNG Publications.

Assessing the effectiveness of peer-facilitated interventions addressing high-risk drinking among judicially mandated college students.

Cimini MD; Martens MP; Larimer ME; Kilmer JR; Neighbors C; Monserrat JM. *Journal of Studies on Alcohol and Drugs* Supplement 16: 57-66, 2009. (78 refs.)

Objective: This study examined the effectiveness of three peer-facilitated brief alcohol interventions --

small group motivational interviewing, motivationally enhanced peer theater, and an interactive alcohol-education program -- with students engaging in high-risk drinking who were referred for alcohol policy violations. Method: Undergraduate students referred for alcohol policy violations (N = 695) at a large northeastern public university were randomized to one of the three conditions. Six-month follow-up data were collected on drinking frequency and quantity, negative consequences, use of protective behaviors, and perceptions of peers' drinking norms. Results: There were no statistically significant overall pre-post effects or treatment effects. However, exploratory analyses indicated that decreases in perceived norms and increases in use of protective behavioral strategies were associated with reductions in alcohol use and alcohol-related problems at follow-up ($p < .01$). Conclusions: The presence of nonsignificant pre-post or main effects is, in part, consistent with recent research indicating that sanctioned college Students may immediately reduce drinking in response to citation and that brief interventions may not contribute to additional behavioral change. The presence of statistically significant correlations between alcohol use and related problems with corrections in norms misperceptions and increased use of protective behaviors at the individual level holds promise for both research and practice. The integration of elements addressing social norms and use of protective behaviors within brief cognitive-behavioral intervention protocols delivered by trained peer facilitators warrants further study using randomized clinical trials. Copyright 2009, Alcohol Research Documentation Center.

Ecosystem modeling of college drinking: Parameter estimation and comparing models to data.

Ackleh AS; Fitzpatrick BG; Scribner R; Simonsen N; Thibodeaux JJ. *Mathematical and Computer Modelling* 50(3-4): 481-497, 2009. (31 refs.)
 Recently we developed a model composed of five impulsive differential equations that describes the changes in drinking patterns (that persist at epidemic level) amongst college students. Many of the model parameters cannot be measured directly from data; thus, an inverse problem approach, which chooses the set of parameters that results in the "best" model to data fit, is crucial for using this model as a predictive tool. The purpose of this paper is to present the procedure and results of an unconventional approach to parameter estimation that we developed after more common approaches were unsuccessful for our specific problem. The results show that our model provides a good fit to survey data for 32 campuses.

Using these parameter estimates, we examined the effect of two hypothetical intervention policies: (1) reducing environmental wetness, and (2) penalizing students who are caught drinking. The results suggest that reducing campus wetness may be a very effective way of reducing heavy episodic (binge) drinking on a college campus, while a policy that penalizes students who drink is not nearly as effective. Copyright 2009, Elsevier Science.

Legal-age students' provision of alcohol to underage college students: An exploratory study.

Brown RL; Matousek TA; Radue MB. *Journal of American College Health* 57(6): 611-618, 2009
 Objective: The authors investigated the magnitude and cultural context of legal-age university students' provision of alcohol to underage students and how such alcohol provision might be deterred. Participants: 130 legal-age students at a midwestern university in the United States were randomly selected. Methods: The authors assessed 16 focus groups and a thematic analysis. Results: Most participants reported frequent alcohol provision. Most denied moral responsibility for any negative consequences that recipients might suffer. Small numbers of participants, chiefly women, would decrease alcohol provision after education on the sexual risks to underage females. Larger numbers would decrease provision in response to consistent law enforcement, severe legal and disciplinary penalties, and education on severe penalties. Conclusions: Legal-age students' provision of alcohol to underage students is an integral part of college Students' drinking culture. As a deterrent, an enforcement-based campaign may be more effective than an educational campaign on the possible negative consequences of alcohol for underage students. Copyright 2009, Heldref Publications.

Magnitude of and trends in alcohol-related mortality and morbidity among US college students ages 18-24, 1998-2005.

Hingson RW; Zha WX; Weitzman ER. *Journal of Studies on Alcohol and Drugs Supplement* 16: 12-20, 2009. (28 refs.)
 Objective: The aim of this study was to estimate, among college students ages 18-24, the numbers of alcohol-related unintentional injury deaths and other problems over the period from 1998 through 2005. Method: The analysis integrated data on 18- to 24-year-olds and college students from each of the following data sources: the National Highway Traffic Safety Administration Fatality Analysis Reporting System, Centers for Disease Control and Prevention Injury Mortality Data, National Coroner Studies, census and college enrollment data, the National

Household Survey on Drug Use and Health, and the College Alcohol Study. Results: Among college students ages 18-24, alcohol-related unintentional injury deaths increased 3% per 100,000 from 1,440 in 1998 to 1,825 in 2005. From 1999 to 2005, the proportions of college ages 18-24 who reported consuming five or more drinks on at least one occasion in the past month increased from 41.7% to 44.7% and the proportions who drove under the influence of alcohol in the past year increased from 26.5% to 28.9%-7% and 9% proportional increases, respectively. The increases occurred among college students ages 21-24, not 18-20. In 2001, 599,000 (10.5%) full-time 4-year college students were injured because of drinking, 696,000 (12%) were hit or assaulted by another drinking college student, and 97,000 (2%) were victims of alcohol-related sexual assault or date rape. A 2005 follow-up of students in schools with the highest proportions of heavy drinkers found no significant changes in the proportions experiencing these events. Conclusions: The persistence of college drinking problems underscores an urgent need to implement prevention and counseling approaches identified through research to reduce alcohol-related harms among college students and other young adults. Copyright 2009, Alcohol Research Documentation Center.

Perceptions about residence hall wingmates and alcohol-related secondhand effects among college freshmen.

Boekeloo BO; Bush EN; Novik MG. *Journal of American College Health* 57(6): 619-626, 2009

Objective: The authors examined the secondhand effects among college freshmen of others alcohol use and related student characteristics, and perceptions about residence hallmates. Participants: The authors surveyed 509 incoming freshmen residing in predominantly freshman residence halls. Methods: The authors administered a Web-based survey 2 months into the 2006 fall academic semester. Results: Most (80%) students experienced at least 1 secondhand effect. Participants' perceptions of wing-mates acceptance and expectation of alcohol use and participants' perceived inability to protect themselves against alcohol problems were related to experiencing secondhand effects, as were being a female and a drinker. Conclusions: Incoming college freshmen frequently experienced secondhand effects of alcohol use. Involving residence halls in norms-based interventions aimed at reducing secondhand effects warrants evaluation. Further research is also needed to examine skill building among college students to avoid and intervene into others' drinking and to examine

resident advisor roles as both engenderers of trust and cooperation as well as enforcers of alcohol rules. Copyright 2009, Heldref Publications.

Residence hall room type and alcohol use among college students living on campus.

Cross JE; Zimmerman D; O'Grady MA. *Environment and Behavior* 41(4): 583-603, 2009. (30 refs.)

The objectives were to explore the relation between the built environment of residence halls and the alcohol use of college students living on campus from the perspective of the theory of routine activity. This exploratory study examined data from two samples on one college campus. Online surveys assessed alcohol use, attitudes toward alcohol use, perceptions of campus alcohol norms, and individual factors (i.e., gender). Data came from an Alcohol Norms Survey using a random sample (N = 440) and a Resident Assessment Survey using a random sample (N = 531) in 2006 and 2007. After controlling for other drinking behavior predictors (attitudes, gender, high school drinking, and perceptions of peer drinking), regression analysis showed that students living in suite halls had a higher odds of drinking more frequently, drinking more alcohol when they socialize, heavy episodic drinking, and drinking more often in their residence halls. Copyright 2009, Sage Publications.

Rx for a party: A qualitative analysis of recreational pharmaceutical use in a collegiate setting.

Quintero G. *Journal of American College Health* 58(1): 64-70, 2009. (26 refs.)

Objective: Using a qualitative methodology, the author examined the sociorecreational use of pharmaceuticals in a collegiate setting. Participants: In all, 91 college students from a public, 4-year institution for higher learning in the Southwest participated in this study. Methods: The author conducted semistructured interviews between May 2004 and December 2005, they then audio recorded, transcribed, and examined the interviews for themes related to the sociorecreational use of prescription drugs. Results: A variety of prescription drugs are used for a number of purposes, including to experience pleasure, manage the duration or intensity of another drug's effects, party or socialize with friends and peers in leisure settings, facilitate sociorecreational activities, and help structure free time. Conclusions: Pharmaceuticals appear to be well integrated into the recreational drug use practices of college students, and prescription drug misuse presents a significant prevention challenge. Copyright 2009, Heldref Publications.

The co-occurrence of alcohol use and gambling activities in first-year college students.

Martens MP; Rocha TL; Cimini MD; Diaz-Myers A; Rivero EM; Wulfert E. *Journal of American College Health* 57(6): 597-602, 2009

Objective: Both alcohol use and gambling are behaviors that can be problematic for many college students however, it is not clear whether the relationship between the 2 exists for students who have recently entered college. Participants: The sample included 908 first-year college students who were surveyed in fall 2005, approximately 1 month after entering college. Methods: Participants completed Web-based surveys on alcohol use and gambling behaviors. Results: Alcohol use and alcohol-related risks were significantly related to both gambling frequency and peak gambling loss. Conclusions: These findings have implications for researchers and clinicians working in the area of addictive behaviors among college students, suggesting that those presenting with problems in 1 domain may also be at risk for problems in the other. Copyright 2009, Heldref Publications.

The role of monthly spending money in college student drinking behaviors and their consequences.

Martin BA; McCoy TP; Champion H; Parries MT; DuRant RH; Mitra A et al. *Journal of American College Health* 57(6): 587-596, 2009

Objective: Alcohol use among college students is pervasive and affected by economic factors such as personal income and alcohol price. The authors examined the relationship among students spending money, drinking rate, and alcohol-related consequences. Participants: In 2005, the authors conducted a Web-based survey among a random sample of 3,634 undergraduate students from 2 large universities. Methods: The authors used multiple logistic regression to model drinking behaviors and multiple linear regression to model alcohol-related consequences. Results: The lowest reported levels of average monthly spending money were associated with reduced levels of drinking and getting drunk. Spending money was independently associated with experiencing alcohol-related consequences caused by a student's own drinking, even after the authors controlled for personal drinking behaviors. The effects

for consequences caused by others' drinking were significant for students who had gotten drunk. Conclusions: These findings have implications for alcohol price and marketing, particularly around colleges, and suggest actions for parents to consider. Copyright 2009, Heldref Publications.

Screening for high-risk drinking in a college student health center: Characterizing students based on quantity, frequency, and harms.

Schaus JF; Sole ML; McCoy TP; Mullett N; Bolden J; Sivasithamparam J et al. *Journal of Studies on Alcohol and Drugs* Supplement 16: 34-44, 2009. (33 refs.)

Objective: This study examined characteristics of students who presented to a college health center and screened positive for the 5/4 definition of high-risk drinking (five or more drinks in a row for men, or four or more drinks in a row for women, on at least one occasion in the past 2 weeks) and analyzed the students' data according to their reporting of alcohol-related harms. Method: Secondary analysis of data obtained for an intervention study to reduce high-risk drinking in college students was used. Data on alcohol use and alcohol-related harms were obtained from Web-based Healthy Lifestyle Questionnaires and 30-day alcohol recall diaries (Timeline Followback calendar). Students (N = 363; 52% female) were classified as nonheavy, heavy, and heavy and frequent drinkers, based on their self-reported alcohol use. Alcohol-related harms were measured using the Rutgers Alcohol Problem Index and eight additional items derived from the Drinker Inventory of Consequences-2L. Results: Students in the nonheavy, heavy, and heavy and frequent groups had mean Rutgers Alcohol Problem Index scores of 10, 14, and 23, respectively. The heavy-and-frequent drinking group comprised 20% of the sample but experienced 31% of the total harms. Conclusions: The 5/4 screening question accurately identified college students presenting to a college health center who were already experiencing significant alcohol-related harms. The addition of a frequency question (drinking 3 or more days per week) to the 5/4 screening question provided a simple method for identifying those students at highest risk and in greatest need of intervention. Copyright 2009, Alcohol Research Documentation Center.