



Published in final edited form as:

*Psychol Addict Behav.* 2009 December ; 23(4): 689–694. doi:10.1037/a0016482.

## Preliminary Examination of Spring Break Alcohol Use and Related Consequences

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### Abstract

The authors examined the extent to which college student drinkers are at risk for experiencing negative alcohol-related consequences during Spring Break. A sample of first-year college student drinkers ( $N = 726$ ) participated by completing an online survey assessing typical drinking, as well as Spring Break drinking and related consequences. Findings suggest Spring Break drinking was positively associated with alcohol-related consequences during Spring Break, even after controlling for sex and typical drinking. Furthermore, results indicated that typical drinking moderated the relationship between Spring Break drinking and expected zero-values (i.e., not reporting any Spring Break consequences), such that the association between SB drinking and the likelihood of being a zero-score was less evident for those who are typically lighter drinkers. Identifying and examining temporal and contextually relevant events and associated drinking is critical for understanding and ultimately preventing extreme drinking and associated consequences associated with specific events like spring break, which place many students at high risk for experiencing acute harm.

### Keywords

college; alcohol; alcohol-related problems; Spring Break; event-specific drinking

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College student drinking has been found to be highly variable, with peak drinking occasions occurring in association with specific events, such as holidays and Spring Break (Del Boca, Darkes, Greenbaum, & Goldman, 2004; Greenbaum, Del Boca, Darkes, Wang, & Goldman, 2005). Identifying events and contexts associated with heavy drinking is important as excessive alcohol use is associated with an increased risk of serious negative consequences to the drinker, including physical, psychological, social, and legal consequences (Abbey, 2002; Hingson, Heeren, Winter, & Wechsler, 2005; Perkins, 2002). While in general typically heavier drinkers (often those drinking at least one standard deviation above the sample mean) are at risk for experiencing negative consequences and harm resulting from alcohol use, recent research suggests that typically lighter drinkers (often those drinking at least one standard deviation below the sample mean) are at particular risk for negative consequences on occasions of increased alcohol use (Lewis, Lindgren, Fossos, Oster-Aaland, & Neighbors, 2009; Neal & Carey, 2007; Neal and Fromme, 2007). For example, typically lighter drinkers have been found to be at greater likelihood than heavier drinkers to experience negative consequences (e.g.,

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sexual coercion, vandalism) on occasions of increased intoxication or drinking, including on 21<sup>st</sup> birthdays (Lewis et al., 2009; Neal & Fromme, 2007). Little research has evaluated whether this pattern may hold for other specific events such as Spring Break (SB).

## Spring Break as an Event for Drinking

Drinking associated with specific occasions presents elevated risks for college students, including cultural or personal events such as college SB (e.g., Lee, Maggs, & Rankin, 2006). Beyond common day-to-day opportunities for drinking, as well as high-risk time limited events, many students use college SB vacations to travel with the intent to engage in excessive alcohol use (e.g., Smeaton, Josiam, & Dietrich, 1998). SB trips have been associated with elevated drinking during SB, especially among students who go on vacations with friends and who are heavier drinkers in general (Grekin, Sher, & Krull, 2007; Lee et al., 2006), while students staying home or vacationing with their parents are at lower risk for increased alcohol use during SB, with many actually decreasing the number of drinks consumed per SB day (Grekin et al., 2007). Combined, there is consistent evidence of a selection effect for SB drinking, in other words typically heavier drinkers may be seeking out opportunities or activities, such as going on SB vacations with friends, with the intent of engaging in extreme drinking.

## The Present Study

The purpose of the present study was to examine alcohol consumption and negative consequences associated with SB and SB trips among first-year college drinkers and whether students who were typically lighter drinkers might be at higher risk for experiencing negative alcohol-related consequences when drinking during SB. For the purposes of the present paper, we operationally define heavier drinking as 15 drinks per typical week and lighter drinking as 1 drink per typical week. We hypothesized typical drinking, SB drinking, and SB trips to be uniquely and positively associated with negative consequences during SB, and that the relationship between SB drinking and consequences would be moderated by typical drinking, such that this relationship would be stronger for typically lighter drinking students. Moreover, we expected students to experience more problems during SB if they consumed heavy amounts of alcohol during SB, especially if they went on a trip. A better understanding of who is at greatest risk for experiencing harm during SB and why is essential in considering the development of targeted interventions for SB drinking.

## Method

### Participants and Procedures

Participants included 726 first-year college students participating in a longitudinal study examining the efficacy of a web-based normative feedback intervention for alcohol use among first-year college student drinkers at a large public university in the northwest United States. The present data come from the first follow-up assessment of the larger study.

Over 4000 first-year students were invited to complete an online survey about alcohol use and social norms during their first quarter of college. Of those invited, 2095 students (51.1% response rate) completed a brief screen used to identify students who reported one or more incidents of heavy drinking (4+ drinks for women/5+ for men) in the last month. Response rates were similar to rates found with other large studies of college students (e.g., Marlatt et al., 1998). Similar to rates found with national samples (e.g., Johnston et al., 2008), 42.8% of students met heavy drinking criteria and were invited to participate in the longitudinal intervention study, with 91.3% being successfully recruited ( $n = 818$ ) and completing the baseline study. All assessments were conducted online over a secure server. All study

procedures were approved by the university Institutional Review Board and a federal Certificate of Confidentiality was obtained to further protect the participants in the study.

Data for the current study were from the six-month assessment, which occurred approximately one-week after SB. Of those in the longitudinal study, 743 completed the six-month assessment (90.8% retention rate) and included 59.0% women, and 65.7% were White, 24.1% Asian, 4.1% Hispanic/Latino, 1.1% Black, .5% Native American, and 4.5% Other. Due to missing data, 726 participants are included in the final analyses. Students were compensated \$25 for completion of the six-month assessment.

## Measures

**Intervention condition**—was coded 0 (control) and 1 (intervention).

**Typical alcohol use**—Participants completed the Daily Drinking Questionnaire (Collins, Parks, & Marlatt, 1985) and were asked to report the number of standard drinks, on average, that they consumed on each day of a typical week (during the past three months). A total drinks per week score was computed by summing the number of drinks reported for each day of the week.

**Spring Break trips, alcohol use, and consequences**—Students were asked, “Did you go on a trip for Spring Break?” Responses were coded as 0 = no and 1 = yes. SB alcohol use was assessed using a modified version of the Timeline Followback (TLFB; Sobell & Sobell, 2002). Students were asked to complete a retrospective 10-day TLFB report for the ten days corresponding to the university’s SB, ranging from the Friday (the last day of finals week) to Sunday (the day before the start of the new Spring quarter). Students were asked to report the number of standard drinks they consumed on each of the ten days of SB. A total drinks during SB score was calculated by summing the number of drinks consumed on each of the ten days.

Participants were asked to report whether they experienced any of eight different consequences as a result of their alcohol use during the week of SB, where 0 = did not experience and 1 = did experience. Items were selected from the Rutgers’ Alcohol Problems Index (White & Labouvie, 1989, 4 items) and the Young Adult Alcohol Problems Screening Test (Hurlbut & Sher, 1992, 3 items) and were chosen to represent consequences that were likely to be experienced (based on frequencies from the initial baseline survey) and that were representative of items across physical and social domains which may be likely to occur during SB. One additional item, “Received an injury as a result of drinking”, was created for use in this study. Final scores were summed to represent the SB alcohol-related negative consequences ( $\alpha = .68$ ).

## Results

### Descriptive Statistics

At the six-month assessment, 5.1% of the sample did not report drinking in the last month and 17.1% would not have met initial heavy drinking screening criteria (defined as 4/5+ for women/men on one occasion). While 82.9% indicated drinking heavily at least once in the last month, 40.5% reported that they typically do not drink heavily. When asked about the past three months, 8.3% indicated they typically did not drink and nearly 29.9% said they typically drink 4 drinks or fewer drinks a week. Approximately 70% of students reported drinking during SB, with 23.6% reporting drinking on five or more days and 4.4% reporting each of the ten SB days. Students consumed on average 15.26 drinks during the 10 days of SB (see Table 1). On average, students drank on 2.78 days ( $SD = 2.87$ ) and consumed an average of 5.06 ( $SD = 2.77$ ) drinks per drinking SB day. Forty-six percent of the sample reported going on a trip for SB

and 36% reported experiencing a negative consequence during SB. Table 1 presents the correlations between typical drinking, SB drinking, and SB consequences and Table 2 presents prevalence rates for each of eight consequences for students who did and did not go on SB trips.

### Data Analysis

Preliminary analyses revealed non-normal distribution for SB alcohol-related negative consequences ( $S = 2.02$ ,  $K = 4.78$ ). The distribution was positively skewed and approximated a negative binomial distribution with the exception of a disproportionately large number of zero values for SB alcohol-related negative consequences (63.3%). Thus, zero-inflated negative binomial regression (ZINB) was selected as the primary analysis strategy (Atkins & Gallop, 2007; Heilbron, 1994; Hilbe, 2007; Simons, Neal, & Gaher, 2006).

Zero-inflated negative binomial regression was used to simultaneously predict expected zero-values as well as predict counts of reported alcohol-related negative consequences experienced during SB among expected drinkers. The first set of tests has a distribution in which the target behavior is always absent. This logistic portion of the model examines the likelihood of the observation being a zero-value (i.e., those who did not experience a problem during SB), such that it predicts the excess zeros (i.e., zero-scores that exceed what would be expected in a negative binomial model). The second set of tests has a distribution in which the target behavior can be any integer including zero, and focuses on the count portion of the model. In these data, this corresponds to evaluating predictors of the number of negative consequences experienced during SB.

We included the same predictors for both dimensions when examining SB alcohol-related negative consequences. Due to documented gender differences in general drinking and during SB (Smeaton et al., 1998), sex was dummy coded and entered as a covariate, as was intervention condition. Main effects for typical drinking, SB drinking, and SB trip were also entered. At Step 2, we examined interactions between typical drinking, SB drinking, and SB trip. All predictors were mean centered to facilitate interpretation of the interaction (Aiken & West, 1991).

### ZINB Regression Results Evaluating Spring Break Negative Consequences

The likelihood ratio for the full ZINB model was  $X^2(10) = 360.30$ ,  $p < .001$ , and the maximum likelihood  $R^2 = .39$ , which indicates that the overall model was significant. Findings indicated support for the ZINB model over other possible count models. The Vuong test for non-nested models supported the use of a zero-inflated model over a standard negative binomial model,  $z = 7.59$ ,  $p < .001$ . Results of the ZINB regression evaluating SB negative consequences are presented in Table 3. Results for the logistic portion of the model represent unique associations between each predictor and expected zero-values (or the absence of any negative consequences). Results for the counts portion of the model represent unique associations between each predictor and the number of consequences (count) experienced during SB.

**Logistic results**—Results of the logistic portion indicated that the intervention, gender, and SB trip were not significantly associated with expected zero-values. Results revealed that SB drinking was uniquely and negatively associated with predicted zero-scores. Thus, students who reported consuming less alcohol during SB were more likely to be an expected zero-value (i.e., to *not* have reported any SB alcohol-related negative consequences).

Results at Step 2 revealed that typical drinking interacted with SB drinking. Figure 1 presents regression lines of the relationship between SB drinking and *expected zero-scores of SB alcohol-related negative consequences* plotted at low, medium, and high values of typical

drinking. Interactions were plotted following procedures described by Aiken and West (1991) and others (Cohen, Cohen, West, & Aiken, 2002; Jaccard & Turrisi, 1991). However, because typical drinking was not normally distributed using one standard deviation above and below the mean to represent high and low values of drinking would not be appropriate. Rather one typical drink (reported by 10.9% of the sample) was chosen as the low value, seven drinks or less (49.0%) as the medium value, and fifteen drinks or less (79.1%) to represent the high value for typical drinking. SB drinking was represented as a continuous score. As shown in Figure 1, the association between SB drinking and the likelihood of being a zero-score was less evident for those who are typically lighter drinkers.

**Count results**—Results from the counts portion of the model indicated that only SB drinking was uniquely and positively associated with number of negative consequences experienced during SB among expected drinkers. At Step 2, there were no significant interactions.

## Discussion

Recent research has begun to examine contextual and temporal risk factors placing college students at risk for heavy drinking. The present study indicates that SB drinking was associated with negative alcohol-related consequences during SB, even after taking typical drinking and sex into account. Consistent with prior research on 21<sup>st</sup> birthday drinking among college students (Lewis et al., 2009), we found that students who consumed less alcohol during SB were more likely to have not reported any negative consequence during SB. However, this association was less evident for those who were typically lighter drinkers (e.g., 1 drink per week), indicating that typically lighter drinkers who drank during SB were more likely to have reported consequences.

Surprisingly, going on a SB trip was not related to SB consequences, nor did it moderate the relationship between SB drinking and consequences, however these results might be due to the lack of a definition of SB trip (i.e., students were not asked where they went, who they were with, or intentions for going). In fact, rates of going on a trip were nearly three times that found in Grekin et al. (2007) for first-year students vacationing with friends. Future research should examine how different destinations, social contexts, and/or intentions, may be differentially related to alcohol use and consequences during SB (e.g., going to a beachfront destination with the intentions to party compared to going on a volunteer service trip). Additionally, findings in this freshmen sample may be somewhat attenuated given that proportionately fewer first-year students go on SB trips with friends (Grekin et al., 2007). Future research should evaluate these relationships in older college students who may be more likely to go on trips with friends.

## Implications

Results from the present study provide support for examining event-specific drinking. Examining temporal and contextually relevant events and associated drinking and consequences is necessary for understanding the variability in drinking and for identifying events that may place students at higher risk for experiencing harm. Prevention and intervention efforts could target specific events, such as SB, with the goal of reducing heavy drinking and negative consequences during the high-risk event. The present research suggests that typically lighter drinkers may be at risk for increased drinking and should be a target of intervention efforts. Typically lighter drinkers may in fact falsely believe that they are at less risk for consequences, since they typically are less likely in general to experience consequences.

Neighbors and colleagues (2007) suggest focused prevention and intervention efforts could include individual (e.g., education about risks, correcting normative SB drinking misperceptions), as well as, environmental (e.g., banning advertisements in college newspapers) targets. For example, Neighbors, Lee, Lewis, Fossos, and Walter (2009) recently



developed and evaluated the efficacy of an individual web-based personalized feedback intervention aimed at reducing 21<sup>st</sup> birthday high-risk drinking by highlighting intentions and perceived norms for 21<sup>st</sup> birthday drinking, as well as protective behavioral strategies for reducing risk. Findings indicate that college students in the intervention group reported lower estimated blood alcohol concentrations (eBACs) on their 21<sup>st</sup> birthday compared to a control group. Similar personalized interventions could be adapted for SB. Interventions with typically lighter drinkers could include feedback on intended SB eBACs and risks for consequences (i.e., both perceived risk and risk associated with intended eBACs).

### Limitations and Other Future Directions

The present study offers preliminary evidence of the impact of SB on first-year college student consequences; however, the findings should be viewed in light of several limitations. First, the sample consists of first-year college students who were originally screened for high-risk drinking. While six months later some students reduced their typical drinking, over 80% of the sample continued to engage in heavy-episodic drinking at least once in the last month. Future research should further examine the influence SB has on drinking from students who infrequently drink or typically drink few in quantity. Second, students come from one institution and primarily self-reported as white and Asian. Results may not generalize to other institutions or ethnicities. Third, due to time constraints, only eight SB consequences were assessed dichotomously over the course of ten days. As such, participants who reported fairly high base-rates of consequences or who responded to multiple consequence items would both receive a score of "1" per item regardless if this occurred one or multiple times during SB, potentially truncating the variance in consequences. Moreover, the consequences measured did not include more severe items with potentially life altering implications (e.g., drinking and driving, requiring medical attention). Additionally, it would be interesting to assess event-level relationships between SB drinking and consequences (i.e., examining daily drinking with corresponding consequences), as well as contextual characteristics of the event. Finally, these results are based on a cross-sectional assessment precluding causal inference. Related, the measure of typical drinking may have included drinking which occurred during SB, potentially resulting in underestimated effect sizes.

### Conclusions

These findings further demonstrate the importance of evaluating event-specific drinking and for understanding who may be at greatest risk when drinking during SB. Further research is needed to evaluate other possible psychosocial characteristics (e.g., SB specific drinking motivations or alcohol outcome expectancies) that may identify students who are likely to seek out particular high-risk SB experiences and those at greatest risk of experiencing consequences. Finally, future research efforts should continue to examine how contextual and temporal drinking relate to typical drinking behavior to aid in developing event-specific preventative interventions.

### Acknowledgments

Data collection and manuscript preparation was supported by National Institute on Alcohol Abuse and Alcoholism Grant R01AA014576. Manuscript preparation was also supported by National Institute on Alcohol Abuse and Alcoholism Grant K01AA016966.

### References

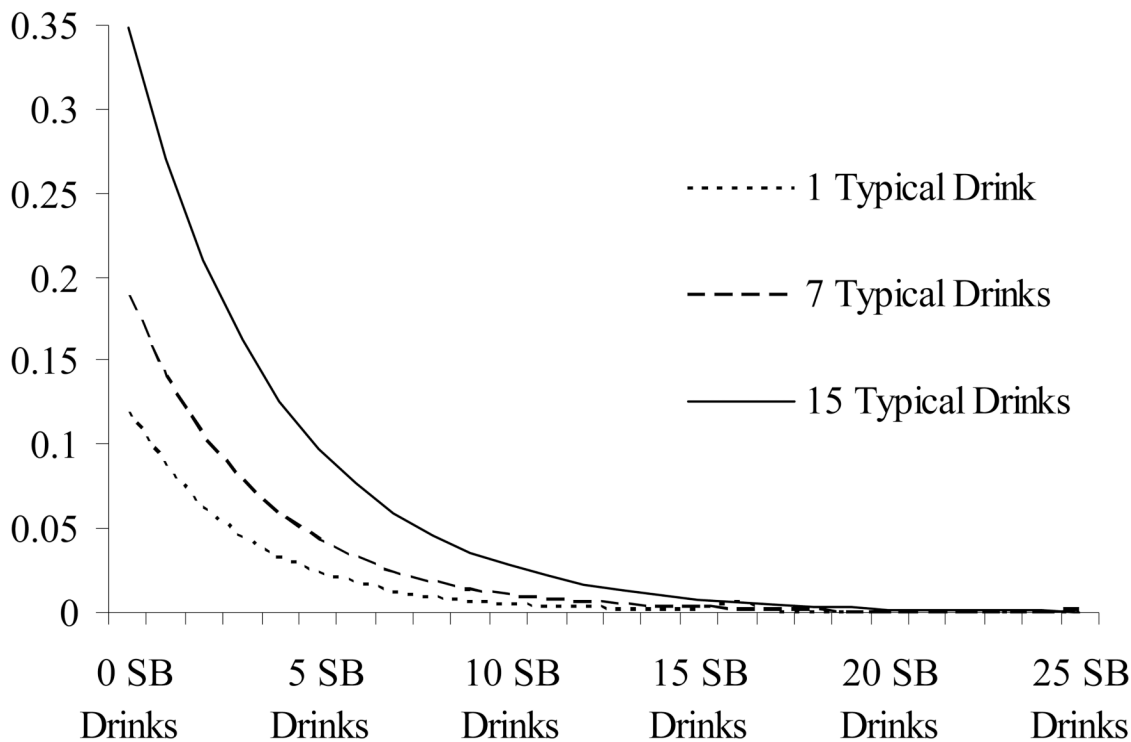
- Abbey A. Alcohol-related sexual assault: A common problem among college students. *Journal of Studies on Alcohol* 2002 Supplement 14:118–128.
- Aiken LS, West SG. *Multiple regression: Testing and interpreting interactions*. 1991

- Atkins DC, Gallop RJ. Rethinking how family researchers model infrequent outcomes: A tutorial on count regression and zero-inflated models. *Journal of Family Psychology* 2007;21:726–735. [PubMed: 18179344]
- Cohen, J.; Cohen, P.; West, SG.; Aiken, LS. *Applied multiple regression/correlation analysis for the behavioral sciences*, (3 ed.). Mahwah, NJ: Lawrence Erlbaum Associates; 2003.
- Collins RL, Parks GA, Marlatt GA. Social determinants of alcohol consumption: the effects of social interaction and model status on the self-administration of alcohol. *Journal of Consulting and Clinical Psychology* 1985;53:189–200. [PubMed: 3998247]
- Del Boca FK, Darkes J, Greenbaum PE, Goldman MS. Up close and personal: Temporal variability in the drinking of individual college students during their first year. *Journal of Consulting and Clinical Psychology* 2004;72:155–164. [PubMed: 15065951]
- Greenbaum PE, Del Boca FK, Darkes J, Wang C, Goldman MS. Variation in the drinking trajectories of freshmen college students. *Journal of Consulting and Clinical Psychology* 2005;73:229–238. [PubMed: 15796630]
- Grekin ER, Sher KJ, Krull JL. College spring break and alcohol use: Effects of spring break activity. *Journal of Studies on Alcohol and Drugs* 2007;68:681–688. [PubMed: 17690801]
- Heilbron DC. Zero-altered and other regression models for count data with added zeros. *Biometric Journal* 1994;36:531–547.
- Hilbe, J. *Negative Binomial Regression*. Cambridge, MA: Cambridge University Press; 2007.
- Hingson R, Heeren T, Winter M, Wechsler H. Magnitude of alcohol-related mortality and morbidity among U.S. college students ages 18–24: Changes from 1998 to 2001. *Annual Review of Public Health* 2005;26:259–279.
- Hurlbut SC, Sher KJ. Assessing alcohol problems in college students. *Journal of American College Health* 1992;41:49–58. [PubMed: 1460173]
- Jaccard, J.; Turrisi, R. *Interaction effects in multiple regression*, (2<sup>nd</sup> ed). Thousand Oaks, CA: Sage; 2003.
- Johnston, LD.; O'Malley, PM.; Bachman, JG.; Schulenberg, JE. *Monitoring the Future national survey results on drug use, 1975–2007: Volume I, Secondary school students* (NIH Publication No. 08-6418A). Bethesda, MD: National Institute on Drug Abuse; 2008.
- Lee CM, Maggs JL, Rankin L. Spring break trips as a risk factor for heavy alcohol use among first-year college students. *Journal of Studies on Alcohol* 2006;67:911–916. [PubMed: 17061009]
- Lewis MA, Lindgren KP, Fossos N, Oster-Aaland L, Neighbors C. Examining the relationship between typical drinking behavior and 21<sup>st</sup> birthday drinking behavior among college students: Implications for event-specific prevention. *Addiction* 2009;104:760–767. [PubMed: 19344447]
- Marlatt GA, Baer JS, Kivlahan DR, Dimeff LA, Larimer ME, Quigley LA, et al. Screening and brief intervention for high-risk college student drinkers: Results from a 2-year follow-up assessment. *Journal of Consulting and Clinical Psychology* 1998;66:604–615. [PubMed: 9735576]
- Neal DJ, Carey KB. Association between alcohol intoxication and alcohol-related problems: An event-level analysis. *Psychology of Addictive Behaviors* 2007;21:194–204. [PubMed: 17563139]
- Neal DJ, Fromme K. Event-level covariation of alcohol intoxication and behavioral risks during the first year of college. *Journal of Consulting and Clinical Psychology* 2007;75:294–306. [PubMed: 17469887]
- Neighbors C, Lee CM, Lewis MA, Fossos N, Walter T. Internet-based personalized feedback to reduce 21<sup>st</sup> birthday drinking: A randomized controlled trial of an Event Specific Prevention Intervention. *Journal of Consulting and Clinical Psychology* 2009;77:51–63. [PubMed: 19170453]
- Neighbors C, Walters ST, Lee CM, Vader AM, Vehige T, Szigethy T, DeJong W. Event-specific prevention: Addressing college student drinking during known windows of risk. *Addictive Behaviors* 2007;32:2667–2680. [PubMed: 17616260]
- Perkins HW. Surveying the damage: A review of research on consequences of alcohol misuse in college populations. *Journal of Studies on Alcohol* 2002 Supplement 14:91–100. [PubMed: 11925064]
- Simons JS, Neal DJ, Gaher RM. Risk for marijuana-related problems among college students: An application of zero-inflated negative binomial regression. *The American Journal of Drug and Alcohol Abuse* 2006;32:41–53. [PubMed: 16450642]

- Smeaton GL, Josiam BM, Dietrich UC. College students' binge drinking at a beach-front destination during spring break. *Journal of American College Health* 1998;46:247–254. [PubMed: 9609971]
- Sobell, LC.; Sobell, MB. *Handbook of Psychiatric Measures*. Washington, DC: American Psychiatric Association; 2002. Alcohol Timeline Followback (TLFB); p. 477-479.
- Wechsler H, Dowdall GW, Maenner G, Glendhill-Hoyt J, Lee H. Changes in binge drinking and related problems among American college students between 1993 and 1997. Results of the Harvard School of Public Health College Alcohol Study. *Journal of American College Health* 1998;47:57–68. [PubMed: 9782661]
- White HR, Labouvie EW. Towards the assessment of adolescent problem drinking. *Journal of Studies on Alcohol* 1989;50:30–37. [PubMed: 2927120]



Odds Ratios for Experiencing No Spring Break Negative Consequences



**Figure 1.** The relationship between SB drinking and expected zero-values (i.e., *the absence of SB alcohol-related negative consequences*) for low (one drink), medium (seven drinks) and high (fifteen drinks) levels of typical drinks per week. Intervention and sex were included in the analyses as covariates. All predictors were mean centered to facilitate interpretation of the interaction



**Table 2**

## Spring Break Alcohol-Related Consequences as a Function of Going on a Trip

Alcohol-related consequence during Spring Break	No Trip	Trip	$\chi^2$
Had a hangover the morning after you had been drinking.	21.83%	32.83%	11.11***
Felt sick to your stomach or threw up after drinking.	15.48%	23.19%	6.96**
Passed out or fainted suddenly.	5.58%	9.34%	3.75*
Had a fight, argument or bad feelings with a friend.	3.30%	8.43%	8.91***
Received an injury as a result of drinking.	3.81%	7.53%	4.80**
Got into fights, acted bad, or did mean things.	2.79%	6.63%	6.10*
Got into sexual situations which you later regretted.	3.05%	6.02%	3.79*
Had a fight, argument or bad feelings with a family member.	2.03%	3.31%	1.16

Note.  $n = 726$  (Trip = 332; No Trip = 394).

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .

**Table 3**  
 Summary of Zero-Inflated Negative Binomial Regression Analysis Predicting Spring Break Negative Consequences

Predictor	B	SE	Z	95% CI
Logistic Portion of the Model				
Step 1				
Intervention	-.776	.495	-1.57	-1.746 .195
Sex	.586	.425	1.38	-.246 1.418
Typical Drinking	.039	.032	1.20	-.024 .101
Spring Break Drinking	-.328	.049	-6.63***	-.425 -.231
Spring Break Trip	-.253	.379	-0.67	-.995 .490
Step 2				
Typical Drinking × Spring Break Drinking	.005	.001	4.38***	.003 .008
Spring Break Trip × Spring Break Drinking	-.068	.086	-0.79	-.237 .101
Spring Break Trip × Typical Drinking	.024	.051	0.46	-.077 .124
Counts Portion of the Model				
Step 1				
Intervention	-.003	.136	-0.02	-.270 .265
Sex	.139	.110	1.27	-.076 .354
Typical Drinking	.002	.005	0.35	-.008 .012
Spring Break Drinking	.010	.003	3.59***	.004 .015
Spring Break Trip	-.001	.103	-0.01	-.202 .120
Step 2				
Typical Drinking × Spring Break Drinking	.000	.000	-0.06	-.001 .001
Spring Break Trip × Spring Break Drinking	.002	.005	0.41	-.008 .012
Spring Break Trip × Typical Drinking	-.005	.010	-0.45	-.025 .016

Note.  $n = 726$ .

\*\*\*  
 $p < .001$ .

Intervention was coded as 0 = control and 1 = intervention. Sex was coded as 0 = women and 1 = men. Spring Break Trip was coded as 0 = no trip and 1 = trip.