

# Partying Before the Party: Examining Prepartying Behavior Among College Students

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**Abstract. Objective:** The authors examined the phenomenon known to college students as *prepartying*, which is the consumption of alcohol prior to attending an event or activity (eg, party, bar, concert) at which more alcohol may be consumed. **Participants:** To explore the extent of this behavior, the authors surveyed 227 college students about each drinking event over a 1-month period. **Results:** Principal results revealed that 64% of participants engaged in prepartying (75% of drinkers) and that prepartying is involved in approximately 45% of all drinking events. Prepartying was predictive of more drinking throughout the day of the drinking event and alcohol-related negative consequences. Men and women engaged in this behavior at similar rates, and prepartying was most related to social reasons for drinking. **Conclusion:** Because prepartying is well-known among students, the authors suggest that clinicians and researchers target it to better understand college drinking and to help students understand the associated dangers.

**Keywords:** alcohol, college students, health education

College students' heavy episodic drinking, or *binge drinking* (5 or more drinks in a row for men, 4 or more drinks in a row for women), is associated with a range of negative consequences—including damaged property, poor class attendance, hangovers, trouble with authorities, injuries, and fatalities.<sup>1-4</sup> Further, many student drinkers endorse “drinking to get drunk” as a major reason for consuming alcohol.<sup>3,5</sup> Although researchers have found that heavy consumption behavior is not consistent over time (ie, nonweekend and post-college behavior), even 1 night of heavy drinking may produce harmful effects.<sup>6,7</sup>

Two major consequences resulting from heavy episodic drinking are blackouts and alcohol poisonings. *Blackouts* are experiences of amnesia postdrinking<sup>8,9</sup> and typically occur when high blood alcohol levels (BALs) are reached quickly.<sup>10,11</sup> In one study, approximately half of all college students who drank alcohol reported experiencing at least 1

blackout.<sup>12</sup> When college students engage in heavy drinking behavior over a short period of time, consequences can emerge both during the blackout (eg, vandalism, risky sex, drunk driving) and in the long-term (eg, lower grade point average, overall heavier drinking patterns).<sup>12,13</sup>

*Alcohol poisoning* results from ingesting large quantities of alcohol and can lead to alcohol-induced nausea, vomiting, and even death.<sup>1,14</sup> Death can occur when large quantities of alcohol cause the brain to be deprived of oxygen, leading involuntary functions that regulate heart rate and respiration to shut down.<sup>15</sup> In 1995, an estimated 318 young people aged 15 to 24 years died from alcohol poisoning.<sup>16</sup> The number of college student deaths could continue to rise if students are unaware of the lethal effects of high consumption levels. Several researchers report that students both underestimate<sup>17,18</sup> and overestimate<sup>19</sup> their actual BALs. Furthermore, as intoxication levels increase, students tend to underestimate their likelihood of experiencing negative consequences.<sup>20</sup> Thus, as BALs rise, fear of consequences diminishes and students may not fully realize the potential effects from drinking. In this scenario, both blackouts and alcohol poisoning can emerge.

Despite the consequences of binge drinking, students typically do not view the standard definition of this behavior (the 5/4 measure) as dangerous drinking, with the majority believing that consumption of 7 or more drinks for men and 6 or more for women is binge drinking.<sup>21</sup> Further, those who think the definition is higher actually drink at higher levels and have more negative consequences from use. Although interventions may attempt to warn students of the dangers associated with binge drinking, students may view heavy drinking as normative among all college students.<sup>22,23</sup> In addition, the social environment of college can promote and reinforce the heavy use of alcohol.<sup>2,24-26</sup> Interventions targeting a behavior viewed as dangerous by researchers and health professionals but not so by students themselves may be ineffective. It may be better to target students' common practices that increase risk. One such practice associated with heavy and rapid consumption is known among students as *prepartying* or *pregaming*.

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*Prepartying* is the consumption of alcohol prior to attending an event or activity (eg, party, bar, concert) at which more alcohol may be consumed. To our knowledge, there are no studies to date that specifically identify or label this type of behavior. Anecdotal experience with students reveals prepartying is typically done with friends while preparing to go out for the night. Students drink multiple shots, beers, or other alcoholic beverages in a brief period of time to become intoxicated. Inexperienced drinkers may not realize that drinking large quantities at a fast rate can leave them significantly impaired and at increased risk for nausea, blackouts, alcohol poisoning, and other negative consequences as they continue to drink. Students in general may not know that this behavior can be dangerous. Thus, it is imperative for college health professionals to understand this behavior and to address it with college students.

We examined the frequency of prepartying behavior among college students and focused on its relation to drinking motives and alcohol-related negative consequences. We conducted this exploratory study to identify the role of prepartying in college students' lives by looking at each drinking event over a 1-month period. Several hypotheses guided the analyses: more drinking will take place on days when students preparty, students who preparty will experience more alcohol-related consequences (specifically related to heavy consumption levels) than those who do not preparty, and the number of drinks consumed during prepartying events will influence the number consumed after prepartying. Last, because the social context of college may influence and reinforce drinking behavior<sup>2,24-27</sup>—and results from several studies show that college students drink for social reasons<sup>25,28-30</sup>—we hypothesized that social reasons for drinking are associated with frequency of prepartying behavior.

## METHODS

### Participants

Ninety participants completed an online assessment for credit in an introductory psychology course. Using a modified respondent-driven sampling (RDS) design,<sup>31</sup> each participant could recruit 1 or 2 college-aged peers (criteria was a college student aged 18–25 years) to complete the same online assessment in exchange for extra credit. Initial participants were given 1 credit for their own participation and 1 credit for each recruited peers' participation. Participants could recruit only 2 participants for a total of 3 credits. Overall, 229 participants consented to participate in the online assessment. We excluded 2 participants aged older than 30 years to obtain a homogenous sample of college students aged 18–25 years. Of the 227 remaining participants who took part in the study, 193 (85%) drank at least once in the past month and 145 (64%) prepartied at least once in the past month (69% of men and 60% of women). The 227 participants had a mean age of 19.05 years ( $SD = 1.18$ ), consisted of 60% women ( $n = 127$ ), and were mainly freshmen and sophomores (40% freshmen, 41% sophomores, 13% juniors, 5% seniors).

Participants were 59% Caucasian or white, 14% Hispanic, 11% Asian or Pacific Islander, 9% mixed ethnicity, 4% African American or black, and 3% "other ethnicity." Participants drank a mean of 30.73 total drinks ( $SD = 33.23$ ) over 5.17 days ( $SD = 4.80$ ) in the past month.

### Design and Procedure

We sent all participants an online assessment questionnaire to the e-mail accounts they provided. Both participants seeking credit and participants recruited by their peers agreed to and electronically signed local institutional review board-approved consent forms before beginning the online questionnaire. In addition, participants were given several prompts throughout the assessment, which reiterated that their data were confidential and would not be connected to their names or e-mail addresses.

The questionnaire began by assessing demographic variables, such as age, ethnicity, and class standing. Participants then responded to 4 drinking behavior questions (days consumed alcohol per week and per month in the past month, average drinks per occasion, and maximum drinks consumed at one time in the past month) and 5 questions we developed assessing prepartying behavior in the past month (frequency, average quantity consumed during prepartying, average hours spent prepartying, typical drinks consumed while prepartying [ie, shots, beers, wine, or mixed drinks], and typical activity performed while prepartying [ie, with friends/roommates while getting ready to go out, alone, playing drinking games, or other]). Prepartying was defined for participants as "drinking *before you went out* to your planned destination (eg, party, bar, concert) at which more alcohol may or may not be consumed." Standard drinks were defined as a drink containing 0.5 fl oz of ethyl alcohol—one 12-oz beer, one 4-oz glass of wine, or one 1.25-oz shot of liquor. Pictures of standard drinks accompanied these descriptions.

The questionnaire also included the 23-item Rutgers Alcohol Problem Index (RAPI),<sup>32</sup> which assessed problems encountered during the past month either during or caused by drinking ( $\alpha = .90$  in the current sample). We added 3 items to the RAPI—1 item assessed how often the participant experienced hangovers in the past month, and 2 questions asked how often the individual drove a car after consuming 2 or more drinks and 4 or more drinks. The questionnaire also included the Drinking Motives Questionnaire (DMQ),<sup>28</sup> which assessed reasons for drinking across 4 subscales, each with adequate reliability: Social ( $\alpha = .92$ ), Mood Enhancement ( $\alpha = .90$ ), Conformity ( $\alpha = .83$ ), and Coping ( $\alpha = .82$ ).

Participants next completed a Timeline Followback (TLFB)<sup>33</sup> assessment of their past month's drinking. A calendar was presented with the following instructions:

You will now do your best to try and recall your drinking behavior over the past month. Before you continue to answer any of the questions, use the calendar below to help you remember the past 30 days worth of drinking behavior. Print

it out and write on it (or use your own personal calendar) to help you remember. By having the calendar as a visual aide, you will find it easier to remember your drinking over the past month.

Participants were given a prompt for each day of the month, asking them to recall how many drinks they consumed that day. If they consumed alcohol on a given day, they were prompted to 3 other questions: whether they prepartied, how much they drank during the prepartying event, and over how many hours they prepartied during that event. Although this computerized TLFB assessment has not been previously validated using a within-subject randomized design, other forms of computerized alcohol assessment have been validated.<sup>34-36</sup> Furthermore, the correlations between self-reported drinking variables and this event-level assessment revealed moderate to high correlations, suggesting that this method was comparable to standard single-item self-report items ( $r = .72, p < .001$  for drinking days;  $r = .78, p < .001$  for average drinks per occasion;  $r = .66, p < .001$  for prepartying frequency;  $r = .66, p < .001$  for average drinks per occasion consumed during prepartying).

### Data Analysis

Because, to our knowledge, this is the first study in which researchers examine prepartying, many of the analyses are descriptive, describing the phenomenon at the individual and event level. We primarily used means from the TLFB variables to determine the extent of drinking and prepartying among participants during the past month of drinking behavior. In addition, we analyzed all drinking events for both men and women to examine the extent of prepartying during each drinking event. We report percentages and frequencies of prepartying activities and used chi-square analyses to determine differences between men and women on typical prepartying activities and types of drinks consumed. We used Pearson's correlation coefficients where correlations are reported. We used linear and stepwise regressions to predict alcohol-related problems and drinks consumed after prepartying as well as to determine which drinking motives predicted prepartying. Predictive statistics represent a positive or direct relationship. Significance was set at  $p < .05$ . We analyzed all data with SPSS 13.0 (SPSS Inc, Chicago, IL).

## RESULTS

### Drinking Behavior

We used the 4 drinking variables computed from the online TLFB (drinking days per month, average drinks per occasion, total drinks per month, and maximum drinks consumed at one time in the past month) to assess drinking behavior in the past month. Men drank more total drinks in the past month than did women, 35.88 ( $SD = 35.27$ ) vs 26.65 ( $SD = 31.05$ ),  $t(215) = 2.05, p < .05$ ; more drinks per occasion, 6.27 ( $SD = 2.49$ ) vs 4.42 ( $SD = 2.22$ ),  $t(182) = 5.29, p < .001$ ; and more maximum drinks at one time, 9.19

( $SD = 5.72$ ) vs 6.40 ( $SD = 4.78$ ),  $t(223) = 3.99, p < .001$ . Male and female participants did not differ in frequency of drinking, with men reporting 5.19 ( $SD = 4.50$ ) and women 5.15 ( $SD = 5.04$ ),  $t(225) = .063, p = .950$ , drinking days in the past month.

## Prepartying Behavior

### Event-Level Analyses

Men ( $n = 100$ ) reported 523 drinking events in the past month, whereas women ( $n = 127$ ) reported 654. For men, 237 (45%) of these events involved prepartying, whereas 357 (55%) of women's drinking events did. Men reported engaging in heavy episodic drinking during 378 (72%) drinking events, whereas women reported heavy episodic drinking during 442 (68%). When men prepartied, they engaged in heavy episodic drinking 84% of the time during that drinking day, compared with 63% of the time on nonprepartying drinking days,  $\chi^2(1, N = 523) = 27.47, p < .001$ . Similarly, on days when women prepartied, they engaged in heavy episodic drinking 83% of the time, compared with 49% on nonprepartying days,  $\chi^2(1, N = 654) = 81.26, p < .001$ . Across all events, men drank an average of 8.15 drinks ( $SD = 3.91$ ) on prepartying days and 5.80 drinks ( $SD = 2.95$ ) on nonprepartying days,  $F(1, 522) = 61.09, p < .001$ . Women drank an average of 5.76 drinks ( $SD = 2.83$ ) on prepartying days and 4.07 drinks ( $SD = 2.75$ ) on nonprepartying days,  $F(1, 653) = 59.40, p < .001$ . After prepartying, men consumed a mean of 4.08 more drinks ( $SD = 3.10$ ), and women consumed an average of 2.48 more drinks ( $SD = 2.12$ ) during the drinking day. Of all drinking events involving prepartying, 20% did not involve additional drinking after prepartying (15% of male events; 24% of female events).

### Mean Behavior Analyses

Table 1 displays means and standard deviations of prepartying variables among men and women. Men averaged 2.84 prepartying days ( $SD = 3.43$ ), consuming a mean of 3.70 drinks ( $SD = 1.77$ ) in 1.36 hours ( $SD = 0.66$ ). Women averaged 2.48 prepartying days ( $SD = 2.63$ ), consuming a mean of 3.22 drinks ( $SD = 1.75$ ) in an average 1.30 hours ( $SD = 0.66$ ). Among drinkers, men reported prepartying before 43.8% ( $SD = 29.59$ ) of their drinking occasions, whereas the frequency for women was 45.2% ( $SD = 34.19$ ).

### Prepartying Duration

Participants reported how long each prepartying event lasted. Nearly half (47%) of men's prepartying events lasted less than 1 hour (with men consuming a mean of 3.37 drinks [ $SD = 1.86$ ] within that time period, range = 1-8 drinks), whereas 53% of women's prepartying events occurred within 1 hour ( $M = 2.61$  drinks,  $SD = 1.35$ , range = 1-7 drinks). The percentage of prepartying events lasting less than 2 hours was 87% for men ( $M = 3.84$  drinks,  $SD = 2.08$ ) and 93% for women ( $M = 3.07$  drinks,  $SD = 1.70$ ). For events lasting 1 hour or less, 31% of men's

**TABLE 1. Drinking and Prepartying Variables in the Past Month, by Sex**

Variable (mean analyses)	Men ( <i>n</i> = 86)			Women ( <i>n</i> = 107)		
	<i>M</i>	<i>SD</i>	Range	<i>M</i>	<i>SD</i>	Range
Drinking days	5.19	4.50	0–20.0	5.15	5.04	0–16.0
Prepartying frequency	2.84	3.43	0–12.0	2.48	2.63	0–12.0
Percentage of drinking days engaged in prepartying	43.80	29.59	0–100.0	45.20	34.19	0–100.0
Average hours spent prepartying	1.36	0.66	0.20–3.0	1.30	0.66	0.20–3.0
Average quantity consumed during prepartying	3.70	1.77	1.00–7.5	3.22	1.75	1.00–8.67
Variable (event-level analyses)						
Average consumed on prepartying drinking days	8.15	3.91**	1.00–23.0	5.76	2.83***	1.00–18.0
Average consumed on nonprepartying drinking days	5.80	2.95**	1.00–18.0	4.07	2.75***	1.00–22.0
Average consumed after prepartying	4.08	3.10	0–15.0	2.48	2.11*	0–13.0

*Note.* All mean and event-level data reported are from the variables obtained from the modified online Timeline Followback<sup>33</sup> assessment.

\**p* < .05 (between men and women). \*\**p* < .001 (between variable on a prepartying and nonprepartying day). \*\*\**p* < .05 (between men and women) and *p* < .001 (between variable on a prepartying and nonprepartying day).

events and 35% of women's events involved heavy episodic drinking during prepartying.

### Typical Prepartying Activities

Two single-item self-report questions with 4 response options each assessed participants' typical prepartying behavior in the past month. Table 2 displays the typical behavior engaged in when prepartying and the type of beverages typically consumed. Women were more likely to consume shots or hard liquor than were men, whereas men were more likely to consume beer than were women.

### Drinking After Prepartying

For both men and women, regression analyses revealed that the number of drinks consumed during prepartying was significantly predictive of the number of drinks consumed after the prepartying event. We entered the total number of drinks consumed during prepartying over the month as the independent variable, with drinks consumed after prepartying (calculated by totaling drinks consumed after all prepartying events for all participants who prepartied) entered as the dependent variable. For men, the number of prepartying drinks consumed was significantly predictive of the number of drinks consumed after prepartying ( $\beta = .75$ ,  $t[65] = 9.12$ ,  $p < .001$ ), accounting for 57% of the variance found in drinks consumed after prepartying. For women, the number of prepartying drinks consumed was

significantly predictive of the number of drinks consumed after prepartying ( $\beta = .75$ ,  $t[75] = 9.74$ ,  $p < .001$ ), accounting for 56% of the variance found in drinks consumed after prepartying. The number of prepartying drinks consumed continued to be predictive of the number of drinks consumed after prepartying after controlling for all 4 reasons for drinking entered in a regression equation on Step 1 and entering total drinks consumed during prepartying on Step 2 for men ( $\beta = .75$ ,  $t[65] = 9.22$ ,  $p < .001$ ) and women,  $\beta = .74$ ,  $t(65) = 9.02$ ,  $p < .001$ .

### Prepartying and Alcohol-Related Problems

Among participants who consumed any alcohol in the month assessed, participants who engaged in prepartying at least once experienced a mean RAPI score of 5.98 ( $SD = 4.52$ ), whereas nonprepartying drinkers reported a score of 3.08 ( $SD = 5.29$ ),  $t(191) = 3.68$ ,  $p < .001$ . Women who prepartied had a mean RAPI score of 5.89 ( $SD = 4.32$ ), whereas nonprepartying female drinkers had a mean score of 2.68 ( $SD = 4.15$ ),  $t(105) = 3.53$ ,  $p < .01$ . In the current sample, 17 male drinkers did not preparty at least once in the past month. Although not significantly different, prepartying men had higher RAPI scores than did nonprepartying male drinkers, 6.07 ( $SD = 4.76$ ) vs 3.82 ( $SD = 6.99$ ),  $t(84) = 1.57$ ,  $p = .118$ .

We recorded individual RAPI scores as 0 (*did not experience in the past month*) and 1 (*did experience in the past*

**TABLE 2. Typical Prepartying Activities by Participants Who Prepartied at Least Once in the Past Month**

Self-report item	Men (%)	Women (%)	$\chi^2$	<i>p</i>
How did you typically preparty?				
With friends/roommates while getting ready to go out	98	100	3.28 <sup>a</sup>	.07
Playing drinking games	45	46	0.002	.97
Alone/other	2	0	2.17 <sup>a</sup>	.14
What did you typically drink when prepartying?				
Shots of liquor	67	90	9.10	.001
Beer	80	43	16.46	.001
Wine	9	23	3.20	.07
Mixed drinks	41	67	7.33	.01

Note. *N* = 1,147. For men, *n* = 69; for women, *n* = 76.

<sup>a</sup>At least 1 cell had an expected count less than 5.

month) to reveal the breadth of the 23 RAPI problems that participants experienced. Prepartying frequency significantly and positively correlated with the breadth of problems experienced in the past month,  $r = .43$ ,  $p < .001$  for men;  $r = .41$ ,  $p < .001$  for women. Furthermore, prepartying was associated with many individual problems (see Table 3). Dangerous consequences typically associated with consuming alcohol in a short amount of time (“Suddenly found yourself in a place you could not remember getting to [ie, blackouts],” “Passed out or fainted suddenly,” and a non-RAPI item assessing number of hangovers) were associated with prepartying frequency and total drinks consumed during prepartying for both men and women.

Total drinks consumed during prepartying significantly predicted alcohol-related problems, with 13% of the variance observed in problems for men ( $\beta = .36$ ,  $t[88] = 3.64$ ,  $p < .001$ ) and 18% of the variance observed for women,  $\beta = .42$ ,  $t(105) = 4.70$ ,  $p < .001$ . However, after controlling for total drinks consumed during prepartying on Step 1, when we entered the number of drinks consumed after prepartying events on Step 2 of a regression equation with composite RAPI scores as the dependent variable, drinks consumed after prepartying predicted problems over and above drinks consumed during the actual prepartying events for both men, ( $\beta = .40$ ,  $t[65] = 2.30$ ,  $p < .05$ ;  $\Delta F[1, 63] = 5.27$ ,  $p < .05$ ) and women,  $\beta = .36$ ,  $t(75) = 2.19$ ,  $p < .05$ ;  $\Delta F(1, 75) = 4.80$ ,  $p < .05$ .

We attempted to determine whether the total number of drinks consumed after prepartying was more detrimental in leading to problems than was the total number of drinks consumed on a nonprepartying occasion. Using a stepwise regression, we entered the number of total drinks consumed on nonprepartying days for all participants on Step 1, with total drinks consumed after prepartying for prepartying participants entered on Step 2. We entered composite RAPI scores as the dependent variable. Drinks consumed on nonprepartying days did not significantly predict RAPI prob-

lems in Step 1,  $\beta = .14$ ,  $t(141) = 1.71$ ,  $p = .09$ . However, in Step 2, drinks consumed after prepartying were significantly predictive of RAPI problems over and above drinking done in the absence of prepartying,  $\beta = .38$ ,  $t(141) = 4.79$ ,  $p < .001$ . It appears that the combination of prepartying frequency and drinks consumed after prepartying contribute greatly to the experience of problems from alcohol use.

### Prepartying and Reasons for Drinking

We used the DMQ<sup>28</sup> to determine whether specific reasons for drinking were associated with prepartying behavior. For men, prepartying frequency significantly correlated with all 4 DMQ subscales: Social,  $r = .46$ ,  $p < .01$ ; Mood Enhancement,  $r = .36$ ,  $p < .05$ ; Coping,  $r = .31$ ,  $p < .01$ ; and Conformity,  $r = .21$ ,  $p < .05$ . For women, the DMQ Social and Mood Enhancement subscales significantly correlated with prepartying frequency,  $r = .39$ ,  $p < .001$ ;  $r = .31$ ,  $p < .001$ , respectively. When we entered all 4 DMQ subscales into a linear regression with prepartying frequency as the dependent variable, the DMQ Social subscale was the only predictor of frequency for both men ( $\beta = .46$ ,  $t[95] = 2.72$ ,  $p < .01$ ) and women ( $\beta = .44$ ,  $t[118] = 3.22$ ,  $p < .01$ ), indicating that social reasons predict prepartying behavior over and above other motives. Social motives accounted for 21% and 15% of the variance observed in prepartying frequency for men and women, respectively. No reason for drinking was predictive of the number of drinks consumed after prepartying for either men or women.

### COMMENT

To our knowledge, we are the first researchers to address the concept of prepartying (or pregamming) among college students. Prepartying appears to be a fairly common practice among college student drinkers, with 75% of drinkers in our study engaging in this behavior at least once in the past month. Event-level data revealed that 45% of all male drinking events and 55% of all female drinking events

**TABLE 3. Correlations of Alcohol-Related Consequences With Prepartying Frequency and Total Drinks Consumed During Prepartying, by Sex**

Alcohol consequence	Men		Women	
	Prepartying frequency	Total drinks prepartying	Prepartying frequency	Total drinks prepartying
Could not do homework or study for test	.32**	.23*	.39**	.43**
Fought, acted bad, or did mean things	.35**	.35**	.26**	.29**
Missed out on things because you spent too much money on alcohol	.14	.08	.45**	.39**
Went to work/school drunk	.11	.10	.12	.09
Neglected responsibilities	.25*	.18	.38**	.38**
Embarrassed someone else	.27**	.23*	.23*	.20*
Believed you needed more alcohol than previously for same effect	.15	.09	.32**	.33**
Relatives avoided you	.02	-.01	.04	.06
Tried to control drinking by trying to drink only at certain times	.15	.18	.15	.19
Had withdrawal symptoms	.12	.14	.12	.17
Noticed a personality change	.42**	.45**	-.13	-.11
Thought you had a problem with alcohol	.26*	.17	.11	.08
Missed a day (or part of a day) of school/work	.38**	.27*	.24**	.22*
Tried to cut down on drinking	.40**	.38**	.11	.20*
Were in a place you did not remember getting to	.34**	.24*	.44**	.48**
Passed out or fainted suddenly	.25*	.24*	.29**	.30**
Fought, argued, or had bad feelings with friend	.14	.12	.18*	.20*
Fought, argued, or had bad feelings with family member	-.06	-.05	-.01	-.07
Kept drinking when you promised yourself not to	.29**	.23*	.14	.17
Felt you were going crazy	.30**	.28**	.08	.05
Had a bad time	.40**	.38**	.29**	.36**
Was told by friend/neighbor to stop/cut down on drinking	.11	.09	.20*	.17
Felt physically/psychologically dependent on alcohol	.26*	.17	.20*	.34**
Had a hangover or felt sick	.43**	.48**	.33**	.32**
Drove shortly after having two drinks	.25*	.19	.29**	.27**
Drove shortly after having four drinks	.21*	.28**	.09	.15

\* $p < .05$ . \*\* $p < .01$ .

involved prepartying. Consistent with our hypotheses, students consumed more drinks on drinking days when they prepartied than on drinking days when they did not. Men were 1.33 times more likely to engage in heavy episodic drinking on prepartying days, whereas women were 1.75 times more likely to engage in heavy episodic drinking on prepartying days. This behavior is concerning because it appears that students consume multiple drinks in brief time periods before going out to drink even more. Only 20% of prepartying events did not involve further drinking, and the amount consumed while prepartying was significantly predictive of consumption after prepartying. Last, prepartying frequency was significantly associated with the number of problems experienced within 1 month for both men and women, whereas problems specifically related to fast consumption (eg, blackouts, passing out, hangovers) all were significantly correlated with prepartying.

Prepartying is not specific to either men or women because both male and female student drinkers engaged in prepartying

at similar rates. Although men drank more drinks on prepartying days and after prepartying events, men and women consumed similar amounts during prepartying. Research suggests that among college students, women's consumption levels and heavy episodic drinking rates are trending higher.<sup>3,37</sup> Qualitative evidence reports that women may drink heavily to fit in and be attractive to their male peers.<sup>38</sup> The increase in heavy drinking rates among women and the similarity in prepartying drinking levels are alarming because of the different ways that men and women process and are affected by alcohol.<sup>14,39</sup> Estimating the BAL of a typical student revealed that a typical 170-pound male student who consumes approximately 4 drinks in 80 minutes (see Table 1) would have a BAL of .06, whereas a typical 130-pound woman who consumes about 3 drinks in the same amount of time would have a BAL of .08. Both BALs are hovering around standard definitions of legal intoxication, a point at which judgment, motor coordination, and decision-making abilities are impaired. These BALs are reached even before prepartiers leave for their intended destination.

Because perception of risk decreases with rises in BALs,<sup>20</sup> both male and female students may not fully realize their intoxication level and may ignore the physical and social determinants to stop drinking that they normally discern on nonprepartying drinking days. Anecdotal experience with students reveals that many students cite as a main reason for prepartying the concern of not being able to obtain alcohol (or not having alcohol available or it being available at prohibitively steep prices) at their intended destination. However, this claim may be inaccurate because we found evidence that both male and female students continue to drink after prepartying. It appears that students are able to obtain alcohol after prepartying, continue to drink (possibly as the result of alcohol-impaired judgment), and thereby increase their risk of experiencing negative consequences.

The relationship between prepartying and consequences appears to be different for men and women. As observed by the correlations between prepartying and specific problems in Table 3 for men and women, it appears that for women, prepartying may be more associated with measures that assess emotional and relational consequences from prepartying (such as missing out on activities and fights with friends), whereas for men, prepartying may be associated more with internalized consequences (such as noticing changes in personality, “feeling crazy,” or trying to cut back on drinking but being unsuccessful). However, more research is needed that examines the direct consequences resulting from actual prepartying events beyond assessment measures that cover an entire month of consequences resulting from drinking in general. Researchers should examine the differential impact of immediate consequences from prepartying on both men and women.

Although men and women preparty at similar frequencies, we found that more women than men drink shots of liquor or mixed drinks when prepartying, whereas more men than women drink beer. The different types of alcohol may contribute to differential effects of prepartying on both intoxication level and risk for problems. As men and women report consuming similar amounts during prepartying, the potential for varying proof levels of liquors and beers combined with the physiological differences between the way men and women metabolize alcohol may leave women with higher intoxication levels than men immediately after prepartying. This may put women at increased risk for several negative sexual consequences.<sup>38,40</sup> This notion of men and women consuming different types of alcohol during prepartying, however, needs to be further examined, with researchers assessing men’s and women’s BALs after prepartying events. In addition, nearly half of male and female prepartiers reported playing drinking games while prepartying. Recent evidence suggests that men and women play drinking games at similar rates<sup>41</sup> and that the consequences from participating in games are numerous.<sup>42</sup> The quick-drinking nature of both prepartying and drinking games combines to augment risk for consequences.

Among all reasons for drinking, social reasons appeared to have the strongest relationship to prepartying, with

nearly all prepartiers engaging in this behavior with friends or roommates in a social setting. It is well documented that students drink for social reasons<sup>2,24-26</sup> and that peers greatly influence students’ behavior.<sup>43</sup> Perhaps peer influence within the social context of college promotes and reinforces this typical behavior among student drinkers. However, students may preparty with their close friends to ease the discomfort or awkwardness they associate with meeting new people at the intended destination. Our findings affirm this idea because students reported prepartying with their friends for social reasons, but the number of drinks consumed after prepartying was not associated with social reasons (or any other reason) for drinking. These findings support our original hypothesis that social reasons for drinking would relate to prepartying. If students do not have a reason (either social, mood enhancement, conformity, or coping) to continue drinking, perhaps they already are intoxicated enough to continue drinking just to drink. Wechsler et al<sup>3</sup> found that many students report drinking to get drunk as a major reason for drinking. Investigators in future studies could examine drinking to get drunk as a main reason for prepartying and other potential motives for drinking heavily prior to going out for the night.

### Limitations

Despite our findings, the study has limitations. Researchers<sup>44,45</sup> recently found that students tend to underestimate how much they drink and do not know the definition of standard drinks. On the questionnaire, we included a graphic of standard drinks and detailed descriptions for participants to use when answering the questions. We anticipated that students would use this reference to guide their responses, but without a detailed explanation or demonstration, students might have under- or overestimated their drinking behavior.

We used a modified RDS design<sup>31</sup> to obtain a larger sample of students. By asking subject-pool students to recruit 1 or 2 college-aged peers, we believed we would develop a more accurate portrayal of prepartying among college students. However, in doing so, participants—both partiers/drinkers and nonpartiers/nondrinkers—might have recruited only close friends with similar drinking patterns. Furthermore, although 75% of underage students prepartied, there were not enough participants older than age 21 for us to meaningfully compare with those younger than 21. In addition, we do not know whether, after prepartying, participants younger than 21 went to an event where they could continue to drink (eg, a friend’s party, using a fake ID) or whether the ability to drink at the destination motivated the amount consumed while prepartying. Researchers in future studies should compare upperclassman (specifically those older than 21) with freshmen and sophomores. Investigators should also further assess where subsequent drinking occurred. We did not know why participants engaged in prepartying behavior. Perhaps it was caused by being underage, trying to save money while at a bar or club, or wanting to arrive at the destination intoxicated. Researchers should examine these

ideas as well as specific personality characteristics, such as self-esteem, social cohesion, and social anxiety, to assess the reasons for individual prepartying behavior.

Students had only 4 response options for typical prepartying behaviors, which we derived from focus group discussions with other students. However, other, more specific prepartying activities may exist, and future research with open-ended questions on prepartying activities can give a more complete portrayal of this phenomenon. Last, because of the small numbers of participants in each of the varying ethnic categories, we did not include in this report an examination of prepartying among different ethnic groups. Researchers who examine large, diverse samples should explore the varied effects of prepartying behavior among different ethnicities and campus groups (eg, students in Greek organizations, athletes, members of non-Greek service organizations).

Nonetheless, our results highlight the prevalence of prepartying and its potentially problematic nature. In this sample, prepartying appears to be common among students, and both male and female students appear to drink at risky levels while prepartying. Furthermore, they continue to drink after prepartying, thus placing themselves at risk for more serious consequences. Because of the serious negative consequences associated with college drinking and the apparent widespread prevalence of prepartying, a deeper understanding of this phenomenon is needed. In particular, researchers should examine prepartying behavior among varying ethnic groups and campus organizations and (in larger samples) compare the immediate consequences for men and women. Finally, college health professionals must address the potential dangers associated with students' prepartying. There is support for brief motivational-enhancement interventions to reduce drinking among students.<sup>46-49</sup> These typically 1- or 2-session interventions involve alcohol-skills training in conjunction with motivational techniques to encourage students to think about their drinking habits. Interventions that fail to mention or target prepartying may miss an important component to college drinking. Thus, brief interventions (especially single-session interventions) should target prepartying, which has the added benefit of connecting with students using terms they understand. Our results reveal the need for more explicit research and direct targeting of prepartying among college students.

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#### NOTE

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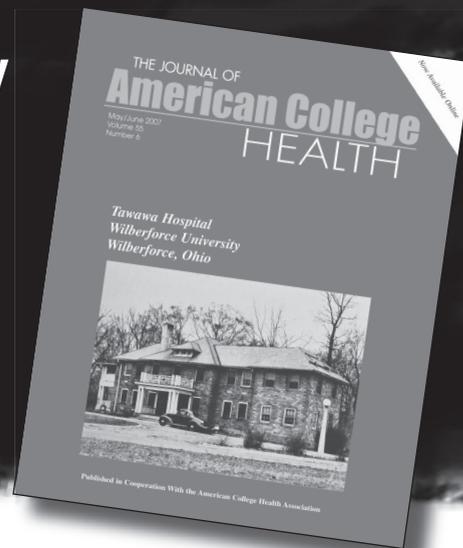
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