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Event- and Context-Specific Normative Misperceptions and High-Risk Drinking: 21st Birthday Celebrations and Football Tailgating*

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Abstract

Objective—Negative alcohol-related consequences often occur during specific events and in specific contexts (eg., 21st birthday celebrations and tailgating parties). A lack of available event- and context-specific interventions suggests the need to better understand factors associated with heavy drinking in these contexts, with an eye toward developing specific interventions. The purpose of this research was to lay the foundation for developing personalized normative feedback interventions for 21st birthday celebratory drinking and tailgating drinking by evaluating whether students overestimate norms in these specific contexts, as they do more generally.

Method—Perceived descriptive norms and alcohol consumption were assessed at event- and context-specific levels in two studies. Study 1 included 119 students turning 21 years old who reported their 21st birthday drinking behavior and estimated the typical number of drinks consumed by students celebrating (their 21st birthday. Study 2 included 140 undergraduates drawn from a stratified random sample who reported their behavior regarding drinking and tailgating and their perceived norms for typical drinking and tailgating behavior.

Results—Results from Study 1 revealed that students overestimated peer drinking during 21st birthday celebrations, and this overestimation was associated with heavier drinking on one's own 21st birthday. In Study 2, students underestimated the percentage of tailgaters who drank but overestimated typical consumption. Overestimation was consistently associated with heavier drinking during tailgating.

Conclusions—Successful correction of general normative misperceptions has been shown to reduce drinking in other research. Documentation of normative misperceptions for specific events and context provided by these results represents an important step in developing event- and context-specific interventions utilizing specific normative feedback.

Alcohol-related negative consequences experienced by college students typically result from acute drinking episodes during specific event or in specific contexts (e.g., hangover after a party or a fight at a football game), rather than being the result of chronic heavy use over a long period of time (e.g., liver damage). Yet, prevention research has maintained a primarily macro perspective, most commonly assessing and targeting quantity and frequency of consumption and/or number and severity of consequences over some extended period of time (e.g., past 3 months). Similarly, predictors of high-risk drinking tend to be operationalized at

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relatively global levels (e.g., perception of peer drinking without reference to event or context in which drinking occurs). The present research extends previous examinations of social drinking norms to greater level of specificity, with the long-term goal of developing event- and context-specific interventions. Specific aims were to evaluate whether normative misperceptions occur for specific events (21st birthday celebration) and contexts (drinking during football tailgating), as well as to evaluate whether event- and context-specific perceived norms were associated with event- and context-specific alcohol consumption and alcohol-related negative consequences.

Perceptions of other people's attitudes and behaviors are a fundamental determinant of one's interpretation of the correctness and appropriateness of particular behavior (Festinger, 1954; Heider, 1958). In short, what one believes that others think and do has a profound impact on what one does (Asch, 1951; Sherif, 1936). Perceptions of others' attitudes and behaviors, however, do not always accurately reflect others' actual attitudes and behaviors. Misperceptions of peer drinking norms have been well documented among college students, such that students consistently believe that their peers drink more and are more supportive of heavy drinking than is actually the case (Borsari and Carey, 2003). Furthermore, the extent to which students overestimate peer drinking norms has been consistently associated with heavier drinking (Baer et al., 1991; Lewis and Neighbors, 2004; Perkins and Berkowitz, 1986; Prentice and Miller, 1993).

The present research focused on descriptive social drinking norms (others' drinking behavior) rather than injunctive norms (others' approval of drinking; Cialdini et al., 1990). We were specifically interested in the discrepancy between *perceived* norms (perceptions of others' drinking behavior) and *actual* norms (others' actual drinking behavior). Correction of this discrepancy or "misperception" forms the basis for social norms-based alcohol interventions. Social norms marketing campaigns have been implemented on campuses all over the country, with varying levels of success (Wechsler et al., 2003; Perkins, 2002). The extent to which these campaigns are successful in reducing drinking appears to be directly related to their ability to correct misperceptions (Mattern and Neighbors, 2004). Personalized information designed to correct normative misperceptions is a commonly included component of empirically supported individual-focused interventions and has been more consistently successful than large-scale marketing approaches (Larimer and Cronce, 2002; Walters and Neighbors, 2005). In sum, a considerable amount of evidence suggests that normative misperceptions exist and are associated with problem drinking and that correction of normative misperceptions is effective in reducing alcohol consumption.

A number of important theoretical distinctions drawn from basic research on social norms have been successfully integrated and applied to the etiology and prevention of heavy drinking (Borsari and Carey, 2003). At least one important ingredient, however, had thus far been left out of the social norms recipe for examining college student drinking: the situation and context in which drinking occurs. The identification of situations associated with heavy drinking is crucial for preventing relapses among alcohol-dependent individuals (Marlatt and Gordon, 1985). Situations that promote relapse among alcohol-dependent individuals (e.g., situations involving pleasant and unpleasant emotions, interpersonal conflict, and social pressure to drink) also have been associated with heavier drinking among college students (Carey, 1993, 1995). More specific situations and contexts have been associated with heavy drinking and alcohol-related negative consequences among college students, including drinking at parties and in bars (Harford et al., 2002); playing drinking games (Borsari et al., 2003); and spring break (Apolstolopoulos et al., 2002; Smeaton et al., 1998). Yet, no research to date of which we are aware has examined normative misperceptions related to specific events or in specific contexts.

Study 1 event: 21st birthday drinking

A student's 21st birthday is an important specific event that marks the transition to legal drinking age in most U.S. states. Although little research has examined alcohol consumption related to this event, media attention has been drawn to several incidents in which students have died from alcohol consumption while celebrating their 21st birthday. Tragic stories related to the tradition of consuming dangerous amounts of alcohol during this event (e.g., the "power hour" and "21 for 21") have been relatively common in the Midwest over the past several years. The "power hour" refers to the hour between midnight and I am, marking the first hour of one's 21st birthday, during which the birthday celebrant attempts to consume a large amount of alcohol (often 21 shots). Recent research has documented the prevalence and severity of heavy drinking related to this event (Neighbors et al., 2005). Neighbors et al. found that 90% of students celebrating their 21st birthday reported consuming alcohol, 75% went to a bar, 61% drank beyond the legal driving limit, and 23% reached dangerous blood alcohol concentration (BAC) levels in excess of .25. A birthday card suggesting moderation had no impact on students' drinking during 21st birthday celebrations—suggesting the need for alternative intervention strategies (e.g., social norms approaches) for this event.

Study 2 context: Alcohol consumption during football tailgating

Tailgating parties at college football games represent a specific context in which drinking typically occurs. A majority of National Collegiate Athletic Association schools with football programs allow alcohol consumption in the parking lots prior to home football games. Fewer schools also allow alcohol to be sold in the stadium during game time.

No published research to our knowledge to date had specifically examined the prevalence of alcohol consumption during tailgating at college football games. Indirect evidence, however, suggests that tailgating is associated with heavy drinking among college students. Bormann and Stone (2001) evaluated the effects of a ban on beer sales at football games. Following the beer ban at the University of Colorado at Boulder, significant decreases were observed in the number of ejections, arrests, assaults, and student referrals to judicial affairs. Nelson and Wechsler (2003) examined differences in drinking between sports fans and non-sports fans in a nationally representative sample of nearly 12,000 U.S. college students. Sports fans were more likely to drink, drank more heavily, and experienced more alcohol-related problems than non-sports fans.

The current research was designed to examine event- and context-specific misperceptions of drinking norms and to determine whether event- and context-specific perceived norms were associated with event- and context-specific problem drinking. We expected that students would overestimate drinking norms for a specific event (21st birthday celebration) and a specific context (football tailgating). We further expected that higher estimates of event- and context-specific drinking norms would be associated with heavier event- and context-specific drinking and more negative alcohol-related consequences.

Study 1 Method

The purpose of Study 1 was to examine normative misperceptions for 21st birthday drinking. We hypothesized that students would overestimate the amount of alcohol typically consumed by students celebrating their 21st birthday and that higher estimates would be associated with heavier drinking while celebrating one's own 21st birthday.

Participants

Surveys were mailed to all students turning 21 during the academic year (N = 1,059; 57% male). Among these, 119 students completed and returned the surveys sent to them. The

response rate was better among women than among men. Among the 119 participants (107 reported their gender), 47 were men (44%) and 60 were women (56%); 95% were white. Most of the students reported some drinking on their birthday (79%), and 88% of these students went to a bar at some point during their celebration. In contrast, of the 21% who reported not drinking, only one (1%) reported going to a bar.

Materials

All students completed a 21st birthday questionnaire. A standard definition of one drink was provided (4 oz of wine, a 10 oz wine cooler, 12 oz of beer, or a cocktail with 1 oz of 100 proof distilled spirits or 1.25 oz of 80 proof distilled spirits). Students provided estimates of their own drinking quantity and that of typical students during their 21st birthday, using items adapted from the Frequency-Quantity questionnaire and the Drinking Norms Rating form (Dimeff et al., 1999), both of which have been used in a number of previous studies. Questions included, “In celebrating their 21st birthday, how much do you think the average NDSU [North Dakota State University] student drinks?” and “In celebrating your 21st birthday, how much did you drink?” For each item there were 26 response options (check boxes) ranging from “0 drinks” to “25 or more drinks.” Students also were asked to identify how they celebrated their 21st birthday, including whether they went to a bar.

Procedure

Approximately 1 week after their 21st birthday, participants each were mailed a packet containing the 21st birthday questionnaire described above. The research presented here was part of a larger intervention study. Evaluation of the intervention is beyond the scope of this article. There were no main effects from the intervention condition, and the results presented here were not affected by the intervention condition.

Study 1 Results and Discussion

We expected that participants would overestimate the number of drinks consumed by peers on their 21st birthday. We also were interested in evaluating the relationship between the perceived quantity norm and participants’ own drinking on their 21st birthday. Participants estimated that the “average” student consumed a mean (SD) of 10.58 (5.15) standard drinks while celebrating his or her 21st birthday. In contrast to perceptions, students actually reported consuming 7.42 (6.62) drinks, on average, when celebrating their 21st birthday. Thus, participants *overestimated* typical quantity consumed by students celebrating their 21st birthday ($t = 5.33$, 117df, $p < .0001$).

Correlation was used to evaluate the relationship between the perceived quantity norm and participants’ own drinking on their 21st birthday. In addition to examining the relationship between the estimated number of drinks by the average student and one’s own drinking during one’s 21st birthday, we also examined BAC, as well as the likelihood of celebrating in a bar. Significant positive correlations were evident between the perceived quantity norm and all three drinking indicators. The perceived quantity norm was positively correlated with the number of drinks consumed ($r = .42$), the estimated BAC ($r = .31$), and celebrating at a bar ($r = .34$; all p’s $< .001$).

Overall, the results were consistent with expectations. Students overestimated the perceived quantity norm for 21st birthday drinking. Students’ estimates of the amount of alcohol consumed by the average student celebrating his or her 21st birthday were about 42% higher than the actual norm. In addition, the event-specific perceived quantity norm was positively associated with event-specific drinking. Moreover, the more students overestimated the number of drinks consumed by the average student celebrating his or her 21st birthday, the

more they themselves drank on their own 21st birthday, the higher their BAC, and the more likely they were to celebrate in a bar.

Study 2 Method

Study 2 was designed to replicate and extend the results of Study 1 and focused on a drinking context (football tailgating) rather than a specific event. We hypothesized that students would overestimate the percentage of students who drank while tailgating and the amount typically consumed by drinking tailgaters. We also expected that context-specific perceived norms would be associated with heavier drinking during tailgating and more negative consequences associated with alcohol consumption during tailgating. Finally, we wished to evaluate the influence of context-specific perceived norms on context-specific drinking, when typical drinking behavior outside of the tailgating context was controlled for.

Participants

Potential participants were 1,000 undergraduate college students selected from a random sample, stratified by age and university class standing to be representative of the university student population as a whole. Participants were sent an email asking them to complete a Web-based survey related to football tailgating. Surveys were completed by 140 students, of whom 73 were men (52%) and 67 were women (48%). Forty-three students (31%) were younger than 21 years old, whereas 97 (69%) were 21 or older. The response rate was similar for men and women but higher among students who were older than 21. Participants were provided no compensation for their participation.

Materials

All participants completed the Tailgating Climate Survey, a 32-item questionnaire developed for specific use in this study. This survey was designed to measure alcohol use and tailgating practices at university football games. The definition of tailgating provided to students was as follows: “For the purposes of this survey tailgating refers to a social gathering that occurs prior to [University name] football games in the parking lot outside of the stadium. Participation in tailgating often includes grilling food and may or may not involve the consumption of alcohol.” Students were asked to report the frequency with which they attend university football games (football game attendance) and the frequency with which they participate in tailgating at university football games (participation in tailgating). Students also reported alcohol consumption levels not specific to any event or occasion, including how often they consumed alcohol in the past 3 months (nonspecific drinking frequency) and how many drinks on average they typically consumed per occasion (nonspecific typical quantity). These items were adapted from the Frequency-Quantity questionnaire (Dimeff et al., 1999). A standard definition of one drink was provided as described in Study 1.

Tailgating drinking behaviors and tailgating perceived drinking norms also were assessed, using four questions adapted from the Frequency-Quantity questionnaire and the Drinking Norms Rating Form (Dimeff et al., 1999). Students reported the frequency with which they drank while tailgating at university football games (tailgating drinking frequency) and the quantity of alcohol consumed while tailgating at university football games (tailgating drinking quantity). Students reported perceptions regarding other students’ tailgating drinking behaviors as well, including their perception regarding the percentage of students who drink while tailgating (perceived percentage norm) and their perception regarding the number of drinks the typical student consumes while tailgating (perceived quantity norm).

In addition, the survey measured 15 tailgating alcohol-related negative consequences taken from the Rutgers Alcohol Problems Index (RAPI; White and Labouvie, 1989). Using a 5-point

scale (1 = none and 5 = more than 10 times), students reported how often they experienced negative consequences associated with alcohol use while tailgating. Sample items included, "Had a headache (hangover) the morning after?" and "Gotten into physical fights?" Internal reliability (Cronbach's alpha) for the 15 consequences-related items was .95.

Study 2 Results and Discussion

Context-specific normative misperceptions

In a few cases student chose not to respond to one or more items. Discrepancies in degrees of freedom are due to missing responses. Two normative misperceptions were evaluated. We expected that participants would overestimate the percentage of students who consumed alcohol while tailgating (perceived percentage norm) and that participants would overestimate the typical quantity consumed by peers who consumed alcohol while tailgating (perceived quantity norm).

Percentage of tailgaters who drink—Participants estimated that about half (mean = 48.96% [24.71%]) of students participating in tailgating consumed alcohol while doing so. Among the students who reported participating in tailgating ($n = 77$), however, 76.62% reported consuming alcohol while doing so. Thus, contrary to expectations, participants significantly *underestimated* the percentage of students participating in tailgating who consumed alcohol while doing so ($t = -13.20$, 138 df, $p < .001$).

Typical quantity consumed by tailgaters—Participants estimated that the average student consumed 4.46 (2.43) standard drinks while tailgating. Yet, students who participated in tailgating reported on average consuming only 3.82 (2.75) standard drinks while tailgating. Thus, consistent with expectations, participants *overestimated* the typical quantity consumed by tailgating students ($t = 3.06$, 138 df, $p < .01$). Follow-up analyses revealed similar results for both discrepancies when examining only students who reported tailgating.

Perceived norms and drinking during tailgating

We were interested in evaluating the extent to which perceived tailgating drinking norms were associated with tailgating alcohol consumption over and above other factors that would be expected to predict alcohol consumption during tailgating. These included frequency of attending football games; frequency of tailgating; gender; and general, not context-specific, drinking behavior (nonspecific frequency and nonspecific typical quantity). Moreover, we wished to provide a strong test of the predictive utility of context-specific perceived norms. Accordingly, hierarchical multiple regression analysis (Cohen et al., 2003) was used to evaluate the association between perceived norms and drinking during tailgating, over and above other predictors. Separate analyses were performed to examine the frequency of consuming alcohol during tailgating (tailgating frequency) and the quantity consumed during tailgating (tailgating quantity). Both regression analyses included the same predictors in the same order At Step 1, attendance at football games and participation in tailgating were entered as covariates. At Step 2, gender and general drinking practices (nonspecific frequency and nonspecific typical quantity) were added. Context-specific perceived norms were added at Step 3 and included the perceived percentage norm and the perceived quantity norm.

Regression results for tailgating frequency are presented in table 1. The results show, not surprisingly, that the strongest predictor of how often students consume alcohol while tailgating is simply how often they participate in tailgating. The frequency of tailgating explained about 60% of the variance in the frequency of drinking during tailgating. General drinking behavior also accounted for variance in tailgating frequency. Students who generally drank more often also drank more often while tailgating. There was a suppression effect for nonspecific typical

quantity. Cohen et al. (2003) define suppression as an indication that the relationship(s) among predictors conceals their real relationship with the criterion, which would otherwise be larger or in the opposite direction. In this case, typical quantity had no zero-order relationship with tailgating drinking frequency ($r = .13$) but had a significant negative association in the context of other variables in the regression. The primary question was whether context-specific perceived norms would explain the unique variance over and above attending football games, frequency of tailgating, gender, and general drinking practices, and indeed they did. Only the perceived quantity norm was uniquely associated with tailgating drinking frequency, however. Thus, the more drinks students thought that other students consumed while tailgating, the more often they themselves reported consuming alcohol while tailgating, even after how often they participated in tailgating and their drinking behavior in general were controlled for.

Regression results for tailgating quantity are presented in Table 2. The results revealed that men drank more than women while tailgating and that general drinking behavior (nonspecific frequency and typical quantity) was associated with greater consumption during tailgating. Yet, even after these factors were controlled for, context-specific perceived norms were associated with greater tailgating drinking quantity. Again, only the perceived quantity norm was uniquely associated with drinking while tailgating.

Perceived norms and negative consequences of drinking during tailgating

We followed a similar approach to examine the association between context-specific perceived norms and alcohol-related negative consequences during tailgating. Table 3 presents regression results. The results are consistent with the results examining drinking during tailgating. The perceived typical quantity consumed by tailgaters was uniquely associated with experiencing more negative alcohol-related consequences during tailgating, even after all other variables in the model were controlled for. To further evaluate the robustness of the perceived quantity norm as a predictor of negative consequences, we conducted another regression, including all of the predictors shown in Table 3 plus the frequency and quantity of consumption during tailgating. The perceived quantity norm remained significant ($t = 2.13$, 124 df, $p < .05$).

Overall, the results were consistent with expectations but primarily for the perceived quantity norm. Students overestimated the tailgating quantity norm, but they unexpectedly *underestimated* the percentage of tailgating students who consume alcohol while tailgating (perceived 49% vs actual 77%). We intended that students estimate what percentage of tailgating students drank while tailgating (the actual percentage was 77%). It is possible that some students may have estimated what percentage of all students drank while tailgating (the actual percentage was 44%). If this were the case, 49% would in fact be an overestimate. Yet, subsequent analyses consistently showed that the perceived percentage norm, regardless of accuracy, had little relation to behavior.

In contrast, students clearly overestimated the perceived quantity norm, and the significance of this finding is apparent in combination with the consistent and robust relationship of the perceived quantity norm with tailgating drinking frequency, quantity, or alcohol-related negative consequences. The more students overestimated the typical number of drinks consumed by their peers during tailgating, the more they themselves drank and experienced negative consequences while tailgating.

General Discussion

This research was designed to extend the theoretical framework underlying social norms and drinking to greater levels of specificity. Overall, the results suggest that normative misperceptions for alcohol consumption exist at event-specific and context-specific levels. The results of Study 1 indicate that students overestimate how much their peers drink during 21st

birthday celebrations. Furthermore, the more students estimate that their peers drink during the celebration, the more they themselves drink while celebrating their own 21st birthday.

The results of Study 2 revealed that, although students may not overestimate the percentage of their peers who consume alcohol while tailgating, they clearly overestimate typical consumption among drinking tailgaters. In addition, perceived norms for tailgating were associated with heavier drinking during tailgating and more negative alcohol-related consequences stemming from drinking during tailgating, even after typical drinking behavior was accounted for.

These results extend previous work related to normative misperceptions, which have focused primarily on perceived typical drinking of some referent group without regard to the situation or context in which drinking occurs. Previous research has examined other dimensions of specificity, including gender-specific versus gender-nonspecific normative misperceptions (Lewis and Neighbors, 2004; Suls and Green, 2003), and questions regarding the optimal referent group for social norms interventions are under consideration (Borsari and Carey, 2003). The results of this study add to those efforts by presenting new dimensions along which normative misperceptions and their consequences can be evaluated (event and context specificity). More importantly, this research opens the door to new paradigms for alcohol interventions.

The rationale for social norms approaches to prevention has been strongly supported. Students who think that other students drink a great deal tend to drink more, when compared with students who do not think that other students drink a great deal. Reducing students' overestimates of peer drinking is effective in reducing heavy drinking (Borsari and Carey, 2000; Mattern and Neighbors, 2004; Neighbors et al., 2004). The present research demonstrates that normative misperceptions, necessary criteria for developing event- and context-specific social norms interventions, are evident, at least for 21st birthday celebrations and football tailgating. An implicit assumption behind this suggestion is that event-specific normative misperceptions are a stronger indicator of event-specific drinking, relative to nonspecific norms. We have not yet evaluated this assumption, and doing so is a logical next step in the development of event-specific prevention approaches.

The results of this research must be interpreted in the context of its limitations. The low response rates in both studies are perhaps the primary limitation. Response rates for mail and email surveys typically range from 40% to 60% (Bongers and Van Oers, 1998; McCabe et al., 2002). These surveys almost invariably include incentives for participation, reminders, contacts before questionnaires are sent, and other factors, which more than double response rates (James and Bolstein, 1992; Helgeson et al., 2002). Response rates similar to those of the present studies have been reported with respect to unsolicited surveys for which no compensation is provided for completion (James and Bolstein, 1992). The fact, however, that response rates were higher for women in Study 1 and for alder students in Study 2 necessitates caution in generalizing results.

In addition to low response rates, the data are correlational, thus preventing any definitive conclusions regarding causal relationships between perceived drinking norms and drinking behaviors and consequences. Although we have framed the results as supporting the influence of perceived norms on drinking behavior, it is clear that drinking behavior also influences perceived norms (Miller and Prentice, 1996). It is possible that participants inflate their estimate of others' drinking in order to justify their own behavior. Indeed, the results of at least one longitudinal study suggest that perceived norms predict later drinking, but drinking also predicts later perceived norms (Marks et al., 1992). A number of social cognitive phenomena (cognitive dissonance reduction, self-presentation, false consensus, and false uniqueness)

suggest that students may alter their perceptions of others or of themselves as a means of reconciling unfavorable social comparisons.

Whereas more work needs to be done to examine the extent to which these processes influence normative misperceptions, intervention studies have consistently shown that reducing normative misperceptions also reduces drinking (Borsari and Carey, 2000; Mattern and Neighbors, 2004; Neighbors et al., 2004; Walters and Neighbors, 2005). Thus, motivational factors influencing misperception do not appear to undermine the effectiveness of correcting normative misperceptions.

The use of self-report measures also represents a limitation of this research. It is possible that students do not overestimate the typical quantity consumed by their peers, but instead underreport their own drinking. This possibility seems unlikely, given that, relative to collateral reports, self-reports do not appear to be systematically biased (Marlatt et al., 1998). Relative to objectively measured BACs, if anything college students appear to overreport their drinking (Carey and Hustad, 2002; Hustad and Carey, 2005).

Finally, neither of the studies presented here occurred in a vacuum. The first study was partly inspired by consequences of students participating in the “power hour” on their 21st birthday —resulting in two hospitalizations and one near-death. Since the initiation of the study, an additional incident resulting in a fatality occurred related to 21st birthday drinking. Not surprisingly, much media attention has been generated related to 21st birthday drinking on the campus on which data were collected.

Similarly, Study 2 was partly inspired by an evaluation of the tailgating policy on the campus in which data were collected. The first and second authors were members of an Alcohol Tailgating Advisory Committee formed by the president of North Dakota State University. The committee was assigned to offer recommendations following controversial media exposure criticizing the existing tailgating policy. It is unclear what impact these events and the media coverage associated with them may have had on students’ perceived norms for 21st birthday drinking and/or drinking during football tailgating. Both 21st birthday drinking and alcohol consumption during tailgating were salient issues on the campus on which data were collected and in the surrounding community. Future studies of the development and evaluation of event- and context-specific alcohol interventions are likely to occur under similar circumstances. We speculate that, if anything, the salience of the events and contexts in students’ minds will increase the perceived relevance of normative information and the power of normative feedback interventions.

These results provide a foundation for the development of event-specific and context-specific interventions using social norms approaches. Currently, empirically supported interventions for specific events known to be associated with excessive alcohol consumption are unavailable. This situation is unfortunate, because the most severe alcohol-related consequences (e.g., alcohol poisoning and death) often occur during specific events (e.g., 21st birthday, homecoming, graduation, and spring break) and contexts (e.g., tailgating, parties, and drinking games).

Event-specific prevention interventions have particular promise, because specific events such as 21st birthday celebrations and spring break (1) are known to involve serious risk for alcohol-related consequences, (2) are known about in advance, and (3) are lime limited. These characteristics can provide directions for the timing of intervention delivery, guide intervention content, and establish evaluation parameters (e.g., follow-up period, outcomes). The outcomes associated with event-specific interventions also are likely to be more informative, because they will necessarily be tied to a specific event rather than having occurred on average over some time period (e.g., average number of drinks per week in the last month). There is a clear

need for event- and context-specific alcohol interventions, and this research represents an important step in their development.

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Table 1

Regression results examining frequency of consuming alcohol during tailgating (n = 135)

Variable	*B* (SE)	β	*t*
Step 1 (attendance and participation)			
Football game attendance	0.03 (0.05)	.04	0.64
Tailgating participation	0.66 (0.05)	.76	12.11‡
Step 2 (gender and general drinking practices)			
Gender	0.10 (0.32)	.02	0.31
Drinking frequency	0.43 (0.09)	.28	4.54‡
Drinking quantity	-0.11 (0.06)	-.12	-2.02*
Step 3 (context-specific perceived norms)			
Percentage of tailgaters who drink	0.01 (0.01)	.05	0.89
Typical quantity consumed by tailgaters	0.21 (0.07)	.18	3.19†

Notes: Gender is coded 1 = male, 0 = female. R^2 = .61 for Step 1; ΔR^2 = .06 for Step 2; ΔR^2 = .03 for Step 3.

* $p < .05$;

† $p < .01$;

‡ $p < .001$.

Table 2

Regression results examining typical quantity of alcohol consumed during tailgating (n = 135)

Variable	*B* (SE)	β	*t*
Step 1 (attendance and participation)			
Football game attendance	0.03 (0.07)	.05	.046
Tailgating participation	0.17 (0.09)	.19	1.89
Step 2 (gender and general drinking practices)			
Gender	0.91 (0.43)	.16	2.12*
Drinking frequency	0.35 (0.13)	.23	2.68†
Drinking quantity	0.35 (0.08)	.35	4.32‡
Step 3 (context-specific perceived norms)			
Percentage of tailgaters who drink	0.00 (0.01)	-.01	0.09
Typical quantity consumed by tailgaters	0.44 (0.09)	.38	4.67‡

Notes: Gender is coded 1 = male, 0 = female. R^2 = .05 for Step 1; ΔR^2 = .30 for Step 2; ΔR^2 = .10 for Step 3.

*p < .05;

†p < .01;

‡p < .001.

Table 3

Regression results examining alcohol-related negative consequences experienced during tailgating (n = 135)

Variable	*B* (SE)	β	*t*
Step 1 (attendance and participation)			
Football game attendance	0.00 (0.07)	-.01	-0.05
Tailgating participation	0.05 (0.08)	.06	0.62
Step 2 (gender and general drinking practices)			
Gender	-0.32 (0.50)	-.06	-0.63
Drinking frequency	0.14 (0.15)	.09	0.92
Drinking quantity	0.20 (0.09)	.22	2.30*
Step 3 (context-specific perceived norms)			
Percentage of tailgaters who drink	-0.01 (0.01)	-.07	0.79
Typical quantity consumed by tailgaters	0.29 (0.11)	.26	2.72†

Notes: Gender is coded 1 = male, 0 = female. R^2= .00 for Step 1; ΔR^2 = .06 for Step 2; ΔR^2 = .05 for Step 3.

*$p < .05$;

†$p < .01$.