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The Social Norms Review

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Getting Students to Believe with the Click of a Button**
Linda Hancock, Ph.D., FNP

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College Students and "Celebration Drinking"
Dennis Martell, Ph.D., Charles K. Atkin, Ph.D.,
Larry Hembroff, Ph.D., Sandi Smith, Ph.D.,
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Introduction

Thanks to a U.S. Department of Education dissemination grant awarded last year to Virginia Commonwealth University (VCU), Dr. Linda Hancock has begun to investigate the use of audience response (or "clicker") technology as part of her effective social norms project addressing student high-risk drinking. As she details in her article in this issue, clickers are being used in small group and classroom settings at VCU to rapidly demonstrate positive and healthy norms, and to do so in a way that students may find quite credible. In a sense, this work is a natural (albeit hi-tech) outgrowth of her pioneering use of snowball surveys—though, as she also points out, clickers may be adaptable to other uses as well, such as pilot testing of normative messages and media. As an added feature, Linda has included a brief description of how her project is currently using the phenomenally controversial Facebook.com to communicate normative messages.

The second article in this issue describes preliminary research conducted at Michigan State University (MSU) about the kind of drinking students engage in during certain "celebratory occasions," such as Welcome Week, Spring Break, and Halloween. As the authors note, although MSU has an ongoing campus-wide social norms project that has successfully reduced students' misperceptions of peer high-risk drinking, resulting in lower prevalence of high-risk consumption, certain times of the year and events may still be cause for concern, given that students may feel impelled, based on event-specific misperceptions of peer behavior, to consume alcohol in a way that places them at greater risk of harm.

As always, we hope that you find this issue of the *Review* to be informative and helpful, and we welcome your comments and suggestions.

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Audience Response Technology in Social Norms Marketing: Getting Students to Believe with the Click of a Button
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Introduction

Social norms practitioners may soon be assisted in their projects by the use of new "clicker" technology that allows for immediate and anonymous communication with groups. This technology has recently become much more affordable and user-friendly. Over the past two decades, immediate response systems have been called by many names including "classroom communication systems," "audience response systems," "real-time polling," and "clickers in the classroom." In this article, we will refer to the technology as "clickers" and we will define a clicker as any hand-held remote device that allows for immediate audience feedback.

This article will provide an overview of the history of clicker development, some facts about the current state-of-the-art including costs, comments about active learning research, and a summary of the use of quasi-anonymous versus anonymous clickers. Next, suggestions for possible application of audience response technology to improving social norms marketing (SNM) efforts will be discussed. Clickers can be adapted for use in media channel surveys, focus group testing, and pilot-testing of media. In addition, these systems may be a new and powerful way to make health norms more credible. Several small group social norming pilot projects that are currently underway at Virginia Commonwealth University (VCU) and lessons learned so far will be described.

Background

Immediate response technology has been under development since the mid 1980s. In the early years of development this technology was very expensive: systems could cost as much as one-half million dollars. Large organizations such as IBM and the U.S. military pioneered the use of these systems to increase active learning. Over time, marketing agencies began to adapt the use of these systems for product development and media testing. The systems are growing in application and today they can be found on many middle school, high school and university campuses.

Systems consist of hand-held remotes for individuals, a receiver, and software to be used with a laptop and a computer projection device. This combination of equipment allows for responses from the group to be instantaneously and anonymously displayed as feedback to the entire group. Responses are usually displayed as histograms for multiple choice and true/false questions. This allows instructors/facilitators to accurately assess attitudes and learning in the group and for members of the group to see what others think.

Current Technology

A plethora of clicker systems are available on the market today. Typically, systems use some combination of hardware and software. It is important to be aware of the most recent

technological improvements if you plan to invest in a system. In the past, many systems used infrared (IR) technology which had limited response speed and distance issues. More recently, radio-frequency (RF) technology has overcome those limitations. Some RF systems can now accept input from over 1000 remotes at a time and accept all of that input in 5 to 7 seconds. The website www.campusclickers.com provides an itemized check list for system capabilities on clicker products from five major manufacturers. Some of the larger companies offering this technology are QuizWisdom, InterWrite, H-ITT, Connect Pro, TurningPoint and eInstruction.

At Virginia Commonwealth University we use an RF system created by eInstruction called Classroom Participation Systems or (CPS). CPS is designed to be used by installing the CPS software on a personal computer. A PowerPoint is created that includes all the questions to be asked of participants. The PowerPoint is then loaded into the CPS software. A receiver is plugged into a USB port on your computer and is used with a typical office or classroom projection system. The data from all responses are saved in a file that can then be downloaded to Excel or SPSS for later analysis, if desired. In addition to being used with PowerPoint, CPS has a group game format available as well.

Clickers and "Active Learning"

Research has shown that within a few minutes of beginning a traditional lecture participants' attention starts to fade. Even the most exemplary lecture is limited by the way people learn. Many learners need to be actively engaged in what is going on in the room in order to process and learn new information. Clickers are one way to keep learners engaged.

Douglas Duncan, author of *Clickers in the Classroom: How to Enhance Science Teaching Using Clickers in the Classroom*, has years of experience with clickers and learning. He makes the point that incorrect, entrenched beliefs are very difficult to change (Duncan, 2005). By assessing immediately how people respond an instructor can see if students have grasped difficult concepts. If the clicker responses show that the group's misconceptions about a particular concept are in fact entrenched, then the instructor knows that more energy needs to be invested in teaching that concept. Duncan advocates that "peer-to-peer" instruction be used in conjunction with clickers. This strategy harnesses the power of dialogue. By one-to-one or small group discussion, those who "get it" can instruct others on a personal level. The group can be re-assessed by clicker questions after the discussion to see if overall learning has improved.

Clickers also help to improve group interaction. Although discussion is an active learning strategy, it is limited by the fact that 10-20% of the participants often dominate the conversation. Clickers help to make visible the thoughts of the majority. This diversification of opinions can open-up discussion and encourage the quieter majority to speak up.

Quasi-Anonymous *versus* Anonymous Clickers

At VCU, clickers are used in two ways: quasi-anonymously and anonymously. First, quasi-anonymous clickers are used by classroom professors to increase active learning. VCU's Center for Teaching Excellence has a contract with eInstruction. Professors have been educated about how to use CPS and receivers have been incorporated into classroom technology. Last semester VCU had over 8,000 students with a clicker on our campus.

Each professor who wants to use clickers for a course requires students to buy and register a clicker. Students buy a clicker once for about $20 from the VCU bookstore. Then, depending on how many instructors are using clickers that semester, the student goes online to www.eInstruction.com and pays a $10-15 registration fee for each course. From campus to campus, registration fees and clicker costs vary depending upon each college's contract and if the textbook manufacturer for a specific course offers a discount for clickers. Individual clickers are *quasi-anonymous* because, although the group never knows how any one individual responded, the instructor does have access to this information after class. The data storage portion of the CPS allows professors to keep attendance, grade quizzes, and give credit for in-class activities.

A second way to use the technology is *anonymously*. For example, VCU's Office of Health Promotion purchased 32 clickers for about $2,500. This one-time purchase included a sturdy carrying bag with the 32 clickers, an RF receiver, software, and lifetime anonymous registration for the clickers in the bag. The one-time fee also provides unlimited online technical assistance and free updates on CPS software. There are no extra charges based on how many classes we teach or on how many focus group sessions we conduct.

VCU's Office of Health Promotion now owns several bags of clickers. CPS clickers are like "Legos" in that you can build onto your system. We recently purchased another bag of 32 clickers for $2,000. It cost less than the original system because we chose not to buy another receiver.

Applications of Clickers to Social Norms Marketing

From start to finish, SNM involves the collection and analysis of data. Baseline data are collected, media habits evaluated, focus groups conducted to provide insight into the target market, media balloting/pilot testing done to help refine media, market saturation surveys administered to track the progress of the campaign, and final evaluation data collected. Clickers can have application to almost all of these areas.

- Media Habits Surveys: These are frequently collected by mall intercept, but it is also possible to conduct media habits surveys in larger groups. Media habits can be surveyed in the classroom or group setting and here is where

the clickers would be very helpful. Clickers allow for the rapid collection of a large amount of data. This method also provides impetus for the group discussion and feedback about media channels that weren't asked about in the original survey.

- Focus group testing: There is great power in focus groups, but there is also risk. One or two individuals in a group can dominate the discussion. Dominating individuals can skew focus group findings. Clickers provide a way to avoid a vocal minority taking over the focus group process. By periodically bringing the discussion back to this anonymous and immediate feedback, support is given to those with differing opinions.

- Pilot Testing & Media Balloting: In media balloting and pilot testing, it is very helpful to have people write down their initial impressions and comments about the media before beginning group interaction. This helps to avoid the influences of group think. However, by then having the audience click in their responses, the group can see the opinions of others and it can help the facilitator quickly focus on important issues. Since time is limited, visual feedback focuses the attention to the media issues that most needed to be explored. For example, if the group overwhelmingly prefers one

piece of media, limited discussion would be needed. However, if participants are divided in preferences, more in-depth discussion would tease out important issues. Clickers, combined with personal comment sheets, may allow pilot testing to be effective even in fairly large groups.

- Market Saturation: While mall intercepts give a snapshot of saturation, it is also possible to combine market saturation when working with any group composed of people from the target market. In addition, since this technology is visual, media can be scanned into the PowerPoint to accurately get feedback about when, where and how often participants saw certain media pieces.

Closing the Credibility Gap: Real-Time Small Group Social Norming

Despite the best SNM efforts, practitioners always struggle with the issues of credibility and believability. As noted before, preconceptions are very difficult to change. The misperception of health norms is deeply entrenched in our culture.

Currently, VCU is pilot-testing the application of clicker systems to Small Group Social Norming interventions. Students are asked perception questions followed immediately by actual behavioral or attitudinal questions. While we have conducted interventions

with over 50 freshmen orientation classes and launched the first wave of data collection in an intervention with athletic teams, follow-up data and analysis of the pre-post data is pending.

What we have learned so far is that many students do admit to being surprised by the healthy norms in their groups. Students tell us that they feel secure using the systems and don't feel the need to lie. However, once the healthy norms are displayed, some students still find the results to good to be true and express the belief that people lie. This is where peer-to-peer instruction may be a powerful tool. We work hard to make sure students know there is no way a clicker answer can be tracked back to any one person. *Students can even pass their clickers back and forth to mix them up in the middle of a session if that helps the group feel more secure.* We are still learning what works best in our pilot-testing. In general however, we have found that students stay very engaged because of the real-time nature of data that is specific to them. FREE PowerPoints and instructors guides will soon be available at our website (see announcement at end of article).

Overcoming Barriers

The adoption of any new technology can be intimidating. Everyone needs some practice and needs to make a few mistakes before feeling comfortable with it. This process can be made less stressful with commonsense attention to detail. In addition, we believe that by freely sharing common mistakes ahead of time, others can avoid the same

problems. For example, the use of clicker technology requires multiple pieces of equipment: a laptop, projector, and clicker bag with receiver have to be connected and kept organized. This was causing us some problems. Three bags of equipment are required, at a minimum. All pieces of equipment have at least one or two cords. In our office we have simplified and demystified the process by labeling all the cords and bags so that they match. The laptop bag has "green frog" stickers. Everything that belongs in that bag has a green frog. The clicker bag is labeled with "zebra" stickers. (Actually, we were going to use boring colored dots, but one of the office members is color blind. Animal stickers are more fun and even less threatening than dots. Our equipment is always organized and ready to go.) All of these hints will be included in our instructors guide by the end of 2006.

Conclusion

It is difficult to say when clicker technology will reach the "tipping point" and become universally accepted. But, in light of the recent improvements in the technology and its rapidly decreasing cost, it won't be long until the use clickers in education is very widespread. Social norms practitioners can benefit now from this technology in many ways. Nevertheless, more research is needed about how to most effectively use this new tool, and to evaluate its relative value in enhancing message credibility compared to other methods, such as the snowball survey (Vatalaro and Hancock, 2004; Christensen, 2005; Gitchell and Zelezny, 2005). For any questions, please feel free to call the Office of

Health Promotion Staff at Virginia Commonwealth University (804) 828-9355. Thanks to grant funding from the U.S. Department of Education, FREE educational and PowerPoint materials will be available at VCU's social norms website www.yourstrategy.org in the near future.

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FREE Small Group Social Norming PowerPoints and Instructors Guide for the use of clickers will be available at www.yourstrategy.org by the Fall of 2006. Thanks to a grant from the U.S. Department of Education, VCU has been given the resources to create, evaluate and disseminate a small group social norming intervention using clickers. Please contact lchancock@vcu.edu for questions about this project.

Also available on the Yourstrategy.org website is an archive of past and current posters from the VCU social norms project, which are among the most creative and engaging being used in a university setting: http://www.yourstrategy.org/posters.html

Facebook Flyer Advertising: A New Media Channel
Linda Hancock

Facebook is a popular social networking service that allows members of high school, college and university communities to post profiles and to join on-line groups. Given its popularity, Facebook is a new media channel for social norms marketing campaigns. By December 2005, Facebook had over six million U.S. college student accounts created. At Virginia Commonwealth University, in the spring of 2006, our media habits survey revealed that 90% of our students had a Facebook account. We also found that the average time spent on Facebook for those with an account was 30 minutes per day.

Anyone with a valid email from over 2,000 universities can register and start a profile, including faculty, alumni and staff. Recently, Facebook utilization has moved to the high school level and over 25,000 American high schools are now registered. The site is free to users and is financed by advertising.

Any group or individual at a local campus can purchase inexpensive ads on Facebook. The ads are called "Facebook Flyers." The flyer is displayed on the left-hand side of an individuals opening screen page. A locally purchased flyer may have text only and has three potential parts: title (25 characters or less), the body of the ad (max of 150 characters) and an optional link for a website (URL). The cost is $5/day for displaying your ad 10,000 times for the day selected. It is $10/day for 20,000 displays on the selected day. Your "Flyer" will always be visible on the

"Flyer Board" for your selected days. For more in-depth information, email flyers@facebook.com.

At Virginia Commonwealth University, our first use of a "facebook flier" was to advertise a social norms raffle where students could register to "win" a free video iPod at www.yourstrategy.org. We found that seeing the print media, in addition to being reminded while they were on the computer, encouraged more students to complete raffle forms and interact with our online website.

Additional information about Facebook flyers is available on its FAQ page:
http://www.facebook.com/adfaq.php
Some of the questions addressed include:

Basics

What are Facebook Flyers?
What is the Flyer Board?
How much do Flyers cost?
How do I get started?

Display

Where will my Flyer be displayed?
Can I include HTML or images in my Flyer?
Will my link display in my Flyer?
Can I post Flyers at any school?
Why do I need to specify a number of days for my campaign?
How will my Flyers be distributed during my campaign?
Will exposure on the Flyer Board deduct from the total number of Flyers that I purchase?
Can I post different Flyers at different schools?
How can I maximize the exposure of my campaign?
Why don't I see my Flyers displaying anymore?

Other

Can I change my Flyer once I've purchased it?
What are your standards for Flyer content?

College Students and "Celebration Drinking"

Dennis Martell, Ph.D., Charles K. Atkin, Ph.D., Larry A. Hembroff, Ph.D.
Sandi Smith, Ph.D., Amy J. Baumer, MPA, Jasmine Greenamyer, MPH

Introduction

Michigan State University (MSU) is the site of a successful global social norms campaign that began in 2000. Students' misperception that the norm for drinking at parties and social occasions was 5 or more drinks had declined more than one-third by 2004 and more than two-thirds by 2005, while the average number of drinks consumed by the majority of students declined from 6 or fewer to 4 or fewer by 2005.   In addition to the global campaign that broadly addresses typical drinking, in 2001 MSU researchers sought to find evidence regarding the existence of, and social norms surrounding, "celebration drinking." Initially funded by a grant from the U.S. Department of Education and later by a grant from the Anheuser-Busch Foundation, the research team sought to answer the following questions: (1) Are there occasions during which larger proportions of students consume alcohol, drink to excess, and commit more time to drinking, and thereby increase the risk of negative consequences? (2) What is the difference between the perceived percentage of other MSU students versus the self-reported percentage of those who engage in drinking during various celebratory occasions?

Method

Research Question 1
Based on discussions in focus groups with MSU students, seven special

occasions of "celebration drinking" were selected as the primary focus of a telephone survey administered between March and May, 2002 to 1,162 MSU undergraduate students selected at random from the university enrollment roster. The typical interview lasted 14.8 minutes (s.d., 6.5) with a median of 15 minutes. Using AAPOR's Standard Definitions as a guide for outcome disposition codes and response rate formulas, the overall response rate for the survey was 63.3% with an upper bound of 65.5%. The refusal rate was 19.6%, the cooperation rate was 76.6%, and the contact rate was 85.9%.

The demographic profile of the respondent sample matched that of the undergraduate population well, but minor non-response adjustments were made for race/ethnicity by sex within each academic class. The final weighted data matched the population profile very closely. Results reported for this survey are based on the weighted data file.

Drinking patterns were measured for these focal occasions of celebration: Welcome Week, Halloween, the home MSU football Saturday with rival University of Michigan, other home football Saturdays, the end of the semester, St. Patrick's Day, and Spring Break. The questions for each of these occasions included whether or not the respondents drank at all during the occasion, whether or not they self-reported getting drunk, how many drinks

they drank, and over how many hours they drank.

In order to establish comparison points for typical drinking, respondents were also asked the same questions about their drinking on the Thursday, Friday, and Saturday evenings immediately prior to the interview; these data provided the basis for constructing appropriate baselines that had comparable lengths of time and days of the week as the celebratory occasions.

Research Question 2

During fall semester 2003, a web-based survey called the Social and Academic Life Survey of Attitudes (SALSA) was conducted at MSU with 1,302 respondents. The Office of Student Services drew a random sample of undergraduate students for the survey, and incentives such as pizza coupons were offered to those who completed the web survey. The demographic characteristics of the sample closely matched MSU's undergraduate population: the proportion of males was 47% in the sample vs. 46% in the population; the distribution by year in school was identical (26% Freshmen, 22% Sophomore, 25% Junior, and 27% Senior); and the average age was 20.2 years in the sample vs. 20.3 years among MSU undergraduates at large. The ethnic comparisons were also similar: Caucasian (84% sample vs. 82% MSU), African American (6% vs. 8%), Hispanic (3% vs. 3%), Native American (1% vs. 1%), and Asian Pacific Islander (6% vs. 6%). The data file was weighted by sex within class to correct for minor differential non-response rates. Results

for this survey are based on the weighted data file.

Among other questions, respondents were asked to estimate the percentage of other MSU students that they believed consumed alcohol on at least one day of welcome week and Spring Break as well as on a typical football Saturday, Halloween, and St. Patrick's Day during the 2003-04 academic year. In addition, the respondents reported whether or not they drank alcohol on each of these occasions so that a comparison of the mean percentages of perceived student body drinking versus actual self-reported drinking could be made to determine if differences in these estimates exist for celebratory occasions.

Results

Research Question 1

In Table 1 (see page 16), drinking that occurred during a typical week[1] is compared to drinking that occurred during welcome week, spring break, and the end of the fall semester. In Table 2, a comparison is made between the drinking that occurred during the Saturday of the UM-MSU football game, the Saturdays of any other football game, and a typical Saturday. In Table 3, drinking taking place on St. Patrick's Day and Halloween[2] are compared to a typical Thursday.

Surprisingly, Table 1 indicates that a larger percentage of students drank during a typical week (47%) than during welcome week (40%) or at the end of fall semester (24%); the typical week

figure was roughly equivalent to the percentage for spring break (48%). It is notable that these data indicate—even during celebratory drinking occasions—that drinking is not the campus norm. Nevertheless, especially during welcome week and spring break, students who consumed alcohol reported a greater average number of daily drinks consumed (8.3 and 7.8 drinks, respectively) than did students during a typical week (6 drinks), and time spent drinking also increased, which is potentially a protective behavior mitigating negative consequences. Finally, a higher percentages of the drinkers reported getting drunk during the three "celebratory" occasions (72%, 55%, and 62%, respectively) than during a typical week (48%).

Table 2 shows clearly that drinking is not the campus norm during the noted time periods. Nevertheless, the data show that higher percentages of students drank at UM-MSU football and other football Saturdays than they did on a typical Saturday. The differences are even greater with respect to the percentages of drinkers who reported getting drunk. Fully 56% of the drinkers reported getting drunk the Saturday of the UM-MSU football game (and 50% on other football Saturdays), compared to 39% who reported getting drunk on non-football Saturdays.

The average number of drinks respondents reported consuming on the Saturday of the UM-MSU football game (7.8 drinks) was 44% greater than the average number reported for the typical Saturday (5.4 drinks); the quantity was

13% greater than usual on other football Saturdays (6.1 drinks).

Table 3 shows the relevant results regarding drinking on Halloween and St. Patrick's Day compared to a typical weekday. In 2001, Halloween occurred during the middle of the week while St. Patrick's Day occurred on a Sunday. Since these are not typical drinking days among college students, we have chosen to compare both occasions to a typical Thursday.

The survey found appreciably lower numbers of students consume alcohol on the typical Thursday (19%) than they do on Halloween (32%) and on St. Patrick's Day (26%). Furthermore, Table 3 indicates that roughly 57 percent of those who drank on Halloween or St. Patrick's Day said they got drunk compared to only about 48 percent of those who drank on the typical Thursday. Results also reveal that students consumed a higher number of drinks and spent more time drinking on Halloween and especially on St. Patrick's Day, compared to an ordinary Thursday.

Across the comparisons in all three tables there is a consistent pattern: those who drink on celebration days tend to drink more and over a longer period of time; and larger percentages of students report getting drunk on celebration days. These findings are all consistent with the proposition that there is a particular phenomenon that we have termed "celebration drinking."

These data were also examined to develop a profile of celebratory drinkers. In order to understand the "celebration drinking" phenomenon, it is necessary to disaggregate students who drink into categories from which comparisons can be drawn. To do this, respondents were divided into four groupings: 54% who drank during a typical weekend and drank at one or more of the celebration occasions (labeled *Anytime Drinkers*); 35% who did not drink during a typical weekend but did drink during one or more of the other celebration occasions (labeled *Celebration Drinkers*); 9% who drank neither during the typical weekend nor during any of the celebration occasions but drank alcohol at some other time (labeled *Seldom Drinkers*); and 2% who drank during a typical weekend but not during any of the celebration occasions (labeled *Non-Celebration Drinkers*). This categorizing of respondents excludes all those who said they had not drunk alcohol since coming to the university.

Table 4 compares the demographic profiles of these four groupings of drinkers. Males were somewhat more likely than females to be Anytime Drinkers, while females were somewhat more likely to be Seldom Drinkers; males and females were similarly likely to be Celebration Drinkers. There were also no significant differences across the academic classes of respondents, although there was a somewhat lower likelihood that freshmen were Anytime Drinkers.

Caucasian respondents were more likely than other student respondents to be Anytime Drinkers, while African American students were much more likely than others to be Seldom Drinkers. Slightly greater percentages of African American and other student respondents were categorized as Celebration Drinkers than were Caucasian student respondents.

Finally, the data in Table 4 (see page 17) indicate that students who had not consumed alcohol in high school were somewhat more likely than those who had to be among the Seldom Drinkers. Those who had consumed alcohol in high school were more likely than their counterparts to be categorized as Anytime Drinkers, but both groups were similarly likely to be Celebration Drinkers.

During the seven celebration occasions examined in this study, other data not tabulated here revealed that Anytime Drinkers reported drinking at an average of 3.8 occasions compared to an average of 2.6 occasions among Celebration Drinkers. The average number of such occasions during which Anytime Drinkers reported getting drunk was 2.4, compared to an average of 1.2 among the Celebration Drinkers. The Anytime Drinkers were also more likely to drink more than Celebration Drinkers, especially during celebration events. During a celebration occasion, Anytime Drinkers generally reported consuming 1-2 more drinks than they would during a typical weekend. In general, Celebration Drinkers tended to drink less than Anytime Drinkers; moreover, the Anytime Drinkers tended to drink more during celebration events than they did during a typical weekend.

The answer to Research Question 1 is that there are celebration events during which larger proportions of students who drink do so to excess, commit more time to drinking, and thereby increasing their risk of negative consequences. There is a consistent pattern across the findings that a substantially higher percentage of students who drink report getting drunk on celebratory occasions than do so on typical days. It should be noted, however, that a self-report of drunkenness a subjective measure that may be sensitive to situational factors.

As the results of the SALSA survey indicate, students overestimated the percentage of students who drank alcohol on each of the five celebratory occasions during the 2003-04 school year: at least one day during Welcome Week (73% estimation versus 58% actual), at a tailgate during a typical football weekend (64% estimation versus 31% actual), during Halloween (67% estimation versus 62% actual), on St. Patrick's Day (64% estimation versus 39% actual), and at least one day during Spring Break (76% estimation versus 70% actual). The answer to Research Question 2 is that there is a difference between perceived and actual percentages of alcohol consumption on all five of the celebration events investigated in the survey; these differences ranged from 6% and 7% for Halloween and Spring Break to 15% for welcome week, and 26% and 33% for St. Patrick's Day and a typical football tailgate respectively.3

Discussion

The results provide evidence that "celebration drinking" is a distinct phenomenon that differs from college students' typical drinking. In its cultural context, celebration drinking is associated with particular events and these are recognized as occasions when even those who may not typically drink will do so, and those who are drinkers see these as occasions to drink more than usual or to get drunk. Furthermore, our findings that students overestimate the percentage of their peers who engage in celebratory drinking suggest that the social norms approach may be an effective way to reduce high-risk consumption and negative consequences during such occasions.

Future studies will need to focus on ways to reduce perceived and actual alcohol consumption, and to increase the expression of disapproval of getting drunk, during celebratory occasions. The high rates of self-reported drunkenness found here also suggest the need to increase the use of protective behaviors during these events. Our research has shown that a number of protective behaviors—such as keeping track of drinks, pacing drinks, going out as a part of group and staying with the same individuals, staying in the same place while drinking, and drinking only one kind of alcohol—lower the likelihood of getting drunk and experiencing negative consequences during both typical and celebratory drinking occasions (Michigan State University, 2002).

This study focused on seven celebratory drinking occasions, each of which falls on the same date for the entire student body. The dates of other celebratory occasions, however—such as birthdays, friends' birthdays, or weddings—will obviously vary from person to person. Nevertheless, Neighbors, Oster-Aaland, Bergstrom, and Lewis (2006) examined 21st birthday celebrations and football tailgating and found that students not only overestimated the number of drinks consumed during both types of occasions but that this overestimation positively correlated with heavier drinking.

Reshaping the celebratory drinking culture about safe levels of drinking, about where to drink, with whom, and what to drink may reduce the pressure to drink excessively on all celebration occasions. Our research has shown that even on a campus where typical drinking levels have steadily declined over time due to an effective social norms campaign, students' perceived and actual drinking behaviors during celebratory occasions remain a source of concern that a more targeted normative campaign may be able to address.

(The authors would like to thank and acknowledge Rebecca Allen, Karen Clark, and Tom Fediuk for their help with these campaigns.)

Footnotes

[1]Based on the aggregated responses to the questions regarding drinking on the previous Thursday, previous Friday, or previous Saturday during the field period of the survey (i.e., the latter half of the Spring Semester).

[2] Midweek day occasions in 2001 and 2002.

[3]The phone survey results are consistently lower than the web survey results and raise the possibility of a mode effect. Dillman (2000) reports consistent results due to mode effects. Social desirability to appear less extreme when talking to someone versus near anonymity of a web survey has been found to result in findings much like ours.

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Table 1
Drinking Behavior During Typical Week (TW) , Welcome Week (WW), End of Semester (ES), Spring Break (SB)

	TW	WW	ES	SB
Percent of All Students who Drank	47%	40%	24%	48%
Mean Number of Drinks Consumed	6.0	8.3	6.2	7.8
Mean Number of Hours Spent Drinking	3.9	5.1	4.3	5.6
Percent of Drinkers who Report Drunkenness	48%	72%	55%	62%

Table 2
Drinking Behavior on Typical Saturday, UM-MSU Football Saturday, Other Football Saturday

	Typical	UM-MSU	Other
Percent of All Students who Drank	23%	38%	37%
Mean Number of Drinks Consumed	5.4	7.8	6.1
Mean Number of Hours Spent Drinking	4.1	5.6	4.7
Percent of Drinkers who Report Drunkenness	39%	56%	50%

Table 3
Drinking Behavior on Typical Weekday, Halloween, St. Patrick's Day

	Typical Thursday	Halloween	St. Patrick's Day
Percent of All Students Who Drank	19%	32%	26%
Mean Number of Drinks Consumed	5.9	6.5	7.7
Mean Number of Hours Spent Drinking	3.6	4.1	5.6
Percent of Drinkers who Report Drunkenness	48%	57%	58%

Table 4
Percentage Distribution of Drinking Types, by Demographic Characteristics

		N	Anytime	Celebration	Seldom	Non-Celeb
Gender	Female	514	49.8%	35.0%	12.5%	2.7%
	Male	431	58.9%	34.1%	4.9%	2.1%
Status	Freshman	180	47.2%	39.4%	11.7%	1.7%
	Sophomore	212	54.7%	35.8%	6.6%	2.8%
	Junior	242	55.0%	33.1%	8.7%	3.3%
	Senior	313	56.5%	31.9%	9.6%	1.9%
Race	Caucasian	793	56.6%	33.7%	7.9%	1.8%
	African American	61	32.8%	37.7%	26.2%	3.3%
	Other	91	45.1%	40.7%	6.6%	7.7%
Drank in	Yes	666	57.8%	34.1%	6.0%	2.1%
H.S.	No	280	44.6%	36.1%	16.4%	2.9%