

Feature Article: Do Your Data Do You Justice? Evaluating Social Norms Interventions

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Social norms interventions to address college student drinking have demonstrated promise in reducing alcohol consumption whether delivered in small group interventions or mass media campaigns. As attention and interest in developing social norms interventions has grown, so has the need for well-controlled studies evaluating their impact and predictors of their success. When evaluating an intervention, it is important to ensure that the analyses being conducted are those best suited to answer the primary research and programmatic questions. Thus, this article will briefly discuss issues in evaluating the effectiveness of social norms interventions with a particular focus on mass media campaigns as the most widespread application of social norms theory within the prevention realm.

From a methodological standpoint, a limitation in the evaluation of most social norms media campaigns is the lack of a control group. Specifically, reductions in excessive drinking, while possibly due to advertisement exposure, could also be a function of changes in an individual or a group of students over time (such as changes due to history or maturation) that are unrelated to the intervention. Additionally, observed changes could be a function of cross-sectional data (a "snapshot" of a campus) in which differences in participation rates or even the impact of a new freshman class could account for observed differences. These concerns could best be addressed through inclusion of a "control campus" to account for environmental and historical influences, as well as longitudinal follow-up of participants and use of self-report measures to assess awareness of the media campaign (in which case, predictors of

differential program effectiveness can be evaluated). Consequently, any study designed to evaluate a norms campaign can be strengthened by building in ways to evaluate changes so that observed differences can more confidently be attributed to intervention effectiveness.

Measures should be utilized that will allow the evaluator to best address his or her questions. Additionally, a range of measures addressing drinking behavior may be needed to adequately detect changes that might result from the intervention (e.g., alcohol-related consequences, variables necessary for blood alcohol level calculation, and measures that use continuous scales to assess amount of alcohol consumed and frequency of consumption, etc.). Particular attention should be paid to use of adequate time frames for assessment and follow-up. For example, if a follow-up occurs three months after an intervention but an instrument instructs the respondent to report on consequences over the past six months, a post-test will include both pre- and post-intervention behavior. Thus, beneficial changes created during the course of the intervention may be obscured. These issues have to do with the scientific integrity of research being conducted.

When applied as a mass media campaign, "most" advertisements detail what "most" students are doing. Typically, an emphasis is placed on the percentage of the student body consuming four or fewer drinks (e.g., "Most (84%) students at this college consume 0, 1, 2, 3, or at the most 4 drinks when they party."). What can be missing in evaluating these data is an exploration of the impact of the message. First, conduct analyses on people's perceptions of what is happening around them. Are perceptions and estimates of the use of students getting

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Editor's notes

Interpreting the Research on Social Norms

The “Recent Research” section in this issue provides much food for thought when it comes to the issue of research conclusions and findings on social norms. The results are encouraging in terms of how they advance our knowledge of norms influence and the conditions required for successful application of the model. Yet each study, although different, also suggests caution in terms of how to interpret and extrapolate from research results. They provide excellent examples about how recommendations based on inferences from data can suggest more certainty than is warranted about implementation strategies and success or failure of the model. This is also a concern when these conclusions (correct or not) are disseminated without an understanding of the research they are based on.

Here are four cases in point, all featured in the “Research Notes” for this issue.

Case One: An excellent study documenting a significant same-gender influence for the effect of misperceptions concludes that gender specific messages are warranted in social norms campaigns. It is abundantly clear from this study that the effect of norm misperception on drinking behavior and consequences is more important than the other influences examined, and that same-gender perceptions exert a very strong effect on drinking. Yet the recommendation for gender specific messages may be overstating the results because the authors did not also exam-

ine the influence of perceptions of the other gender’s behavior. For example, even though women’s drinking was very strongly influenced by what women thought other women drank, it is also possible that women’s perceptions of men’s drinking could be even more important. Thus, one can conclude that gender specific messages might be effective (on this campus), but not that they will be more effective than gender-neutral messages.

Case Two: Some of the previous research on fraternity drinking has suggested that fraternity members are relatively accurate in perceiving the drinking of their brothers. As a result, some scholars and critics have concluded that social norms interventions are not likely to be effective with fraternities. Yet a new study reveals two important facts: first, even if this misperception is smaller, it does have an effect and second, perceptions of attitudinal or injunctive norms are very significant in predicting Greek drinking—much more than behavioral norms. Thus, there is reason to believe that carefully designed social norms interventions with fraternities could be effective.

These studies remind us of an important lesson about social norms. Norms and the process of integrating information are “contextual,” i.e. what norms are salient and what works can be variable based on campus climate and other environmental factors. A methodology that works on one campus, or for a particular group of students may not work when done in the same way on another campus, unless the intervention is revised so that it is

tailored to the culture of the new campus. Thus even positive results do not necessarily mean that the same program will have the same effect or mean the same thing on another campus. In addition, researchers who are distant from student life on their campus may not design studies that take adequate account of these contextual issues unless they partner with student affairs professionals and students who are closer to the ground. While there is “good practice” that is relevant to all it is also true that this practice must be adapted creatively each time.

Case Three: Students randomly selected from three co-educational residence halls are surveyed and then exposed to a social norms campaign, but there are no changes in perceptions and behavior following the campaign. The author concludes that more research is needed to determine the effectiveness of the social norms approach. This conclusion thus implies uncertainty about the impact of social norms interventions. Yet, this is an unfair conclusion because the study itself was flawed in a number of significant ways. First, the campaign lasted only twelve weeks, which is too short to see an impact. Second, only fifty of the six-hundred participants completed both pre- and post- surveys. Third, the students selected for the campaign were a random sample living in three residence halls with other students who were not part of the campaign. Thus, the media campaign was not relevant to the context that the students were living in, and any effects of the campaign may have been undermined by the other students not exposed to the campaign. In other words, when group norms are presented, they may need to be presented to the *whole* group to have an impact.

Other research suggests that normative feedback can be used to change an

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individual's behavior, independent of the larger peer group, when the feedback is of a particular kind. For example, computerized personalized feedback is effective in reducing problem drinking, as was the case in a study described in this issue's "From the Field." Again, while perceptions of norms are clearly influential, not all norms are the same and the context is all important.

Case Four: A group intervention that includes normative feedback is found to be ineffective. Yet a second treatment group that receives only normative feedback shows reductions in the drinking of its participants after the study. If this study had only included the first treatment group, the authors may have concluded that the normative feedback was not efficacious when in fact it was the context in which the feedback was provided that determined its effectiveness.

Jason Kilmer and Jessica Cronce provide additional insights in their thought-provoking "Feature Article" on evaluation issues. They offer examples of how the positive effects of social norms campaigns may be overlooked when evaluation measures are too global or are not constructed carefully.

For all of these reasons, we occasionally hear of social norms interventions like those mentioned above that "didn't work," leading some to conclude that more research and evaluation is needed, or that the jury is still out on social norms. Yet many of these studies are flawed in their conceptualization and implementation, or are the basis of erroneous extrapolations from the available data. At the same time there are ample examples of well-done social norms interventions that produce very strong effects – stronger than is currently available for any other interven-

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tion evaluated for college student populations – to provide ample faith in the model.

All of these mistakes and misinterpretations are understandable and part of the natural process of science. Yet they can be taken out of context and have been used unfairly by the critics of social norms. Thus, it behooves us to be cautious and careful in our conclusions regarding what data tells us about the theory of social norms and the effectiveness of our interventions. We can be our own best critics and learn much from each other in the process.

On another note, this issue reminds us of the enormous contribution to the field made by Alan Marlatt and his colleagues at the University of Washington. Almost all of the work currently being done on providing individualized normative feedback to heavy drinkers is influenced by Alan's work or is being conducted by former graduate students of his. Their collective research has provided impeccable empirical support for the efficacy of normative feedback as an essential component of individual or tertiary prevention. It was only after assembling this issue of the *Report* that I noticed that this issue's "Feature Article," "From the Field" case study, and one of the studies in the "Recent Research" section are all based on the original work conducted by Alan. Thank you, Alan.

Finally, your thoughts and comments are always welcome.

Alan D. Berkowitz, Ph.D.
Editor
The Report on Social Norms
e-mail: alan@fltg.net
telephone: 607 387-3789

Social Norms Presentations at the American College Personnel Conference

The National Meeting of the **American College Personnel Association** in Minneapolis (March 29-April 2) featured six presentations on social norms. Three of these were part of a special conference institute hosted by Alan D. Berkowitz: *The Social Norms Approach: Theory and Research* (Alan Berkowitz, Michael Haines and H. Wesley Perkins); *The Social Norms Approach: Small Group and All-Campus Intervention Strategies* (Alan Berkowitz, Kim Dude, Michael Haines, Jeffrey Linkenbach and H. Wesley Perkins) and *Evidence for the Effectiveness of Social Norms and Common Controversies* (Alan Berkowitz, Jeffrey Linkenbach and H. Wesley Perkins).

Other sessions included: *Developing a Social Norms Assessment Plan* (Gavin Henning), *Using Social Norms to Improve the Lives of Student Athletes* (H. Wesley Perkins and David W. Craig), and *Accentuate the Positive: Affecting Behavior Change Through Normative Influence* (Jean C. Peden and Manny Cortes).

The program by Peden and Cortes reported on interventions used at Stony Brook University to address student apathy, vandalism, and community safety (door popping). Preliminary results indicated a decrease in negative behaviors and an increase in self-reported student satisfaction in these areas.

from the field

The Impact of Computer Delivered, Personalized Normative Feedback

Editors Note: Each newsletter of The Report on Social Norms will feature model programs or interventions that have been successfully implemented in a community setting.

Heavy drinking by some college students continues to be a problem. Yet college students in general overestimate the extent of heavy drinking. This overestimation has in turn been prospectively associated with heavier and more problematic drinking. Correcting these misperceptions is the central goal of social norms interventions. This report describes a particular form of providing such feedback: computerized, personalized normative feedback provided with the aim of reducing alcohol consumption among heavy drinking college students (Neighbors, Larimer, & Lewis, 2003). It provides a basis for individualized normative interventions that can be delivered in a one-on-one format.

Personalized Normative Feedback

Personalized normative feedback is information designed to correct normative misperceptions. According to this definition, personalized normative feedback requires three pieces of information. These include 1) one's own drinking behavior, 2) one's perceptions of others' drinking behavior, and 3) others' actual drinking behavior. This information is believed to be sufficient to enable students to change their perception of "normal" drinking by comparing their perception of the norm to the actual norm as well as their behavior to "normal" behavior. Theoretically, personalized normative feedback is likely to be a more effective intervention for heavy drinking students than social norms marketing because it is individually tailored and more likely to be personally meaningful to the individual. In a sense,

social norms marketing campaigns provide "personalized normative feedback" to a whole campus, just as small group norms interventions provide such feedback to a group. Here, the feedback is provided to an individual, in this case a heavy drinker.

Some evidence for the efficacy of personalized normative feedback can be deduced from the efficacy of brief interventions where personalized feedback has been incorporated as an intervention component. The Brief Alcohol Screening and Intervention for College Students (BASICS; Dimeff, Baer, Kivlahan, & Marlatt) is one such intervention. BASICS and a number of other brief interventions that include personalized normative feedback have been found effective in reducing heavy drinking. Almost without exception these interventions utilizing personalized normative feedback include other intervention components. Even studies that have purported to evaluate personalized normative feedback have usually included one or more other intervention components (e.g., review of risk factors such as family history, review of negative consequences, expectancy challenge, tolerance, BAC information, and/or other didactic materials). Such multi-component interventions may have the best chance of reducing problem drinking precisely because they offer a variety of types of information. However, they do not allow us to determine the unique impact of any of the constituent components. This is problematic because, if the intervention works, it is difficult to know why it works. It may, in fact, be effective because of a single active component and it is possible that

adding additional components waters down the effect of the component(s) that is responsible for reducing heavy drinking. Thus, this study was designed to assess the impact of normative feedback alone, independent of other components.

Design and Method

Participants were screened from a large sample of college students in order to identify heavy drinking students. Students were contacted if they indicated at least one heavy drinking episode in the previous month. Participants included 252 heavy drinking students (104 men and 148 women).

The procedure included a baseline assessment as well as two follow-up assessments at three and six months.

Students were randomly assigned to an intervention or assessment-only control. The intervention was modeled after the normative feedback component of BASICS. Immediately after completing baseline measures of perceived norms and drinking behavior, participants in the intervention condition were provided computerized feedback detailing their own drinking behavior, their perceptions of typical student drinking, and actual typical

"...the changes in consumption were primarily due to changes in normative misperception, suggesting not only that the intervention works, but that it works for the reason we expect it to work. Thus, these findings demonstrate that personalized normative feedback (in the absence of any other information or components) is sufficient to reduce normative misperceptions and consequent heavy drinking among college students for up to six months."

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From the Field

student drinking. No other components were included. Procedures for three and six month follow-up were similar in the sense that students completed the same assessment measures as they completed at baseline, however participants did not receive feedback. Figure One provides an example of the type of feedback provided.

mation or components) is sufficient to reduce normative misperceptions and consequent heavy drinking among college students for up to six months.

These results have several important implications. First, the fact that this extremely minimal single component intervention was able to reduce con-

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Computerized interventions allow students to receive graphic feedback immediately after they have reported on their own drinking behavior and their estimates of peer drinking. This makes it easy for them to see (and remember) where the feedback comes from. In addition, because the entire procedure is computer based it can be easily modified. Computerized, personalized normative feedback can be delivered over the Internet, reaching a wide audience at relatively low cost. Similar programs that include normative feedback combined with additional intervention components are already available.

Finally, this research shows that personalized normative feedback alone is sufficient to reduce heavy drinking. Future research is needed to determine if additional components (e.g., review of risk factors and negative consequences, expectancy challenge, tolerance, BAC information, etc.) add anything beyond personalized normative feedback.

Currently, we are in the process of replicating and extending these findings at North Dakota State University.

Clayton Neighbors, Ph.D. and Melissa A. Lewis, M.S., North Dakota State University

For more information please contact Clayton Neighbors at: clayton.neighbors@ndsu.nodak.edu

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- Dimeff, L. A., Baer, J. S., Kivlahan, D. R., & Marlatt, G. A. (1999). Brief alcohol screening and intervention for college students. New York: Guilford Press.
- Neighbors, C., Larimer, M. E., & Lewis, M. A. (2003). Targeting misperceptions of descriptive drinking norms: Efficacy of a computer delivered personalized normative feedback intervention. Manuscript submitted for publication.

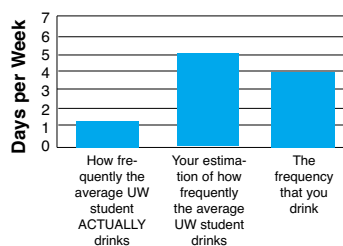
Sample Feedback

According to the information you provided us during the computer assessment, the number of occasions you drank (frequency) was 4 times a week. The average amount you drank on each occasion (quantity) was 6 drinks.

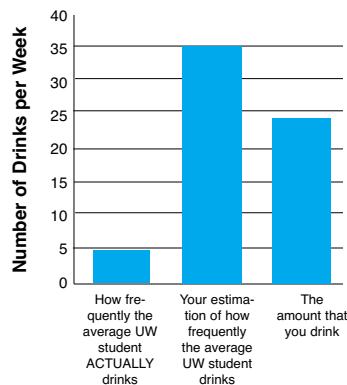
You completed questions asking you what you believed the average frequency and quantity of alcohol consumed by other college students was. You told us that you believed that the average student drank 5 times a week and during each occasion, s/he consumed 7 drinks.

The actual drinking norm for students at the University of Washington is 1.5 times a week drinking about 3.5 drinks on each occasion. Your percentile rank (comparing you to other college students) is 91%, which suggests that you drink more than 91% of other college students

Frequency of Alcohol Consumption



Quantity of Alcohol Consumption



Results and Conclusions

Results revealed reduced consumption among feedback participants at three months and six months post-baseline relative to the control group. Personalized normative feedback also reduced misperceptions in drinking norms at both three and six month follow-up sessions relative to the control group. In addition, the changes in consumption were primarily due to changes in normative misperception, suggesting not only that the intervention works, but that it works for the reason we expect it to work. Thus, these findings demonstrate that personalized normative feedback (in the absence of any other infor-

sumption for at least six months demonstrates the impressive power of individually tailored normative feedback. Peer drinking norms have been found to be among the strongest influences on personal drinking behavior of college students. This research adds to the evidence that peer influence can be used to reduce problem behavior. Other implications stem from the fact that the interventions and assessments used were computer based. This allows for immediate feedback to participants based on their individual responses. In this research even the structure of the quantity graph was tailored to the individual such that the y-axis range adjusted to each individual's data.

Recent Research

All of the studies reported below address the issue of “salience” in some way—i.e. which norms are most relevant for which groups in which context. This is one of the most critical issues for social norms practitioners to consider. Some interventions fail because the norms provided may not be the relevant ones for the target group in question. These studies also raise important questions about what we should conclude from social norms research. Please see the “Editor’s Note” in this issue for more on this topic. (The Editor)

Gender Role Conflicts and Sex-Specific Drinking Norms: Relationships to Alcohol Use in Undergraduate Women and Men. (2003) James S. Korcuska and Dennis L. Thombs. *Journal of College Student Development, 44(2):204-215.* Gender differences have rarely been examined in studies of social norms and their influence. In this study the influence of same-sex peer drinking norms on drinking was compared with the influence of gender-role conflict and other socio-demographics on drinking in a sample of 640 undergraduates. For both men and women, alcohol use intensity and drinking consequences were positively correlated with perceived peer norms for both “close friends” and “typical students.” Perceived drinking norms for close friends of the same sex explained 48% of the variance in alcohol intensity and 31% of the variance in drinking consequences and were a stronger predictor of drinking than norms for “typical students.” In addition, the predictive effect of norms on drinking was much stronger than the effect of gender role conflict on drinking, which has been associated with problem use in other studies. The authors concluded that

their findings lent additional empirical support for the social norms approach to prevention and recommended that social norms campaigns use gender-specific normative messages. However, because the authors did not examine the effect of opposite gender norms on drinking, it is not clear which norms are actually more influential, despite the very strong influence of same-gender norms on this campus. For example, other authors have found that women’s drinking is more strongly correlated with perceived norms for men than for women and therefore recommend using all-campus norms for media campaigns (for instance, the examples of Northern Illinois University and Hobart and William Smith Colleges provided by Rich Rice in the first issue of *The Report on Social Norms.*) Thus, further research is needed to determine if gender-specific normative messages are more influential than mixed-gender norms, or if the relative strength of these influences are campus specific.

Considerations for More Effective Social Norms Based Alcohol Education on Campus: An Analysis of Different Theoretical Conceptualizations in Predicting Drinking Among Fraternity Men. (2003). Mickey Trockel, Sunya Williams and Janet Reis. *Journal of Studies on Alcohol, 64:50-59.* The issue of “salience” is especially important when designing targeted social norms interventions for specific groups. This study of perceived drinking norms in fraternities suggests that misperceptions of attitudinal or injunctive norms (i.e. what someone thinks others expect of them, or what the authors call “perceived collective attitude”) are more important than misperceptions of behavioral norms for drinking. Both types of norms were significant in predicting alcohol consumption levels and also predicted differences in consumption within chapters and across chapters of fraternity men. A third norm that measured perceptions

of brothers’ permissive attitudes towards drinking was not influential, suggesting that some attitudinal or injunctive norms are more important than others. In this case the perceived expectations of others were more important than perceptions of general permissiveness about alcohol use. Participants were 379 members of 28 randomly selected chapters from within two national fraternity organizations. Twelve chapters came from one fraternity while the other 16 came from the second fraternity. The greater importance of attitudinal expectancy norms was in part due to the fact that fraternity members slightly underestimated the drinking behavior of other chapter members. Thus, this study replicates previous research supporting the importance of norm misperceptions in explaining fraternity drinking, as well as research suggesting that fraternity members may not misperceive their immediate peers’ drinking as much as other students. However, while other authors have concluded that the lesser degree of behavioral misperceptions in fraternities indicates that social norms interventions would not be effective in this population, this study supports the potential efficacy of norms correction interventions for fraternities but shifts the focus from behavioral norms to particular attitudinal norms. The authors also conclude that providing normative feedback to fraternities with general population norms is unlikely to be effective.

College Student Alcohol Abuse Prevention: Using Social Norms Within a Health Communication Campaign. (2001). K.C.W. Bailey. *Dissertation Abstracts International, 62 (6):2040A (165588).* A survey assessing student attitudes and behaviors with respect to alcohol and perceptions was distributed to six hundred randomly selected students from three co-educational residence halls. A twelve-week social

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norms health communication campaign was implemented. At the end of the campaign there were no improvements in perceptions and no changes in behavior among the fifty students who completed the post-test. The author concluded that “although the Misperceived Norms Model may be a promising approach to the reduction of college alcohol consumption, more research is needed in its application and effectiveness.” However, the study may have been ineffective for a number of reasons that do not necessarily reflect on the efficacy of the social norms approach (see the “Editor’s Note” in this issue for an explanation).

Reducing Alcohol Use in College Students: A Controlled Trial of Two Brief Interventions. (2000). Scott T. Walters, Melanie E. Bennett and Joseph H. Miller. *Journal of Drug Education*. 30 (3):361-372. This study tested two forms of alcohol reduction programming for college students, both including mailed personal feedback. The first treatment group received a two-hour group information and motivational session followed by mailed feedback and the second treatment group received the mailed personal feedback only. A third group served as a control. At a six-week follow up the feedback-only group showed a significant decrease in number of drinks per month. The authors suggest that the students in the group treatment session may have paid less attention to the mailed feedback after participating in the group, and that the effect of attending a group with other heavy drinkers may have inadvertently reinforced the self-serving (mis)perception that their own drinking was normative, thus making them more resistant to the norm-based feedback. As with many other studies, this points to the importance of the context in which the feedback is given as an important determi-



Editor’s Note: “The Gathering Place” brings together news, announcements, and important developments in the field of social norms.

Perspectives on Social Norms from Henry Wechsler and Wes Perkins. A recent issue of the American Sociological Association’s on-line journal *Footnotes* contained a favorable overview of the social norms approach (see RSN March

2003). In response to this article Henry Wechsler and colleague Toben Nelson offered a critique of social norms, with the now familiar criticisms that the popularity of social norms has mistakenly been interpreted as a sign of its effectiveness, that beverage industry sponsorship renders social norms suspect and that social norms has “a weak theoretical basis that is isolated from other theory and has little empirical support” – particularly in peer-reviewed academic journals. They concluded, “If something sounds too good to be true, it usually is.” A response by H. Wesley Perkins refers to Wechsler’s “now familiar but unsubstantiated criticism of social norms research and interventions” and goes on to enumerate a variety of theoretical models and research to contradict these claims, commenting that “Wechsler’s and Nelson’s disparaging remarks exhibit an inexplicable lack of knowledge about social norms theory and its associated published research base.” Perkins address the beverage industry issue by reminding us that all of the original published research and case studies introducing the social norms approach were funded solely by government grants and local school support (as is the case for the overwhelming majority of social norms campaigns now in existence – Editor). (www.asanet.org/footnotes/feb03/fn20.html)

Appropriate Use of the Term “Binge.” The *Journal of Studies on Alcohol*, the premier research and scholarly journal in the field of alcohol and alcoholism, has a policy against use of the term “binge” in articles it publishes when the term is used to describe high-risk drinking based on the 5/4 or similar measures. Their explanation for this editorial policy statement provides a cogent analysis of why the term “binge” should be limited to its standard clinical definition of “an extended bout of drinking or other substance abuse (often operationalized as at least 2 days) in which the person neglects other activities in order to drink.” (www.rci.rutgers.edu/~cas2/journal~Binge/html)

Action, the official newsletter of the American College Health Association, in its winter issue (Vol 42, #3) had three references to social norms. First, a case study report of a tobacco social norms intervention at the University of Vermont that reported improvements in perceptions and slight decreases in smoking rates after two years. Second, a study comparing the efficacy of social norms with a traditional health education approach at Ball State University. Third, the release of National College Health Assessment Data, including data on a variety of behaviors, perceptions, risk and protective factors. At Northern Illinois University, NCHA data showed that a number of alcohol-related protective behaviors cluster together that are associated with decreased alcohol-related harm. (www.acha.org)

An on-line forum on the social norms approach is being sponsored by the International Center for Alcohol Policies (www.icap.org). It contains Invited Opinions from Koreen Johannessen (University of Arizona), researcher Bradley Smith (University of South Carolina), and Gregory Joiner, a student from a campus with an active social norms marketing campaign (University of Virginia). While Johannessen’s perspective on social norms is positive, Smith is more cautious and highlights a number of methodological concerns. Joiner, who was involved in the University of Virginia campaign as a student, provides a participant’s perspective. This forum will be reported on at greater length in a future issue of the *Report*.

Do Your Data Do You Justice?

more accurate? If so, what follows should be a decrease in drinking. With longitudinal data, one can evaluate this issue exactly. If, overall, a norms campaign does not appear to have had an impact, is there a differential effect based on norm correction (i.e., is there a reduction in drinking in those for whom a correction of a misperceived norm occurred in comparison with those whose perceptions maintained stable)? Is it possible that some student were exposed to campaign media more than others? In other words, if a campus wide decrease is not observed, there may still be a decrease in drinking among those for whom misperceptions decreased

Additionally, a significant impact of an intervention can be absolutely lost and masked if the emphasis is exclusively placed on significant changes between two distinct categories of consumption: those abstaining or drinking moderately (0-4 drinks on a given occasion) and those drinking heavily (5 or more drinks). A scientifically and methodologically sound study evaluating the effect of a norms campaign could demonstrate a pre-test prevalence of 85% consuming 0-4 drinks and, following an intervention, the campus wide rate could remain 85% despite changes within this range. Similarly, a campus could see the percentage of students consuming 0-4 drinks increase over time and then seemingly stop changing. However, prior to concluding that a once successful intervention has now

lost its effectiveness and, as such, did not have the expected impact, one must evaluate any movement within these two categories.

For example, the mean number of drinks per occasion could move from ten to six, but this is still clearly “5 or more” and this movement would not, therefore, be demonstrated in analyses focusing on the prevalence of students drinking “4 or fewer.” Further, just as the category of research participants drinking “5 or more” is not a homogenous one, neither is the category of those drinking “4 or fewer.” Has the average number of drinks per occasion in this category of students gone down? A number of light drinkers could become abstainers, yet the 0-4 rate would not change.

Essentially, if the percentage of participants reporting consumption of 0-4 drinks per occasion has not moved, it would be incorrect to conclude that no change has occurred in these particular scenarios. As one gets to “know” the intricacies of one’s data, a clearer picture of what is occurring on campus could emerge.

The evaluation of any intervention begins with the basic issue of: “What is one attempting to demonstrate?” In the evaluation of social norms campaigns, goals include correcting misperceived norms and, ultimately, reducing drinking. Regression analyses can be used to see if changes in norm perception are predictive of changes in drinking. Analysis of variance and regression pro-

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cedures can be used to evaluate the impact on a range of drinking variables following the implementation of an intervention.

This is an exciting time to be working in the social norms field. We have the ability to learn with and from each other in our prevention efforts. As research efforts become increasingly more collaborative within and across campuses, as findings from this research are disseminated, and as ways to apply these findings are implemented, “most” of us will undoubtedly consider ways to build on this growing body of research.

Jason R. Kilmer, Ph.D., The Evergreen State College and Saint Martin's College, and Jessica M. Cronce, B.S., University of Washington

For more information contact Jason Kilmer at 360 867-6775 or kilmerj@evergreen.edu

Social Norms Internship

The Montana Social Norms Project has announced a summer internship in social norms for an upperclass college student. The internship will provide a stipend for assisting with the “Most of Us” campaign, helping to plan a conference, and developing media advocacy strategies. For more information contact Stacey Scott at 406 994-7155 or slscott@montana.edu.

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