

The Report on Social Norms

Volume 4 Issue 8
November 2004

Feature Article: Social Norms, Body Image and Problem Eating

By Alan D. Berkowitz, Ph.D.

"The research reviewed here provides strong support for the predictions of social norms theory as applied to disordered eating and body-image issues, provides evidence that norms and misperceptions of them are an important influence on eating and body-image issues, and suggests that the field may be ready for the development of actual interventions to test the efficacy of the social norms approach for these problems."

There is considerable interest in the application of social norms to the issue of eating disorders, problem eating and body image. In one of the first articles on this subject (Berkowitz, 2003) I suggested that eating behaviors might be amenable to a social norms intervention based on research suggesting that women misperceive the norm for issues such as attractiveness and problem eating. Since then a number of additional studies have been published confirming that unhealthy eating behaviors are over-perceived among women and that these misperceptions are correlated with risky health behaviors. Other studies have documented similar misperceptions for norms for thinness, body image and body size. This article reviews these studies and discusses their implications.

The research reviewed here provides strong support for the predictions of social norms theory as applied to disordered eating and body-image issues, provides evidence that norms and misperceptions of them are an important influence on eating and body-image issues, and suggests that the field may be ready for the development of actual interventions to test the efficacy of the social norms approach for these problems.

The importance of norms. There is considerable research that establishes the influence of social norms on behavior, including peer and cultural norms for eating and body image issues. While this research does not examine to what extent these norms are misperceived, the findings nonetheless establish the importance of norms and therefore provide a foundation for social norms interventions for these issues. Thus, if it can be shown that norms are important, and if it can also be shown that they are misperceived, then norms correction interventions are indicated as a health-promotion strategy. Studies that establish the influence of norms on behavior without assessing if these norms are

misperceived include a study by Neumark-Sztainer and her colleagues in 2003. They found that "weight-specific norms within the adolescent's proximal environment" were extremely important, accounting for more of the variance in explaining unhealthy weight-control behaviors than other variables. In another study, Baker, Little and Brownell (2003) tested the importance of social norms and perceived behavioral control as predictors of eating and exercise behaviors. They found that "girls' perceived peer norms exerted a stronger indirect influence on eating intentions than perceived parent norms (p. 193)." These and similar studies establish the important influence of norms on eating and body image issues.

Women's misperceptions of men's preferences. Research conducted on issues of body image indicates that women (presumably heterosexual women) misperceive what men find attractive in terms of body image (Fallon & Rozin, 1985), with women believing that men are attracted to very thin women in spite of the fact that men say that less thin women are more desirable. Women also "tend to overestimate their own body size and underestimate what others find attractive," thereby creating pressure to diet (Fallon, 1987). Similar findings have been reported for women from non-western countries (Lamb et al, 1993) and for women older than college-aged women (Rozin & Fallon, 1988). These findings assume that heterosexual women are primarily influenced by what they think men believe, as opposed to what they think women believe, and that correcting women's misperceptions of men's beliefs can provide a mechanism for behavior change. However, other research suggests that women's perceptions of other women's attitudes and behaviors are also influential and that correcting these within-gender misperceptions is more desirable, as explained below.

Women's misperceptions of other women. In addition to women's misperceptions of what

continued on page three



The Gathering Place brings together news, announcements, and important developments in the field of social norms.

A Guide to Marketing Social Norms for Health Promotion in Schools and Communities is now available from the website of the National

Social Norms Resource Center (www.socialnorm.org). The guide is a comprehensive, step-by-step manual for implementing the social norms approach in high schools and communities.

Applications for the **National Collegiate Alcohol Awareness Week** award competition are available and can be found in the NCAAW booklet or by contacting Dr. Herbert Songer at hsonger@fhsu.edu. Entries are evaluated on a number of criteria including "Use of Social Norms Approach in Prevention Activities." Applications must be submitted by April 1, 2005. Each award-winner will receive \$5,000 and a plaque commemorating their achievements.

Misleading use of statistics is the subject of an article in *About Campus* (July-August 2004, p. 2-9) by Gregory Blimling titled "White Blankets May Make You Smarter and Other Questionable Social Science Findings." One of the statistics that Blimling deconstructs and shows to be highly misleading is the oft-quoted number that 1,400 college students are killed a year from drinking. This number is probably the most commonly cited item in media accounts of the 2002 NIAAA "Call to Action" on college student drinking. Blimling explains that this number is not based on actual data but rather is derived from a series of questionable inferences and assumptions. For example, he points out that "alcohol-related deaths" mean "that alcohol was involved but not necessarily ingested by the persons who died" or even by the driver. Another questionable assumption is that rates of "alcohol-related deaths" are similar for college and non-college youth. Blimling concludes "Guessing about a number is fine, as long as it is made clear that it's just a guess. Research can become a problem when it's taken out of context and quoted as fact."

Editor's notes

Each month, as I prepare the next issue of the *Report*, my last task is to write the "Editor's Note." In its own way, each issue is a snapshot of the state of the field. Unless there is a special theme issue, the contributions are not intentionally related to each other. Yet when I read and compare them, certain themes often jump out and these provide a focus for my notes to you.

This month the theme of evaluation and effectiveness is again prominent. In the "From the Field" contribution Sarah Dufresne from the National Collegiate Athletic Association reports on a successful targeted social norms campaign for Division III student athletes. Interestingly, the benefits of the campaign were weak after two years and much stronger among schools that continued them for a third year. The "Recent Research" section looks at effectiveness from a different angle, in this case an evaluation of environmental management interventions that are part of the Robert Wood Johnson Foundation's "A Matter of Degree" (AMOD) program. Here, only those AMOD programs that fully implemented the model were effective. Both of these studies point to an issue that is becoming increasingly clear as the field matures: successful interventions require time and may not show effectiveness at first, and to be successful interventions must be faithful to the model (otherwise called "fidelity"). While these conclusions should come as no surprise it is remarkable how many evaluations of social norms programs that are published in the literature do not take these two factors into account when evaluating success.

The "Feature Article" on "Social Norms, Body Image and Problem Eating" reflects a special interest of mine that goes back to the very first social norms conference. When I sat down to do the literature review for this topic I was surprised to see how much has been written on this subject, including an actual intervention that was successful. Eating and body issues represent one of the cutting edges of social norms and based on this research, appear to hold promise. One of the important conclusions of these studies reinforce conclusions from other social norms research—that social norms interventions may have differential effects on individuals based on gender, stages of change, personality, and/or self-esteem issues.

Finally, this issue inaugurates a new feature of the "Recent Research" section titled "To Be Reviewed." It is difficult to keep up with the growing number of studies on social norms issues, and many of these studies are not reviewed in these pages until long after publication. This new feature will alert you in a more timely fashion to recently published research that may be of interest.

Sincere regards to all,
 Alan D. Berkowitz
 Editor
The Report on Social Norms
 E-mail: alan@fltg.net

Feature

men find attractive, recent studies conducted on college campuses have documented that women overestimate the percentage of their female peers who prefer thinness and who engage in unhealthy eating and/or dieting. For example, in an unpublished study conducted at the Rochester Institute of Technology (White & Snyder, 2003), women overestimated the prevalence of dieting-related behaviors and appearance/weight related pressure among female peers.

In a second study (Brennan & Dell, 2003), body image misperceptions were found among college men and women, including overestimations of negative behaviors and attitudes and underestimations of positive behaviors and attitudes. Thus, males and females overestimate the importance others placed on appearance, the extent that peers accept societal standards of appearance and the frequency of eating disturbance behavior.

In research on the importance of thinness to women, Sanderson, Darley and Messenger (2002) found that college women “believed that, compared to themselves, other women are thinner, want to be thinner, exercise more frequently and for more aesthetic reasons (e.g., weight loss, attractiveness) and are more aware of and influenced by the thinness norm (p. 172).”

Norms and eating disorders prevention. Women also overestimate the percentage of female peers who have eating disorders (Mann et al, 1997). Results from two studies suggest that prevention programs on eating disorders may actually exacerbate these misperceptions (Carter et al, 1997; Mann et al, 1997). Thus traditional prevention programs run the risk of causing harm to women by normalizing problem eating behavior and increasing pressure to diet. This problem is compounded when pictures and advertisements used in workshops portray women who are thin and/or attractive according to perceived cultural norms, thereby sending subtle cues to participants about what is attractive.

In a meta-analysis of eating disorder prevention programs, Stice & Shaw (2004) found that successful programs were more likely to be interactive, continue for more than one session, rely on cognitive interventions as opposed to providing knowledge, and target at risk (secondary prevention) populations. A number of their conclusions are consistent with the premises of social norms, including: cognitive interventions that alter maladaptive attitudes, building resilience to the pressures to be thin and using “covert” delivery methods that do not explicitly focus on body image and eating disturbances.

The effect of misperceptions. Other studies have correlated these overestimations with measures of body dissatisfaction, disturbed eating and concern with appearance. For example, Kusch (2002) found that women significantly overestimated the degree of thinness their female and male peers selected as ideal. These overestimations in turn were positively correlated with measures of body dissatisfaction, disturbed eating and concern with appearance. More recently, Bergstrom, Neighbors and Lewis (2004) reported a similar conclusion in a study of “misperceptions of opposite sex perceptions of attractive body image.” They found that men were

"In addition to women's misperceptions of what men find attractive, recent studies conducted on college campuses have documented that women overestimate the percentage of their female peers who prefer thinness and who engage in unhealthy eating and/or dieting."

accurate in their perceptions of what women find attractive among men, but that women believed that men wanted women to be thinner than men actually reported was the case. This inaccurate perception among women was associated with eating disorder symptomology

continued from page one

and greater problem eating among women who held greater overestimations of men's preference for thinness in women. Finally, this correlation was greater among women whose self-esteem was based on external considerations such as physical attractiveness (termed “contingent self-esteem”).

Similarly, Sanderson, Darley and Messenger (2003) found that women who felt discrepant from the norm for thinness demonstrated more symptoms of eating disorders than women who felt less discrepant did.

The potential efficacy of social norms interventions. The correlation between disordered eating/body dissatisfaction and misperceptions of eating and size issues suggests that a social norms intervention could reduce these problems. In 2003 I recommended that social norms approaches to eating disorders prevention among women document both the healthy norms and behaviors of the majority of women and the protective behaviors that women engage in to prevent over-concern with attractiveness and eating problems. Social norms media campaigns could be designed to correct these underestimations of healthy behaviors, and provide information on protective behaviors. This information could be included in small group norms workshops as well.

Providing women with accurate information about women's norms may be preferable to providing women with information about what men think is desirable for women's body size (Berkowitz, 2003). Carol Gilligan and her colleagues (Gilligan et al., 1991) have noted that our culture teaches girls to devalue themselves and to overvalue boy's opinions as they get older, which contributes to mental health problems, including eating disorders. A case in point is provided in the previously cited study by Bergstrom, Neighbors and Lewis (2003), in which the correlation between eating disorder symptomology and misperceptions was strongest among women with “contingent self-esteem” (i.e., self-esteem based on external factors). Thus, there is a danger that a social

continued on page seven

from *the* field

A Successful Social Norms Intervention for Student-Athletes

By Sarah Dufresne, National Collegiate Athletic Association

In 2001, the National Collegiate Athletic Association (NCAA) began a pilot social norms-based prevention program targeting over 3,000 student-athletes at eight Division III institutions. What it found was success. This intervention and the Most Valuable Players intervention at Hobart and William Smith Colleges (HWS), are the first successful social norms interventions specifically targeting college student athletes (Perkins, Craig & MacInnis, 2004; Perkins, Craig & Diana, 2003).

As administrator of the NCAA Division III Pilot “Student-Athletes Taking Active Responsible Roles” (STARR) social norms campaign, and as a newcomer to the field of social norms, my first goal in the spring of 2001 was to learn as much as possible about social norms theory. As I was educated on social norms theory by experts and STARR consultants Dr. H. Wesley Perkins and Dr. David W. Craig, I became more and more excited about this approach. Not having been too far removed from my college days at the start of the pilot, I remembered the typical approaches to prevention, the mangled car on the quad and the action/consequence messages. While these were memorable, I recalled feeling a disconnect between the negative messages promoted around alcohol use and my real life experiences.

My work as liaison to the combined NCAA Divisions I, II and III

Student-Athlete Advisory Committees, composed of student-athletes responsible for lending the student-athlete voice to NCAA legislation, has shown me the positive energy and drive of NCAA student-athletes. In their approach to academics, athletics and community involvement, they possess a positive, “can do” attitude and competitive energy that is displayed in all aspects of their life. As a result I came to believe that an alcohol prevention strategy that matched their every-day level of positive, competitive energy could succeed more than others had in the past. The STARR pilot project provided an opportunity to test this assumption.

I also believed that statements offering factual information would be something student-athletes would receive favorably. As many of us see in our daily work of guiding and mentoring young adults, the collegiate experience is often one of self-discovery. Feeling empowered to make an educated decision can be an impactful experience for a young adult. After being introduced to the social norms approach, I felt that its factual nature, its empowerment through an educated choices message, along with the potential competitive element asking the question “How do I measure up to my peers?” might be the perfect mix for student-athletes.

In fall 2000, 19 Division III institutions applied to participate in the STARR pilot. In Spring 2001, eight institutions were selected to receive a \$15,000 grant to participate in the two-year pilot from fall 2001 through spring 2003.

Each institution was responsible for forming a team and creating a social norms campaign reflecting its unique norms and campus culture. Institutions began by attending a two-day orientation to learn about social norms theory, key elements to implementing a successful campaign, how to administer the Web-based, student-athlete survey from which they would

form their messages and an overview of the electronic media software developed by Dr. Perkins and Dr. Craig.

Project goals. The pilot incorporated the following five goals:

1. Correct inflated misperceptions carried by student-athletes, faculty and staff, that most student-athletes abuse alcohol.
2. Reduce personal alcohol use (e.g., a decrease in the number of drinks a student-athlete consumes at a party).
3. Decrease negative consequences due to high-risk drinking (e.g., decreased reports of violence, property damage, and alcohol related illnesses) and increase positive behaviors (e.g., the amount of time student-athletes spend studying, meeting with faculty or volunteering).
4. Determine if social norms, delivered through print and electronic media, is an effective strategy for accomplishing the above goals.
5. Determine if Division III institutions can successfully implement a social norms campaign, considering the typical Division III institution’s resource availability.

Timeline. With the pilot’s goals and timeline in hand, campus administrators were off to begin their campaigns. For the next academic year, eight Division III institutions implemented the following steps toward a social norms campaign.

- Institutions surveyed their student-athlete population to determine their normative behavior using the HWS alcohol education project web-based survey (November, 2001).
- Institutions received campus-specific statistics (January–March 2002).
- Institutions developed print media from their survey results to be posted in spring or fall 2002 when

continued on page five

From the Field

continued from page four

the student-athletes returned to campus (Spring, 2002).

- The consultants traveled to each institution to conduct electronic media software installation and instruction (Summer, 2002).
- All institutions implemented a print media campaign. All but one implemented an electronic campaign using screen savers on campus computers (August, 2002).
- Institutions administered their second survey to determine if their efforts showed a change in student-athlete misperceptions or behaviors regarding alcohol use (November, 2002).

Message delivery. Social norms messages were distributed by both print and electronic media. Print media bearing social norms messages included posters; newspaper advertisements; CD cases; thunder sticks; planners; t-shirts; Frisbees; magnets; lanyards; pens; squeeze balls; cups; seat cushions; highlighters; shoe bags and newspaper articles honoring one student-athlete as the “STARR of the Month” honoree for outstanding achievement in academics, athletics or community involvement.

The use of electronic media was a new initiative. Consultants Perkins and Craig developed a program allowing campuses to upload print media into a database and forward it out to campus computer labs’ and internet cafes’ screensavers via the campus server. Electronic media not only included screen savers, but also e-mails distributed to student-athletes bearing fun athletics department facts and social norms messages.

Campaign Results. At the time of the second survey, or first impact assessment, student-athletes had received only three to six months of program exposure, from late spring 2002 to November 2002. Even so, analysis of the first three to six months of media exposure showed statistically significant behavior changes toward the pilot’s initial goals in half of the participating schools,

including the following:

- Six of eight schools showed measurable change toward correcting inflated misperceptions that most student-athletes abuse alcohol or participate in other risky behaviors.
- Four of the eight schools showed a reduction in personal alcohol consumption.
- Four of the eight schools showed a reduction in negative consequences or an increase in positive behaviors like increased study time or community involvement.
- Four of the eight schools showed a statistically significant reduction in perceived tobacco use among student-athletes. One of the schools showed a reduction in actual use.
- Three of the eight schools also showed a statistically significant increase in student-athletes’ hours spent studying or preparing for class per week. Two of the eight schools showed a statistically significant increase in student-athletes’ hours spent volunteering per week.

At this point, five of the eight institutions felt that three to six months of exposure was not enough time to fully implement the strategy and proposed that the STARR program continue for a third year. The NCAA Division III Initiatives Task Force (Task Force) approved funding for these five institutions to continue their campaigns through the 2003-04 academic year. Each institution was awarded an additional \$7,500 grant to support their campaigns.

At the conclusion of the three-year pilot, their continued efforts proved successful. In an aggregate analysis, results showed that both perceptions and behaviors were positively changed for the student-athletes on these campuses.

An aggregate evaluation conducted by consultants Perkins and Craig indicates the following changes in the

extended-pilot schools:

- 15 percent reduction in the proportion of student-athletes misperceiving a permissive alcohol attitude as the norm.
- 20 percent reduction in the proportion of student-athletes erroneously perceiving that more than once-per-week alcohol consumption among teammates was the norm.
- 16 percent reduction in the number of student-athletes consuming alcohol more than once a week.
- 29 percent reduction in the number of student-athletes who got drunk more than once a week.
- Significant reductions in student-athlete tobacco use also were achieved, including a 33 percent reduction in the number of student-athletes using tobacco weekly or more often, and a 38 percent reduction in the number of student-athletes using tobacco daily.
- Additionally, the pilot found that the mean hours reported for studying each week went up, while the mean hours of partying went down.

Significance of the project. When interviewed for the NCAA News, Perkins commented on the findings.

“We significantly reduced the perceptions of high-risk drinking, and we significantly reduced problem drinking rates and also got significant reductions in tobacco use and other things,” said Perkins. “This project was the first one to attempt

“analysis of the first three to six months of media exposure showed statistically significant behavior changes toward the pilot’s initial goals in half of the participating schools”

continued on page six

From the Field

to—and successfully—deliver social norms messages about the positive norms about the majority of student-athletes using a variety of venues.”

One unanticipated outcome Perkins and Craig encountered, however, was the amount of turnover among student-athletes at participating schools. Because of this turnover it was not possible to measure changes in individual athletes’ behavior. Rather, we evaluated aggregate changes in the cohorts of athletes from each school at the beginning and end of the project.

Next steps. For now, the STARR program will remain available to Division III institutions through the Division III Initiatives Grant application. The Task Force decided to use the knowledge gained during the three-year pilot to produce a toolkit for Division III institutions wanting to produce a social norms campaign. The toolkit will provide a cost-effective way to allow more NCAA institutions access to this prevention approach. It will contain chapters on how to produce a successful campaign with help from nationwide social norms experts.

Helpful hints. I recently asked each administrator from our STARR campuses to offer their helpful tips learned while administering their STARR campaigns. Their feedback is below. They hope that these “lessons learned” will help other beginners in the field and wish everyone luck on their prevention efforts.

“At the conclusion of the three-year pilot, their continued efforts proved successful. In an aggregate analysis, results showed that both perceptions and behaviors were positively changed for the student-athletes on these campuses.”

- Host an orientation/informational session with coaches during an athletics meeting. “Informing the coaches helped them understand what we were trying to do which made it easier for them to embrace the idea and support us.” *Kris Hartz, Carroll College*
- Use your public relations department. “They were able to help us develop and make much of our print media, were there to support us on the college campus, as well as write tidbits to the college community about the grant and the subsequent successes with it. Also, it was an inexpensive way to get a lot accomplished without going off campus to develop print media.” - *Kris Hartz, Carroll College*
- Communicate with the student-athlete leaders. You can use “SAAC meetings to be sure they (student-athletes) are all on line with the program. The students are the best disseminators of information and can help facilitate conversations we may never hear. It is also important not to overwhelm the audience with too many factoids and novelty items. Hold some back and do something new every month to keep the excitement alive!” -*Michelle Gallagher, Baldwin-Wallace College*
- Ensure that you have an adequate number of staff members to help implement the campaign. *Denise Bierly, Eastern Connecticut State University*

Note: A core team of three, one from the athletics department, one from the health and wellness center and a third individual (e.g., information technology representative, CHAMPS/Life Skills coordinator, faculty member) were essential to the success of the STARR campaigns. Institutions who had a team of three contributing equally to the implementation of the campaign reflected more significant results. Also, writing campaign responsibilities into

continued from page five

team member performance plans or job descriptions may also ensure that your campaign maintains a high level of energy throughout the year.

Finally, as administrator for STARR Campaign, I cannot take credit for bringing this program to NCAA member institutions. My friend and colleague, Mary Wilfert, who serves as the NCAA’s lead prevention practitioner and is fondly referred to as the “drug czar” at the national office, had the vision to initiate this program. I thank her for having the courage to support this new concept in prevention and for her mentoring along the way.

Sarah Dufresne (formerly Sarah MacInnis) is the Assistant Director of Education Outreach for the National Collegiate Athletic Association (NCAA). She can be reached at: sdufresne@ncaa.org

Note: The Division III Initiatives Grant application is mailed to all Division III schools annually in December. The application is due on June 1 of each year. For more information on the Division III Initiatives Grant program or application, please contact Kim Ford at 317/917-6222 or kford@ncaa.org.

References

- Perkins, HW, Craig, DW & MacInnis, S. (2004). *Using Social Norms to Promote Health among College Student Athletes: Results from the HWS Most Valuable Players Project and the NCAA STARR Project*. Presented at the National Conference on the Social Norms Model, July 21-23, Chicago, Illinois.
- Perkins, HW, Craig, DW & Diana D (2003). Most Valuable Players—Using Social Norms to Target Athletes as a High-Risk Sub-Population. *The Report on Social Norms*, 3(6):3-4.

Feature

norms intervention to correct women's misperceptions of what men prefer could in fact unintentionally reinforce contingent self-esteem, which in turn could make women more vulnerable to disordered eating behaviors. This example suggests that all misperceptions are not the same and that correcting some misperceptions could have undesirable effects if the broader context of the behavior and the implications of the misperception are not addressed. This concern also suggests that it might be safer to address women's misperceptions of women in social norms media campaigns for this subject.

Thus, it seems desirable that any social norms interventions for eating and body issues not focus exclusively on correcting women's misperceptions of what men find attractive. Instead, a workshop could focus on healthy, protective behaviors that women engage in and that help women feel positive self-esteem. This could be followed by a discussion of the reasons why women are encouraged to place importance on men's opinion and the role of peer pressure among women to be thin. The data on protective behaviors presented in the workshop could also be disseminated as part of a social norms marketing campaign.

The only published study of a social norms intervention to address disordered eating suggests that correcting college women's misperceptions of other women's norms for thinness can be effective in modifying women's problem eating. Mutterperl and Sanderson (2002) used an experimental research design to compare normative feedback with a control procedure at a small liberal arts college (N = 117). Participants were randomly assigned to read either a norm misperception or a control brochure about disordered eating. The misperceptions brochure was titled *Are You Following the Imaginary Crowd? (Women and Body Image on College Campuses: Why it Seems Like Everyone Else is on a Diet)* and described common misperceptions about eating and exercise, why they occur, and possible effects of these misperceptions. The

intervention (i.e. reading the brochures) was very short, taking only 10 minutes. In a three-month follow-up positive outcomes were found for the normative feedback intervention. In particular, disordered eating was reduced among a sub-group of women in the normative feedback condition who were more likely to compare themselves with other college students with regard to ideal body weight. In other words, the norms correction intervention was effective for women who held internalized social norms about what their peers found, even though it only required the reading of a brochure. This finding is consistent with normative feedback research in the alcohol prevention field, where brief mailed feedback has been found effective in impacting the drinking behaviors of individuals (See Berkowitz, 2004 for an overview of this research). This study also had an unexpected outcome, however. Women who were more likely to compare themselves with media images of women (as opposed to peers) were negatively affected by the intervention. This finding is similar to results reported by Bergstrom, Neighbors and Lewis study (2004), who found that individuals were differentially affected by exposure to normative feedback about body-image and eating issues, depending on which norms were salient for them.

Summary. These findings suggest the potential efficacy of a social norms intervention for disordered eating and negative body image among women. They also indicate that more research is needed to determine which norms are salient for which women. Potential interventions in individual and group contexts or through media campaigns could focus on protective behaviors that women employ, correct women's misperceptions of other women's risk behaviors and address issues of contingent self-esteem and why women are taught to over-value what men think.

Alan David Berkowitz is the Editor of The Report on Social Norms. He can be reached at alan@fltg.net.

References

Baker, CW, Little, TD & Brownell, KD. (2003). Predicting Adolescent Eating and Activity

continued from page three

Behaviors: The Role of Social Norms and Personal Agency. *Health Psychology*, 22(2):189-198.

Bergstrom, R, Neighbors, C & Lewis, MA. (2004). Do men find "bony" women attractive? Consequences of misperceiving opposite sex perceptions of attractive body image." *Body Image*, 1:183-191.

Berkowitz, AD (2004). The Social Norms Approach: Theory, Research and Annotated Bibliography. Posted on the HEC Social Norms website www.edc.org/hec/socialnorms/

Berkowitz, AD (2003). Applications of Social Norms Theory to Other Health and Social Justice Issues. Ch 16 in H. Wesley Perkins (Ed), *The Social Norms Approach to Preventing School and College Age Substance Abuse*, San Francisco, Jossey-Bass.

Brennan, J & Dell, D. (2003). *Decreasing Eating Disorder Symptomology and Body Dissatisfaction: Do Social Norms Matter?* Poster presented at the American Psychological Association Annual Convention, Toronto, Canada (August)

Carter, JC, Stewart, DA, Dunn, VJ & Fairburn, CG. (1997) Primary Prevention of Eating Disorders: Might it do More Harm than Good? *International Journal of Eating Disorders*, 22:167-72.

Fallon, A. (1987) Standards of Attractiveness: Their Relationship Toward Body Image Perceptions and Eating Disorders. *Food and Nutrition News*, 59(5):79-81.

Fallon, AE & Rozin, P (1985). Sex Differences in Perceptions of Desirable Body Shape. *Journal of Abnormal Psychology*. 94:102-105

Gilligan, C, Rogers, AG & Tolman, DL (1991) *Women, Girls and Psychotherapy: Reframing Resistance*. New York: Haworth Press.

Kusch, J. (2002). *Test of a Social Norms Approach to Understanding Disordered Eating Practices in College Women*, Dissertation submitted to Washington State University, Department of Psychology. Also cited in *The Report on Social Norms*, Recent Research, 1(2):3.

Lamb, SC, Jackson, LA, Cassiday, PB & Priest, DJ (1993). Body Figure Preferences of Men and Women: A Comparison of Two Generations. *Sex Roles*, 28:345-358.

Luann, T, Nolen-Hoeksema, S, Huang, K, Burgard, D, Wright A & Hanson, K. (1997) Are Two Interventions Worse Than None? Joint Primary and Secondary Prevention of Eating Disorders in College Females. *Health Psychology*, 16(3):215-225.

Mutterperl, JA & Sanderson, CA. (2002). Mind Over Matter: Internalization of the Thinness

continued on page eight

Recent Research

Reducing Drinking and Harms in College: Evaluation of the "A Matter of Degree" Program. (2004). Elissa Weitzman, Toben Nelson, Hang Lee, and Henry Wechsler. *American Journal of Preventive Medicine*, 27(3):187-196. The "A Matter of Degree" (AMOD) program is a major initiative funded by the Robert Wood Johnson Foundation that implements environmental management prevention programs in higher educational institutions with high-risk drinking environments. This article provides the first quantitative evaluation of AMOD. The authors found that the effectiveness of AMOD depended on the extent to which the model was comprehensively implemented. Thus, when ten AMOD sites were contrasted with thirty-two comparison schools no differences were found on a variety of measures assessing alcohol use and its effects over a four-year period from 1997-2001. However, when the five AMOD schools that most closely imple-

mented the model were evaluated "small improvements in alcohol consumption and related harms at colleges were

observed." This finding holds true for the social norms field as well – i.e., evaluation must take into account not only the approach used but the degree of fidelity to the model in terms of implementation. The study may be the first quantitative research documenting the effectiveness of environmental management strategies in higher education. However it is interesting to note that the effect sizes reported for most of the variables are extremely small, ranging from 5-11% on a variety of measures of alcohol use that reported statistically significant differences between the five AMOD implementers and the comparison schools. For example, reductions of 5-11% in prevalence rates of "binge drinking," frequent intoxication, taking up "binge drinking," and in "usually bingeing when drinking" were found at the five implementing program schools

"the effectiveness of AMOD depended on the extent to which the model was comprehensively implemented."

over a four-year period. In addition there was an 18% reduction in students who experienced five or more alcohol-related negative consequences. These numbers are extremely small when compared with the double-digit percentage reductions in high-risk drinking produced by effective social norms programs in a shorter period of time. Thus, one issue facing the field is not only to evaluate the relative effectiveness of different intervention strategies, but also to assess their relative cost in relation to their efficacy.

Feature

continued from page seven

- Norm as a Moderator of Responsiveness to Norm Misperception Education in College Women. *Health Psychology*, 21(5):519-523.
- Neumark-Sztainer, D, Wall, MM, Story, M & Perry, CL (2003). Correlates of Unhealthy Weight-Control Behaviors Among Adolescents: Implications for Prevention Programs. *Health Psychology*, 22(1):88-98.
- Rozin, P & Fallon, AE (1988). Body Image, Attitudes to Weight, and Misperceptions of Figure Preferences of the Opposite Sex: A Comparison of Men and Women in Two Generations. *Journal of Abnormal Psychology*, 97:342-345.
- Sanderson, CA, Darley, JM & Messenger, CS. (2002). "I'm Not as Thin as You Think I Am." The Development and Consequences of Feeling Discrepant from the Thinness Norm. *Personality and Social Psychology Bulletin*, 28(2):172-183.
- Stice, E & Shaw, H. (2004). Eating Disorder Prevention Programs: A Meta-Analytic Review. *Psychological Bulletin*, 130(2):206-227.
- White, J & Snyder, L. (2003). Unpublished Data. Rochester Institute of Technology.

To be reviewed in a future issue:

Predicting Drinking Behavior and Alcohol-Related Problems Among Fraternity and Sorority Members: Examining the Role of Descriptive and Injunctive Norms. (2004). Mary Larimer, Aaron Turner, Kimberly Mallett and Irene Geisner. *Psychology of Addictive Behaviors*, 18(3):202-212.

One Close Look at Why One Social Norms Campaign Did Not Reduce Student Drinking. (2004). Dennis Thombs, Scott Dotterer, Scott Olds, Katherine Sharp and Carrie Raub. *Journal of American College Health*, 53(2):61-68.

The Report on Social Norms is published by PaperClip Communications. Four working papers, five newsletters and one index are published each year as part of *The Report on Social Norms* publication. Copyright 2004. No portion of this newsletter may be reproduced without the express written consent of PaperClip Communications, Inc. • 125 Paterson Ave. • Little Falls, NJ 07424 • 866 . 295 . 0505 • fax 973 . 256 . 8088 • www.Paper-Clip.com • www.socialnormslink.com.

Editorial Advisory Board:

William DeJong, Ph.D., Higher Education Center • Pat Fabiano, Ph.D., Western Washington University • Linda Hancock, Ph.D., Virginia Commonwealth University • Koreen Johannessen, M.S.W., University of Arizona • Jason Kilmer, Ph.D., Evergreen College and St. Martin's College • Jeff Linkenbach, Ed.D., Montana State University • Richard Rice, M.A., National Social Norms Resource Center

Editorial Staff:

Alan Berkowitz, Ph.D., Editor
Joellen Collins-Cardona

Andy McLaughlin, Publisher
Lisa Hudson

Julie Phillips