An Overview of the Social Norms Approach

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Introduction

"Social Norms" is a theory and evidence-based approach to addressing health issues that has gained increasing attention. Social norms interventions have been successful in reducing alcohol and tobacco use in college and high school populations, and has promise as an intervention to address violence and social justice issues. As a result of these successes, practitioners in the field of social norms have received national recognition for their work and social norms programs have received a number of best practice awards from Federal agencies. Currently social norms interventions are being funded by the United States Department of Education, the Department of Justice, the Centers for Disease Control, state health departments, private foundations, and in some cases, the beverage industry. In addition, four large outcome studies funded by the National Institute on Alcoholism and Alcohol Abuse (NIAAA) are currently underway that will provide additional data on the effectiveness of this approach. This chapter provides an overview of the theory of social norms, a brief history, reviews relevant research, presents evidence of successful outcomes, and concludes with a discussion of challenges and emerging issues.

The Theory of Social Norms

Social norms theory describes situations in which individuals incorrectly perceive the attitudes and/or behaviors of peers and other community members to be different from their own when in fact they are not. This phenomenon that has been called "pluralistic ignorance" (Miller and McFarland, 1991; Toch & Klofas, 1984). These misperceptions occur in relation to problem or risk behaviors (which are usually overestimated) and in relation to healthy or protective behaviors (which are usually underestimated). One of the effects of pluralistic ignorance is to cause individuals to change their own behavior to approximate the misperceived norm. This in turn can cause the expression or rationalization of problem behavior and the inhibition or suppression of healthy behavior. This pattern has been well documented for alcohol, smoking, illegal drug use, and a variety of other health behaviors and attitudes, including prejudice. In the case of ATOD use, perceiving the norm to be more permissive than it really is can facilitate increased use and provide a rationalization for problem users to justify

their own abuse. The literature on social norms and the supporting research has been thoroughly reviewed by Berkowitz (2003A) and Perkins (2002, 2003A). Most of the research conclusions in this chapter are based on the evidence presented in these literature reviews.

College student use of alcohol can provide a case example. There is extensive research suggesting that most college students overestimate the alcohol use of their peers (i.e., there is pluralistic ignorance with respect to alcohol use. This overestimation results in most moderate or light-drinkers consuming more than they would otherwise and may also encourage non-users to begin drinking. Heavy users of alcohol are even more likely to believe in this misperception and use it to justify their heavy drinking. This latter case is an instance of “false consensus” (i.e. falsely believing that others are similar when they are not). The extent to which alcohol use is misperceived has been strongly correlated with heavy drinking in many studies. Similar patterns have been documented for tobacco use.

False consensus and pluralistic ignorance are mutually reinforcing and self-perpetuating. In other words, the majority is silent because it thinks it is a minority, and the minority is vocal because it believes that it represents the majority. Providing accurate normative feedback is one way to break this cycle, which can otherwise create a self-fulfilling prophecy (i.e., everybody drinks more because everybody thinks that everybody drinks more).

Social norms theory predicts that interventions to correct misperceptions by revealing the actual, healthier norm will have a beneficial effect on most individuals, who will either reduce their participation in potentially problematic behavior or be encouraged to engage in protective, healthy behaviors. Thus, information about healthy drinking norms and attitudes will encourage most individuals to drink less or not at all (which is more consistent with their underlying values and intentions), and also challenge the reasoning that abusers use to justify their drinking.

All individuals who misperceive contribute to the climate that allows problem behavior to occur, whether or not they engage in the behavior. Perkins (1997) coined the term “carriers of the

misperception" to describe these individuals. Thus, social norms interventions attempt to correct the misperceptions of all community members whether they actually engage in the problem behavior or not.

Social norms theory can also be extended to situations in which individuals refrain from confronting the problem behavior of others. Thus, individuals who underestimate the extent of peer discomfort with problem behavior may refrain from expressing their own discomfort with that behavior. If the actual discomfort level of peers is revealed, these individuals may be more willing to confront the perpetrator(s) of the behavior. Recent research on homophobia, for example, suggests that most college students underestimate the extent to which their peers are intolerant of homophobic remarks (Bowen & Bourgeois, 2001; Dubuque et al, 2002) and may be willing to confront these remarks when made aware that peers also feel uncomfortable (Berkowitz 2002A; 2003B.) Similarly, men underestimate other men's discomfort with sexist comments about women and are more willing to confront perpetrators when they believe that other men feel the same way (Fabiano, et al, submitted for publication).

The term "social norms" as used here must be distinguished from public health approaches that attempt to "change social norms." In this chapter, the term "social norms approach" refers to the correction of misperceptions of social norms rather than attempts to change norms when the majority of a population already behaves in a healthy manner and/or has healthy attitudes. Thus the goal is to reveal and enhance already existing healthy norms that have been underestimated and weakened. While there may also be social and public health issues for which actual norms need to be changed, this is not what is meant by the use of the term "social norms" here. Because both meanings of "social norms" are widely used and have different connotations they must be carefully distinguished because they refer to different phenomenon and presuppose different models of change.

The assumptions of social norms theory are presented in Table 1.

(Insert Table 1 Here)

The social norms approach integrates a variety of concepts and phenomenon that have been well documented in the social science literature. For example, the social psychological phenomenon of "pluralistic ignorance" and "false consensus" have been extensively studied and provide a coherent

explanation of why individuals act differently from how they feel (in the case of pluralistic ignorance) or rely on a self-serving bias like false consensus to justify problem behavior. Social norms interventions can also be understood in terms of cognitive dissonance theory, another well-established framework within the social science literature. Providing accurate information about norms creates cognitive dissonance by informing those who are "in the misperception" that what they believe is wrong, i.e. that those who are pluralistically ignorant are in the majority and that those who are in false consensus are in the minority. Introducing cognitive dissonance can catalyze a process of change if information about the true norm is introduced in a way that is believable and credible. Social norms relies on indirect methods of persuasion that provide accurate information about what people think or do without telling them what they should do. The information provided helps the recipient to act differently without feeling that this change is being imposed from without. This methodology is consistent with a variety of social psychological approaches to change that have been empirically supported (Kilmartin, 2003).

A History of the Social Norms Approach

The social norms approach was first suggested by myself and H. Wesley Perkins based on research conducted at Hobart and William Smith Colleges in the 1980's (Berkowitz & Perkins, 1987, Perkins and Berkowitz, 1986), although it was initially referred to by different names. It has since been implemented at all levels of prevention: primary or universal with entire campus or community populations, secondary or selective with particular subpopulations (such as Greeks and athletes) and tertiary or indicated with individuals. These approaches use a variety of methodologies to provide normative feedback as a way of correcting misperceptions that influence behavior.

The first social norms intervention was initiated in 1989 by Michael Haines at Northern Illinois University (Haines, 1996; Haines & Barker, 2003; Haines & Spear, 1996). Haines expanded on the theory of social norms by applying standard social marketing techniques to present the actual healthy norms for drinking to students through specially designed media. This approach has been called "social norms marketing" (SNM) to distinguish it from traditional social marketing, which does not contain

information about actual norms. The social norms marketing campaign at NIU is an excellent example of universal prevention, because it reached the entire population of a community. It has been in existence since 1989 and has produced significant increases in the proportion of students who abstain (from 9% in 1989 to 19% in 1998), and in the proportion of students who drink moderately (from 46% in 1989 to 56% in 1998) and a decrease in the proportion of students who drink heavily (from 45% in 1989 to 25% in 1998), as reported by Haines and Barker (2003).

The NIU intervention was followed by campaigns with equally impressive results at the University of Arizona (Glider et al, 2001; Johannessen et al 1999; Johannessen & Glider, 2003), Western Washington University (Fabiano, 2003), Hobart and William Smith Colleges (Perkins & Craig, 2002, 2003A), Rowan University (Jeffrey et al, 2003) and later at dozens of institutions of higher education around the United States and in a number of high schools as well. On these campuses reductions in high-risk drinking of 20% or more were achieved within one-two years of initiating a media campaign. Since then successful social norms marketing campaigns have been conducted for tobacco (Haines, Barker & Rice, 2003; Hancock & Henry, 2003; Hancock et al 2002; and Linkenbach & Perkins, 2003A), in a state-wide media campaign (Linkenbach, 2003), and with promising results for sexual assault (Bruce, 2002; White, Williams & Cho, 2003). Other social norms marketing campaigns have focused on particular groups of students (such as athletes or Greeks) rather than an entire campus population. The websites of the National Social Norms Resource Center (www.socialnorm.org) and the Higher Education Center (www.edc.org/hec) contain numerous examples of successful social norms campaigns and the media used to present actual norms.

Concurrent with the development of social norms marketing campaigns, targeted social norms interventions utilizing interactive workshops in small groups were being developed. This approach was conceived in the late 1980's by Jeanne Far and John Miller at Washington State University, who developed a protocol for providing normative feedback to groups in an interactive talk show format (Far, 2001; Far & Miller, 2003). "The Small Group Norms Model" (SGNM) was offered to a variety of student groups, including sororities and fraternities, athletic teams, first year students in orientation

seminars and residence halls, and students in academic classes. Far and Miller's research suggests that this methodology is more effective in pre-existing groups where group norms are relevant to the individual, rather than in ad-hoc groups such as classes and some living units. They reported significant reductions in student misperceptions of drinking frequency and quantity that were correlated with actual decreases in drinking among Greeks and in the general campus population (Far & Miller, 2003) as a result of SGNM.

A third type of normative intervention is to provide feedback to a single individual. The initial research on using normative feedback as an indicated or tertiary intervention was conducted by Alan Marlatt and his colleagues at the University of Washington and Gina Agostinelli and William Miller at the University of New Mexico using motivational interviewing and stages of change theory as a framework. They have developed standardized protocols for providing individual feedback that can be administered by trained clinicians, peers, and/or in interactive computer sessions. One of these, the Alcohol Skills Training Program (ASTP), has been extensively researched with well-documented effectiveness (Dimeff, et al, 1999; Marlatt & Baer, 1999), confirming that providing normative feedback to individuals is an essential ingredient contributing to the success of individual interventions. A recent study suggests that providing individualized normative feedback by itself, without the other components of ASTP, may be equally effective (Neighbors & Lewis, 2003).

Research on Social Norms

Documentation of Misperceptions. Misperceptions have been documented in over forty-five studies published in refereed journals (see Berkowitz, 2003A for a detailed list of these studies). Alcohol use misperceptions have been found in studies with small samples of college students from an individual campus, in larger surveys of individual campus populations, in multiple campus studies analyzing data from the CORE survey and the College Alcohol Study, and among middle and high-school students, and young adults not in college. Some of these studies are also discussed in recent reviews by Perkins (2002, 2003A).

Misperceptions of alcohol use are held by all members of campus communities including undergraduate and graduate students, faculty and staff, students and student leaders. Researchers have also reported misperceptions for DWI (driving while intoxicated) and RWID (riding with someone who is intoxicated).

Other studies have reported misperceptions for cigarette smoking and for marijuana and other illegal drug use. In addition to alcohol, tobacco and other drugs, misperceptions have been documented for homophobia, attitudes about sexual assault, gambling, and eating behaviors in studies reviewed by Berkowitz (2003B).

Misperceptions are formed when individuals observe a minority of individuals engaging in highly visible problem behavior (such as public drunkenness or smoking) and remember it more than responsible behavior that is more common but less visible (Perkins, 1997). These misperceptions are assumed to be normative and are spread in "public conversation" by all community members (Perkins, 1997).

Misperceptions have been found among fraternity members, athletes, student leaders, among students of different religious backgrounds, and may vary by gender. In addition there are over fifteen studies of pluralistic ignorance documenting misperceptions for topics such as white's attitudes towards desegregation, gang behavior, and student radicalism (see Miller and McFarland, 1991 and Toch & Klofas, 1984 for reviews of this literature).

Table 2 contains a summary of studies documenting misperceptions, listed by topic and population.

(Insert Table 2 Here)

Which Norms Are Salient? Individuals have friends, are members of groups, may live in residence halls, and are part of a larger community. Each of these overlapping groups have norms that may be similar or different, and some or all of these norms may exert an influence on an individual's behavior. Thus, one critical issue is to evaluate the relative strength of these different norms. For example, on most campuses students have a general idea of the "average" student and are influenced by this campus

norm (Perkins, 2003B) even when the norms of friends and more immediate groups are more influential. In other cases, group identity may supplant campus or community identity, especially if the community is very heterogeneous or diffuse (for example, on a commuter campus).

Misperceptions increase as social distance increases, with most individuals perceiving that friends drink more than they do and that students in general drink more than their friends (see Berkowitz, 2003A for a summary of this research). Among college students, others in a living unit are thought to drink more than friends but less than students in general, and students who live together tend to develop similar patterns of misperceptions over time (Bourgeois & Bowen, 2001). Misperceptions thus tend to increase as social distance from the misperceiver increases, but social groups that are "closer" are more influential in shaping behavior. This leads to the question of whether closer "local" norms of a group or more distant "global" campus norms should be addressed in designing an intervention. In most cases both can be addressed together through a combination of primary and secondary prevention strategies such as small group norms interventions and campus-wide social norms media campaigns. Selecting the most relevant and salient norms for a particular intervention and the appropriate strategy for changing those norms should be an integral part of planning a social norms intervention.

Do Misperceptions Predict Behavior? There are at least fifteen published studies in which misperceptions are positively correlated with drinking behavior or predict how individuals drink.

In a study by Perkins and Wechsler (1996), perceptions of campus drinking climate explained more of the variance in drinking behavior than any other variable. Similarly, Clapp and McDonnell (2000) found that perceptions of campus norms predicted drinking behavior and indirectly influenced drinking-related problems. In a number of other studies, misperceptions predicted alcohol use and/or problem use (Beck and Trieman, 1996; Korcuska & Thombs, 2003; Perkins, 1985, 1987; Thombs, Wolcott and Farkash, 1997; Trockel, Williams and Reis, 2003). Similarly, Page, Scanlan and Gilbert (1999) found that overestimations of binge drinking were directly correlated with rates of binge drinking. In other studies examining drinking behavior over time, perceptions of drinking norms at

time one predicted drinking behavior at time two (Sher et al, 2001; Prentice and Miller, 1993; Steffian, 1999)

In studies of high school and middle school populations, perceptions of norms have accurately predicted behavior change at a later point in time (D'Amico et al, 2001; Botvin, et al, 2001; Marks, Graham & Hansen 1992). Finally, Thombs (1999) tested four different models of driving while intoxicated (DWI) or riding with someone who was intoxicated (RWID), and found that misperceptions for DWI and RWID had the greatest predictive value in explaining both DWI and RWID.

These studies are listed in Table Three.

(Insert Table Three Here)

In summary, a substantial body of research suggests that misperceptions exist, that misperceptions are associated with increased drinking or other problems, and that problem behavior is often best predicted by misperceptions of attitudes/or and behaviors. This includes correlational studies, longitudinal studies, and outcome studies with experimental and control groups.

Successful Interventions Utilizing the Social Norms Approach

As mentioned earlier, social norms theory can be used to develop interventions that focus on three levels of prevention specified as universal, selective, and indicated (Berkowitz, 1997). *Universal prevention* is directed at all members of a population without identifying those at risk of abuse. *Selective prevention* is directed at members of a group that is at risk for a behavior. *Indicated prevention* is directed at particular individuals who already display signs of the problem. Interventions at all three levels of prevention can be combined and intersected to create a comprehensive program that is theoretically based and has mutually reinforcing program elements. Interventions in each of these categories are reviewed below.

Universal Prevention – Social Norms Marketing Campaigns. A number of campuses have successfully reduced drinking by developing campus-wide electronic and/or print media campaigns that promote accurate, healthy norms for drinking and non-use. These include Western Washington University (Fabiano, 2003), the University of Arizona (Glider et al, 2001, Johannessen & Glider, 2003;

Johannessen, et al, 1999), Northern Illinois University (Haines, 1996; Haines & Barker, 2003; Haines & Spear, 1996), Hobart and William Smith Colleges (Perkins & Craig, 2002, 2003A) and Rowan University (Jeffrey et al, 2003). These campaigns use social marketing techniques to deliver messages about social norms. At these schools, a reduction of 20% or more in high risk drinking rates occurred within two years of initiating a social norms marketing campaign, and in one case resulted in reductions of over 40% after four years. Haines, Barker and Rice (2003) reported similar results for both tobacco and alcohol in social norms marketing campaigns conducted in two Mid-western high schools. In all of these campaigns, positive changes in behavior were associated with correction of misperceptions over time. In addition, efforts in past years using other approaches to drug prevention did not result in any behavior change.

The website of the Social Norms Center (www.socialnorm.org) presents data from these and other schools. Monographs developed by Haines (1996), Johannesen et al (1999), and Perkins and Craig (2002) and chapters by Fabiano (2003) and Linkenbach (2003) outline the stages of developing a social norms marketing campaign, offer guidelines for creating effective media, and present evaluation data in support of the effectiveness of social norms marketing campaigns.

Perkins and Craig (2002) conducted the most thorough and comprehensive evaluation of a social norms marketing campaign. Their intervention combined a standard poster campaign with electronic media, an interactive web site, class projects that developed parts of the campaign, and teacher training for curriculum infusion. It was begun in 1996 at a college with higher than average alcohol use. Multiple evaluations that were conducted determined that: 1) increases in drinking that normally occur during the freshman year were reduced by 21%; 2) previous weeks' high risk drinking decreased from 56% to 46%; and 3) alcohol-related arrests decreased each year over a four-year time period. Corresponding reductions were also found in misperceptions of use, heavy drinking at a party, and negative consequences associated with alcohol use. Surveys conducted at three time periods over a five-year period indicate successive linear decreases in all of these measures over time.

More recently, social norms marketing campaigns have been successful in reducing smoking prevalence and delaying smoking onset. For example, in a seven county campaign directed at 12-17 year olds in Montana, only 10 percent of non-smokers initiated smoking following the campaign, while 17 percent in the control counties began smoking, a 41% difference in the proportion of teens initiating smoking in the intervention counties as compared with those in the rest of the state (Linkenbach & Perkins, 2003A). Another study at the University of Wisconsin-Oskosh reported a 29% decrease in smoking rates as a result of a multi-component intervention, while rates at a control campus remained unchanged (Hancock, et al, 2002). Finally, at Virginia Commonwealth University cigarette use remained stable as perceptions became more accurate while the number of cigarettes smoked per month at a control campus increased (Hancock et al, 2002; Hancock & Henry, 2003). These tobacco studies provide strong support for the effectiveness of social norms campaigns for smoking, and their use of control groups strengthens the scientific literature in support of the model. Hancock et al (2002) discussed the differences between smoking and alcohol use behaviors that need to be considered when designing a social norms marketing campaign for smoking.

Table three provides a summary of these social norms marketing campaigns.

(Insert Table Four Here)

In summary, these interventions using social norms marketing provide strong evidence that the social norms approach can be effectively applied as a universal prevention strategy for alcohol to reduce high-risk drinking and promote moderate use, and for smoking to reduce smoking prevalence and delay its onset.

Selective Prevention – Targeted Social Norms Interventions. Targeted interventions focus on members of a particular group, such as first-year students, fraternity and sorority members, athletes, or members of an academic class. In most of these campaigns information about the actual norms for the group are provided in small interactive group discussions, workshops, or academic classes. Due to their smaller size and more manageable format, many of these interventions have been evaluated using control groups.

Successful targeted small group norms interventions have been reported by Schroeder & Prentice (1998), and by Barnett, et al, (1996), Far & Miller (2003), and Peeler et al (2000) using the SGNM. Steffian (1999) compared a small group norms approach for alcohol abuse prevention with a traditional alcohol education program and found that "changes in normative perception were among the strongest contributors to a function discriminating between those who decreased their drinking and those who did not."

Social norms messages have also been integrated into interactive peer theater performances, with significant reductions in the frequency of use, DWI, and regretted behavior, and corresponding increases in protective behaviors in comparison with a control group (Cimini, Page & Trujillo, 2002).

Other selective interventions have utilized more focused media campaigns directed at a particular group of students in combination with other strategies. For example, the University of Virginia designed a targeted social norms marketing campaign for first-year students. Over a period of three years the number of drinks per week for first-years went down from 3 drinks a week to 1, the median number of drinks per week for Greek first year men went down from 15 to 7, and the percentage of abstainers went up from 35% to 49% (Bauerle, 2003; Bauerle, Burwell & Turner, 2002).

At Rochester Institute of Technology a social norms marketing campaign was developed for Deaf and Hard-of-Hearing students to reduce the incidence of sexual assault (White, Williams, & Cho, 2003). The tailored campaign was successful in changing attitudes and perceptions, and resulted in fewer sexual assaults.

These examples provide strong support for the effectiveness of selective social norms interventions directed at particular groups of at-risk students when used alone or in combination with other strategies. Targeted social norms interventions such as these appear to be more effective when the normative data are tailored to the group in question and when they are presented in more extended, interactive formats.

Indicated Prevention (Individualized Social Norms Interventions.) Normative data about drinking can be presented to high-risk drinkers and abusers as part of individual counseling

interventions. Since abusers tend to adhere strongly to misperceptions that serve to rationalize their abuse, providing individualized normative feedback is a non-judgmental way to create cognitive dissonance in heavy drinkers and catalyze change. Alan Marlatt and his colleagues at the University of Washington (Dimeff, et. al. 1999) developed the Alcohol Skills Training Program (ASTP), an eight-session motivational interviewing approach based on stages of change theory to provide heavy drinkers with non-judgmental feedback about their drinking indicating that it is much more extreme than that of peers on a variety of measures. ASTP has been condensed into both a one-hour intervention (BASICS) and a correspondence course in which subjects use a manual. All three interventions have been successful in reducing drinking at follow-ups as long as 1-2 years (Dimeff, et. al. 1999; Larimer & Cronce, 2002), including with high-risk drinkers (Murphy et al 2001).

Agostinelli, Brown & Miller, 1995 were able to produce similar reductions in drinking by mailing participants personalized graphic feedback following their completion of a mailed survey. Similar results were found in a larger population study, in which a normative feedback pamphlet was mailed to over 6,000 households, with respondents in households receiving normative feedback reported significantly lower alcohol use than controls (Cunningham et al. 2001).

High-risk drinkers and smokers have also been influenced by campus-wide media campaigns. Thus, in studies mentioned previously, Perkins and Craig (2002) reported four-fold reductions in the typical increase in high-risk drinking among first-year students and a 21% reduction in weekly heavy drinking, and a University of Wisconsin campaign resulted in a 29% decrease in smoking rates in one year. As noted earlier, social norms interventions at Washington State University (Far & Miller, 2003) and the University of Virginia (Bauerle, Burwell & Turner, 2002) have also been successful in reducing high-risk drinking.

In summary, norms corrections interventions with heavy drinkers are theoretically sound and can be effective both in individual contexts as part of a motivational interviewing strategy or as part of campus-wide media campaigns.

Emerging Challenges and Issues

As noted above, interest in the social norms approach is growing, research continues to validate the theory, and new applications are being developed in a variety of areas. With this growth and expansion and the enthusiasm that accompanies it are a number of challenges. In particular, it is important to learn from unsuccessful interventions along with the numerous and growing examples of success. These failed interventions can be very instructive and serve to articulate, refine, clarify and expand the model. Because most of these failures may be due to lack of fidelity to the model, it is important to consider the following challenges:

Developing the necessary infrastructure to support a social norms campaign (i.e. "readiness"). The theory of social norms makes intuitive sense to many prevention specialists in contrast to other approaches which may have failed to produce results. Yet while the theory is elegant, implementation is difficult and requires a significant amount of "readiness" or preparation to ensure that an infrastructure is available that can deliver a quality intervention. Johannessen and Dude (2003) reviewed elements of readiness that include: 1) training key stakeholders and staff in the model, 2) creating support and discussion in the larger community, 3) revising policies that may foster misperceptions, 4) collecting and analyzing data, and 5) training and supporting project staff to implement the model properly.

Deciding which messages are appropriate and relevant for which audience (salience). In relatively homogeneous communities, all members may feel a part of the community and react positively to a community norms-based message. Many social norms marketing campaigns adopt this format with slogans such as "most of us" or "students at our university…" However, in a very heterogeneous community students may not identify with messages like these unless they are carefully constructed to have broad appeal. Some students may identify more with particular identities such as participation in a sport or affinity group and be better reached through these channels. Thus, which messages are "salient" to which groups is an important consideration in social norms campaigns.

Creating credible messages in terms of message, source, and explanation of data (believability). Social norms messages contradict widely held beliefs and introduce cognitive dissonance by suggesting that the truth is different from what is popularly thought. Ideally, these messages will stimulate a process of self-reflection and re-examination of what is normative. However, when a message is not believed and easily rejected, a campaign is compromised. This can be due to a variety of factors, including when the source of the message is not trusted, the presentation of the message is not appealing, or data that is questioned is not explained thoughtfully. Granfield (2002) has provided a case study of a social norms campaign in which issues of believability initially undermined the campaign.

Making sure that program evaluations are thorough and reveal any successes (evaluation). Kilmer and Cronce (2003) have suggested that inadequate evaluation of social norms campaigns may lead to the incorrect conclusion that they have not been successful when in fact positive changes have been overlooked. Thus, while the overall percentage of students who drink less than a certain amount may remain unchanged, beneficial changes can occur within this group. Similarly, some groups may be positively affected while others are not. Finally, methodological difficulties in evaluation design may obscure positive changes.

Responding to critics. The social norms approach has met with criticism from some individuals. Berkowitz (2002B), Perkins (2003B) and Rice (2002) have provided detailed responses to a variety of criticisms. They suggest that critics may be holding the social norms approach to a higher standard of evidence and implementation than other approaches, and that many of the complaints are based on misunderstandings, or lack of familiarity with the research.

Issues of replicability. Social norms campaigns are context specific. Thus, a particular message or style of media presentation may be appealing in one community and not in another. In addition, the best means of disseminating information may differ among groups or communities. Because of this context issue, attempts to replicate social norms interventions independent of a specfic

context may fail. Similarly, when a social norms intervention is adapted to a different health issue, the intervention must be tailored to the culture of the new problem.

Combining Social Norms with Other Approaches to Drug Prevention. There is currently no consensus regarding whether social norms is effective when combined with other drug prevention strategies – particularly environmental management. At a minimum, other strategies and methodologies that foster fear and call undue attention to extreme behavior should be minimized because they will undermine social norms efforts and have not been found to be effective. Some experts argue that social norms and other environmental management strategies can be effectively combined, while others argue that the desired changes can be created through social norms alone.

In summary, as the social norms approach has evolved a variety of issues and concerns have surfaced at the same time as new successes are reported. It is important to consider to what extent an intervention is faithful to the model when evaluating it and to address the factors noted above.

Conclusion

The social norms approach has met with considerable success in preventing alcohol and tobacco use and abuse since it was proposed over fifteen years ago by H. Wesley Perkins and myself. Successful social norms programs have been developed for universal, secondary, and indicated prevention, and applications have been tested for a variety of other issues. The social norms approach provides an excellent example of how theory and research driven interventions can be designed, implemented, and evaluated to address health problems. Finally, it represents a paradigm shift in which the underlying health of a community is emphasized and enhanced, in contrast to traditional to fear-based messages that focus exclusively on the problem

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Table 1

Assumptions of Social Norms Theory

1. Actions are often based on misinformation about or misperceptions of others' attitudes and/or behavior.

2. When misperceptions are defined or perceived as real, they have real consequences.

3. Individuals passively accept misperceptions rather than actively intervene to change them, hiding from others their true perceptions, feelings or beliefs.

4. The effects of misperceptions are self-perpetuating, because they discourage the expression of opinions and actions that are falsely believed to be non-conforming, while encouraging problem behaviors that are falsely believed to be normative.

5. Appropriate information about the actual norm will encourage individuals to express those beliefs that are consistent with the true, healthier norm, and inhibit problem behaviors that are inconsistent with it.

6. Individuals who do not personally engage in the problematic behavior may contribute to the problem by the way in which they talk about the behavior. Misperceptions thus function to strengthen beliefs and values that the "carriers of the misperception" do not themselves hold and contribute to the climate that encourages problem behavior.

7. For a norm to be perpetuated it is not necessary for the majority to believe it, but only for the majority to believe that the majority believes it.

Table from: Berkowitz, A (2003B). Applications of Social Norms Theory to Other Health and Social Justice Issues. Chapter 16 in HW Perkins (Ed). The Social Norms Approach to Preventing School and College Age Substance Abuse: A Handbook for Educators, Counselors, Clinicians, San Francisco, Jossey-Bass. (Portions of this table are adapted from Miller & McFarland (1991) and Toch & Klofas, 1984).

Table 2

Misperceptions Documented in Published Studies By Topic, Setting and Population

<u>Alcohol</u>

Study	Setting and Population
Agostinelli, Brown & Miller, 1995	Individual College Campus
Baer, 1994	
Baer & Carney, 1993	
Baer, Stacy & Larimer, 1991	
Barnett et al, 1996	
Bourgeios & Bowen, 2001	
Carter & Kahnweiler, 2000	
Clapp & McDonnell, 2000	
Fabiano, 2003	
Far & Miller, 2003	
Glider et al, 2001	
Haines & Barker, 2003	
Haines & Spear, 1996	
Jeffrey et al, 2003	
Johannessen & Glider, 2003	
Larimer et al, 1997	
Page,Scanlan & Glibert, 1999	
Peeler et al, 2000	
Perkins, 1985	
Perkins, 1987	
Perkins & Berkowitz, 1986	
Perkins & Craig, 2003A	
Prentice & Miller, 1993	
Schroeder & Prentice, 1998	
Sher et al, 2001	
Steffian, 1999	
Thombs, 1999	
Thombs, 2000	
Thombs et al, 1997	
Werch et al, 2000	
Agostinelli & Miller, 1994	Multiple College Campuses
Perkins et al, 1999	
Pollard et al, 2000	
Perkins & Wechsler, 1996	
Beck & Trieman, 1996	Middle and/or High School Students
Botvin et al, 2001	
D'Amico et al, 2001	
Haines, Barker & Rice, 2003	
Hansen & Graham, 1991	
Linkenbach & Perkins, 2003B	
Perkins & Craig, 2003B	
Thombs et al, 1997	

Tobacco

Haines, Barker and Rice, 2003	Middle and/or High School Students
Hansen & Graham, 1991	
Linkenbach & Perkins, 2003A	
Perkins & Craig, 2003B	
Sussman et al, 1988	
Hancock & Henry, 2003	College Students
Hancock et al, 2003	

Illegal Drug Use

Hansen & Graham, 1991	High School Students
Perkins & Craig, 2003B	
Perkins, 1985	College Students
Perkins et al, 1999	
Pollard et al, 2000	
Wolfson, 2000	

Other Behaviors

Bigsby, 2002	Bullying
Bowen & Bourgeios, 2001	Homophobia
Bruce, 2002	Sexual Assault
Dubuque, et al, 2002	Homophobia
Hancock, 2002	Prayer
Kusch (2002)	Eating Disorders
Larimer & Clayton (forthcoming)	Gambling
Linkenbach, Perkins & DeJong ,2003	Parenting behaviors
Thombs, 1999	Driving while intoxicated
Thombs et al, 1997	Driving while intoxicated
Wenzel, 2001	Income tax compliance
White, Williams & Cho, 2003	Sexual assault

Specific Populations

Baer, 1994	Fraternity members
Baer, Stacy & Larimer, 1991	
Carter & Kahnweiler, 2000	
Far & Miller, 2003	
Larimer et al, 1997	
Sher et al, 2001	
Trockel, Williams & Reis, 2003	
Berkowitz & Perkins, 1986	Resident Advisors
Korcuska & Thombs, 2003	Men and Women (Gender Differences)
Thombs, 2000	Athletes

Table Three

Studies in Which Misperceptions Predict Behavior

<u>Misperceptions are correlated with drinking behavior</u>

Beck & Trieman, 1996
Clapp & McDonnell, 2000
Korcuska & Thombs, 2003
Marks, Graham & Hansen, 1992
Page, Scanlan & Gilbert, 1999
Perkins, 1985
Perkins, 1987
Perkins & Wechsler, 1996
Thombs, Wolcott & Farkash, 1997
Trockel, Williams & Reis, 2003

<u>Perceptions of drinking norms at time one predict behavior at time two</u>

Botvin et al, 2001
D'Amico et al, 2001
Prentice & Miller, 1993
Sher et al, 2001
Steffian, 1999

Table 4

Outcomes of Social Norms Marketing Campaigns

School and Study	Description	Outcomes
Alcohol		
Northern Illinois University (Haines & Barker, 2003, Haines, 1996, Haines & Spear, 1996)	1989-1998, cluster sampling, yearly n from 550-1,052	From 1989-1998 decrease in 6+ drinks when partying from 45% to 25%, increase in 1-5 drinks when partying from 46% to 56% and increase in abstainers from 9% to 19%
University of Arizona (Johannessen & Glider, 2003; Johannessen, et al 1999; Glider et al, 2001)	1995-1998, n = approx 300 each year	From 1995-1998 decrease in heavy drinking (≥5) of 29%, 30 day use rate decrease from 74% to 65%, plus decreased negative consequences
Western Washington University (Fabiano, 2003)	1997-1998 n = 489 and 1,127	No change in drinking from 1992-1997 From 1997-1998 decrease in 5+ drinks weekend night from 34% to 27, and increase in 1-2 drinks from 34% to 49%, plus decreased negative consequences
Hobart and William Smith Colleges (Perkins and Craig, 2002, 2003A)	1996-1998 n = 156, 274	21% decrease in 5+ drinks in a row, 20% increase in abstaining 14% decrease in average drinks at a party
	1995-2000 n = 232, 326	19% decrease in average drinks at a party, 18% decrease in days drinking last two weeks, 24% decrease in average drinks at a party, 50% increase in rarely or never experience negative consequences, 46% decrease in liquor law violation arrests
Rowan University (Jeffrey et al, 2003)	1998-2001 n = 483, 453	Decrease in 5+ drinks at a party from 40% to 30%, 5+ drinks in a row in last two weeks from 48% to 37%
Two Midwestern High Schools (Haines, Barker & Rice, 2003)	1999-2001 n = 317 – 380	Decrease in 5+ drinks in a row in last two weeks from 27% - 19%, Decrease in got drunk in last 30 Days from 32% to 26%.

Tobacco

Virginia Commonwealth (Hancock & Henry, 2003; Hancock et al, 2002)	Fall 1999 Ten weeks apart n = 371 VCU, N = 163 control (matched samples)	Mean #days smoked/month and mean # cigarettes/day stable at VCU and increases at control school
University of Wisconsin-Oskosh (Hancock et al, 2003)	2000-2001 Intervention campus n = 437, 621 Control campus N = 774, 678	29% decrease in smoking rates No change in control group
Montana Youth (Statewide) (Linkenbach & Perkins, 2003A)	2000-2001 229 intervention counties and 258 control counties	In control group 17% of adolescents initiate smoking while only 10% of intervention sample does = 41% lower rate of smoking initiation
Two Midwestern High Schools (Haines, Barker & Rice, 2003)	1999-2001 n = 317 – 380	Decrease in # cigarettes smoked in last 30 days from 27% to 19%

Note: In all of these campaigns, alcohol and/or tobacco use remained unchanged in years prior to the social norms campaign. In addition, at the end of the evaluation period, decreases in alcohol and/or smoking were associated with decreases in the degree of misperception of these behaviors.