Preface – The State of Social Norms
Prevention approaches based on social norms theory are growing by leaps and bounds in popularity, and evidence is mounting that these programs can be effective when correctly implemented.
This past year as part of a recent comprehensive effort to look at the problem of college drinking the National Institute on Alcoholism and Alcohol Abuse (NIAAA) appointed an expert panel of approximately twenty prevention specialists to make recommendations for the field. Communicating accurate social norms was among the strategies suggested by this panel, which commented in its final report that:

"Initial results from programs adopting an intensive social norms approach are promising. Several institutions that persistently communicated accurate norms have experienced reductions of up to twenty percent in high-risk drinking over a relatively short period of time.... Together these findings provide strong support for the potential impact of the social norms approach. Although any case report in this literature could be challenged methodologically, the results of each study are remarkably consistent." (NIAAA, p. 13, 2002)

In addition to the addressing alcohol use social norms marketing campaigns noted by the NIAAA panel, other programs have demonstrated the effectiveness of social norms interventions in reducing or preventing cigarette smoking and changing attitudes associated with rape proclivity in men. Positive results have been obtained with college and university students and with high school and middle-school populations. More recently, a number of social norms interventions have been evaluated and found to be successful without parallel changes in control groups. In addition, evaluation research suggests that when programs incorporate social norms as part of a comprehensive intervention using multiple strategies, the social norms component is often one of the important ingredients associated with program effectiveness.
Introduction
Social norms theory provides a model for understanding human behavior that has important implications for health promotion and prevention. It states that our behavior is influenced by incorrect perceptions of how other members of our social groups think and act. For example, an individual may overestimate the permissiveness of peer attitudes or behavior with respect to alcohol, smoking or other drug use, or underestimate the extent to which peers engage in healthy behavior. The theory predicts that overestimations of problem behavior will increase these problem behaviors while underestimations of healthy behaviors will discourage individuals from engaging in them. Thus, correcting misperceptions is likely to result in decreased problem behavior or increased prevalence of healthy behaviors. These assumptions have been validated by extensive research on teenage and young-adult drinking and cigarette smoking and by interventions to promote safe drinking and tobacco cessation on college campuses and in high schools. Other social norms interventions have been developed to prevent sexual assault, improve academic climate, and reduce prejudicial behavior.
Social norms interventions focus on peer influences, which have a greater impact on individual behavior than biological, personality, familial, religious, cultural and other influences (Berkowitz & Perkins, 1986A; Perkins, 2002). These peer influences are based more on what we think our peers believe and do (the "perceived norm") than on their real beliefs and actions (the "actual norm"). This misperception and the effect it has is the basis for the social norms approach. By presenting correct information about peer group norms in a believable fashion, perceived peer pressure is reduced and individuals are more likely to express pre-existing attitudes and beliefs that are health promoting.
This review summarizes evidence in support of the social norms approach, including studies documenting the existence of misperceptions, their efficacy in predicting behavior, successful interventions targeting individuals, groups and campuses, a brief discussion of unsuccessful efforts, and examples of applications to other health and social justice issues. It concludes with an annotated bibliography of important resources and an extensive bibliography.

Types of Misperceptions
Individuals may misperceive their social environments in a number of ways that influence their behavior. For example, the majority who engage in healthy behavior may incorrectly believe they are in the minority when they are actually in the majority (pluralistic ignorance.) In contrast, people may incorrectly think that they are in the majority when they are actually in the minority (false consensus). Finally, an individual may enjoy thinking that his or her behavior is more unique than it really is
(false uniqueness). Each of these misperceptions operates in a different way and may affect behavior differently.
The most common misperception occurs when a majority of individuals falsely assume that most of their peers behave or think differently when in fact they are similar. For example, most students drink moderately or not at all but incorrectly assume that other students drink more than themselves and more than they do in reality. This phenomenon is referred to as pluralistic ignorance (Miller & McFarland, 1987, 1991; Toch & Klofas, 1984). Pluralistic ignorance encourages individuals to suppress attitudes and behaviors that are incorrectly thought to be non-conforming and instead to engage in the behaviors that are incorrectly thought to be normative. It is often motivated by fear of embarrassment.

Social norms interventions correct pluralistic ignorance by informing the majority that their behavior is actually more normative and healthy than they previously thought, thus removing the fear of embarrassment associated with its expression. This provides permission to act on values of moderation or non-use by bringing behavior more closely in line with personal attitudes.

False consensus is the incorrect belief that others are like oneself when they are not (Ross, Greene & House, 1977). For example, heavy drinkers may think that most other students are heavy drinkers when this is not true, or prejudiced individuals may incorrectly believe that they speak for their group. The false consensus misperception functions to maintain an individual’s denial that his or her attitudes or behavior are problematic or unusual. For example, heavy drinkers have a personal motivation for believing in exaggerated drinking norms because this misperception allows them to justify their abusive drinking and deny that there is a problem. Studies have found that misperceptions have more influence on the drinking of alcohol abusers than on other drinkers (Page, Scanlan & Gilbert, 1999; Perkins & Wechsler, 1996) and that abusers misperceive more than other students (Agostinelli & Miller, 1994; Pollard, et al., 2000). Correcting the misperceptions of heavy drinkers has been found to reduce their drinking in a number of studies (see later citations).

Research has documented similar patterns for smoking, with smokers overestimating smoking prevalence more than non-smokers (Sherman et al., 1983; Sussman et al., 1988).

Finally, the phenomenon of false uniqueness occurs when individuals assume that the difference between themselves and others is greater than is actually the case (Suls & Wan, 1987). False uniqueness differs from pluralistic ignorance because individuals experience false uniqueness as a desirable phenomenon that allows the holder to feel special. Like false consensus, it functions as a self-serving bias. False uniqueness may occur among abstainers, for example, who underestimate the prevalence of abstinence and falsely assume that they are more unique or special than they really are.
Toch & Klofas (1984) noted that the strongest and most vocally expressed views in a community are often held by those who engage in false consensus. For example, heavy-drinking individuals have a greater stake in believing in their misperceptions and view themselves as "subculture custodians" or guardians of the truth about their reference group. In this imagined role, they speak out actively against enforcement of policy and interventions to combat abuse. The combination of false consensus and pluralistic ignorance allows these heavy drinking "subculture custodians" to have an influence that is greatly disproportionate to their numbers by strengthening their voice and suppressing the voice of the "silent majority" who may favor policy initiatives and interventions to curb abuse. The application of social norms to policy development, termed "normative policy enforcement" can be useful in presenting a community with the true norm that exists in support of various policies and consequences for abuse so that a consensus for action can occur (DeJong, 2003).

Social norms interventions have been found to be effective in changing the behavior of the moderate or non-drinking majority (pluralistic ignorance) as well as confronting and changing the behavior of the heavy drinking minority (false consensus).

**Studies Documenting Misperceptions**

Misperceptions have been documented in over thirty-seven published studies. Alcohol use misperceptions have been found in studies with small samples of college students from an individual campus (Agostinelli & Miller, 1994; Agostinelli, Brown & Miller 1995; Baer, 1994; Baer, Stacy & Larimer, 1991; Baer & Carney, 1993; Barnett et. al. 1996; Beck & Treiman, 1996; Bourgeois & Bowen, 2001; Carter & Kahnweiler, 2000; Clapp & McDonnell 2000; Page, Scanlan & Gilbert, 1999; Peeler et al, 2000; Prentice & Miller, 1993; Schroeder & Prentice, 1998; Sher et al 2001; Steffian, 1999; Thombs, 1999; Thombs, 2000; Thombs et. al. 1997; Werch et. al, 2000), in larger surveys of individual campus populations (Fabiano, 2003; Glider et al, 2001; Haines & Spear, 1996; Jeffrey et. al. 2003; Perkins, 1985; Perkins, 1987; Perkins & Berkowitz, 1986; Perkins & Craig, 2003A), and in multiple campus studies analyzing data from the CORE survey (Perkins et. al., 1999; Pollard et al, 2000) and the College Alcohol Study (Perkins & Wechsler, 1996). Some of these studies are 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 (Berkowitz, 1997, Berkowitz & Perkins, 1986B; University of Michigan, 1993). They have been documented in a statewide sample of young adults both in college and not in college (Linkenbach & Perkins, 2003B) and among middle and high-school students (Beck & Trieman, 1996; Botvin et al, 2001; D’Amico et al, 2001; Haines, Barker & Rice, 2003; Perkins & Craig, 2003B; Thombs, et al, 1997). Thombs et. al. (1997) reported misperceptions for
DWI (driving while intoxicated) and RWID (riding with someone who is intoxicated).

Other studies have reported misperceptions for cigarette smoking (Haines, Barker & Rice, 2003; Hancock & Henry, 2003; Linkenbach & Perkins, 2003A; Perkins & Craig, 2003B) and for marijuana and other illegal drug use (Hansen & Graham, 1991; Perkins, 1985; Perkins & Craig, 2003B; Perkins et al, 1999; Pollard et al, 2000; Wolfson, 2000). In addition to alcohol, tobacco and other drugs, misperceptions have been documented for homophobia, attitudes about sexual assault, and eating behaviors in studies reviewed by Berkowitz (2003) and cited later in this paper.

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 members of the community (Perkins, 1997). There is only one published study that calls into question the existence of misperceptions (Wechsler & Kuo, 2000) and which claims that students accurately perceive campus norms for binge drinking. In a critique of its methodology DeJong (2000) noted that the survey did not provide respondents with a clear definition of binge drinking when asking students to estimate the on-campus rate and then used arbitrary cut-off ranges to determine whether these estimates were accurate or not.

**Which Norms Are Salient?**

Individuals have friends, are members of groups, may live in residence halls on college campuses, and are parts of a larger academic 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 saliency of these different norms when designing a social norms intervention.

**Do Misperceptions Predict Behavior?**

There are at least fourteen published studies in which misperceptions are positively correlated with drinking behavior or predict how individuals drink (Beck & Trieman, 1996; Botvin, et al, 2001; Clapp & McDonnell, 2000; D’Amico et al, 2001; Marks et al, 1992; Page et al, 1999; Perkins, 1985; Perkins 1987; Perkins & Wechsler, 1996; Prentice & Miller, 1993; Scher et al, 2001; Steffian, 1999; Thombs, 1999; Thombs et al, 1997).

In some of these studies, perceptions of drinking norms were positively associated drinking behavior. For example,
Clapp and McDonnell (2000) found that perceptions of campus norms predicted drinking behavior and indirectly influenced drinking-related problems.

What Is the Effect of Correcting Misperceptions?

Successful Interventions Utilizing the Social Norms Approach

Social norms theory can be used to develop interventions that focus on three levels of prevention specified as universal, selective, and indicated (Berkowitz, 1997). These categories, developed by the Institute of Medicine, replace what was formerly called primary, secondary, and tertiary prevention (Kumpfer, 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.

Berkowitz (2003) suggested that there are certain questions that must be answered in order for the social norms model to be applied effectively:

- What misperceptions exist with respect to the attitude or behavior in question?
- Are there over or under-estimations of attitudes and/or behavior?
- What is the meaning and function of misperceptions for individuals and groups?
- Do the majority of individuals in a group or community hold these misperceptions?
- Does the target group function as a group with respect to the behavior in question? That is, are the group norms "salient," and are the individuals in the group an influence on each others behavior?
- What is the hypothesized effect of these misperceptions?
- What changes are predicted if protective behaviors that already exist in the population are supported and increased?

Norms Correction as Part of A Multi-Component Intervention

A number of community-wide and school-based comprehensive interventions have incorporated norms correction into classroom or workshop activities. Because the social norms activity was only one of multiple interventions used, it is not possible to specifically evaluate its impact. In these cases, revealing accurate norms to participants may have served as a catalyst that increased their receptivity to other program components, such as skill-training, information, and strengthening resiliency.
When Social Norms Interventions Are Unsuccessful

When social norms campaigns are unsuccessful, it is important to assess what went wrong and why, rather than to assume automatically that the model is flawed. Berkowitz (2002) has provided an extensive response to each of these concerns, suggesting that some may be based on misunderstandings and overgeneralizations about the implications of failed interventions, while others reflect important theoretical and methodological issues that need to be addressed as part of the evolution of the model. In the same article, Rice (2002) reviewed common questions and concerns based on methodological issues.

Social Norms Interventions for Other Health Issues and Social Justice Issues

Many of the normative influences that affect health behaviors such as alcohol and tobacco use are also operative for a wide variety of issues, including sexual assault and violence, disordered eating and body image disturbance, academic climate, and prejudicial behaviors. Berkowitz (2003) suggested that social norms efforts be used to address these problems, reviewed research documenting misperceptions for different health and social justice issues, and provided examples of innovative programs. These included a social norms marketing campaign designed to change male attitudes associated with rape proclivity (Bruce, 2002), a social norms marketing campaign addressing sexual assault prevention among Deaf and Hard-of-Hearing students (White, Williams, & Cho, 2003), and a homophobia prevention workshop that incorporates a small group norms challenging activity (Smolinsky, 2002).

In preliminary studies, predictions based on social norms theory have been confirmed for beliefs about masculinity, body ideal, prayer, and honesty in paying taxes. For example, Gottfried (2002) found that men misperceived other men’s beliefs about how men should behave, with men overestimating the extent to which other men hold stereotypical beliefs about masculinity. Greater disparities between men’s perceptions of themselves and of other men were correlated with lower self-esteem.

Appendix

Annotated Bibliography of the Social Norms Literature

This annotated bibliography provides brief summaries of notable resources for social norms theory, case studies and implementation issues, other applications, and significant research.

Theory

Berkowitz, AD (2002) Responding to the Critics: Answers to Common


Case Studies and Implementation Strategies


Linkenbach, J. (2002). The Main Frame: Strategies for Generating Social Norms Media. Available from www.socialnorm.org or from www.edc.org/hec. This is a practical guide to writing media stories about social norms interventions, along with guidelines and talking points for interacting with the media to shift the "frame" of the discussion to positive, health-promoting behaviors.

Perkins, HW (2003). (Ed). The Social Norms Approach to Preventing School and College Age Substance Abuse: A Handbook for Educators, Counselors, Clinicians, San Francisco, Jossey-Bass. This book on the social norms model contains case studies of successful social norms interventions at a variety of colleges and universities for smoking and alcohol, including both social norms media campaigns and small group interventions. Successful campaigns with high school and adolescent populations are also provided. Guidelines for effective implementation are provided in a number of the chapters (see www.socialnorm.org for a Table of Contents.)


**Research**

Perkins, HW (2002). *Social Norms and the Prevention of Alcohol Misuse in Collegiate Contexts*. Journal of Studies on Alcohol, Supplement 14:164-172. A review of the literature on the effects of norms on drinking behavior. Research on parental, faculty, resident advisors and peer norms are reviewed, with the conclusion that peer norms are the strongest influence on student drinking. A brief overview of the social norms approach is presented.
Perkins, HW and Berkowitz, AD (1986). *Perceiving the Community Norms of Alcohol Use Among Students: Some Research Implications for Campus Alcohol Education Programming*. International Journal of the Addictions, 21(9/10): 961-976. This is the original study providing data for student misperceptions of attitudes towards alcohol, along with a discussion of the effects of these misperceptions.

Perkins, HW, Meilman, PW, Leichliter, JS, Cashin, MA & Presley, CA (1999) *Misperceptions of the Norms for the Frequency of Alcohol and Other Drug Use on College Campuses*. Journal of American College Health, 47:253-258. Reviews data documenting the prevalence of misperceptions of alcohol and other drug use in all sizes and types of schools, and in all regions of the country.


Scher, K, Bartholow, BD & Nanda, S (2001). *Short- and Long-Term Effects of Fraternity and Sorority Membership on Heavy Drinking: A Social Norms Perspective*. Psychology of Addictive Behaviors, 15:42-51. An excellent longitudinal study examining the alcohol use of Greek members during and after college. Greeks consistently drank more than non-Greeks during the college years but Greek status did not predict post-college drinking levels. Variations in Greek drinking during the four years of college were predicted by perceived peer norms for alcohol use among Greeks.


**Other Issues**


assault. An overview of the campaign and the process used to develop media is provided.


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Bacchus (2002). *Customized Health Education Materials,* BACCHUS Midwest, Minneapolis, MN (available from dhellstrom@qwest.net).


Bowen, AM & Bourgeois, MJ (2001). Attitudes Towards Lesbian, Gay, and Bisexual College Students: The Contribution of Pluralistic Ignorance,


Larimer, ME & Cronce, JM (2002). Identification, Prevention and Treatment: A Review of Individual-Focused Strategies to Reduce


Perkins, HW and Berkowitz, AD (1986). Perceiving the Community Norms of Alcohol Use Among Students: Some Research Implications for Campus


University of Michigan (1993). University of Michigan Survey Regarding Alcohol and Other Drugs. UM Initiative on Alcohol and Other Drugs, Ann Arbor, MI.

