

Social Norms and the Prevention of Alcohol Misuse in Collegiate Contexts

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ABSTRACT. *Objective:* This article provides a review of conceptual and empirical studies on the role of social norms in college student alcohol use and in prevention strategies to counter misuse. The normative influences of various constituencies serving as reference groups for students are examined as possible factors influencing students' drinking behavior. *Method:* A review of English language studies was conducted. *Results:* Parental norms have only modest impact on students once they enter college beyond the residual effects of previously instilled drinking attitudes and religious traditions. Faculty could theoretically provide a positive influence on student drinking behavior, but there is little evidence in the literature that faculty norms and expectations about avoiding alcohol misuse are effectively communicated to students. Although the norms of resident advisers (RAs) should ideally provide a restraint on student alcohol misuse, the positive influence of RAs is lim-

ited by their negotiated compromises with students whom they oversee and by their misperceptions of student norms. Research reveals student peer norms to be the strongest influence on students' personal drinking behavior, with the more socially integrated students typically drinking most heavily. The widespread prevalence among students of dramatic misperceptions of peer norms regarding drinking attitudes and behaviors is also a consistent finding. Permissiveness and problem behaviors among peers are overestimated, even in environments where problem drinking rates are relatively high in actuality. These misperceived norms, in turn, have a significant negative effect promoting and exacerbating problem drinking. *Conclusions:* Interventions to reduce these misperceptions have revealed a substantial positive effect in several pilot studies and campus experiments. (*J. Stud. Alcohol*, Supplement No. 14: 164-172, 2002)

NORMS ARE fundamental to understanding social order as well as variation in human behavior (Campbell, 1964; Durkheim, 1951). Group norms reflected in the dominant or most typical attitudes, expectations and behaviors not only characterize these groups but also regulate group members' actions to perpetuate the collective norm. Indeed, norms can be powerful agents of control as "choices" of behavior are framed by these norms and as the course of behavior most commonly taken is typically in accordance with normative directives of "reference groups" that are most important to the individual. Although many persons think of themselves as individuals, the strong tendency of people to conform to group patterns and expectations is consistently documented in laboratory experiments, social surveys and participant observation of cultural contexts. Social psychologists have long argued that people tend to adopt group attitudes and act in accordance with group expectations and behaviors based on affiliation needs and social comparison processes (Festinger, 1954), social pressures toward group conformity (Asch, 1951, 1952) and the formation and acquisition of reference group norms (Newcomb, 1943; Newcomb and Wilson, 1966; Sherif, 1936, 1972). Thus one can think of a group norm in this sense as the cause of much belief and action in addition to a descriptive characterization of the status quo, as a power-

ful independent variable accounting for or determining individual behavior.

Studies of norms influencing drinking among adolescents have produced a large research literature documenting the influence of social group norms (e.g., those of family, friends, schools, neighborhoods and religious/ethnic groups). Although not as prevalent as studies of normative influence among adolescents in general, studies among college students in late adolescence and young adulthood have also produced a sizable literature on norms. Such studies date back to the 1950s with Gusfield's (1961) research on drinking among college men in a 1955 sample where parental norms, religious traditions and fraternity affiliation were all found to be important normative influences. Classic comprehensive studies of drinking in college (Maddox, 1970; Straus and Bacon, 1953), likewise, reflected these concerns.

This article first provides an updated review of theoretical and empirical studies on college student adherence to social norms about alcohol use. It draws most evidence from empirical studies conducted within the last two decades. The second purpose of this article is to recast the discussion about norms as a determinant of student drinking into a prevention framework by considering how and to what extent certain norms can potentially function or be more effectively invoked to reduce alcohol misuse in college contexts.

It is important that two different but related types of norms are both considered. One type, attitudinal norms,

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refers to widely shared beliefs or expectations in a social group about how people in general or members of the group ought to behave in various circumstances. This notion focuses on what the majority of group members typically think is morally correct or conventionally acceptable behavior. The other type, behavioral norms, refers to the most common actions actually exhibited in a social group, be it the modal category or statistical average representing what is most typical behavior of group members. Both types of norms are relevant for the prevention field in higher education in that both can be independent variables having an impact on the individual. How most other community members believe everyone should behave and what behavior is most common may be correlated, of course, but each component may also be somewhat distinct and play a part in prevention initiatives.

Reference Group Normative Influences on Students

Several constituencies have relationships and sufficient contact with college students so that they may act as reference groups establishing and communicating norms. The extent and results of research vary considerably, however, with regard to impact of these normative groups.

Parents

Parents may serve as one reference group for students making the transition to adulthood as they enter college and begin to take on adult roles. Certainly parents can, and sometimes do, communicate their expectations for their sons and daughters going off to college. These moral/behavioral guidelines may range from expected abstinence to expectations of consumption facilitated by parents playing the role of alcohol suppliers to underage students. Parental norms may be communicated directly in discussions with offspring or assimilated through observation of parents' styles or levels of drinking behavior.

Studies of the power (or lack thereof) of parental norms on student drinking in college are limited. Research to date, however, has demonstrated relatively little direct impact of parental values and behavior on college students. There is some evidence of a connection between problematic drinking behavior of students and problematic parental drinking (see Bradley et al., 1992; Karwacki and Bradley, 1996; Perkins and Berkowitz, 1991). This may be viewed to some degree as the impact of family norms or collective parental values and expectations, but in the cases of children of alcoholics (which can represent about one-fifth of students on most campuses), it is also likely to reflect a combination of biological influence and modeled behavior from an individual alcoholic parent (Sher, 1991). Most research on parental influence in general, however, typically shows a declining impact of parents as youth grow older and as

peers become more important determinants of their behavior. Indeed, as demonstrated in research on high school students (Beck and Treiman, 1996), only a relatively small normative influence of parents has been noted in years immediately preceding college. Thus, by the time most students go to college, parents' ability to directly influence students' drinking style may have waned considerably, especially if students have moved out to attend a residential college.

Even with reduced contact, however, parental norms may remain as a residual influence on students' drinking through internalized parental attitudes and modeled behavior. In a nationwide survey of college students (Wechsler et al., 1995), whether or not a parent was an abstainer and if the family approved or disapproved of alcohol use each had a modest impact on reducing the chances of the student being a high-risk drinker. Family view of alcohol was dropped out of the final equation for most efficient predictors in this study, however, leaving only parents' abstention as a contributing factor. In a survey of first-year students in a southern university, Lo (1995) found a modest effect of parental norms, which was stronger for female than male students. Parents' normative influence on drinking may be primarily exerted through the effect of religious beliefs and traditions passed down from parents to the offspring that influence drinking (Perkins, 1985, 1987). Among students attending a northeastern college, Perkins (1985) found very little influence of parental attitudes on student drinking once the student's religious tradition and strength of religious commitment were controlled.

Faculty

Most discussion and research on faculty contributions to misuse of alcohol have come under the rubric of "curriculum infusion" and have largely concentrated on educational strategies that impart pharmacological and risk knowledge to students. Evaluation studies of this approach suggest that the strategy, while making students more knowledgeable about characteristics of alcohol, rarely produces any notable benefit in terms of reductions in problem drinking (Duitsman and Cychoz, 1997; Robinson et al., 1993b). Furthermore, voluntary education offered specifically on risks and dangers of drinking, whether delivered by faculty or health/peer counseling staff, is likely to reach only the least problematic students due to self-selection into these programs (Scott et al., 1997). Nevertheless, in their roles as teachers and mentors, faculty are presumed to be an important reference group for students. Very little scientific research has been conducted to examine faculty impact on student alcohol use in this capacity, but there is a good deal of speculation about the positive or negative influence of faculty norms in terms of course instruction, role model behavior and personal values communicated to students.

Research has demonstrated not only large differences between faculty and student consumption patterns, but also differences in what is thought to be indicative of problem drinking where faculty are more conservative in their judgments about consumption levels, frequency of intoxication and inappropriate drinking times, even after controlling for the differences in personal consumption levels (Leavy and Dunlosky, 1989). Indeed, many faculty view student alcohol misuse as a significant problem, are quite interested in the welfare of their students and are concerned about the impact of drinking on academic work; yet relatively few are actively involved in prevention efforts or speaking out on campus (Ryan and DeJong, 1998). Thus faculty teaching an expanded array of topics and issues about drinking across the curriculum (Gonzalez, 1988) and incorporating discussions of both student and faculty values, attitudes and behaviors in this type of broader curriculum infusion may be key to effectiveness as faculty norms are given greater visibility. This type of curriculum infusion might be promoted in first-year general education, sociology, psychology, ethics, philosophy and gender-related courses, for example. In addition to achieving a more comprehensive exposure to issues of alcohol use, this kind of teaching might help make students more aware of faculty norms (and vice versa) as an additional normative influence on students.

Faculty norms concerning academic class expectations in general may be an important component of prevention, if collectively acknowledged and practiced in teaching. Maintaining deadlines and standards and giving concrete and immediate feedback to students about academic performance will help reveal (and possibly curtail) emerging drinking problems among specific students more quickly as these problems often take a toll on academic work (Perkins, this supplement; Ryan and DeJong, 1998). Faculty may also be important normative agents if willing to compassionately confront and refer students who are perceived to have a drinking problem (Margolis, 1992). Although one study suggests that faculty are more likely to take action to assist or confront a student than to do so with a colleague, they are still hesitant or ambivalent in many cases about intervening individually (Scott and Stevens, 1998). Thus the contribution of faculty in deterring student alcohol misuse might be strengthened if they *collectively* encourage each other to intervene, making the practice a community standard. Faculty initiatives as well as research data to assess this approach are woefully lacking, however.

Resident advisers

In colleges and universities with residential living facilities, the residential advisers (RAs) are another potential reference group providing normative standards for students.

Indeed, for beginning first-year students, these older undergraduates or graduate students are often the first students representing both institutional and student culture that are encountered. Thus RAs may be watched and listened to closely and may be very important in communicating norms through their initial verbal contacts and personal behavior when interacting with new students. What little research there is on RA norms suggests they are quite similar to average student characteristics with regard to alcohol use (Andrews, 1987; Berkowitz and Perkins, 1986), although variation among RAs as individuals may tend to be less extreme and thus more representative of relative moderation (Berkowitz and Perkins, 1986).

Dealing with student alcohol misuse is among the most frequent issues RAs note they must face, a consistent finding over decades (Schuh et al., 1988). Over the course of the academic year, RAs may compromise to some degree with the normative standards of their student residents as they come to informal mutual agreements about how, when and to what degree rules will be enforced. They may even teach residents how to break drinking rules by talking to them about using discretion and showing them how to break these rules under circumstances of social control. Based on interview research with RAs, Rubington (1990) concluded that they promoted a norm in their words and actions that had less to do with moderating or limiting amounts of alcohol than with residents drinking behind closed doors, minding their own business and keeping their noise levels down, so that they would not disturb their neighbors and force the RA to act as an official rule enforcer.

Peer norms

Most research in general has found that by late adolescence peers are typically the strongest influence on personal behavior, especially with regard to alcohol and substance use (Kandel, 1980, 1985), and traditional-age college students appear to be no exception in this regard. For example, Lo's (1995) study of first-year students at a southern university found that peer norms were stronger predictors of level of intoxication than were parental norms, with peer influence being greatest for men. Likewise, Perkins' (1985) study of a cross-section of undergraduates at a north-eastern college found peer influences (perceived friends' drinking norm and fraternity membership) to be much stronger predictors of alcohol consumption than other background factors including religion, gender and parents' attitudes. The strength of peer influence may be key to understanding findings where students will exhibit drinking behaviors on occasion that they oppose in terms of their personal attitudes (Robinson et al., 1993a). Furthermore, peer norms may be of particular importance in "peer-intensive" college contexts, for example, undergraduate and residential institutions where students lack frequent contact with parents,

siblings and other reference groups such as religious communities and full-time employment.

Given the relative strength of peer influence and assuming that students' drinking norms are more permissive than the norms of other constituencies that may influence an individual student's behavior in most colleges, then findings showing the more socially integrated students as heavier drinkers make sense. For example, in a nationwide college survey (Wechsler et al., 1995), measures reflecting intensive peer exposure—having five or more close student friends, socializing with friends more than 2 hours per day and living in a fraternity or sorority—predicted significantly higher levels of heavy drinking after controlling for demographic factors and other student activities. In another study of college students nationwide (Leichliter et al., 1998), athletes consumed significantly more alcohol and experienced more drinking problems than nonathletes. Leaders among these athletes were not more responsible with regard to drinking. In fact, male athletic leaders consumed more alcohol and suffered more consequences than did the other male team members. In research on undergraduates at one state university, Orcutt (1991) found that although students who were generally light drinkers did not increase their drinking in the presence of close friends, students disposed to drink heavily did so among friends. The latter type of student may have viewed the presence of peers, presumably perceived to be of like mind, as encouragement or normative support for them to act on their drinking preferences. Martin and Hoffman (1993), studying undergraduates at an eastern university, found that peer influence in terms of the number of college and noncollege friends who drank was a significant predictor of personal consumption even after controlling for the individual's living environment and positive expectancies associated with alcohol use.

Misperceptions of Peer Norms

Although peer norms, which are typically more permissive than other group norms, appear quite influential, research has also clearly documented pervasive differences between what students believe to be their peer norms and what are the actual norms. This finding applies to both types of norms (commonly held attitudes about correct behavior and the most commonly exhibited behaviors concerning alcohol use). Most students tend to think that their peers are, on average, more permissive in personal drinking attitudes than is the case, and likewise that peers consume more frequently and more heavily, on average, than is really the norm. In an initial study identifying and examining this phenomenon in one undergraduate college population, Perkins and Berkowitz (1986) found that more than three-quarters of students believed that one should never drink to intoxication or that intoxication was acceptable only in limited circumstances. Yet almost two-thirds of these

same students thought their peers believed that frequent intoxication or intoxication that did interfere with academics and other responsibilities was acceptable. This gross misperception of peer attitudes was not simply the result of a particular historical situation momentarily distorting students' perceptions. Surveys conducted over several years consistently demonstrated misperceptions of similar magnitude (Berkowitz and Perkins, 1986; Perkins, 1994).

Subsequent research on this phenomenon identified misperceptions of peer norms at other schools as well. For example, students at a New England state university (Burrell, 1990) described their friends as heavier drinkers than themselves. Among students attending a large western university (Baer and Carney, 1993; Baer et al., 1991), misperceptions of peer drinking norms were found to persist across gender and housing types. Prentice and Miller (1993) found misperceptions of peers' attitudinal norms about drinking among students at an Ivy League university. In research that included faculty and staff as well as students on two southwestern university campuses, heavy drinking and drunk driving in the university population as a whole was substantially overestimated compared with actual rates at both schools (Agostinelli and Miller, 1994). Among students attending a university in the Northwest, Page et al. (1999) found that both males and females overestimated the extent of heavy episodic drinking among their peers of the same and opposite gender.

In research conducted on nationwide data from institutions that have participated in the Core Institute Survey on Alcohol and Drugs (Perkins et al., 1999), it was found that at every one of the 100 colleges and universities in the study, most students perceived much more frequent use of alcohol among their peers than actually occurred at their school. This pattern was the result at each particular institution, regardless of the actual norm for the frequency of use. Thus exaggerated misperceptions of alcohol norms are commonly entrenched at schools across the country, in private and public schools of every size and in every region. These patterns of exaggerated perceptions have been found to appear consistently for all other types of drugs too in substance use research (Perkins, 1994; Perkins et al., 1999). Misperceived norms also exist across subpopulations categorized by gender, ethnic group, residential circumstances and Greek affiliation (see Baer and Carney, 1993; Baer et al., 1991; Borsari and Carey, 1999). They may have different levels of actual use but the misperceptions are widely held across most subpopulations in college. Furthermore, these misperceived norms are not unique to college populations; they can also be found in high school contexts (Beck and Treiman, 1996) and in statewide populations of young adults (Linkenbach, 1999).

Theoretical explanation of the causes of these misperceptions (Perkins, 1997) points to phenomena operating at the psychological, social and cultural levels. At a cognitive

level, psychologists have demonstrated that humans are prone to error in overly attributing actions of other people to their dispositions rather than to environmental contexts in which the behaviors occur because the observers lack the information to make accurate attributions about the cause of other people's behavior. Thus, when students observe a peer in an intoxicated state, they tend to attribute the drunken state to that student's typical lifestyle or disposition in order to account for it if the behavior cannot be contextualized as an unfortunate and atypical occurrence. Without the information needed to contextualize occasional problem drinking behavior by other students, this behavior becomes perceived as more common or typical of them than is actually the case as the observer's mind continually attempts to account for peer behavior. Added to this phenomenon is the fact that public intoxicated behavior is often quite vivid as observed by others in social situations. When a student does get drunk, it may be quite entertaining as he or she acts out in a comical way. It may be sad or disgusting when a student gets sick or vomits in front of other students or passes out in a public setting. It may be frightening if a student belligerently attacks others in an intoxicated state. Yet no matter whether the affective experience is positive or negative for the observer, these occurrences involving student drinking are easily remembered and frequently talked about in subsequent social conversations with peers. Students, like most people, do not undertake an assessment to get an accurate accounting of all behavior in social situations. They simply retain what is most memorable and give it disproportionate weight in subsequent estimates of what is typical and in social conversations, which further exaggerate the perceived drinking norm among students. Lastly, at the cultural level, the popular entertainment media contribute heavily to the production and reinforcement of misperceptions through films, television shows and advertisements that disproportionately and unrealistically emphasize heavy drinking as part of youth culture.

Once established in the minds of most students, these exaggerated perceptions of student drinking norms are likely to have substantial consequences on personal use as students wish to or feel pressured to conform to erroneously perceived expectations of peers (Perkins, 1997). Several studies on college students at large and small schools in various regions support this claim by showing that perceived social norms are significantly correlated with students' personal drinking behavior (Clapp and McDonnell, 2000; Nagoshi, 1999; Page et al., 1999; Perkins and Berkowitz, 1986; Perkins and Wechsler, 1996; Wood et al., 1992). It is a sociological dictum that if situations are perceived as real, they are real in their consequences; perceptions of reality can ultimately produce behaviors leading to a "self-fulfilling prophecy" (Merton, 1957). Alcohol use and misuse may actually increase as students behave,

at least in part, in accordance with their misperceptions of peer expectations regarding drinking, thus producing at least a partially self-fulfilling prophecy. That is, actual drinking norms are pulled higher by these misperceptions than would otherwise be the case, which, in turn, helps to extend the exaggerated perceptions even more in a vicious cycle. The process is limited only by the fact that a large number of students enter and leave the college community each year.

Furthermore, misperceptions of the norm discourage the more responsible students from publicly expressing opposition to heavy drinking and from intervening in potential situations of peer alcohol misuse (Perkins, 1997). Prentice and Miller (1993) demonstrated that when students with moderate or more conservative attitudes about alcohol use mistakenly believed their position was quite discrepant from the norm, they felt more alienated from the university and student peers. What appears then to be a lack of opposition to heavy drinking further extends and reinforces the misperceived peer norm about what is acceptable behavior.

Thus students with the most permissive personal attitudes and who exhibit the most extreme drinking behavior are bolstered by the misperceptions they (and others) hold and articulate, which make them believe they are in a comfortable, albeit fictitious, majority. In contrast, students who are at the highest risk in terms of their own permissive attitudes and yet happen to have a more moderate (i.e., more realistic) perception of their peers' norm for alcohol use are in a more cognitively dissonant circumstance, which makes it more difficult for them to act on their attitudes and drink heavily (Perkins and Berkowitz, 1986). Perkins and Wechsler's (1996) research based on nationwide data from 17,592 students attending 140 institutions found that, even after controlling for the actual norm on the student's campus and his or her personal attitude, differing personal perceptions of the local campus drinking culture as more or less permissive had a significant impact on students' own use and drinking problems. Moreover, the effect of these perceptions was strongest in accentuating or constraining alcohol misuse by those students with the most permissive personal attitudes. This study, furthermore, demonstrated a stronger influence of perceived norms in comparison with sociodemographic and contextual variables that are often found to correlate with alcohol misuse such as gender, race, fraternity/sorority membership and type of campus housing.

Some groups such as fraternities and sororities may actually have a stake in maintaining a normative perception among students of high alcohol use as it may also connect to other perceived norms and beliefs about social group popularity (Larimer et al., 1997). RAs, although typically moderate or responsible in their own drinking behavior, have been found to hold misperceptions of student norms that were distorted as much in an exaggerated direction as those of student peers (Berkowitz and Perkins, 1986). Thus

RAs as “carriers” of these misperceived peer norms may have a negative impact on new students as the RAs pass along in conversation the common notions about student drinking, thereby inadvertently encouraging moderate students to drink more and giving erroneous normative license to students with the most permissive personal dispositions about drinking. Likewise, faculty and staff who are also “carriers” of the misperception may inadvertently add to the problem by reinforcing students’ notions that most students drink much more heavily than is the case as they communicate this misperception in casual conversation or in traditional prevention programs on campus.

Norms Research Implications for Prevention Programs

Reducing student misperceptions of peer norms

Given the pervasiveness of exaggerated perceptions of peer drinking norms and the research suggesting that these misperceptions facilitate alcohol misuse, some prevention researchers and program specialists have introduced a variety of interventions to reduce these misperceptions. The strategy of communicating actual student norms to dispel myths, increasingly referred to as the “social norms approach,” has begun to receive significant attention for its simplicity, cost efficiency and effect (Berkowitz, 1997; Haines, 1996; Johannessen et al., 1999; Perkins, 1997). The basic idea is simply to communicate the truth about peer norms in terms of what the majority of students actually think and do concerning alcohol consumption. Thus the message to students is a positive one—that the norm is one of safety, responsibility and moderation because that is what the majority of students think and do in most student populations. In some instances, the actual norms in terms of average consumption levels or the predominant attitude about drinking on a campus or within a particular student constituency may be far from ideal, but the actual norms are substantially less problematic than what students believe the norms to be. Therefore, communicating the truth about student norms becomes a constraining intervention on problem drinking no matter what the actual norms are. As students begin to adhere to more accurately perceived norms that are relatively moderate, the actual norms become even more moderate as the process of misperception leading to misuse is reversed.

Interventions can publicize data about actual drinking norms in orientation programs, student newspaper ads and articles, radio programs, lectures, campus poster campaigns and other public venues to address high-risk students’ misperceptions as well as those of students at large (Berkowitz and Perkins, 1987; Haines, 1996; Johannessen et al., 1999; Perkins, 1997; Perkins and Craig, forthcoming). Such publicity can help reduce students’ false impressions about alcohol and other drug use. Disseminating

information as widely as possible is especially important because, as previously noted, all types of students may be “carriers” of the misperceptions even if they themselves do not misuse alcohol. Although most prevention programs on campuses have not employed electronic media to supplement interpersonal and print communications (Werch et al., 1996), the opportunities for using such media with a social norms approach are clear (Perkins and Craig, forthcoming).

Initial results of program interventions that have adopted an intensive social norms approach are quite promising. Several institutions with programs that have intensively and persistently communicated accurate norms about healthy majorities of students have experienced significant reductions in high-risk or heavy episodic drinking rates (as much as 20% declines) in relatively short time periods (see Berkowitz, 1997; Haines, 1996, 1998; Haines and Spear, 1996; Jeffrey, 2000; Johannessen et al., 1999; Perkins and Craig, forthcoming). Taken together, these findings provide remarkably strong support for the potential impact of the social norms approach. Although any of the case studies in this literature might be challenged or criticized as imperfect on some methodological criterion, each study with different strengths and weaknesses conducted at different times produces remarkably similar results with sizable declines in high-risk drinking (DeJong and Linkenbach, 1999). These findings revealing reductions in heavy drinking from schools employing a social norms approach are further strengthened by the fact that the same or similar measures of high-risk drinking among college students nationwide have not shown any decline over the last decade (Johnston et al., 1997; Wechsler et al., 2000). Moreover, the positive impact of social norms interventions is noted at demographically diverse institutions from across the country. The findings of these programs are also particularly valuable because they are longitudinal studies using equivalent pre- and postintervention measures in student samples, some with multiple follow-ups across several years.

Programs can also target specific problem-prone groups (e.g., first-year students, fraternity or sorority members, particular residential units, athletes or individuals identified as high-risk or heavy drinkers) for special attention. Workshops or brief counseling interventions can help these students confront their own misperceptions of peer use and can facilitate discussion about student norms identified in group assessments and campus-wide studies (Barnett et al., 1996; Berkowitz and Perkins, 1987; Borsari and Carey, 2000; Steffian, 1999). Marlatt et al. (1995), for example, targeted entire fraternities and sororities for programming and included accurate group feedback regarding drinking practices within a larger framework of motivational enhancement strategies. Using a sample of college students identified as heavy drinkers at a southwestern university, Agostinelli et al. (1995) reported an experiment that randomly assigned these students to two groups, one receiving

mail feedback about personal use compared with actual population norms and a control group receiving no feedback. The results of this experiment demonstrated a significant reduction in alcohol consumption in the group that received normative feedback and no change in the control group after 6 weeks. In another applied experiment at an eastern university (Schroeder and Prentice, 1998), first-year students were invited to participate in alcohol education discussions in small residential groupings as part of their initial orientation program. Half of the groups that agreed to participate were randomly assigned to a presentation of data revealing students' misperceptions of their peers' comfort with campus drinking practices, while the other (control) group participated in a discussion of how to make responsible personal drinking decisions. Students in the experimental groups that had been introduced to actual and perceived norms at the beginning of the year consumed significantly less alcohol on a weekly basis in the follow-up data collected 4 to 6 months later.

Prospects for other normative influences

Research to date does not suggest that families will play a large role as normative forces beyond what they have instilled in students through modeling drinking behavior and through religious traditions handed down to offspring. Although they may be able to take a more active role in organizations or in punitive control of sons or daughters who have been identified as a problem, it does not appear likely that they will be able to significantly change student behavior by simply continuing to articulate or make more evident their family norms about drinking. Anecdotal comment and news reports have appeared in recent years on the normative influences of graduates, including discussions of the potential negative impact of drunken behavior among alumni and alumnae at athletic events and reunion weekends and the potential positive effects of graduate norms in communicating opposition to alcohol misuse. The value of graduate norms in prevention initiatives remains an open question, however, without any research evidence.

Research about faculty contributions to prevention is quite limited, but what evidence exists clearly suggests the need to move beyond specialized teaching about pharmacological effects and risks of drinking if faculty are to make a contribution. Given the extent of interaction many faculty have with students at some schools, the opportunity exists for faculty to exert a stronger collective voice about their norms and standards regarding drinking. This may take place by raising issues of social values and concerns about consumption and by highlighting positive normative values that already exist among students and faculty both in a variety of course contexts and in informal interaction (Leavy and Dunlosky, 1989).

RAs as a normative influence exist in an inherent position of role conflict as they simultaneously play the part of friend, counselor and older sibling to new students as well as official institutional representative in living environments. Limited research suggests that they personally model reasonable behavior and informally negotiate compromises of drinking violations on the part of residents, if drinking is done with discretion to minimize problems with relationships both inside and outside the residence. The potential for improving prevention through RAs from a normative vantage point may lie in two areas related to misperceived norms. First, RAs can be trained not to be "carriers" of the misperception by talking about accurate norms rather than false stereotypes with new students. Second, they can work with residents to identify the actual levels of student support for residential policies regarding alcohol because the residence hall community is likely to perceive that there is less support for policies than is actually the case. By raising student consciousness of the actual normative support that does exist for limitations on drinking, policies may be easier to enforce. If RAs and student residents can more accurately perceive less opposition to drinking regulations than they initially thought, then both RAs and student residents can more easily demand adherence to the policies. Then, strengthened by a growing realization of support for policies that promote healthy environments, students and RAs, along with administrators, can more effectively call for further policy reforms on campus (DeJong and Linkenbach, 1999).

To conclude, there is significant potential for engaging norms to serve in prevention efforts to reduce problem drinking among students. Work on correcting misperceived student norms to constrain problem drinkers and empower responsible students, in particular, holds great promise based on theory and research to date. Although the normative power of constituencies other than student peers appears to be more limited, much more research is needed to explore these domains and suggest ways in which positive social norms provided by faculty, graduates and residence life staff can be more salient in students' lives.

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