A Social Ecology Theory of Alcohol and Drug Use Prevention among College and University Students

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Introduction

This paper presents a social ecology theory of alcohol and drug use prevention; its goal is to establish the relationship of naturally existing social structures to problems of drug and alcohol use among college students. Previous researchers have sketched out a social ecology theory (Berkowitz & Perkins, 1986; Perkins & Berkowitz, 1986), but their work lacks the breadth, depth, and definition needed for robust theoretical application. The following discussion offers a model that college and university personnel might use as they develop strategies to combat substance abuse on campus.

The fundamentals of social ecology

Programs to prevent substance abuse inherently rest on certain assumptions about why people use alcohol and other drugs. Strategies for prevention, in turn, are based on these assumptions. To date, most prevention efforts have focused on changing the traits and behaviors of individuals, with heavy emphasis on their personalities, their backgrounds, or their ability to respond to their environment. Thus, some educational programs teach individuals about the dangers of substance use in order to promote fear of those dangers. Others teach them skills for dealing with inter- and intra-personal social influences (such as stress and peer pressure). Still others emphasize the improvement of personal qualities, such as self-esteem, that help people function in a complex world. These education efforts are based on theories that locate the causes of substance abuse primarily within the individual. Even in cases where the role of the social environment is given prominence, the responsibility for action is placed on the individual.

Social ecology theories begin with the premise that these assumptions are inherently false. Such theories postulate that instead of looking for causes within the individual, or even in the individual's way of interacting socially, we should focus on the social system itself and how that system affects individuals. Clearly, some causes of substance abuse lie within the individual, and these should not be ignored. Social ecology theory, however, seeks causes primarily in the social environment. Consequently, efforts to modify use must focus on changing the person's environment rather than the person. For the

central tenet of social ecology is that individual behaviors are mainly the result of socialization; to change the behavior, we must change the social institutions that shape it.

Examples of social movements that include changing social ecologies

During the 1960s and 1970s, three social movements had a tremendous impact on the social ecology of the United States: the feminist movement, the peace movement (in opposition to the war in Vietnam), and the civil rights movement. An underlying assumption of all three movements was that major changes were necessary in the social system itself. Individual beliefs and actions were surely affected by these movements, but the changes they introduced were essentially systemic.

These movements, while clearly powerful in effect, accomplished their ends through both formal and informal means. There were formal requests to Congress (the Equal Rights Amendment, Congressional oversight for the war budget, and the Civil Rights Act). However, these requests were not isolated from the informal activities of others committed to social change. Newspapers ran editorials, magazines were devoted to the cause *(Cosmopolitan, Rolling Stone, Ebony),* marchers filled the streets, the media covered events, and folk songs proclaimed the objectives at hand *(I am woman hear me roar, All we are saying is give peace a chance, We shall overcome).*

In debates, activists raised issues that, at least for the preceding generation, had been minor issues if they had been issues at all. Value-laden labels describing opponents became part of the common vocabulary *(male chauvinist pig, war monger, racist pig).* Symbols abounded *(the burning bra, the peace sign, the clenched fist).* Conservatives, those who aligned themselves with the status quo, were attacked in public and in private. Newly formed counter-culture organizations often went underground to accomplish their goals.

In the end, these movements made significant progress toward achieving their goals, introducing structural and substantive changes. Moreover, each movement altered the normative fabric of American life. Congress passed laws (though the ERA was never ratified), and the courts acted as well. Abortion was legalized. Row v. Wade became the law of the land.

Television shows now feature women and African Americans in new roles. The Vietnam War ended but left a legacy that, even now, shapes our nation's military options; the essential strategy that guided the war with Iraq was to avoid another Vietnam. African American citizens can now eat at any lunch counter, join any social organization, and enroll at any college in the country. The feminist, anti-war, and civil rights movements have by no means accomplished all of their goals, but these movements have nevertheless transformed our culture.

The social ecology of substance abuse

When applied to alcohol and drug abuse, social ecology theory shifts attention to a different set of variables from those that most program developers typically deal with. Of particular interest from this theoretical perspective are variables like culture, traditions, rituals, inter-personal relationships (including power relationships), group value systems, and social norms. Of lesser interest are variables such as personal belief, perception of risk, and intra-personal skills.

Since the preponderance of research on drug and alcohol use has focused on individual-level variables, the evidence for social ecological processes is partly conjectural at this point. Nonetheless, there is evidence that social ecological processes are at work. The strongest predictors of alcohol and drug abuse among young people are social. Among adolescents and college-age adults, for example, the friendship group dominates as the best predictor of substance use (other than previous drug use). Those who take drugs usually do so in a social context of one kind or another. From such data, we may conclude that individuals use drugs primarily as a function of the social group with whom they interact. This principle applies directly to casual and experimental use and indirectly to addictive use of substances. Obviously, at some point in an addict's history, physiological and psychological effects drive use. Even for addicts, however, we can postulate that the social ecology continues to play an important role.

It is specifically within the social group, then, that we can expect to find the causes of alcohol and drug use. Groups that have traditionally had a powerful influence on the behavior of their members include religious organizations, fraternities and sororities, athletic associations, professional societies, and political activist organizations. For some of these groups, such as fraternities and sororities, anecdotal evidence strongly suggests that traditions, rituals, and norms facilitate drug and alcohol use. Given the pervasive influence of various social groups on the lives of college students, it makes sense to adopt basic principles from social ecology theory in designing programs to prevent substance abuse. If we hope to change a particular behavior (e.g., excessive use of alcohol), we must change the social context—the institution or group—that shapes the behavior. In other words, we must address the effects of social influence.

According to the social influence model, substance use and misuse are functions of an individual's interaction with the immediate peer group. In this model, two mechanisms mediate substance use: normative beliefs and social exposure to alcohol and drugs.

Normative Beliefs

The term "normative belief" refers to an individual's perceptions about how much his or her close friends use alcohol and drugs and approve of such use.

A person who sees the peer group as favorably inclined toward substance use is typically motivated to use alcohol and drugs as a means of gaining social acceptance (Downs, 1987). On the other hand, those who belong to groups not disposed toward substance use will most likely be inhibited from using alcohol and drugs because of implied and real sanctions proscribing use (Hirschi, 1969; Johnson, 1986).

Significant research verifies the role of normative beliefs in triggering the onset of substance use. Most prominently, Ajzen and Fishbein argue that normative beliefs figure in predicting individual intentions and behavior (Azjen & Fishbein, 1973; Fishbein & Ajzen, 1975). Their theory, briefly summarized, predicts that intentions to behave are a linear combination of personal attitudes and social normative beliefs, the weights given to each being an empirically derived relationship defined by the weights from regression equations.

This theory has recently been applied in predicting the use of alcohol and other substances (Chassin, 1984; Chassin et al., 1986; Grube & Morgan, unpublished; Grube, Morgan, & McGree, 1986; Morgan & Grube, 1989a). Normative beliefs (compared to personal attitudes) generally predominate as predictors of use among young people. As individuals grow older, normative influences become stronger predictors of use until about age sixteen (Morgan & Grube, 1989a), after which the relative strength of normative beliefs versus personal attitudes gradually diminishes. However, even during late adolescence and young adulthood, normative beliefs remain strong predictors of alcohol and substance use. Normative beliefs about friends are stronger predictors of substance use than are students' normative beliefs about their peers in general (Downs, 1987; Morgan & Grube, 1989b).

Individuals often misjudge the extent to which peers consume alcohol and other substances and approve of such consumption. Their estimates of substance use are much higher than warranted by known data (Hansen, Graham, Wolkenstein, Lundy, Pearson, Flay, & Johnson, 1988; Perkins & Berkowitz, 1986). This overestimation occurs even when actual rates of use are relatively high, e.g., at or above 50% prevalence. Particularly important for developing prevention programs is the fact that individuals misjudge even their close friends' behavior (Graham, Marks, & Hansen, 1991).

Correcting such misperceptions is potentially a powerful strategy for changing alcohol and drug use among young people. This researcher, for example, developed a program to manipulate individual normative beliefs about substance use among young adolescents (Hansen, Graham, Wolkenstein, & Rohrbach, 1991). This program has reduced overall alcohol and marijuana consumption of eighth graders who participated in the program during the seventh grades (Hansen & Graham, 1991). In addition to changing individuals' normative beliefs, it may also be possible to do likewise within groups. Norm-referent groups and peer opinion leaders may be appropriately targeted to establish a conservative use norm as part of the group identity.

Social Exposure to Alcohol and Drugs

Another mechanism that influences substance use is social exposure to alcohol and drugs—the extent to which individuals (a) receive offers from peers to drink alcohol and (b) find themselves in situations where alcohol and drugs are being used by peers. Individuals who receive more offers and who are frequently in social settings where alcohol and drugs are available have increased risk of substance use.

The behavior of others has long been known to induce conformity (Asch, 1951; Deutsch & Gerard, 1955; Kiesler & Kiesler, 1969). It has been argued that one reason for accepting offers to drink alcohol and use drugs is a lack of self-efficacy to refuse offers (Hansen et al., 1988). Many school-based prevention programs have addressed this issue, training students to increase their skill and self-efficacy in refusing offers. While there are generally promising results from these studies, particularly for tobacco prevention (Flay, 1985), alcohol and drug prevention efforts have not been uniformly successful (Botvin, Baker, Botvin, Filazzola, & Millman, 1984; Duryea, Mohr, Newman, Martin, & Egwaoje, 1984; Duryea, 1983; Duryea & Okwumabua, 1988; Pentz et al., 1989; Perry et al., in press). One program has successfully increased young adolescents' skills for refusing alcohol and drugs (Graham, Rohrbach, Hansen, Flay, & Johnson, 1989; Hansen, Graham, Wolkenstein, & Rohrbach, 1991; Rohrbach, Graham, Hansen, Flay, & Johnson, 1987). However, self-efficacy was not improved by this method. Furthermore, training to refuse offers had no independent effect on reducing the onset of alcohol use (Hansen & Graham, 1991). On the other hand, the norm setting program did improve self-efficacy and reduced offers to use alcohol and other substances, suggesting that rather than skill training, altering normative beliefs may effectively reduce the social availability of alcohol and drugs.

Researchers have not systematically investigated other methods for altering availability. However, various ways of curbing availability are possible. Peer opinion leaders, who clearly contribute to the planning of social functions at which drugs and alcohol may be available, could be targeted for programmatic action.

Social ecology units and their influence on substance abuse

Two types of social units are relevant to college and university students. The first type is the formal group or institution. Classes, which are a major feature of the social ecology of every college and university, fall into this category. In addition to classes, formal campus institutions include the administration, the faculty, student government, student services (such as the student health service), the student newspaper, and organizations such as fraternities, sororities, religious fellowships, athletic teams, special interest clubs, and dormito-

ries. Formal groups are characterized by such features as official rules and operating procedures, a name, a list of members or affiliates, a leadership hierarchy, a defined budget, a plan for self-perpetuation, and public or semi-public recognition.

The second type of social unit is the informal group. At their most extreme, such groups consist of friendships and acquaintances. The organizational links that hold these social groups together are never written down, and, for the outsider, difficult to specify. Nonetheless, it is clear that all friendships have at an informal level many of the qualities that formal institutions do. There are implicit rules for making decisions, expectations about procedures, understandings about membership (although these are usually more flexible and less enduring than for formal groups), and an informal leadership hierarchy (which may change periodically). Such groups rarely have a name, a budget, a plan for continuation, or public recognition.

Individuals may and, in fact, probably do belong to formal and informal groups that overlap. Friendships emerge from formal relationships; formal relationships may emerge from informal acquaintances. Like minded friends often seek membership in the same fraternity or sorority. By college age, then, some individuals are involved in networks that include formal organizations as well as a large number of informal relationships.

The Potential of Social Units to Affect Substance Use

In evaluating social units—formal and informal—we should consider the potential each has for influencing the behavior of its members. I surveyed a sample of my employees (n=7) to determine the potential of sixteen such units for socializing students. The survey asked respondents (all of whom had attended college) to rank a random list of social institutions, thereby indicating the relative influence of each institution in socializing students. The results from this survey (see Table 1) are non-scientific but nonetheless telling. With relatively good inter-rater reliability (r=.66), respondents saw certain institutions as having high potential for influence: dormitories, roommates, friends, and acquaintances. Parties were the next most likely influence, followed by cafes, night spots and stores. Classes and classmates, fraternities and sororities, and special interest clubs and groups also ranked high. Institutions least likely to influence socialization were the student health service, the administration, student government, and the faculty. Ironically, these latter social units are the very ones we typically count on to change norms.

In the following pages, each unit will be analyzed for its potential to alter the social ecology of campuses and to influence the socialization of students regarding alcohol and drug use. Two general assumptions will guide this analysis. First, social units in which individuals spend the most time will influence them most; greater time equals greater potential to transfer existing normative standards. Second, social units that foster greater bonding (identification with members) will be more likely to cause the adoption of group norms.

1. Friends and acquaintances. Friends and acquaintances are the strongest influence in all social groups, including student groups. Friendships are the basis of socializing and socialization.The extensive literature on friendship formation shows that attitudes among friends are relatively convergent. When attitudinal disagreements do occur, friends either suppress them or dissolve the friendship (Heider balance theory). It is not clear how frequently friends state or openly discuss their attitudes; frequency may vary considerably from group to group. Male-centered, female-centered, and mixed friendship groups most likely address normative issues differently.

Conversations among friends tend to reinforce existing group norms rather than explore new ones. Norms about alcohol, for example, are generally discussed as secondary or incidental concerns; such norms may emerge more as a result of story-telling and joking than serious discussion. In discussing substance use, friends will probably not work actively to resolve strong attitudinal differences. Rather, they are likely to ignore controversial issues.

Friendships usually have an internal hierarchy in which dominant individuals have influence but not necessarily power. Collegiate friendships are dynamic and diffuse, with students often making new friends and maintaining multiple friendships. When members of a group hold weak opinions

Rank	Social Unit	Average Rank
1	Friends & Acquaintances	1.93
2	Dormitories & Roommates	1.93
3	Parties	5.21
4	Cafes, Night Spots, Stores & Hang Outs	5.71
5	Classes & Classmates	5.93
6	Fraternities & Sororities	6.93
7	Special Interest Clubs & Groups	7.14
8	Campus-Sponsored Special Events	8.36
9	Worksites	9.57
10	Athletic Teams	9.64
11	The Student Newspaper	10.64
12	Religious Fellowships	11.50
13	The Faculty	11.64
14	Student Government	12.79
15	The Administration	13.14
16	Student Health Services	13.93

Lower scores indicate greater potential for social influence.

Table 1. Potential for influence

about a particular issue, a dominant friend can usually influence them to change their attitudes.

Couples who are dating or romantically involved may be the single greatest influence on each other for socialization and the adoption of norms. Often, those involved in such relationships enter a new friendship group; with this change comes pressure to accept practices and beliefs common to the group. Romantic relationships are often fraught with difficulties as the

two partners try to balance their competing norms. For example, one partner and her friends may have different norms for substance use than the other partner and his friends. Such a discrepancy may hamper the development of strong social bonds, either fracturing the relationship or inducing one partner to adopt the norms of the dominant friendship group.

2. Dormitories and roommates. Social relationships in a dormitory are relatively more structured than those among friends and acquaintances, although the set of individuals involved may overlap considerably. Roommates often become friends and, whether close or not, they set up a social ecology that influences socialization in college. Given the communal nature of dormitory life, such socialization is inevitable.

Dormitories often evolve their own cultures. They sometimes have reputations for substance use or for attitudes and behaviors associated with such use (e.g., anti-establishment views, rowdiness). Campus residents often form opinions about individuals based on which dormitory they live in; these opinions circulate and become part of a campus's social ecology.

3. Parties. Parties can be defined almost exclusively in terms of social ecology. Their entire purpose is to bring people together for mutual social enjoyment. As such, parties are an important means of socialization. That is, people learn from party experiences what is and is not acceptable to the group that sponsors or participates in the party. Much of the socialization that accompanies parties may, in fact, occur before or after an event in discussions about dress, interpersonal behavior, social customs, and alcohol and drug use.

Parties can be both formal and informal, with both types serving to socialize college students. Most parties are planned by sponsors to include alcohol use. There are several plausible reasons for this, including campus traditions that create expectations of heavy use. Because of these expectations, alcohol is generally regarded as a means of reducing shyness and heightening social interaction. Some groups associate alcohol with social rituals, such as toasts at wedding banquets and other special events. Finally, at some parties, alcohol is used in social contests. The chug-a-lug, for example, pits contestants against each other in a test of drinking skill.

Along with actual alcohol consumption, college parties often feature much talk about such consumption. Conversations include story telling and jokes that describe adventures with alcohol and drugs, slightly or greatly exaggerated to add humor and appeal. One-upmanship and status building may contribute to this exaggeration.

4. Cafes, cafeterias, night spots, stores, and hang outs. These institutions exist in various forms on and around most college campuses. Insofar as socialization is concerned, they provide settings for unstructured discussion among students. They give friends and acquaintances a chance to explore attitudes about social issues and to transmit information about normal behavior.

These settings also serve as a location for testing competence. Individuals may discuss contemporary issues and campus life. Such interaction is a way for students to demonstrate their ability to navigate social institutions.

Ordering alcoholic beverages (understanding the terminology, having confidence in being served, etc.) may reinforce an image of social competence. For a person of legal age, acquiring alcohol for an under-age friend can confer social status. Since they make significant profit from the sale of alcohol, night spots are often designed intentionally to promote drinking. They benefit from the underlying need to demonstrate social competence, actively promoting consumption through direct marketing (waitresses, waiters, and bartenders) and through various types of advertising. Cafes and cafeterias may offer alcohol, but they generally do so with less overt promotion.

5. Classes and classmates. Although they are the primary reason for colleges and universities to exist, classes have only a moderate impact in the social ecology of most campuses. The reasons for this are several. Classes are, for the most part, temporary; they exist for a quarter or a semester and then disband. At most universities, classes are not tracked. They continually mix and remix students. Further, the objective of most courses is to master a body of material, not to explore current events or issues. To the extent that social issues do become a focus of discussion in class, the potential of that class to influence socialization increases.

On the other hand, classes are an important means of social introduction. Shared course work may initiate friendships and prompt interaction outside of class, especially if classes are based on discussion rather than lecture. Students often get to know each other while talking about homework and tangential issues related to course topics. Those who share majors are more likely to meet and form friendships because of their shared course work.

6. Fraternities and sororities. Fraternities and sororities focus primarily on providing opportunities for socialization. Membership is characterized by intense bonding, fostered in part by standards of selection and initiation that promote a specific group identity. The reputations of fraternities and sororities are perpetuated through this selection process. Alcohol and drug use may become part of a fraternity's or sorority's reputation. To maintain a desired reputation, chapter houses sometimes seek members who exhibit high-risk or rowdy social behavior. Alternatively, houses may foster reputations for political and social competence. However, a reputation for alcohol use may be particularly important for attracting pledges. During rush, veteran members may explicitly or implicitly raise expectations about such use.

Pledges typically go through a period of ridicule or hazing to test their determination to join the group and adopt its norms. This process breaks down individual differences and creates a situation in which survival requires cohesion to the group. Brotherhood and sisterhood imply a willingness to defend the institution actively against outsiders.

Fraternities and sororities help their members develop social skills. They do so partly through informal counseling to promote socialization. Older or more experienced members may counsel newer members about relationships with the opposite-sex, job opportunities, public behavior, and ways to achieve status or enhance social success. Discussions of alcohol and drugs

may be part of this process, including advice about how to obtain and use substances to promote personal status. Members may also counsel each other about using alcohol and drugs to disinhibit members of the opposite sex in preparation for sexual conquest or other forms of social manipulation. Fraternities and sororities may sponsor parties partly to complete the social training of members.

Fraternities and sororities also promote jokes and storytelling, including institutionalized forms of alcohol-and-drug-related mischief. A fraternity or sorority may direct or foster alcohol-related pranks (e.g., spiking punch or inducing over-indulgence among naive members). Various members may develop personal reputations based on alcohol or drug use; their exploits become part of an oral tradition, often repeated with humorous embellishment. Storytelling may encourage other members to participate in risky behavior. Becoming part of house lore is a mark of status conferred partly by the use of alcohol or drugs. Fraternities and sororities have enormous potential for positive norm setting, but a long history of deviance and irresponsibility works as a countervailing force against that potential.

7. Special interest clubs and groups. Special interest clubs and groups place less emphasis than do fraternities and sororities on identity and bonding with the group. These less intense groups, however, give individuals a chance to associate with those who share a particular interest or need for affiliation. And while the potential for socialization in such groups is reduced, it nevertheless remains a factor. For instance, the group may sponsor get-togethers and parties at which alcohol is served. Thus, interest clubs and groups may foster friendships and regular interaction among members. To the extent that they do so, their potential to influence socialization is increased.

8. Campus-sponsored special events. College students usually attend concerts, speeches, and sporting events in the company of friends. To the extent that this is the case, special events become opportunities for socialization and norm setting. In conjunction with such events, students may use or share alcohol and drugs. Campus-wide norms may even develop around a certain event, with students generally believing that they should attend the event drunk. Such norms, spread by casual conversation and storytelling, can evolve into regular social rituals passed down from one generation of students to the next.

The formal nature of campus sponsored events provides for some regulation. The purchase of alcohol, if legally allowed, may be restricted to adults. Or alcohol may be banned entirely. Enforcement then becomes the primary issue, and control of the physical environment, especially in places like bathrooms and parking lots, becomes problematic. The accepted purpose of most special events (entertainment and recreation) is at odds with strict enforcement and this makes the task of control difficult.

9. Worksites. To help pay college expenses, many students work part or full time in settings where other students work. Worksites typically do little that directly promotes the use of substances; indeed, many businesses have adopt-

ed policies to exclude from employment anyone who uses hard drugs (heroin, marijuana, cocaine). Even bars and restaurants that serve alcoholic beverages may severely restrict employees' access to company stocks. As informal settings, however, worksites may foster the development of friendships; thus, the normal socialization that occurs among friends may be observed in worksites.

10. Athletic teams. Athletics is an important part of college life for members of both varsity teams and intramural teams. And most students use campus athletic facilities for physical education courses or for free-time fitness activities. By its very nature, athletics promotes group identity, either with the college (for varsity sports) or with the sponsoring group (for intramurals). The strong emphasis on bonding and esprit de corps make athletics a key institution for socialization.

To the extent that health consciousness is a component of athletics, participants are expected to avoid the risks associated with drugs and alcohol. In practice, however, the socialization of team members may not support this expectation. Chewing tobacco has long been an accepted practice for baseball players, for instance. And alcohol consumption is sometimes tolerated—or even promoted—as consistent with the iron-man image of football players. Further, as part of team building, athletes may celebrate victory or ease the pain of defeat with after-game parties.

Team sports are hierarchical, with the head coach, assistant coaches, team captains, and squad captains all participating in the organizational structure. First-string players enjoy higher status than second-string players, outstanding athletes more status than weaker ones. Seeking status within this hierarchy may involve the use of alcohol and other substances.

Coaches may play a critical role in the development of drug habits. Eager to win the confidence of their players and concerned about players' emotional well-being, coaches sometimes tolerate or promote substance use as a way to build camaraderie. They may also use substances to help players deal with stress, cope with defeat, and celebrate victory. Recruitment efforts may also include promises about access to drugs. While such practices are obviously illegal, there is wide speculation that they are commonplace. Naive recruits may see the use of a substance like cocaine as a high-status reward for performance.

Athletes may even see some dangerous drugs as having health benefits. For instance, the use of anabolic steroids for muscle development has become a focus of national concern. In some cases, the use of such substances is directed, or at least sanctioned, by the leadership hierarchy of an athletic team. If these drugs are part of the team's culture, members may be introduced to them as an ordinary part of the socialization process.

Of course, coaches can also play a role in preventing the onset of substance use and in getting help for athletes who have started to abuse drugs. If group sanctions and personal values are clearly defined, coaches and team leaders can actively watch for and intervene with players. Coaches may also set standards for inclusion in the team leadership hierarchy, promoting play-

ers who are drug- and alcohol-free.

Players, of course, may develop a culture outside the purview of coaches. Senior players may dominate a social hierarchy and impose initiation rites akin to those found in fraternities and sororities. Well established expectations about social behavior may also have a specific place in the culture of team membership. Junior members may feel pressured to prove themselves through risky or adventurous exploits, with alcohol and drug use figuring prominently in such rites of passage. Similar but less dramatic socialization will probably occur on intramural teams. Although team spirit may be a less important factor, socializing after games and practices may encourage alcohol and drug use.

Drug testing is likely to become more and more an issue in inter-collegiate sports. If detection is frequent and sanctions real, testing has great potential to deter individual behavior and to establish appropriate group norms. On the other hand, if individuals can avoid testing or believe that they can mask test results, the establishment of appropriate norms will depend upon other socialization forces.

11. The student newspaper. In American colleges, the student newspaper has periodically served as the social conscience of the student body. Indeed, the campus paper has the potential to help define issues and set agendas for discussion. In practice, most campus newspapers rarely achieve their potential as mechanisms of change. This may be due in part to administrative oversight, which limits the range of possible expression. Censorship may not be obvious, but budgetary pressures and pressures to eliminate political turmoil may subtly steer editors away from controversy. At the same time, some newspaper staff may continue a tradition of apparent independence from the administration and thus resist taking the officially sanctioned position on a given social issue.

Campus newspapers generally play only a minor role in establishing group norms for substance use. They may advertise alcohol and tobacco products, alcohol- and tobacco-sponsored events, and local establishments that sell alcohol. Or they may feature articles and editorials about drug and alcohol use on campus. A review of past issues of the student newspaper at Wake Forest University turned up some advertising about alcohol but no other coverage of substance use. Of course, surveys of other campus papers may not reveal the same pattern.

12. Religious fellowships. Religious fellowships generally play a limited role in student socialization. That is probably due to several factors, including the limited presence of fellowships on campus and a low rate of participation among students. At state-sponsored campuses, religious organizations may have low status or may lack official recognition. On the other hand, private colleges with strong religious affiliations may encourage religious activity and instruction as part of their social tradition. Fellowships may also emerge from student-generated interests. Overall, participation in religious fellowships is likely to ebb and flow, as it has during the previous three decades, in response

to cultural valuation of religion.

Religious affiliation can be a very effective means of introducing social and moral values to those who participate. However, religious groups differ widely in the degree to which they address lifestyle issues in general and alcohol and drug abuse in particular. As a result, some fellowships may be very effective in promoting drug- and alcohol-free lifestyles, whereas others may have a limited effect.

13. The faculty. Outside of class, contact between undergraduates and their teachers is limited; thus faculty have little influence on student norms for substance use. Indeed, most faculty have minimal interest in the socialization or lifestyles of students, and the barriers between students and their teachers, such as limited times for office hours, may send students a message of disinterest. Furthermore, students themselves may have little interest in non-academic contact with faculty.

In general, therefore, the potential of faculty to influence alcohol and drug use is slight. Some individual faculty, however, may influence their students in diverse and specific ways. For example, a highly visible anti-establishment faculty member admired by students might help foster norms for liberal alcohol and drug use. On the other hand, students are sometimes subjects of psychology experiments and sociological studies. Faculty who use students as participants in well-crafted intervention projects may have an opportunity to affect their socialization significantly.

14. Student government. At most college campuses, the potential for elected student leaders to effect social change is probably greater than what is typically realized in practice. The influence of student government is limited for several reasons. Those who hold office sometimes regard their functions as largely ceremonial. Actual powers are limited and duties circumscribed. Those who seek office may be interested predominantly in social status and popularity rather than in social change. Furthermore, even with an agenda for change, many student leaders lack the necessary vision and skill to alter the campus culture in significant ways. Participants are simply unschooled and unpracticed when it comes to changing policies and procedures at academic institutions.

As an institution, then, student government has limited capacity to influence the socialization of students. However, as individuals, officers may have significant potential. They are likely to belong to, and have a strong voice in, numerous social organizations on campus. Thus, student government may become an indirect vehicle for the expression of social norms about many issues, including alcohol and drug use.

15. The administration. College administrators have little personal interaction with students. However, their decisions about policies and funding (such as funding for campus police) do directly affect students in a broad way. Virtually all institutions have regulations—issued under the direction of chief administrators—that address alcohol and drug use. These rules influence other social ecology units on campus, units that more directly establish and

reinforce norms among students.

On an informal level, administrators may have profound influence on a few individuals, primarily those in student government. Administrators are unlikely, however, to communicate messages about alcohol and drug use directly to these students. Indirectly, student leaders may observe indicators (the presence of alcohol at administration-sponsored events, etc.) that reveal normative expectations about personal use.

16. Student health services. On many campuses, the student health service may be the primary agency responsible for alcohol and drug problems. Ironically, this institution apparently has little influence on the social ecology of the campus; students regard the student health service as the provider of a limited number of specific tasks. Some of these tasks relate directly to alcohol and drug use (e.g., diagnosing and referring alcoholic or drug-dependent students or treating injuries that result form substance use). In dealing with such cases, the health service sees a small number of students and spends little time with them. The power to influence the socialization of students is thus beyond the purview of the health service.

Personnel from the student health service may be asked to provide information about substance use at orientation or in specific classes. In most cases, however, this information will emphasize facts about substance use and its consequences, not normative beliefs. However, the health service could shift the emphasis of its presentations, designing them specifically to help set or alter norms.

Social Ecology Strategies for Changing Substance Use

Social ecology theory suggests that the more profoundly a social unit affects interaction among students, the more likely it will be to promote or discourage alcohol and drug use. The list of social units given above shows the relative influence each has on student socialization. A major challenge facing those responsible for altering substance use is the fact that those units most likely to influence students are also the ones least amenable to direct programming. A social ecological model postulates that informal rules (norms) about alcohol and drug use, rather than formal ones (policies), most profoundly influence group behavior.

Interventions based on a social ecology model aim to reinforce conservative norms within a given social unit. Thus in settings where expectations for use are low and intolerance of substance abuse is high, the best tactic is to strengthen existing norms. In high-use settings, on the other hand, a more aggressive program is necessary, one designed to alter normative expectations.

1. Friends and acquaintances. Friends and acquaintances may be an optimal group to target for behavior change—but a very difficult one to reach in a formal way. Friendships are often ill defined and in flux. New relationships constantly take shape and old ones fade away. Even though friends do not interact in a standardized way, changing the attitudes of a dominant individual may lead to a change in attitude among that person's friends and acquain-

tances (e.g., more conservative norms for substance use). Formal programming to change key individuals within friendship groups has not been tried specifically. However, there is evidence that peers can act as change agents for improving behavior.

2. Dormitories and roommates. Dormitories have a relatively high degree of formal structure. The stability of these social units and the presence of residence advisors make it possible to alter their normative climate. Colleges should select residence advisors who are personally intolerant of excessive alcohol and drug use. In making such a selection, however, they must also seek advisors who are socially aware and friendly enough to earn the respect and confidence of residents.

Residence advisors should be trained to assess students' normative beliefs, to facilitate interaction, to correct erroneous perceptions of norms, and to deal successfully with violations of dormitory policies about alcohol and drug use. Training should particularly emphasize two skills: (1) using personal influence to establish conservative norms within the residence hall and (2) using appropriate methods to handle students who have problems.

3. Parties. Designers of intervention programs face serious challenges in finding methods to reduce or eliminate substance use at parties. Nevertheless, because most parties are planned events, it is possible to influence behavior if sponsors are identified and appropriately groomed in advance. In particular, it may be possible to shift party goers from heavy use to moderate use.

Students who routinely plan parties (e.g., representative of fraternities or sororities) may be willing to participate in training about alternatives to traditional "drinking" parties. Trainers should spell out the ramifications (legal or otherwise) of serving alcohol to minors and of using illegal drugs. Trainees should discuss actual consequences of substance use, not merely hypothetical ones. It might also help to present local survey data showing conservative personal beliefs and normative preferences about alcohol and drugs among likely party goers. Party sponsors should also be taught to identify and help those who overindulge. And they should learn to handle risky situations involving substance use (driving and violence).

4. Cafes, cafeterias, night spots, and stores. Because these institutions are open and semi-public, they may offer campus personnel relatively easy access to at-risk populations. However, interventions may have to be structured creatively in order to promote participation. Gaining the support of owners and operators has traditionally been a major barrier to reaching students in these kinds of establishments. Servers can be invited (or, if possible, required by local ordinance) to participate in training to help them deal with intoxicated clients. Campus groups may also promote zoning ordinances to restrict the number of liquor licenses in a certain geographic area, thereby reducing access to alcohol.

5. Classes and classmates. Most courses do not lend themselves to prevention activities. There are several notable exceptions, however. Some courses,

for instance, specifically address substance use and related issues as academic subjects. Faculty teaching such courses may want to include material about substance abuse. Whether this material has the potential to change the campus social ecology is an open question. Typically, information about substance abuse emphasizes predictors and consequences of individual use, not predictors and consequences at a sociological level. Even in classes centered on substance abuse, social pressure not to use substances is rarely mobilized.

A second exception is honors courses, in which students are likely to be tracked—or at least know each other from previous classes or activities. Furthermore, such classes usually engage students intensely and may bring current events and issues into focus. In this sort of setting, substance use may become a topic of discussion. A major benefit of mobilizing honors students is the potential for having the best and the brightest allied with the anti-drug movement. Honors students tend to have strong social influence on campus and often fill positions of leadership in fraternities and sororities. As participants in student government, they are outspoken and articulate. And among their friends they are respected and followed. These are obviously overgeneralizations, and individual honors students will not meet all of these expectations. However, on the whole, their potential is well worth cultivating.

6. Fraternities and sororities. Nearly all campuses allow fraternities and sororities to operate only with administrative approval. Furthermore, these groups traditionally report to some sort of panhellenic organization, which provides a mechanism for intervention. However, since houses highly prize their independence, coercive tactics are likely to have less impact than strategies that invite cooperation. Administrators can encourage houses to sponsor alcohol and drug-free events for members. As noted above, fraternity and sorority leaders who plan parties may be willing to learn ways to moderate alcohol use at social events. Additionally, houses might want to rethink longstanding images and traditions that promote substance abuse. House customs are sometimes out of touch with the actual preferences of current members. Alternative ways to achieve a desired image (toughness, sophistication, etc.) can also be explored. At a minimum, fraternities and sororities should foster understanding and respect for the wishes of non-drinkers and non-drug users.

Those charged with developing intervention programs can assist fraternities and sororities in learning to identify and help members with substance abuse problems. House leaders may be willing to attend workshops that explore strategies for promoting non-use or reduced-use within the group. Such training can lead to more conservative normative expectations. The leadership may even be asked to glamorize drug-free pranks as a relatively safe way for the group to maintain a desired reputation for high-risk exploits.

7. Special interest clubs and groups. To the extent that such groups are formal and recognized, intervention may be possible. Unfortunately, these groups usually are informal, making intervention difficult. Planners should anticipate difficulty gaining access to special interest clubs and groups; they

may want to approach opinion leaders identified in other contexts. These leaders can be trained to understand and respond to inaccurate normative expectations expressed by group members.

8. Campus-sponsored special events. Special events are usually held in locations governed by formal rules for alcohol and drug use. Unfortunately, these formal means of control, because they are so externally directed, may result in confrontations and emotional reactions. Planners should consider alternative ways to promote conservative alcohol and drug-use norms. Legal enforcement may help suppress consumption on site, but in many cases, drug use will occur before the event in a setting beyond the control of security personnel.

Those who supervise special events should plan to monitor them carefully, using surveys to sample student opinion about the availability of alcohol and drugs. These surveys can identify norms for substance use and help supervisors develop appropriate plans for deterrence. A low norm should be publicized to enhance an event's reputation. If the norm is high, enforcement procedures might help lower it. Any changes in violation rates as well as shifting expectations among attendees should be reported to promote a new image for the event.

Inasmuch as enforcement is unavoidable, policies should be stated clearly and posted in obvious places. Alcohol sales can be eliminated or strictly monitored. Particularly important points of enforcement are entrances and restrooms. Security personnel should deal directly with any rowdy behavior that results from alcohol or drug use. Policies that prohibit leaving and returning to events may further strengthen the control of substance use on site. Those charged with supervising events should have adequate training and resources to enforce policies.

9. Worksites. Worksites that employ college students should be identified and targeted for intervention. Employers can be encouraged to adopt hiring policies that screen for substance abuse and to use application forms that clearly state zero-tolerance policies for drinking and drug use on the job. Employee assistance programs are increasingly being adopted as effective strategies for detection and referral of substance abuse problems.

10. Athletic teams. Coaches and team captains should be trained in methods for establishing and reinforcing conservative normative expectations among team members. Specifically, coaches can be advised to state explicitly that drug and alcohol use will not be tolerated in conjunction with training regimens. Nonsporting activities, such as awards banquets and parties, should be planned with alcohol and drug use prohibited. And coaches should be instructed about symptoms of drug use and be made aware of referral resources.

11. The student newspaper. Student newspapers can set agendas for public debate about alcohol and drug use, identifying issues and airing opposing views. The focus should be on fostering discussion about controversial topics. Potential topics may include the suitability of alcohol advertising for campus events and the acceptability of drug use as a rite of passage. The student

paper can also be a vehicle for reporting survey results about alcohol and drug issues. Publicizing lower-than-expected rates of consumption can help correct students' inflated perceptions about use.

12. Religious fellowships. Fellowships can be encouraged to discuss religious beliefs or teachings about alcohol and drug abuse. Dilemmas about tolerance and hypocrisy may become the focus of such discussions. Since religious individuals tend to have low use, surveys of members may be undertaken and reported to the group as a way to correct any normative misperceptions. Fellowships may be actively engaged to assist with prevention and intervention efforts.

13. The faculty. Faculty can be encouraged to assign small research projects that explore normative beliefs about alcohol and drug use. And those with appropriate credentials may want to involve students in field experiments about such beliefs.

14. Student government. Student government can be mobilized to bring the issue of substance use to the forefront in campus affairs. Administrators might be willing to fund student projects to assess attitudes and behavior; such projects can develop strategies to increase awareness or curb substance abuse. The student council, for example, might challenge the university's investments in tobacco and alcohol companies.

Student leaders can also be trained to understand and influence social norms, or they can learn to use polls and other tools to identify conservative individual attitudes about alcohol and drugs on campus. They can then use the collected data to develop policies and position statements. Leaders may also want to apply norm setting skills to constituent groups and to leaders of other student groups.

15. The administration. Administrators can take several steps to influence alcohol and drug use on campus. Prior to doing so, however, they should be well informed about the various ways in which norms operate in the social ecology of college campuses. They should then authorize and support a systematic program to influence normative beliefs. They should also encourage student government to promote discussion about substance abuse and should support ongoing assessment of the campus climate regarding alcohol and drug use. Finally, they should examine and modify policies to address norms (not just behavior).

16. Student health services. Staff of the health service should receive regular, up-to-date instruction about the prevalence of substance use and abuse on campus. They should use this information in educating students and in referring them to appropriate outside agencies as necessary.

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