

# A Conceptual Model of the Alcohol Environment of College Students

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**ABSTRACT.** Alcohol use is highly prevalent among U.S. college students and alcohol-related problems are often considered the most serious public health issue on American college campuses. Recent efforts in alcohol prevention on college campuses have focused on changing drinking environments. However, little conceptual work has been produced or published to guide such efforts. This paper presents an empirically based conceptual model of college alcohol use from an environmental perspective. Specifically, the paper discusses the underlying assumptions of environmental approaches to alcohol problems, presents a program model to guide and evaluate interventions, discusses a conceptual model to organize the social environment related to alcohol use and problems, and provides a series of interventions and measurement approaches consistent with the conceptual model. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-342-9678. E-mail address: <getinfo@haworthpressinc.com> Website: <http://www.HaworthPress.com> © 2002 by The Haworth Press, Inc. All rights reserved.]*

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Alcohol use is highly prevalent among U.S. college students (Presley, Meilman, & Lyster, 1995), and alcohol-related problems are often considered the most serious public health threat on American college campuses (Wechsler, Davenport, Dowdall, Moeykens, & Castillo, 1994). The misuse of alcohol by college students is associated with date rape and other violent behavior, poor academic performance, vandalism, injury, high-risk sexual behavior (Eigen, 1991; Wechsler & Isaac, 1991; Presley et al., 1995), and even death (AP, 9/9/97).

Presley et al. (1995) presented data collected from 108 ( $n = 45,000$  students) colleges and universities funded between 1990 and 1992 by the U.S. Department of Education's Alcohol and Drug Prevention Program. Within this sample, 83.5% of the respondents reported drinking alcohol at least once in the past year with virtually no difference in prevalence by gender. AOD-related problems reported by respondents ranged from having a hangover (59.8% at least once) to attempting suicide (< 1%). Men reported higher frequencies of problems than did women across all problem categories.

Several recent college alcohol studies have examined heavy episodic or "binge" drinking (i.e., five or more drinks in one sitting for men, four or more for women) and its correlated problems (Wechsler et al. 1994; Wechsler, Fulop, Padila, Lee, & Patrick, 1997; Wechsler & Isaac, 1991). These studies indicated that the prevalence of heavy episodic drinking among college students in the United States is moderately high. In 1994, Wechsler and associates reported that 44% of all college students in their national sample were heavy episodic drinkers. In 1998, Wechsler and associates found this percentage had decreased to 42.7%. As one might expect, Wechsler et al. (1994) also reported that the frequency of heavy episodic drinking was positively associated with self-reported alcohol problems including physical problems, unwanted or unsafe sexual activity, violence, and academic problems.

Despite a decade of college AOD prevention programming, the above numbers appear to be stable. Over the past decade, the U.S. Department of Education (DOE) has funded over 600 college and university-based AOD prevention programs (personal communication with R. Bucknam). These programs employed myriad strategies ranging from information dissemination to environmental prevention approaches. Despite the number of programs funded, these projects yielded little outcome data (Ziemelis, 1998). In addition, such programs have been found to be atheoretical (Werch et al., 1994) or

ideologically driven and heavily influenced by the institutional environments in which they operate (Clapp, Stanger and Burke, 1996; Clapp, Burke and Stanger, 1998).

In a content analysis of DOE-funded (1987-1990) college AOD prevention programs, Werch et al. (1994) found that virtually all of these programs employed information dissemination as a prevention strategy. By 1990, 81% of the funded programs were using environmental prevention strategies to some extent (policy changes, increased enforcement of laws, limiting promotion and availability). Werch et al. (1994) noted, however, that most programs did not articulate any specific theoretical perspective. Rather, such activities reflected "theories in practice" concerning the etiology of college AOD problems.

Given the limited information concerning theoretical approaches to college AOD prevention, efforts are currently underway to develop typologies of college prevention interventions (Ziemelis, 1998). Beyond categorization, the development of theoretical models to guide college AOD prevention efforts is crucial.

National experts in college alcohol prevention students have recently emphasized changing student environments (DeJong, Vince-Whitman, Colthurst, Cretella, Gilbreath, Rosati, Zweig, 1998). DeJong et al. (1998, p. 6) suggested "traditional approaches to prevention have tacitly accepted the world as it is and then tried to teach students as individuals how to resist temptations. In contrast, the environmental management approach is a coordinated effort to change the world."

Such an approach represents a paradigm shift from traditional alcohol prevention efforts targeting college students. With this shift, will come new challenges for prevention professionals. Environmental alcohol prevention strategies like server training and responsible beverage service must be adapted and tested in college settings. Additionally, program developers and evaluators must develop methods for determining environmental campus needs related to alcohol use. One key change will be the development of direct measures of the alcohol environment. Perhaps most significantly, a sound conceptual model must be advanced to guide selection of environmental interventions and measurement strategies in a coherent and testable fashion. To date, there is no literature that presents a theoretical/conceptual model of alcohol problems experienced by college students from an environmental perspective. Despite these challenges, environmental ap-

proaches to college AOD problems appear to provide a comprehensive framework from which prevention efforts can be conceptualized, implemented and assessed.

This article contributes to the extant literature concerning college alcohol prevention by presenting a conceptual model describing a complex system of interacting sectors that impact alcohol use and problems experienced by college students. Literature is presented suggesting potential interventions and their impacts within these sectors. The model also outlines both institutional representatives of various sectors and potential measures of need or change with sectors. The model presented here is currently being tested at a large public university in the U.S., and future studies will report on its efficacy.

#### *THE ASSUMPTIONS OF ENVIRONMENTAL ALCOHOL PREVENTION*

For the past three decades, the predominant mode of AOD prevention targeting young adults has been at the individual-level. As Treno and Holder (1997) noted such efforts typically included education, skills training, normative campaigns, or some combination of these strategies. Unfortunately, these approaches have not resulted in large reductions of AOD problems (Treno and Holder, 1997). Given the limited success of individually oriented prevention efforts, initial attempts have been made to expand the focus beyond the individual to include the environment. Such environmental approaches are based on community simulations studies (Holder and Blose, 1986), conceptual work (Holder and Giesbrecht, 1990), and more recently, community-based drunk driving prevention trials (Holder, Saltz, Grube, Voas, Gruenwald, and Treno, 1997).

Underlying this work are some common assumptions. First, the environmental approach to alcohol problems views the etiology of alcohol use as being complex and dynamic (Wallack and Holder 1987; Holder and Giesbrecht, 1990). That is, alcohol use is influenced by environmental conditions. In turn, alcohol use influences environmental conditions. Alcohol-related problems, similarly, have a reciprocal relationship with myriad environmental conditions including the availability of alcohol, social norms, contexts of alcohol use, enforcement of formal laws regulating alcohol and the like.

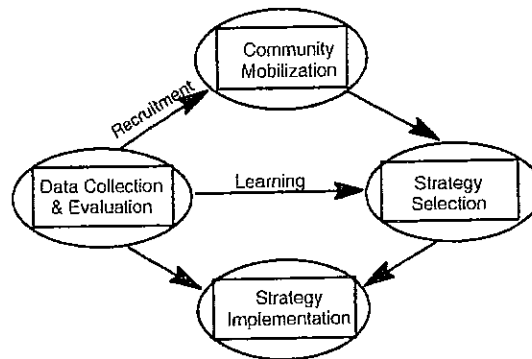
Second, given the complexity of alcohol use and its attendant prob-

lems, preventive efforts must not focus solely on individuals. Although programs aimed at educating or training individuals can be part of a comprehensive prevention strategy, alone, they are insufficient. Given that environments are dynamic, incorporating numerous subsystems (e.g., legal system, health care system, alcohol industry, etc.), preventive efforts must be comprehensive and ongoing. Further, environmental alcohol problem prevention efforts must involve community members and representatives from specific sectors in the community. Such involvement helps provide support to preventive strategies like policy change, while helping to guard against the unintentional displacement of alcohol problems from one community sector to another.

Third, preventive efforts focusing on alcohol should be guided by current, reliable and valid epidemiological data. The interaction of multivariate problems with dynamic environments necessitates flexible prevention systems. Current organizational theory stresses the importance of environmental scanning, organizational flexibility, and information management for organizations to remain responsive to complex environmental conditions (Senge, 1990; Watkins and Marsick, 1993; Clapp, 1998). Similar to the conceptualization of alcohol use and problems, organizations (and programs) must be conceptualized as complex systems that are both influenced by, and influence, their external environments (Senge, 1990). Given this reciprocal relationship, organizations must continually monitor their efforts as well as changes in their external environment. Such environmental scanning facilitates modification of programmatic activities, making them responsive to changing conditions. This is consistent with Saltz's (1988) suggestion that program planning should be integrated with program evaluation to create data-driven AOD prevention programs. As such, evaluation data is both formative and summative. That is, environmental indicators help shape program activities and they can be used to assess programmatic impacts. Figure 1 presents a conceptualization of such a learning system.

In addition to guiding programming and evaluation, such epidemiological monitoring helps prevention professionals identify the unintended displacement of alcohol problems from one context to another. Given that students seldom drink solely on campus, alcohol consumption and alcohol problems can occur in a variety of contexts including campus environments and community settings. Each of these settings

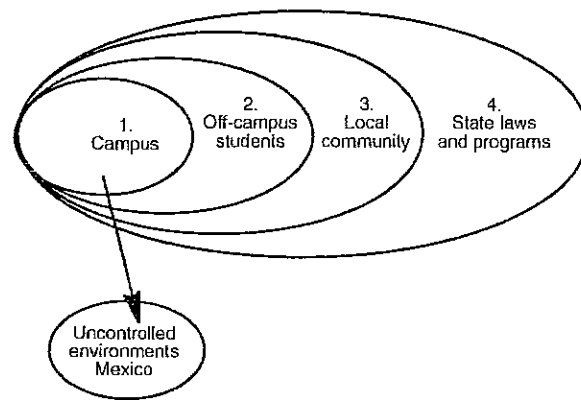
FIGURE 1. Learning System Program Model.



may vary in the level of control university officials can assert over students. As such, it is important to consider how on-campus prevention efforts might impact the greater community by forcing alcohol consumption off-campus. This possibility of problem displacement is inherent in environmental prevention approaches and thereby necessitates monitoring the environment off-campus and working with key stakeholders in the greater community (e.g., town/gown coalitions). Taking this approach, we can identify four spheres of influence as shown in Figure 2.

There is the campus itself, where the university administration will have the most authority to influence the drinking environment. A second sphere of influence for the university administration lies with students who live off campus. While the administration retains some influence with these students, it is shared with city officials who exercise the greatest control over environmental factors related to drinking. Other than students living off campus, the university administration has no authority at all over the community, but the community's policies about alcohol, sales, service, and law enforcement related to youth who are not students and have no relation to the university may still strongly affect the student body. Finally, state governments exercise some control over the drinking environment to which students are exposed through drinking and driving and Alcohol Beverage Control (ABC) legislation and, more directly, through the enforcement activities of the state police. These authorities create an interactive system

FIGURE 2. Displacement of Alcohol Problems.



that has a strong influence on molding the environment in which student drinking occurs.

A serious concern in managing alcohol problems on campus is the potential for displacing the problem from levels where the control of drinking is highest to locations where less rigid controls are exercised. Thus, a strong argument frequently presented by campus administrators against barring alcohol from the campus is that students will respond by drinking off campus with two potential risks: (1) higher consumption where service is less tightly supervised, and (2) greater risk where driving must follow drinking in order to return to the campus.

Perhaps of greater concern than movements between legal drinking locations is the displacement of consumption to uncontrolled environments. Examples of such uncontrolled environments are keg parties in the homes of absent parents, in parks and on beaches, at fraternity parties where no staff or alumni are present, partying during spring break, and the like. They are examples of situations designed to avoid the controls enforced by the school, the community, and the state. To the extent that controls are established that inhibit heavy episodic drinking, there will be increased motivation to seek locations having four characteristics: (1) parents, supervisors, law enforcement, and other regulators are not present; (2) alcohol is readily available at low cost; (3) peers who support heavy drinking are present; (4) the environment is tolerant of drunkenness and has loose behavioral standards (that is, allowing customers to "go a little crazy"). Increasing strict-

ness of regulations in the four environments described in Figure 2 may motivate these heavy episodic drinkers to seek situations that fall outside of the regulatory structure or environment created by the university and its surrounding community.

#### *A Conceptual Model of the Alcohol Environment of College Students*

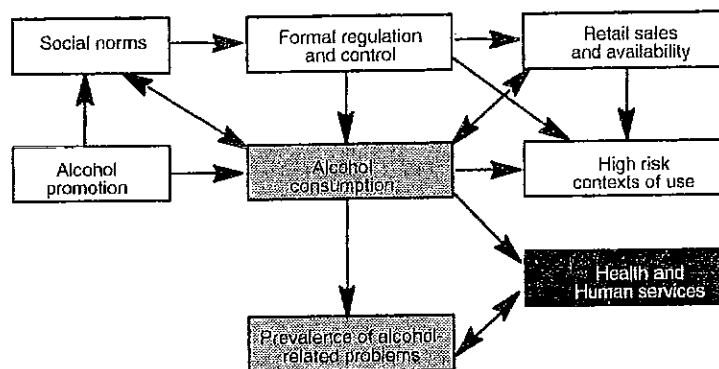
To effectively identify and monitor key indicators in the social environment, programs must specify a coherent and conceptually sound model of community alcohol problems. Such models must cut across all the spheres of influence noted above. Although somewhat limited in the literature, such models have been presented by Holder and Blose (1986), Holder and Giesbrecht (1990), Giesbrecht et al. (1993), and Segars (1990). These community systems models delineate subsystems of interest within the community context that contribute to alcohol-related problems. They are grounded in literature exploring the etiology and epidemiology of community alcohol problems and provide conceptual approaches for addressing such problems. However, these models are not specific to college communities.

#### *Campus Alcohol Systems Model*

Based on these models and the extant literature concerning college students and alcohol consumption, we have adapted a conceptual model of community alcohol problems applicable to college campuses. Figure 3 presents our systems model of college alcohol problems. Table 1 presents environmental strategies and measures for each sub-system in the conceptual model.

*Norms:* Within this model, social norms are conceptualized as the "acceptable" drinking patterns and behaviors within the population (Perkins, 1997). Perkins and Wechsler suggested "that perceiving a permissive environment encourages students to drink more heavily than they otherwise would based on their personal attitudes" (1996, p. 961). Thus, norms are seen as developing from the variety of formal messages that are given to students concerning what is acceptable. Misperceptions of alcohol consumption norms in which students over-estimate the actual norm are positively associated with consumption (Perkins and Wechsler, 1996). Baer et al. (1991) found that students

FIGURE 3. Community Sectors Important to College Drinking.



Adapted from Segars (1989) and Holder and Blose (1986)

consistently overestimate their peers' alcohol consumption regardless of their own drinking patterns. Using a nationally representative sample, Perkins and Wechsler (1996) reported that misperceptions of campus norms predicted alcohol-related problems when controlling for other common predictors.

Perceptions of norms are commonly measured through student self-report of "typical" student drinking behavior (Perkins, 1997; Haines and Spear, 1996). However, what is considered acceptable drinking behavior can be measured through a variety of indirect sources. Other indicators of permissiveness of the environment might include formal messages such as discussions and findings of campus units such as student council or administrative committee agendas, student newspaper articles, or student organization activities.

Social norms campaigns represent the most direct intervention within this sector. Perkins (1997) and Haines (1997) have each outlined approaches to correcting misperceptions of drinking norms on college campuses. Although no conclusive evidence has been published demonstrating the efficacy of this strategy, an uncontrolled study by Haines and Spear (1996) noted a substantial reduction in heavy episodic drinking at one major university using a misperception of norms social marketing campaign over a multiyear period.

Social norms influence formal regulation and control. Conceptually, permissive norms are associated with less regulation and control.

TABLE 1. Environmental Sectors, Prevention Strategies and Empirical Support

Subsystem(s) Targeted	Strategy	Empirical Support	Key Measures
<ul style="list-style-type: none"> <li>Alcohol promotion</li> </ul>	<ul style="list-style-type: none"> <li>Media advocacy/policy changes university newspaper and bulletin boards</li> </ul>	Grube & Wallack (1994); Saffer (1991)	<ul style="list-style-type: none"> <li>Number of alcohol ads in student paper and college bulletin boards</li> </ul>
<ul style="list-style-type: none"> <li>Social norms</li> </ul>	<ul style="list-style-type: none"> <li>Norms campaign</li> </ul>	Haines (1996); Perkins & Wechsler (1996)	<ul style="list-style-type: none"> <li>Perceive peer versus self-consumption</li> </ul>
<ul style="list-style-type: none"> <li>Formal regulation control</li> </ul>	<ul style="list-style-type: none"> <li>Community-based policing enforcement targeting private parties: Noise policies, etc.</li> <li>Resident hall policy development and enforcement</li> <li>Increase DUI enforcement—random breath testing and patrols</li> <li>Underage drinking interdiction (Cops and Shops)/Decoy/ABC</li> </ul>	U.S. Bureau of Justice (1993); DeJong & Langenbahn (1996); Hornel (1988); Wittman (1990); Aitman et al. (1989)	<ul style="list-style-type: none"> <li>Resident hall incident reports</li> <li>Campus police reports</li> <li>Police Department DWI and AR arrests</li> <li>police/ABC sting reports</li> </ul>
<ul style="list-style-type: none"> <li>Retail sales and availability</li> </ul>	<ul style="list-style-type: none"> <li>RBS/server training: Campus pub and student-oriented bars</li> </ul>	Saltz (1989); Erenberg & Hacker (1997)	<ul style="list-style-type: none"> <li>Alcohol pricing on campus</li> <li>Risk assessment of campus and student bars</li> <li>Student survey high risk reports</li> </ul>
<ul style="list-style-type: none"> <li>High-risk contexts of use; formal regulation and control</li> </ul>	<ul style="list-style-type: none"> <li>Policy changes at campus stadium and arena (RSB and price increases; tailgate enforcement)</li> <li>Responsible party training: fraternities, general student population</li> <li>Server intervention</li> </ul>	Coate & Grossman (1988); Clapp et al. (in-press); DeJong & Langenbahn (1996); Voas, Lange, & Kelley Baker, (1998)	<ul style="list-style-type: none"> <li>Place of last drink</li> <li>Reports from DWI arrests and student surveys</li> </ul>

Permissive norms also are positively related to alcohol consumption. Conversely, restrictive norms are related with less consumption (Perkins and Wechsler, 1996) and greater formal regulation and control.

*Formal Regulation and Control:* Formal regulation and control encompass regulations, policies and enforcement related to campus alcohol sales and consumption (Mosher and Jernigan, 1989). This sector represents the legal methods used to control behavior.

Formal regulations and their implementation are observed in the actual legal regulations incorporated in various official records. Indicators of enforcement can be found in quantitative and qualitative measures of incidents and their adjudication. Sanctions imposed represent an indicator of the implementation of these regulations.

Interventions in this sector include attempts to change policies, enforcement, or sanctions related to alcohol use. Specific activities would include police check-points, changes in regulations concerning drinking in dorms and fraternities, or increased sanctions for students caught drinking on campus.

As noted above, this subsystem is influenced by and influences social norms. The impact of policies, their enforcement, and responsiveness to changes in the environment are all of interest within this sector.

*Alcohol Promotion:* Alcohol promotion is defined as alcohol-related promotions and advertising occurring on campus or specifically targeting college students. Breed, Wallack, and Grube (1990) and Ryan and Mosher (1991) have documented such promotion. For instance, in a national study, Breed and associates found that alcohol advertising was much more prevalent in college papers than advertising for books or soft drinks. Local, on-sale establishments (i.e., bars and restaurants) accounted for a large proportion of such advertising. Other forms of promotion included sponsorship of university events by the alcohol industry, flyers and handbills promoting alcohol-related events and parties (both private and bar sponsored), alcohol ads on billboards on or near campus, and the like (Ryan and Mosher, 1991). Although the causal relationship between advertising and drinking behavior is not firmly established, relational studies (Atkin, Neuen-dorf, McDermott, 1983; Grube and Wallack, 1994) have found that exposure to advertising is related to some high-risk drinking behaviors and intentions to drink. Within our model, alcohol promotion is

viewed as being a positive correlate to alcohol consumption and permissive social norms regarding alcohol use.

Alcohol promotion can be measured in several ways. Content analyses of student newspapers and public access bulletin boards provide one method of assessing alcohol promotion on campus. Such content analyses might focus on the price of alcohol being advertised, high-risk promotions (e.g., wet t-shirt contests, bladder busters, etc.), stories about alcohol incidents, as well as stories concerning prevention programs. At the institutional level, the amount of money received annually by the university from the alcohol industry is a key indicator.

As suggested above, such data can be used to guide preventive efforts and as a measure of the alcohol environment. For instance, bars that consistently advertise cheap drinks might be approached and offered responsible beverage service training. Other interventions in this sector might include restrictions on alcohol advertising in the campus paper or on campus itself, restrictions on alcohol industry sponsorship of campus events, and counter-advertising campaigns promoting healthy norms and drinking practices.

*Retail Sales and Availability:* Retail sales and availability encompasses the number and density of alcohol outlets on the campus, in the campus area, and in other geographic areas frequented by students. Myriad policies and regulations including ABC laws, university regulations, state and federal laws, and in some cases, international laws (Voas, Lange, Lauer, 1998) influence this subsystem. Retail sales and availability influence alcohol consumption. That is, alcohol consumption is related to the sales and availability of alcohol, not of other theoretical predictors (Gruenewald, Ponicki, Holder, 1993). Chaloupka and Wechsler (1996) found that self-reported availability was strongly related to underage drinking and binge drinking among both sexes. Interestingly, "greater sales of alcohol stimulate more alcohol outlets per capita" (Gruenewald, Madden, and Janes, 1992). Thus, sales and availability are portrayed in the model as influencing, and being influenced by, alcohol consumption.

The price of beverages is also of interest within the retail sales and availability subsystem. Research by Coate and Grossman (1988) found that price controls tend to have the biggest effects on young heavy drinkers. In a study using a national data set of college students, Chaloupka and Wechsler (1996) found that increases in beer prices resulted in lower rates of binge drinking and underage drinking among

women but not men. Thus, price promotions that discount alcoholic beverages are of particular interest within this model, as are price controls. Finally, in this subsystem alcohol service practices in on-sale outlets are of concern. Serving intoxicated patrons, failing to provide food with alcohol, serving alcohol to minors, overcrowding, and allowing intoxicated patrons to drive home all can be conceptualized as unsafe serving practices (Saltz, 1989). As such, these practices are conceptualized as contributing to heavy alcohol consumption and/or high-risk contexts of use.

Measures of retail sales and availability can include the number and type of alcohol outlets near the campus (or in areas that students frequent), the price of alcohol at establishments targeting college students, and the number of ABC violations on or near campus. In addition, responsible beverage risk assessments can be conducted regularly at campus bars (Novak, 1998).

Prevention strategies within this sector include responsible beverage service training for college bars and working with alcohol beverage control agencies to reduce or limit outlet density on or near the campus. Responsible beverage service training teaches bar owners how to serve alcohol in a way that minimizes patron intoxication without minimizing profits (Novak, 1998; Saltz, 1997). Research evidence has illustrated that such programs, when properly implemented, can reduce intoxication among patrons (Saltz, 1997).

*Contexts of Use:* Closely related to retail sales and availability and formal regulation and control are high-risk contexts of alcohol use. High-risk contexts of use can be defined in several ways (see Jessor, 1982). In this model drinking contexts represent social, temporal and physical characteristics of drinking events including, group composition, duration, location, protective factors and risk factors (Clapp, Shillington, and Segars, 2000; Clapp and Shillington, in-review). Increased sales and availability can lead to high-risk contexts. Similarly, increased enforcement of alcohol laws and regulations might be associated with unintended increases in high-risk contexts (e.g., shifting drinking from controlled to uncontrolled settings) or intended decreases in high-risk contexts (e.g., reducing drinking at the beach, etc.). In turn, high-risk contexts lead to heavy consumption and alcohol-related problems (Clapp et al., 2000).

Protective factors associated with drinking contexts include the availability of food at drinking events, and having roommates or close

friends present. Risk factors include having illicit drugs available and playing drinking games (for males) (Clapp et al., 2000).

High-risk drinking contexts can be identified and measured indirectly and directly. One approach is to query students about their typical contexts or their last drinking occasion. Several survey studies have used this approach (Hilton, 1989, Harford, 1979, Clapp et al., 2000). Besides surveys, high-risk drinking contexts can be identified through social indicators such as arrest data and campus incidents reports.

Interventions within this sector vary depending on the high-risk contexts identified. For instance, if a particular bar near campus is identified as being particularly high-risk, some of the approaches detailed above might be most appropriate. In contrast, contexts such as private parties will require other environmental approaches such as party registration (for campus sanctioned events), development and enforcement of noise ordinances among others.

*Alcohol Consumption and Alcohol-Related Problems:* These two subsystems are closely related. Within our model, consumption drives problems. In this model, heavier consumption is associated with higher problem levels. Consumption can be conceptualized in terms of quantity-frequency and quantity-frequency-variability typologies. In addition, heavy episodic drinking can be conceptualized as a form of consumption. As noted in Figure 3, several subsystems directly and indirectly influence consumption.

Alcohol-related problems are conceptualized within this model as heavy episodic drinking (binge drinking), self-reported problems, alcohol-related arrests and incidents, intoxication and the like.

Measurement of alcohol use among college students has overwhelmingly been based on self-reports (Wechsler et al., 1994, 1998; Presley et al., 1995). As such student surveys are the most common data collection method used to measure consumption. Environmental measures of consumption might include the number of discarded alcohol containers after a party (Ryan, Colthurst and Segars, 1994) or (if available) sales data for alcohol outlets catering to college students. Perhaps the most direct measure of student alcohol consumption has been implemented by Foss, Marchetti, Holladay, and Scholla (1999), who collected breath samples to determine blood alcohol levels of students at a major university in the southeastern U.S.

### *Health and Human Services*

Within our model, the health and human services subsystem is viewed as being impacted by alcohol consumption and alcohol problems. This subsystem also influences such problems by coordinating and implementing the efforts described in the other subsystems.

### *DISCUSSION*

This paper presented a conceptual model of college drinking environments. The paper offered potential measurement strategies and interventions within a number of community/environmental sectors. The model is intended to facilitate alcohol prevention research targeting college students from an environmental perspective. In addition, it is hoped that the model will be of practical use for prevention programmers working on college campuses.

Future research is needed to test and modify this conceptual approach. Such research efforts will be challenged to further develop valid and reliable environmental measures within each sector. Such efforts are currently underway at a few major universities in U.S., however, as more universities and researchers interested in college drinking begin to embrace environmental prevention strategies, the focus on standardized environmental measures will take on increasing importance.

In addition to measures, interventions within each sector of the model presented here, must be further specified and evaluated. Although the intervention strategies suggested here are primarily grounded in research and theory, they need to be modified and evaluated within college communities. Modifying such environmental strategies would benefit from collaborative efforts between college AOD prevention professionals and community prevention professionals.

Similarly, as suggested above, in many instances alcohol-related problems experienced by college students will transcend the geographic boundaries of the campus. As such, town/gown partnerships are often required to develop, implement, sustain and evaluate environmental alcohol prevention strategies targeting college students. Again, such organizing efforts are typically beyond the normal skills and job responsibilities of college AOD prevention specialists. Train-

ing efforts in community organizing are needed to help prepare college prevention specialists for such work. Fortunately, community AOD prevention professionals and researchers have documented organizing approaches to AOD problems (see Fawcett, Lewis, Paine-Andrews, Francisco, Richer, Williams, and Copple, 1997). Similar studies are needed to examine the efficacy of "town/gown" coalitions.

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