

# Evaluation of College Alcohol Policies

An Evaluation of College Online  
Alcohol-Policy Information

VIVIAN B. FADEN, PhD; MARCY L. BASKIN

## Table of Contents

Method .....	5
Results.....	7
Comment .....	11
Limitations.....	12
Recommendations .....	13
Appendix .....	14
References .....	15

Excessive and underage drinking among college and university students is a widely acknowledged problem [1,2,3](#). According to a number of national surveys, about 40% of college and university students engage in heavy episodic drinking (often called "binge" drinking), typically defined as consuming 5 or more drinks in a row for men and 4 or more in a row for women at least once in the past 2 weeks. [3,4,5](#) Many of these students are under the legal drinking age; Wechsler et al [6](#) found that, in 2001, 77.4% of underage college students drank alcohol. Furthermore, half of the students under 21 years of age reported that they found alcohol very easy to obtain.[6](#)

The negative consequences of excessive and underage drinking by these college and university students can be serious. According to a recent study, approximately 1,400 alcohol-related deaths, 500,000 alcohol-related unintentional injuries, and 70,000 alcohol-related sexual assaults or date rapes occur each year among college students aged 18 to 24 years.[7](#) An additional 600,000 students aged 18 to 24 are assaulted by another student who has been drinking.[7](#)

Grossman and Markowitz<sup>8</sup> identified the following 4 types of violent behavior that may occur as the result of drinking: (1) getting in trouble with the police or college authorities, (2) damaging property, (3) getting into a fight or argument, and (4) taking advantage of another person sexually or being taken advantage of sexually. In addition to these consequences, heavy drinkers among college students have been found to maintain lower grades,<sup>5</sup> miss more classes, and fall behind in school work more often than their peers.[3,9,10](#) In another recent study, Knight et al<sup>11</sup> identified 37.9% of 4-year college students as reporting symptoms consistent with a diagnosis of alcohol abuse or dependence.

Because of the many negative outcomes of alcohol use, reducing the misuse of alcohol on college campuses is a top priority of college administrators. In addition, to be eligible for federal funds, the "Drug Free Schools and Communities Act Amendments of 1989" (PL 101-226) obligates colleges and universities to implement a "program to prevent the use of illicit drugs and the abuse of alcohol by students."[12](#) At a minimum, this program must include the distribution of information to students about (1) laws regulating alcohol and drug use, including minimum legal drinking-age laws, as well as any other standards of conduct that are applicable to students at the institution; (2) the penalties for breaking local, state, and federal laws and campus rules; (3) the health risks associated with the abuse of alcohol; and (4) any counseling, treatment, or rehabilitation programs that are available to students. The legislation also requires a biennial evaluation of the program.[12](#)

Many components may be included in the alcohol policy on a particular campus. To satisfy the provisions of [PL 101-226](#), the majority of college and university alcohol policies include a section articulating applicable local, state, and federal laws, a description of the health risks of alcohol consumption, and information about the provision of and referral to services for alcohol-related problems. Colleges and universities are also legally required to detail the penalties for infractions of their alcohol policy and give a copy to their students. Penalties for violations may vary from campus to campus and can range from warnings and fines to expulsion.

In addition to providing this information, many specific regulations may be included in a school's alcohol policy. For example, schools can prohibit sponsorship of campus events by alcohol retailers, place restrictions on advertising, and prohibit or restrict alcohol consumption in residence halls.[13](#) Schools can also place limitations on student- or campus-sponsored events that involve alcohol. Other possible policy components include designating specific areas where alcohol can be consumed, restricting such areas to students of legal drinking age, eliminating self-service, and not serving alcohol at campus functions that underage individuals may attend.[13](#) Some colleges and universities mandate

that trained servers must be present at functions where alcohol is served, and many schools have instituted keg restrictions,<sup>13</sup> as well as prohibiting alcohol in parking lots to eliminate alcohol from tailgating parties.<sup>14</sup>

Alcohol-policy information has typically been provided in student handbooks. However, with college students' increasing reliance on the Internet "as their primary and, in some cases, sole source of information,"<sup>15</sup> we expected colleges and universities to have responded by putting their alcohol policy online, in addition to providing it in the hard copy edition of their student handbook. Given the "wired" nature of today's students and the certainty that reliance on the Web as a source of information will increase, providing alcohol-policy information online is both logical and responsible. Indeed, according to Kenneth Kotovsky of Carnegie Mellon University, "students' first recourse for any kind of information is the web."<sup>15</sup> In addition, for the interested parents of prospective students who will probably not have a hard copy of the students' handbook, putting the policy online makes it more accessible.

Our purpose in this study was to evaluate the information about alcohol policies that could be ascertained from college and university Web sites. Our goal was to learn about the accessibility of this information online and about how accurately one could characterize a school's policy from the information provided on its Web site. To do this, we investigated the Web sites of the "top 50 national universities" (52 due to ties) listed in *US News and World Report's* rankings in 2002.<sup>16</sup>

## Method

We reviewed the recent, relevant literature on college and university alcohol policies and visited the Web sites of a number of well-known schools to compile a list of components we thought would provide an accurate and fairly complete delineation of an institution's alcohol policy. We then organized these components into four categories: (1) information/explanation; (2) rules, restrictions, and requirements; (3) possible consequences delivered to groups; and (4) possible consequences delivered to individuals.

The national universities (52 due to ties) whose Web site we chose to examine are listed in the Appendix. Because these are large institutions, we reasoned that they should have the resources to develop well-articulated alcohol policies and to create comprehensive, user-friendly Web sites. We carefully explored the Web sites of these 52 schools as a means of evaluating the available information in the categories that we had identified. We began by using the National Institute on Alcohol Abuse and Alcoholism (NIAAA) Web site, (<http://www.collegedrinkingprevention.gov>), which provides links to alcohol policies that are found on college and university Web sites. If the university was not a link on the NIAAA page (links to college and university Web sites are continually being added to the list), we began our search on the institution's home page. Following this, we browsed the site extensively. We consistently searched on the terms student alcohol policy, student handbook, alcohol regulations, alcohol policy, and undergraduate alcohol policy whenever the Web sites had this capability.

We also consistently examined the student handbook when it was available online. However, the sites varied in their organization and sophistication, which influenced our search process. In general, we were guided, much as a casual searcher would be, in our individual searches by how particular Web sites were organized. We searched the 52 sites thoroughly and repeatedly to determine whether the policy components we had identified were mentioned anywhere on the site.

To conduct our review of the sites, we looked at all Web pages with any reference to the alcohol policy. Parts of the policy were often found under residential life or Greek life, but because only information relevant to that page would be included, the most accurate representation of the school's policy was typically the "main alcohol policy" page. By main alcohol policy page, we mean a page on the Web site that contained information related only to the alcohol policy that was clearly labeled as the university alcohol policy. We labeled the university's policy incomplete until we found the main alcohol-policy page, which would often be the only place to include certain features, such as an explanation of alcohol-related laws. This page could often be found in several places, such as in the online handbook or on the university policy page. We used all of the information we found in the various Web site locations to compile our report of the university's Web-based alcohol-policy information.

Next, we sought to assess the accuracy and completeness of the information we had developed. To do this, we randomly selected 9 schools from our list of 52. We telephoned these schools to ask administrative personnel, such as the dean of students, about the school's alcohol policy. We asked about each of the policy components we had identified and also inquired whether any feature of their policy was missing from our list. If the individual we were speaking with could not provide all the information, we asked to speak with someone who could. In addition, we requested a hard copy of the student handbook.

To summarize agreement between the Web site statement and the information provided by administrators, we used the kappa statistic,<sup>17</sup> a measure of concordance that can take on values from  $< 0$  (*no agreement*) to 1 (*perfect agreement*). We computed kappa for each school and policy category by using the components in a category as the observations. The average kappa over the 9 schools is reported for each policy category.

## Results

By examining the college and university Web sites, we were able to ascertain information about the alcohol policy of 50 of the 52 schools. We could not find the policies of 2 schools on the institutions' Web sites. A third school explicitly stated on its main alcohol-policy page that the entire alcohol policy was not on the Web site, although some information was available there.

The Web sites varied in ease of use, with some schools presenting their alcohol policy in one location and others providing the information in multiple locations. For example, general campus regulations would often be found on the main alcohol-policy page, whereas the rules specific to event planning would be located under student activities. The schools also varied considerably in the degree of detail about a policy that was available online. As a result, we were unable to determine whether the absence of information about the alcohol policy component meant that a school did not have that particular component as part of its policy or that the information was not included on its Web site. When we were unable to locate any information about a specific policy component, we labeled it as "no mention." However, it is possible that the information was elsewhere on the Web site and that we were unable to locate it.

[Table 1](#) contains a summary of the data we were able to find for the 52 schools we studied. The 2 schools with no information are always included in the "no mention" category. Of the remaining 50 colleges and universities, almost all included certain components in their online policy information: 49 explained or cited state and federal laws, and 26 described the health risks associated with alcohol consumption in the main policy page. Another 22 described these risks in other parts of their Web sites such as student health services. The majority of schools provided information about counseling somewhere on their Web site—34 listed it on the main alcohol-policy page, and 14 showed it elsewhere on the site. In addition, the schools often provided specific information about how to contact such services, 26 on the main alcohol-policy page and 22 elsewhere on the site. When counseling information was not included on the main alcohol-policy page, it was most often on the university's health-services page.

Twenty-nine schools had some kind of advertising restrictions, and 19 specifically prohibited advertisements from mentioning alcohol. Nine schools forbade alcohol at membership recruitment for student organizations (including Greek "rush"), and 12 of the schools noted mandatory programs on alcohol abuse or event planning for members of organizations planning to hold events where alcohol would be served.

In addition to alcohol intervention programs, all the schools for which we found information cited possible disciplinary sanctions for violations of the alcohol policy that were similar to those for other nonacademic offenses. But they differed in that 38 of the schools presented the information about sanctions in the main policy page, whereas 11 schools did not mention specific sanctions in that page. All of the schools that provided information had similar sanctions, including warnings, suspensions, and expulsions. The parental notification policy was often more difficult to locate. Some schools notified parents if an underage student was caught drinking; others notified parents only if an underage student committed an alcohol-related disciplinary violation. One school notified parents in extreme circumstances only. In all, we found the parental notification policy of only 13 schools.

We also enumerated how many components in a category each of the 52 schools' Web sites contained comments on. In [Table 2](#), the average number of components mentioned for the group of 52 schools is

shown by category. An examination of that table indicates that many of the components we had delineated were not commented on in the majority of Web sites.

The data in [Table 3](#) show the means and ranges of the kappa statistics for the 9 schools in the validation sample to indicate the level of agreement between the Web site and the administrator's information. The kappa statistics were generally low, indicating relatively poor concordance between the Web site and administrator's information. An examination of the data indicated the lack of agreement largely resulted from the schools' often having policy components in place that were not mentioned on their Web sites. By contrast, when we found information on the Web site, it was almost always consistent with the information provided by the administrators. We did not include the 2 schools for which no information was available on the Web site in the validation sample of 9 schools.

Often, we would not find a policy component on the Web site; yet, when we spoke to the administrator, we learned that a particular component was, in fact, part of the school's alcohol policy. To evaluate the significance of not finding a policy component on a school's Web site, we computed the percentage of instances in which schools had the policy component even though we did not locate it on the Web site. This part of the analysis was based on the 9-school validation sample and was done for the category on rules, restrictions, and regulations and for the 2 consequence categories. The results ranged from a low of 13% for the sponsorship by alcohol manufacturers to 100% for most of the individual consequences. In sum, we found that even when we did not locate a policy component on the Web site, it was quite likely (generally 50% or higher) that a school had such a policy in place. None of the administrators we spoke with identified any additional components of their institution's alcohol policy that were not included in the list of components we asked about.

Table 1

Summary of Alcohol-Related Policies and Content of Web Site Information for 52 National Universities That Award Doctoral Degrees						
Policy/content	Mention				No Mention	
	n	%	n	%	n	%
	On policy page		Elsewhere		Policy incomplete	
Information/explanation						
Explanation/citation of applicable laws	49	94.23	0	0.00	3	5.77
Description of health risks	26	50.00	22	42.31	4	7.69
Information about counseling	34	65.38	14	26.92	4	7.69
Phone numbers/contact for counseling	26	50.00	22	42.31	4	7.69
	Permitted		Not permitted		Policy incomplete	
Rules, restrictions, requirements						
Consumption						
In residence halls	32	61.54	2	3.85	18	34.62
In public places	0	0.00	38	73.08	14	26.92
In stadium	1	1.92	10	19.23	41	78.85
Tailgating	5	9.62	1	1.92	46	88.46
Alcohol references in advertising	7	13.46	19	36.54	26	50.00
Use student funds to buy alcohol	2	3.85	8	15.38	42	80.77
Alcohol at membership recruitment	0	0.00	9	17.31	43	82.69
Sponsorship by alcohol manufacturer	4	7.69	3	5.77	45	86.54
	Restricted		Not restricted		Policy incomplete	
Kegs	27	51.92	1	1.92	24	46.15
Activities that promote drinking games	16	30.77	0	0.00	36	69.23
Advertising of alcohol	29	55.77	0	0.00	23	44.23
	Required		Not required		Policy incomplete	

Nonalcoholic drinks, food at parties	31	59.62	0	0.00	21	40.38
Registration of parties	27	51.92	1	1.92	24	46.15
Security at events with alcohol	10	19.23	3	5.77	39	75.00
Host trained in alcohol abuse, event planning	12	23.08	0	0.00	40	76.92
	Yes		No		Policy incomplete	
Possible consequences						
Group						
Prohibited to sell, serve alcohol	11	21.15	0	0.00	41	78.85
Denial of program approval	14	26.92	0	0.00	38	73.08
Organization probation	15	28.85	0	0.00	37	71.15
Loss of organizational status	18	34.62	0	0.00	34	65.38
Individual						
Fines	13	25.00	0	0.00	39	75.00
Parental notification	12	23.08	1	1.92	39	75.00
Warning	42	80.77	0	0.00	10	19.23
Suspension	41	78.85	0	0.00	11	21.15
Expulsion	43	82.69	0	0.00	9	17.31
Dismissal from university housing	15	28.85	0	0.00	37	71.15
Alcohol education sessions	22	42.31	0	0.00	30	57.69
Alcohol evaluation	19	36.54	0	0.00	33	63.46
Alcohol treatment	23	44.23	0	0.00	29	55.77
Additional						
Policy in one location	18	34.62	31	59.62	3	5.77
Mentioned sanctions on alcohol-policy page	38	73.08	11	21.15	3	5.77

Table 2

Mean Number of Alcohol-Policy Components Mentioned in 52 College and University Web Sites, by Category		
Category	Components	
	n	Mentioned <i>M</i>
Information/explanations	4	2.6
Rules	15	6.2
Consequences		
Group	4	1.2
Individual	9	4.5

Table 3

Concordance of Web Site and Administrator-Reported Alcohol-Policy Information for 9 Validation Schools		
	K	
Policy Category	M	Range
Information/explanations	.18	.05-.23
Rules	.36	.06-.70
Consequences		
Group	.15	0.0-.24
Individual	.20	.06-.48

## Comment

Many studies have examined college students' excessive and underage drinking and its consequences. Other studies have evaluated the efficacy of certain policy measures, including some of those mentioned earlier. Fewer studies have attempted to enumerate what policies are currently in place on a national level, and no study that we are aware of has examined the efficacy of the Web as a dissemination tool for information about alcohol policy.

As we have already mentioned, the [Drug Free Schools and Campuses Regulations Act of 1989](#) requires colleges and universities to provide a copy of their alcohol policy to students.<sup>12</sup> Traditionally, this information was provided in the handbook distributed to first-year students, but as the Internet gains in popularity, the information is increasingly being provided online. In fact, for 4 of the 9 schools that we followed up on in person, the student handbook was only available online, which made the Internet the sole source of alcohol policy information for students and parents.

Although research indicated that providing information about state laws and campus regulations and the negative consequences of alcohol misuse is not a sufficient deterrent to consumption for most students,<sup>19, 20</sup> it is still important for such information to be available and accessible. We thought it would be a simple task to locate a school's alcohol policy on its Web site; for some schools it was, but in many cases we discovered that the alcohol policy was often difficult to find among all of the other information on a school's Web site.

The difficulty in locating some of the policy components was unexpected. We did not anticipate that the information would be in so many locations. In fact, most schools break up their alcohol policy under different departments, such as the office of student activities and the office of residential life. Several of the schools did not have clear links to the alcohol policy, and/or the searcher had to go through multiple links to find the policy. Combined, these challenges could discourage a casual searcher and dissuade him or her from continuing to search for the policy.

Knowing where to begin searching can also be a problem. General Web site searches (when one uses the site search engines with terms such as student alcohol policy and student handbook) often did not bring up the main alcohol policy page. We found policy components in different places in different college and university Web sites. We spent hours searching for all of the Web-based alcohol policy information a school had to offer, but a casual searcher would be unlikely to be as persistent.

The schools we studied had similar policy components, especially regarding penalties for noncompliance. But few of the schools included information in their Web sites that encompassed the majority of the components we had identified. Some schools had only a brief paragraph that mainly referred to the state law but did not provide many specifics, such as campus rules or disciplinary consequences, on their sites. Sometimes these components could be found elsewhere. Other schools had more detailed policies on line, but most sites lacked information about some components, especially group consequences.

## Limitations

Several limitations in our study that may have influenced our findings on the 52 schools should be noted. Despite our having searched each Web site extensively, when we found no information about a policy component, we could not know for certain whether the particular school had no policy to address that component or whether more information was available on the Web site but we could not find it. Nevertheless, because we searched extensively and persistently, we assume that we found most of the online information available. In general, the validation portion of our study revealed that when we found information on the Web sites, it was accurate, but that when we did not find information about a component, it was still very likely that the school did have an alcohol policy on it.

Although we randomly selected the 9 schools to follow up with in person in the validation phase of our study, most were, by chance, large state schools (5/9) and in the lower half of the Top 50 (7/9). None was in the top 15, and the percentage of the public schools in our survey (66.67%) was greater than in the Top 50 (32.69%). In spite of these limitations, this phase of the study was extremely useful.

Following up with a subsample of our original group of schools allowed us to evaluate the quality of the alcohol-policy information that could be derived from a complete and careful search of college and university Web sites compared with information that was directly provided by university authorities who were very knowledgeable about their school's alcohol policy.

The gaps in the Web-site-derived information indicate that colleges and universities need to post more complete information about their alcohol policies online, and the difficulties we encountered in accessing and collecting the information indicate that they should consider presenting it in a single location on their Web site. In addition, we found that the alcohol-policy information was easier to use when it was presented in outline format, and colleges and universities may want to consider presenting their policies in this way. If a student, prospective student, or parent is seeking alcohol-policy information, finding it and using it should be easy. A person who goes online to find information about the alcohol regulations on a particular campus should not be required to go through a complicated process to locate what she or he is looking for.

## Recommendations

We recommend that schools post their complete policies in one location on their Web sites and that searches on terms such as alcohol policy or alcohol regulations link directly to the complete policy. Similarly, Web sites should provide clear links to the policy from the health-center page, the pages on student and residential life, and perhaps others. We believe it is the responsibility of colleges and universities to enhance their Web sites to meet these criteria so that students and parents have easy online access to this important information.

---

Note: Please address comments and correspondence to Vivian B. Faden, PhD, Chief of the Epidemiology Branch, Division of Biometry and Epidemiology, NIH, NIAAA/DBE, 6000 Executive Blvd, Suite 514, Rockville, MD 20892 (e-mail: [vfaden@willco.niaaa.nih.gov](mailto:vfaden@willco.niaaa.nih.gov)).

\*Vivian B. Faden is chief of the Epidemiology Branch, Division of Biometry and Epidemiology, National Institute on Alcohol Abuse and Alcoholism, Bethesda, Maryland, where Marcy L. Baskin was a research intern at the time the study was completed.

Copyright is not claimed. This article is in the public domain.

## Appendix

National Universities That Award Doctoral Degrees: Top 50 According to *US News and World Report*, 2002<sup>16</sup>

Rank	University
1	Princeton University (NJ)
2	Harvard University (MA) Yale University (CT)
4	California Institute of Technology
5	Massachusetts Institute of Technology Stanford University (CA) University of Pennsylvania
8	Duke University (NC)
9	Columbia University (NY) Dartmouth College (NH) University of Chicago
12	Northwestern University (IL) Rice University (TX)
14	Cornell University (NY) Washington University in St. Louis
16	Brown University (RI) Johns Hopkins University (MD)
18	Emory University (GA)
19	University of Notre Dame (IN)
20	University of California—Berkeley*
21	University of Virginia* Vanderbilt University (TN)
23	Carnegie Mellon University (PA) Georgetown University (DC)
25	University of Michigan—Ann Arbor*
26	University of California—Los Angeles* Wake Forest University (NC)
28	Tufts University (MA) University of North Carolina-Chapel Hill*
30	College of William and Mary (VA)*
31	University of California-San Diego*
32	New York University University of Wisconsin-Madison*
34	Brandeis University (MA) University of Southern California
36	University of Illinois—Urbana-Champaign* University of Rochester (NY)
38	Boston College Case Western Reserve University (OH) Lehigh University (PA)
41	Georgia Institute of Technology* University of California—Davis* University of California—Irvine* Yeshiva University (NY)
45	University of Washington*
46	Pennsylvania State University—University Park* Tulane University (LA)
48	Pepperdine University (CA) Rensselaer Polytechnic Institute (NY) Texas A&M University—College Station* University of California—Santa Barbara* University of Texas—Austin*

Note. Blank in rank column indicates tie with last-listed rank.

\* Indicates public school.

## References

- <sup>1</sup> National Institute on Alcohol Abuse and Alcoholism. *A Call to Action: Changing the Culture of Drinking at U.S. Colleges*. NIH Publication 02-0510: 2002.
- <sup>2</sup> Wechsler H, Lee J, Kuo M, Lee H. College binge drinking in the 1990s: A continuing problem. Results of the Harvard School of Public Health 1999 College Alcohol Survey. *J Am Coll Health*. 2000;48:199-210.
- <sup>3</sup> Wechsler H, Lee J, Kuo M, Seibring M, Nelson T, Lee H. Trends in college binge drinking during a period of increased prevention efforts. *J Am Coll Health*. 2002;50(5):203-217.
- <sup>4</sup> O'Malley PM, Johnston LD. Epidemiology of alcohol and other drug use among American college students. *J Stud Alcohol*. 2002; suppl 14:23-39.
- <sup>5</sup> Presley CA, Meilman PW, Cashin JR. *Alcohol and Drugs on American College Campuses: Use, Consequences and Perceptions of the Campus Environment*. Vol IV: 1992-94. Carbondale, Ill.: The Core Institute, Student Health Program, Southern Illinois University; 1996.
- <sup>6</sup> Wechsler H, Lee J, Nelson T, Kuo M. Underage college students' drinking behavior, access to alcohol, and the influence of deterrence policies. *J Am Coll Health*. 2002;50(5):223-236.
- <sup>7</sup> Hingson R, Heeren T, Zakocs R, Kopstein A, Wechsler H. Magnitude of alcohol-related mortality and morbidity among U.S. college students ages 18-24. *J Stud Alcohol*. 2002;63:136-144.
- <sup>8</sup> Grossman M, Markowitz S. *Alcohol Regulation and Violence on College Campuses*. National Bureau of Economic Research. 1999; <http://www.nber.org/papers/w7129>.
- <sup>9</sup> Wechsler H, Molnar B, Davenport A, Baer J. College alcohol use: A full or empty glass? *J Am Coll Health*. 1999;47(6):247-252.
- <sup>10</sup> Wechsler H, Isaac N. "Binge" drinkers at Massachusetts colleges. *JAMA*. 1992;267(21):2929-2931.
- <sup>11</sup> Knight J, Wechsler H, Kuo M, Seibring M, Weitzman E, Shuckit M. Alcohol abuse and dependence among U.S. college students. *J Stud Alcohol*. 2002;63:263-270.
- <sup>12</sup> [PL 101-226](#), Drug Free Schools and Communities Act Amendments of 1989. 1989; Section 22.
- <sup>13</sup> Toomey T, Wagenaar A. Environmental policies to reduce college drinking: Options and research findings. *J Stud Alcohol*. 2002; Supplement 14:193-205.
- <sup>14</sup> Mitka M. Persuading youths that hops ain't hip. *JAMA*. 1998;280:499-500.
- <sup>15</sup> Stepp LS. Point. click. think? *Washington Post*, July 16, 2002, pp. C1-C2.
- <sup>16</sup> *US News and World Report*, National Universities—Doctoral: Top 50. September 2001.
- <sup>17</sup> Gordis L. *Epidemiology*. Philadelphia: W.B. Saunders. 2000;77-79.
- <sup>18</sup> Anderson D, Galedeto A. Results of the 2000 College Alcohol Survey: Comparison with 1997 results and baseline year. Available from authors. 2000.
- <sup>19</sup> Larimer ME, Cronce JM. Identification, prevention, and treatment: A review of individual-focused strategies to reduce problematic alcohol consumption by college students. *J Stud Alcohol*. 2002; Supplement 14:148-163.
- <sup>20</sup> Moskowitz JM. The primary prevention of alcohol problems: A critical review of the research literature. *J Stud Alcohol*. 1989;50:54-88.