Alcohol in the College Environment: Findings from the City University of New York Prepared by: Stephanie Kneeshaw-Price, MS, PhD, on behalf of the Healthy CUNY Initiative

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I. The Healthy CUNY Initiative

The Healthy CUNY Initiative (HCI) is a campaign designed by the City University of New York's (CUNY) students, faculty and staff to make CUNY the healthiest urban public university in the United States. HCI seeks to ensure that students leave CUNY healthier and better able to protect their future health than when they entered. Acknowledging the strong connection between educational achievement and health, HCI seeks to reduce the physical, psychological and family-related health barriers that block academic success and graduation.

Because of our integration with student services, we work closely with CUNY's health and mental health services. In addition, we develop short-term health campaigns to promote behavioral, environmental, and policy change. In terms of policies, Healthy CUNY was part of the development of an institution-wide Tobacco Free Policy and spearheaded its implementation and evaluation. We have created and distributed food policy recommendations to the University as a whole on procuring healthier food and vending contracts with our vendors, as well as recommendations for food and beverages at CUNY meetings and events. We are currently gathering alcohol policy data from colleges and universities across NYC; we hope to provide a resource guide to NYC universities and colleges using our study findings.

Healthy CUNY is sponsored by the CUNY Chancellor's Office and the CUNY School of Public Health. Healthy CUNY has both internal funding from the Vice Chancellor's Office of Student Affairs and external funding from such sources as the NYC Department of Health and Mental Hygiene and New York State Health Foundation.

II. Healthy CUNY Data Sources

The Healthy CUNY Survey (representative sample)

To recruit a representative sample of CUNY undergraduate students, investigators obtained from the CUNY Office of Institutional Research a random sample of email addresses and telephone numbers of 5,000 CUNY undergraduates. The initial random sample was selected in a single stage with no oversampling.

To be eligible, students had to be at least 18 years old, speak English, and be enrolled in one of 17 CUNY undergraduate colleges. Between April and June 2012, 4,932 eligible students were invited to participate in an online survey via a secure email link. Sixty eight students were not invited because they did not have both an email and telephone number on file. Of these, 740 consented to participate by email; 635 of these students had valid data, and 105 students completed less than 50% of the survey and were deemed ineligible. The 3,296 eligible students who did not respond to the email invitation were contacted by telephone and of these, 401 provided surveys for a total of 1,036 responses, an overall response rate of 21 percent. Students who completed the survey were invited to participate in a raffle for an iPad®.

To ensure that the sample accurately reflected the overall population of CUNY undergraduates on relevant characteristics, the 1,036 respondents were stratified on six parameters: college type (senior or community college); class standing (freshman, sophomore, junior, or senior); gender (male or female); race/ethnicity (Hispanic, non-Hispanic white, non-Hispanic black, or Asian/American Indian/Alaskan Native); age (under 21 or 21 and older); and grade point average quartile (quartiles 1-4 or a 'missing' quintile). The sample was then weighted to reflect the distribution of the CUNY undergraduate population on these six parameters. This study was approved by the Institutional Review Board of Hunter College and the survey was carried out by the Baruch Survey Research Center, a CUNY-based polling group.

Alcohol in the College Environment: Residence Halls & Student Life Survey (non-representative sample)

Residence hall students were recruited for this survey via email. The email addresses of approximately 1,800 of CUNY's 2,000 residence hall students were obtained from four of CUNY's six residence hall directors. Email addresses for members of student clubs and organizations, international students, intercollegiate athletes, members of student government, students who have served in the United States Armed Forces, and members of fraternities and sororities were not available. Thus, to recruit these individuals, an email with the link for the survey was sent to campus directors representing each of these groups. This email requested that each individual director distribute the survey link to their respective student population and post to appropriate listservs. Thus, we are not able to ascertain the universe of students invited to participate in this survey, nor to compare the characteristics of those who responded to those who did not respond. Six hundred and forty four (644) CUNY students completed the survey. The survey assessed CUNY students' drinking habits and pattern, perception of their peers' alcohol use as well as their encounters with alcohol advertising and promotion in their daily lives. This study was approved by the Institutional Review Board of CUNY's Central Office.

Alcohol in the College Environment: Hunter College Focus Groups (non-representative sample, qualitative data)

Using information from peer-reviewed literature on problem drinking among college students and secondary data analyses of the Healthy CUNY survey, sub-populations of Hunter College students were identified as potentially at higher risk for problem drinking. Groups identified were: students living in the residence hall, fraternity/sorority members, and intercollegiate athletes. A convenience sample was recruited from these three sub-populations via email invitation directing them to a short electronic eligibility screening survey. Focus groups discussed alcohol advertising and establishments around the Hunter Main Campus, and perceptions of problem drinking among Hunter students.

A total of 48 eligible students were invited to participate. Four focus groups of 6-10 students were conducted with a total of 29 students participating (11 male, 18 female). Students were asked a set of pre-determined questions about alcohol advertising as well as their perceptions of alcohol use among their peers. Responses were audio-recorded to ensure that all thoughts and opinions were accurately represented. This study was approved by the Institutional Review Board of Hunter College.

CUNY Student Alcohol Use

Table 1. Healthy CUNY Survey: CUNY Students' Alcohol Behaviors

Alcohol Use	Percent
Used Alcohol in the Past Year	58.2
Once Every Couple of Months	21.2
Once or Twice a Month	17.2
1-2 Times a Week	15.2
3 or More Times a Week	3.6
Every Day	0.5
Average Standard Drinks per Drinking Occasion	2.9
Average Peak BAC	0.06

BAC=Blood Alcohol Concentration

Table 2. Alcohol in the College Environment Survey: Alcohol use patterns by sub-groups							
	Sample Size (n)	Alcohol Use Frequency	Number of students reporting no drinks in last 12 months (%)	Average # Drinks Consumed in a Typical Episode	Average Blood Alcohol Concentration (BAC)	Rutgers Alcohol Problem Index (RAPI)-18	Primary Drinking Location
Full Sample	664	Once every couple of months or less (26% of sample)	118 (19.9%)	3.46 (s.d.=2.98)	0.08 (s.d.=0.08)	2.96 (s.d.=5.25)	Bar, club, lounge (27% of sample)
Students living in CUNY Residence Halls	440	Once or twice a month (25% of sample)	87 (21.2%)	3.94 (s.d.=3.30)	0.09 (s.d.=0.08)	2.87 (s.d.=5.43)	Bar, club, lounge (25% of sample)
Student Club and Organization Members	296	Once or twice a month (28% of sample)	59 (20.6%)	3.57 (s.d.=3.56)	0.08 (s.d.=0.09)	3.40 (s.d.=5.79)	Bar, club, lounge (29% of sample)
International Students	108	Once or twice a week (26% of sample)	24 (22.4%)	2.08 (s.d.=1.61)	0.05 (s.d.=0.06)	2.74 (s.d.=5.00)	Bar, club, lounge (33% of sample)
Intercollegiate Athletes	45	Once every couple of months or less (31% of sample)	11 (24.4%)	4.4 (s.d.=6.33)	0.10 (s.d.=0.15)	3.22 (s.d.=5.41)	Bar, club, lounge (47% of sample)
Student Government Members	39	Once or twice a month (33% of sample)	6 (15.4%)	3.20 (s.d.=1.87)	0.06 (s.d.=0.04)	1.92 (s.d.=2.77)	Bar, club, lounge (39% of sample)
Veterans	29	Once every couple of months or less and Once or twice a week (both 31% of sample)	1 (3.9%)	3.43 (s.d.=2.56)	0.04 (s.d.=0.04)	4.25 (s.d.=5.61)	Bar, club, lounge (36% of sample)
Fraternity and Sorority Members	21	Once or twice a month and Once or twice a week (both 33% of sample)	1 (4.8%)	4.00 (s.d.=2.73)	0.06 (s.d.=0.07)	3.00 (s.d.=4.16)	Bar, club, lounge (50% of sample)

Table 2. Alcohol in the College Environment Survey: Alcohol use patterns by sub-groups

Characteristics		Number of Problems in Typical Drinking Episode*			
Age	18-20	203 (85.3)	16 (6.7)	19 (8.0)	
	21-24	211 (81.5)	23 (8.8)	25 (9.6)	
	25-30	121 (86.8)	8 (5.8)	10 (7.3)	
	31+	105 (96.6)	2 (1.8)	2 (1.6)	
Gender	Female	413 (85.6)	36 (7.9)	32 (6.5)	
	Male	240 (86.6)	13 (4.6)	24 (8.8)	
Race/ethnicity	Hispanic	177 (82.4)	18 (8.1)	21 (9.5)	
	White (nonH)	123 (81.7)	11 (8.2)	16 (10.1)	
	Black (nonH)	165 (92.1)	9 (4.5)	7 (3.5)	
	Asian/PI	152 (87.1)	8 (4.6)	12 (8.3)	
	Other	23 (90.7)	2 (9.3)	0 (0)	
College Type	Senior College	456 (86.4)	33 (6.3)	39 (7.3)	
	Community College	202 (85.6)	16 (6.8)	17 (7.5)	
Total		658 (86.1)	49 (6.5)	56 (7.4)	

Table 3. Healthy CUNY Survey: Risky Alcohol Behavior Scale by Demographics

significant differences between groups, p<0.05

*This scale ranks students who report no, one or two problems during a 'Typical Alcohol Drinking Episode' Alcohol Scale: Range 0-2, Max 2. The two problem indicators are:

- 1. Blood Alcohol Concentration (BAC)>0.08=1, less =0
- 2. Binge drinking (5 for males, 4 for females)=1, less =0

CUNY Student Non-Prescribed Use of Prescription Drugs

Data source: Healthy CUNY Survey

Approximately 3.5% of CUNY undergraduates reported non-prescribed use of prescription drugs in the past 12 months. For those 3.5% of students, frequency of use is reported in Table 4.

Table 4. Frequency of Non-Prescribed Useof Prescription Drugs	Percent
Every day	6.7
3 or more times per week	4.7
1-2 times per week	11.7
1-2 times per month	23.5
Once every couple of months or less	34.2
Not sure	13.7
Refuse	5.6

IV. Inferential Statistics: Understanding Drinking Behaviors and Perceptions

Deciding Factors in Drinking

Data Source: Hunter College Focus Groups

According to focus group findings, students claimed that alcohol advertising does not persuade them to buy the alcohol brand advertised. Participants proposed that in the case of students in New York City, ad agencies "waste money" in "elaborate schemes" to procure loyal clientele. For example, while Dos Equis' Most Interesting Man in the World was a clear favorite among the students, none said that they actually liked or drank that beer. In fact, students were keen to show that ads were not a deciding factor when deciding what to drink. Students were more likely to choose a drink because peers were drinking it rather than brand advertisement.

Despite claims of independence from advertisements, students' comments on alcohol and image suggest otherwise at times, a contradiction worthy of further investigation in future studies. Students had strong associations between image and the type of alcohol, with advertisements often portraying the same image. Students though that type of alcohol being consumed revealed certain cultural and social positions of the drinker. For example, one student mentioned that no one in New York City would drink Budweiser or Pabst Blue Ribbon (with the exception of hipsters seeking to be ironic). However, he also described a party in Long Island that he had recently attended, recounting the crowd as "no one that really looked older, or had any kind of sophistication at all." At this party, "Bud was the first to go... [while] they didn't touch the wine". In another discussion, students perceived the Johnny Walker ads as promoting a sophisticated drink. One student later admitted that now that he is older he prefers more "sophisticated" drinks, like whiskey, instead of vodka.

Certain types of alcohol were also associated with different types of drinking culture. Vodka and beer were often mentioned as drinks that were consumed with the intention to get intoxicated. One focus group discussed a vodka ad whose message could relate to a party or club scene, while another group thought that beer ads also relied on the party scene for their ads. In contrast, wine and dark liquors, which had ads aimed at "sophisticated drinkers," were seen as drinks to have on a quiet night with friends. These themes might also help to influence campaigns designed to raise awareness of the risk of drinking to get drunk.

Perceptions of Others' Alcohol Use

Data source: Alcohol in the College Environment Survey

The perceptions students hold about habits of "friends", "typical CUNY undergraduates", and "typical non-CUNY undergraduates" were assessed. T-tests comparing actual drinking habits of the entire sample and each sub-population vs. the perceptions of the drinking habits of the groups noted in table 2 above were conducted. These analyses revealed the following statistically significant differences:

- On average, CUNY undergraduates perceived that the "typical" CUNY undergraduate drank more (average # drinks=4.16) relative to their actual drinking habits (average # drinks=3.58) (p=0.0496).
- On average, international students perceived that their friends drank more (average # drinks=4.13) relative to their own drinking habits (average # drinks=2.14) (p<0.0001).
- On average, international students perceived that "typical" CUNY undergraduates drank more (average # drinks=4.35) relative to their own drinking habits (average # drinks=2.14) (p<0.0001).

- On average, international students perceived that "typical" non-CUNY undergraduates drank more (average # drinks=4.68) relative to their own drinking habits (average # drinks=2.16) (p<0.0001).
- On average, students who viewed no alcohol ads in the past week perceived that "typical" non-CUNY undergraduates drank more (average # drinks=5.90) relative to their own drinking habits (average # drinks=3.18) (p=0.03).

Data Source: Hunter College Focus Groups

Participants' descriptions of a problem drinker were students who relied heavily on drinking, either at social events or by themselves. Interestingly, many students admitted that alcohol was a useful social lubricant, with some revealing that they relied on alcohol to feel more confident in social interactions. The difference seemed to depend on the student's intention. If it was to relax in a social situation, it was acceptable. If it was drinking to get drunk, the student was labeled a problem drinker.

Perceptions of CUNY Alcohol Policy

Data Source: Hunter College Focus Groups

Another theme that was discussed was policies and practices that tackle alcohol misuse and problem drinking among students. Some noted that because of the "no tolerance" alcohol policy in residence halls, safeguards were in place to monitor and uncover drinking of any kind occurring there. From the student perspective, participants in the focus groups reported they were averse to policies that relied on scare tactics or that were unreasonably harsh. Rather, they made suggestions that relied on harm reduction tactics. They noted that college students will drink regardless of policies. Many students felt that strict policies serve only to make students less likely to go to college staff if they needed help because of fearing the consequences. For example, students mentioned that Public Safety officers at the dorms would call an ambulance if a student was visibly drunk, with the student paying the bill, and that students would lose their room if they got caught with alcohol in the dorms. They acknowledged that the policy was somewhat effective, though, since students would not want the economic consequences or humiliation associated with either penalty. Yet, participants offered many stories of their friends getting intoxicated at the dorms or coming home intoxicated from the bars. Many of the students agreed that having a "no tolerance" policy was harsh, especially when considering that some of the students in the dorms were of the legal drinking age. Students suggested that what may be more beneficial is education programs offered by CUNY regarding drinking responsibly rather than force them to hide their drinking habits. As one student described, "it tells people how to not get caught drinking...not how to drink."

Future Intervention and Policy Considerations

Data Sources: Alcohol in the College Environment Survey and Hunter College Focus Groups One of the primary considerations for CUNY moving forward is that students do not drink around their campuses. Focus group participants cited clubs/bars, dorms/apartments and parks during nice weather as preferred places to drink, and the primary locations where students reported drinking in the Alcohol in the College Environment Survey were bars, clubs, and lounges (see Table 2, last column). A second consideration is the diversity of CUNY's student body may present challenges in creating targeted campaigns.

V. Suggested Future Directions

Our studies suggest several questions that warrant further investigation as we seek to develop policies and programs designed to reduce problem drinking and drinking-related problems among CUNY students. These include:

1. What are student perceptions of current campus alcohol policies and what suggestions do students have for specific prevention and harm reduction policies? What are administrators' responses to those suggestions?

2. Does the alcohol environment vary by CUNY campus and are there CUNY campuses where the immediate campus environment or campus culture encourages (or discourages) problem drinking?

3. Are there sub-populations at risk of problem drinking (e.g., members of fraternities and sororities), and what are the specific patterns of drinking in these groups?

4. Are there establishments (e.g., clubs) or settings (e.g., concentrated geographic neighborhoods such as the Lower East or West Side) where many CUNY students engage in problem drinking that could be useful venues for educational campaigns? (e.g., the model of gay bath houses as a site for HIV education).

5. Are there problematic consequences of drinking for CUNY students that warrant further investigation (e.g., arrest for drinking alcohol in public places, academic difficulties resultant from party-related drinking, participating in drinking contests at clubs)? What is the prevalence of these problems? How do students and campus administrators assess the cost of these consequences?

6. What marketing practices (including traditional and online) are alcohol companies and retail outlets using to reach diverse urban young adults? What role do college environments play in this marketing? What are college students' perceptions of these marketing strategies?

Studies that can answer these and related questions will provide the evidence that health and campus officials need to reduce problem drinking among New York's college students.