Methodology Report for the College Students' Survey for the Texas Commission on Alcohol and Drug Abuse

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Introduction

Over the past decade the Texas Commission on Alcohol and Drug Abuse (TCADA), in conjunction with the Public Policy Research Institute (PPRI), has conducted numerous studies in an effort to establish treatment needs and measure addictive behaviors. While many of the studies have focused on the general adult population or on children under eighteen, little attention has been paid to the adults bridging that gap. To remedy this situation and to allow for drug abuse prevention programs to be targeted as needed, TCADA sponsored a survey of college students in 1997.

It should be noted that information on drug and alcohol attitudes and usage rates of Texas college students had been desired for several years, however, the college aged population is difficult to study. They are not often in households reached with normal phone surveys, which tend to exclude dormitories, fraternities, and sororities. In addition, the times that they tend to be available in regular households are erratic. College students also tend to be clustered in very dense pockets, sometimes in non-urban areas. Until quite recently, this type of survey required a large and cumbersome institution-based sample to get accurate representation, since there usually is great heterogeneity in the college student populations. Recently however, educational institutions have made public their enrollment lists and often make these available on the Internet. Other agencies have compiled similar information. For this study Survey Sampling Inc. (SSI) was able to put together names and telephone numbers of students by institution, which greatly facilitated sampling.

The study population was comprised of all full-time undergraduate students between the ages of 18 and 26 enrolled in one of the ten largest four-year public and private universities during the academic year of the survey. PPRI began collecting data via telephone interviewing on April 2, 1997 and completed the final survey on May 27, 1997. Two thousand four hundred and twenty students were interviewed during the study.

Survey Instrument Development

The college questionnaire was developed to measure drug and alcohol attitudes and usage as well as other addictive behaviors. Much of the focus was on alcohol use and abuse. TCADA staff included questions by relying on Wechsler's (1993) instrument. Weschler conducted a mail survey of college students in the early 1990s. TCADA staff also examined other relevant instruments such as the Core Alcohol and Drug Survey (Core Institute, 1994). PPRI and TCADA staff worked on improving the wording and flow of the questions. A copy of the final instrument is available in Appendix A.

The survey included sections on the following: student life (including housing, major, GPA, and student activities); knowledge of the school's alcohol policies and programs; personal alcohol use (including frequency and type of drinking); use of drugs other than alcohol; other personal behaviors (drinking and driving as well as sexual experience); gambling; and basic demographic information.

Pre-testing the Survey Instrument

As is standard procedure at PPRI, prior to a pretest using actual respondents, the supervisors used survey staff as respondents and conducted mock interviews. These were not true surveys because the staff role-played as respondents rather than actually answering questions. However, it enabled preliminary checks to be done on characteristics such as readability, flow, logic, and timing. At each stage, modifications were made in the draft to respond to problems. This process was repeated several times during the development of the questionnaire and comments were sent to the project officer.

Pre-test interviews were conducted by three different interviewers who practiced the survey during the

mock interview phase described above. The pretests were observed by at least one senior staff member as well as a survey supervisor. At the end of the interview, a short debriefing interview was organized, which allowed the "respondent" to discuss any survey problems or questions that arose. As soon as the interview was completed, the interviewer and those monitoring the interview met and went through the interview, comparing notes and observations and making suggestions for possible changes. These comments were also sent to the TCADA project officer.

Sample Design

Only full-time undergraduates in four-year colleges and universities in Texas were sampled. There were substantive reasons that students at the four-year colleges represented a definable community of students. The researchers wanted to capture the attitudes of students that were part of an identifiable group as separate from a regular household. Because much of the student body at two year institutions either remain at home or are older than 26 and because many two year institutions are not campuses but rather commuter schools, the decision was made to exclude those students. Thus, the decision was made by TCADA to only include four year institutions. For similar reasons the researchers decided to limit those interviewed to full-time students.

It was decided that PPRI would sample the largest colleges in the state. Since numbers would have to be obtained by campus, it was cost effective to limit the number of campus units. The largest campuses also include a relatively high proportion of the students in the state.

TABLE 1: Enrollment by Institution for Universities in the TCADA Sample

School	Enrollment[1]	Full-time Undergraduate Enrollment[2]
Public		
University of Texas	47957	35789
A&M University	43256	31825
University of Houston	31298	21522
North Texas University	25605	17296
Texas Tech University	24083	18187
UT-Arlington	23280	13709
Southwest Texas University	20896	NA
UT-San Antonio	17577	13246
Private		
Baylor University	12240	10346
Southern Methodist University	9014	4642
Texas Christian Univiversity	6481	5587

[1] Data are from www.thecb.state.tx.us/divisions/grpi/puniv.htm and from www.thecb.state.tx.us/divisions/grpi/iuniv.htm.
[2] Data are from a survey of schools conducted by PPRI in May-June, 1997 of the institutions with students in the sample.

The initial plan was to sample the largest public and private four year colleges in Texas. This plan was modified somewhat due to the fact that no lists of students were available from some campuses and that we wanted to include private university students in the sample. Specifically, we selected the eight largest public campus (based on total enrollment), and the three largest private colleges in the state. One of the public campuses was excluded (Southwest Texas) due to the lack of availability of a list of students. The list of campuses sampled, total enrollments, and full-time undergraduate enrollments are found in Table 1. The colleges sampled represents 49% of all Texas college students, 54% of all students at public colleges and universities, and 28% of all students at private colleges.

The sample was randomly taken from published directories of students at the selected universities. The lists were obtained from Survey Sampling Inc. and provided students' names and phone numbers by institution. Most public and private institutions are free to release the name, address and telephone numbers for students who do not request that the information be held confidential.

The number of students interviewed at each institution was roughly proportionate to the number of students at the campus. Since the efficiency of the lists from the different schools varied widely (see Table 2), the number of telephone numbers sampled varied widely by campus. The final sample was weighted so that the proportion of students from each school, gender, and year in school is equal to the proportion in enrollment in the sampled schools. This is discussed in detail later in the section on weights.

There was concern among PPRI and TCADA staff that respondents would feel uncomfortable answering personal questions posed by an interviewer of the opposite sex. For that reason, the sample was divided into two separate gender sub-samples. The randomly selected respondent names were examined and their phone numbers were placed in either the "mostly male" study or the "mostly female" study accordingly. Those names which were not typically associated with a particular gender were placed in the mostly male list.

Even though the interviewers did not ask for a particular student, the sex distributions corresponded well with the study divisions. Ninety percent of the "mostly male" list were male while eighty percent of the "mostly female" were female respondents. The two samples were worked equally with a concerted effort to place male interviewers on the "mostly male" study. Same gender interviewers conducted most interviews: Eighty percent of male interviewers interviewed male respondents and 61% of female interviewers interviewed females, reflecting the fact that there were more female interviewers[3].

Although we started with a list of specific students, to maximize confidentiality we followed a procedure that minimized the use of the student's name. Sampling involved random selection of students available at a particular telephone number identified from the list. If no student lived at the number, an attempt was made to trace the student to another number. However, at the new number we would randomly pick an anonymous student.

The interviewer was not given access to the student's name, but was instructed to ask for the college student at that number who had the most recent birthday (e.g., "may I speak with the University of Texas student who had the most recent birthday?"). If no student lived there the interviewer asked for the new number of the student.

[3] This effort appears to have been unnecessary. There were no statistically significant differences in responses to the sensitive question on sexual intercourse between same and different gender interviewer/interviewees.

To insure confidentiality of the respondent, the student's name was only accessible to the programming staff and to those few individuals assigned to call directory assistance. Whenever a contact resulted in a disposition of "bad number", that record was "tagged" and directory assistance was contacted for a new phone number. In some instances residents of a household provided other telephone numbers where a particular respondent could be located. For “bad numbers” another person other than the interviewer attempted to track down the student’s new number. An additional five attempts were made to reach the student at the new number. Using the volunteered telephone numbers and directory assistance resulted in 883 replacement phone numbers which were then attempted.

The Computer Assisted Interviewing System

PPRI used a computer assisted telephone interviewing (CATI) system for programming the computers to run the survey. The CATI system managed the sample, controlled what the interviewer read, and checked the data entered by the interviewer. The CATI system reduced errors by edit checking all entries during the interview. Illegal entries were not allowed. The program also controlled all skips, so interviewer error having to do with conducting the survey was eliminated.

Interview Monitoring and Data Verification

The interviewing was carefully monitored using standardized PPRI survey lab operating procedures. Five percent of all interviews were verified through supervisor verification. Using the CATI, a monitoring schedule for each interview shift was established at the 5 percent level. Supervisors at a central terminal listened in on randomly selected interviews while simultaneously observing the interviewer's entries into the CATI system. Errors in asking questions or in recording the data were noted and corrections made as needed.

Procedures for Contacting Respondents

One of the most important factors affecting the quality of survey data is the effort made to reach respondents. Our standard procedure for attempting to contact a household is to place a call during each of five different shifts throughout the week. Four of these calls normally occur during the evening or weekend hours when respondents are more likely to be at home. Numbers that are apparently disconnected are tried twice, failing which survey staff use directory assistance. PPRI also maintain an 800 number to facilitate return calls from sampled respondents. Busy numbers are tried twice during the same shift, and attempts are repeated during five different shifts. When a household has been reached, but the correct respondent is not available, as many as five more tries are made to reach the correct respondent.

Attempts were made to convert virtually all refusals. Interviewers completed a special form when a refusal occurred that provided as much information as possible on the circumstances of the refusal. These respondents were routinely re-contacted by interviewers specially trained to convert refusals. These procedures maximized the response rate in each of the stratum of the sample called for by TCADA.

Table 2 shows the final dispositions for the sample divided by college and ranked by number of undergraduate students. From this table, the final cooperation rate for the study, accounting for screening, [using the formula [(CM+NOTQ)/(CM+NOTQ+RF/TM)] is calculated as 70.0%. Since 307 of the RF/TM occurred after the screening process, the cooperation rate after screening [using CM/(CM+RF/TM after screening)] was 88.7%.

Table 2:Final Disposition of 1997 College Telephone Survey on Alcohol and Drug Use[4]

University Name	Completes	BN/DS	NA/BZ/AM	Call Back	Not Qualified	RF/TM	Exclude	TOTALS
UT Austin	379 (11.7%)	447 (13.8%)	1,272 (39.4%)	510 (15.8%)	432 (13.4%)	122 (3.8%)	66 (2.0%)	3,228
TAMU CS	485 (17.1%)	955 (33.7%)	532 (18.8%)	373 (13.2%)	230 (8.1%)	239 (8.4%)	17 (0.6%)	2,831
U of Houston	255 (9.6%)	317 (11.9%)	879 (33.1%)	642 (24.2%)	397 (14.9%)	122 (4.6%)	46 (1.7%)	2,658
TX Tech	280 (13.6%)	959 (46.6%)	295 (14.3%)	172 (8.4%)	105 (5.1%)	239 (11.6%)	9 (0.4%)	2,059
Univ North TX	189 (13.9%)	264 (19.4%)	254 (18.6%)	230 (16.9%)	274 (20.1%)	118 (8.7%)	35 (2.6%)	1,364
UT Arlington	145 (5.0%)	933 (32.0%)	691 (23.7%)	400 (13.7%)	353 (12.1%)	354 (12.1%)	44 (1.5%)	2,920
UT San Antonio	174 (10.7%)	496 (30.6%)	216 (13.3%)	223 (13.8%)	293 (18.1%)	200 (12.3%)	18 (1.1%)	1,620
Baylor Univ.	243 (14.5%)	570 (34.1%)	341 (20.4%)	188 (11.2%)	96 (5.7%)	224 (13.4%)	10 (0.6%)	1,672
TCU	214 (9.2%)	1,122 (48.1%)	348 (14.9%)	180 (7.7%)	102 (4.4%)	346 (14.8%)	20 (0.9%)	2,332
SMU	56 (5.0%)	276 (24.7%)	292 (26.1%)	109 (9.7%)	216 (19.3%)	156 (13.9%)	14 (1.3%)	1,119
TOTALS	2,420 (11.1%)	6,339 (29.1%)	5,120 (23.5%)	3,027 (13.9%)	2,498 (11.5%)	2,120 (9.7%)	279 (1.3%)	21,803

Interviewers

PPRI's established pool of interviewers is comprised of both students and local community residents who are participating in ongoing studies or have worked on several short-term projects. The availability of experienced interviewers simplifies the training requirements and ensures a high-quality product. Of the 74 interviewers used for the college survey 49 were selected from among those who have extensive experience with other PPRI interviewing projects. Twenty-five new interviewers were recruited and selected utilizing PPRI's standard operating procedures. This process began with the announcement of new interviewer positions in local newspaper advertisements and student employment offices. A multi-step screening process required potential interviewers to telephone our Survey Lab supervisor. Prospects were initially screened through this first telephone conversation. Those who failed to present themselves well on the phone were eliminated from further consideration. The others who passed the initial screening were asked to visit the Lab and complete an application form. Prospects whose applications were positively evaluated were interviewed face-to-face by the Survey Lab supervisor. In addition to providing standard employee information, the prospect was required to conduct a brief telephone interview with the supervisor using the project questionnaire. Each applicant was rated and the top applicants were selected.

[4] **Completes** = Completed Survey -- Successfully interviewed the respondent.
BN/DS = Bad number/Disconnect -- Invalid phone number/Phone number was disconnected.
NA/BZ/AM = No answer/Busy/Answering machine -- No response at the phone number attempted after 5 attempts.
Call Back = Respondent requested to be called back later...was not able to contact again to complete survey.
Not Qualified = Contact was not an 18 to 26-year-old undergraduate, full-time student of one of the top 10 Texas universities.
RF/TM = Refusal/Terminate -- Respondent refused to answer any questions/Respondent partially completed the survey, but Refused to/or could not be re-contacted to complete the survey.
Exclude = Phone number was to a business or government agency.

The criteria for evaluation included:

- Evidence of reliability as an employee;
- demonstrated articulation;
- positive telephone "personality"; and
- accuracy and attention to detail in reading the survey questionnaire, following instructions, and marking the responses.

Interviewer Training

PPRI used existing training manuals covering the Survey Lab's standard operating procedures, as well as training material designed specifically for this project. In addition to the printed manuals, training materials included overhead slide presentations, worksheets and example questionnaires.

The training session covered the topics included in the training manual and was designed to encourage active participation of trainees and to familiarize them with the different types of respondents. A large portion of the training session, like the training manual, was devoted to a question-by-question review of the survey instrument. In addition, much of the training session involved didactic classroom sessions and interviewing practice time.

Each trainee was observed and evaluated during the training session. Trainees who did not perform satisfactorily were given additional individualized training or replaced, as necessary. The training session was designed to maximize the effectiveness of the interviewers. Topics covered in the training included:

- background of the project including information on PPRI and TCADA;
- organization of the interviewing staff including responsibilities of supervisors, interviewers, and other staff;
- standard management procedures including scheduling, logging in and out, payroll, sickness, absences, tardiness, etc.;
- information on sampling (how it works in general, how the TCADA survey was derived, what the interviewer must do, why the procedures must be followed exactly);
- general instructions on interviewing including interviewer preparation, how to establish contact, how to maximize response rates, and how to deal with problems;
- asking questions, including maintaining neutrality, encouraging responses, probing, etc.;
- specifics of the TCADA survey including pronunciation, skips, allowable clarifications, etc.;

- dealing with specific problems (such as the purpose of the survey, research uses of the data, or substantive questions about survey content); and

- procedures for ensuring confidentiality.

Senior PPRI staff and Survey Lab managers conducted the training session. Supervisors worked on an individual basis with the trainees. Although some of the material was presented in a lecture format, much of it was also presented by example, or through participation in exercises designed to replicate actual interviewing experiences. Finally, interviewers practiced interviewing each other using the actual CATI program on lab equipment.

All interviewers received at least eight hours of training. The first four-hour session covered general interviewing issues and introduced the TCADA project general issues. A second two-hour session provided specific instruction on the survey instrument. The final two hours were devoted to practicing the interview using the CATI system.

Special presentations at the training sessions were videotaped so that they could be used to train additional interviewers as they were needed during the course of the project. At the end of the training session, prospective interviewers were tested for basic knowledge of the material and evaluated in a practical interviewing exercise. Trainees not meeting adequate standards were required to improve on their deficiencies before conducting project interviews.

Finally, new interviewers were carefully monitored during a trial period to identify and remedy problems immediately. This "on-the-job training" continued until the basic skills were mastered. Five experienced shift supervisors were assigned to the project and trained along with the interviewers.

Conducting Interviews

Prior to each week of scheduled interviews, supervisory staff determined the requisite number of interviews to be assigned to each shift. Typically there were 20 to 25 interviewers assigned to the project during evening (6:30 pm to 9:30 pm) and weekend shifts (10:00 am to 2:00 pm and 2:30 pm to 6:30 pm on Saturday and from 1:30 pm to 5:30 pm on Sunday). Four to five interviewers worked during business hours to make daytime attempts and callbacks.

Survey Supervision

The survey program supervisory staff oversees the preparation for interviewing each day. The following tasks are routinely part of that activity:

- Using the CATI to produce sample status reports. Use the reports to identify potential problems and establish priorities for interviewing during the shift.

- Using the CATI to produce interviewer productivity reports. Use the reports to identify problems.

- Determining the appropriate response to refusals, (e.g., scheduling another attempt) and other special situations such as bad numbers.

Prior to each shift, supervisors normally:

- allocate interview stations on the CATI to interviewers;
- assign interviewers to special tasks, such as refusal conversion; and
- determine the monitoring of interviewers (priority was given to new interviewers, interviewers with recognized problems, and interviewers who had not been monitored during their last four shifts).

During an interviewing session, shift supervisors normally have the responsibility for:

- answering questions that arise and dealing with difficult situations with respondents;
- monitoring interviews -- at least 20 percent of the interviewers in a shift are usually monitored and at least 5 percent of interviews conducted are normally monitored;
- maintaining shift productivity; and
- monitoring the CATI system to make sure that appropriate allocations of the sample are being made.

Interviewers are carefully supervised. One supervisor is on duty for every ten interviewers. Interviews are regularly monitored from a central phone and supervisors are required to monitor at least 20 percent of the interviews during a shift.

Participant Confidentiality

There are a variety of procedures that ensure confidentiality in the interviewing process. PPRI is required to maintain confidentiality of records on a variety of projects, including ones in which records are maintained on identified individuals. The approaches include maintaining security, following specified procedures, and training and supervising employees.

We have already discussed in detail the methods used to protect the respondent's identity from the interviewer, even though the sample was a list of names and telephone numbers. The interviewers did not know the name of the student, only that at least one student was likely at the number. When attempts were made to trace students, someone other than the person conducting the interviews were used to find new telephone numbers.

The CATI system enables control to be maintained over all files and records. The computer handles all sample management and data collection and there is no printed material that could compromise confidentiality. The computer system is secure and all areas where confidential material is stored is password protected and accessible only to a select group of staff. Floppy disks from the workstations contain data that are not readable in a meaningful way without access to computer programs available only to supervisory staff. Additionally, the premises and physical storage areas are secured.

The most important procedural consideration in maintaining security is to make sure that the

anonymity of the telephone interviews is not compromised. In the CATI system, specific information (e.g., telephone number, first name of someone to be called back) are in a file separate from the collected data. These files can be linked, but they are not maintained in a linked form. As soon as the results have been processed there is no further need for access to telephone numbers and other identifying information, and these data are destroyed. All staff at PPRI are aware of the issues involved in confidentiality. Highlighting its importance is part of all new employee training as well as the monitoring and supervision processes.

Quality Control

As mentioned earlier, many sources of possible error are eliminated or reduced by the use of the CATI program. The interviewers can enter only valid codes. Skips occur automatically, under control of the program. When a response requires a specific skip, the program allows no interviewer error in making that skip. The CATI program also permits checking of internal consistency of responses during the interview, allowing corrections to be made during the interview if necessary.

Monitoring procedures outlined above allow supervisory staff to identify problems of inconsistency, practices that reduce response rates for some interviewers, and practices that reduce the ability of the respondents to understand some interviewers. Listening to the interview while observing the screen seen by the interviewer allows complete monitoring of all aspects of the interview. The CATI allows data for each interviewer to be constantly accessible. These data provide information about cooperation rates, number of calls made, and other characteristics of interviewers that must be monitored constantly. Any problems can be spotted and addressed immediately by the supervisory staff.

Coding

Although the majority of responses required the respondent to select from among fixed choices, there were a few questions where open-ended responses were allowed. Responses from the first one hundred or so questionnaires were used to develop a preliminary list of codes. The codes were reviewed by project staff. A single coder was used to assign codes to all respondents. As responses that did not fit the original codes were encountered, additional codes were added under the supervision of the coding supervisor. The codes used are listed in Appendix B. A file with the verbatim responses along with the assigned codes were delivered to TCADA.

Weights

Weights have been supplied to adjust to the sample by the known distribution of students by university, gender, and classification (freshman, sophomore, junior, senior). The figures for enrollment by strata for fall 1996 term were obtained directly from the registrar or public information office at each of the colleges.

Three variables that can be used were computed with SUDAAN and/or SAS:

Sudstrat: Strata identifier that can be used by SUDAAN to identify the strata

Wt: Weight used by SUDAAN or SAS. It is the POPULATION divided by the SAMPLE in each strata. It weights the sample up to the population of all schools in the sample.

Sudpop: Population in each strata used by SUDAAN.

The values of the populations, samples, and weights for each strata are available in Table 3.

It should be noted that the number of seniors in most universities was disproportionately high compared to the number in other classes. This is because many students have the required number of hours to be a senior, but have not met the other requirements to graduate.

Table 3: Institutional Population and Sample by Gender along with Study Weights

		POPULATION		STUDY		WEIGHT	
Code	**College and Classification**	**Males**	**Females**	**Males**	**Females**	**Males**	**Females**
3276	Baylor Freshmen	1361	1790	33	39	41.2424	45.8974
	Baylor Sophomores	959	1251	21	28	45.6667	44.6786
	Baylor Juniors	972	1194	24	25	40.5000	47.7600
	Baylor Seniors	1223	1596	39	34	31.3590	46.9412
	TOTAL	**4515**	**5831**	**117**	**126**	**158.7681**	**185.2772**
3235	SMU Freshmen	554	663	4	3	138.5000	221.0000
	SMU Sophomores	602	683	4	6	150.5000	113.8333
	SMU Juniors	541	601	3	14	180.3333	42.9286
	SMU Seniors	452	546	8	14	56.5000	39.0000
	TOTAL	**2149**	**2493**	**19**	**37**	**525.8333**	**416.7619**
3318	TAMU-CS Freshmen	2919	2961	66	47	44.2273	63.0000
	TAMU-CS Sophomores	3433	3010	55	38	62.4182	79.2105
	TAMU-CS Juniors	4480	3899	51	42	87.8431	92.8333
	TAMU-CS Seniors	6287	4836	123	63	51.1138	76.7619
	TOTAL	**17119**	**14706**	**295**	**190**	**245.6024**	**311.8057**
3262	TCU Freshmen	551	794	26	47	21.1923	16.8936
	TCU Sophomores	542	788	16	35	33.8750	22.5143
	TCU Juniors	501	729	21	24	23.8571	30.3750
	TCU Seniors	683	999	20	25	34.1500	39.9600
	TOTAL	**2277**	**3310**	**83**	**131**	**113.0744**	**109.7429**
3370	TX Tech Freshmen	1867	2183	39	30	47.8718	72.7667
	TX Tech Sophomores	2254	2024	45	37	50.0889	54.7027
	TX Tech Juniors	2170	1878	22	21	98.6364	89.4286
	TX Tech Seniors	3328	2483	55	31	60.5091	80.0968
	TOTAL	**9619**	**8568**	**161**	**119**	**257.1062**	**296.9948**
3287	U of Houston Freshmen	2134	2367	21	22	101.6190	107.5909
	U of Houston Sophomores	2054	2140	26	21	79.0000	101.9048
	U of Houston Juniors	2473	2963	36	48	68.6944	61.7292
	U of Houston Seniors	3620	3771	40	40	90.5000	94.2750
	TOTAL	**10281**	**11241**	**123**	**131**	**339.8134**	**365.4999**
3263	U of North TX Freshmen	1277	1542	14	13	91.2143	118.6154
	U of North TX Sophomores	1596	1723	20	22	79.8000	78.3182
	U of North TX Juniors	1989	2202	14	18	142.0714	122.3333
	U of North TX Seniors	3508	3459	51	36	68.7843	96.0833
	TOTAL	**8370**	**8926**	**99**	**89**	**381.87**	**415.3502**
3255	UT Arlington Freshmen	1093	1120	13	13	84.0769	86.1538
	UT Arlington Sophomores	1302	1264	19	13	68.5263	97.2308
	UT Arlington Juniors	1667	1795	25	12	66.6800	149.5833
	UT Arlington Seniors	2685	2783	20	30	134.2500	92.7667
	TOTAL	**6747**	**6962**	**77**	**68**	**353.5332**	**425.7346**
3358	UT Austin Freshmen	4081	3778	35	18	116.6000	209.8889
	UT Austin Sophomores	3635	3650	48	25	75.7292	146.0000
	UT Austin Juniors	4100	4115	49	36	83.6735	114.3056
	UT Austin Seniors	6329	6101	92	76	68.7935	80.2763
	TOTAL	**18145**	**17644**	**224**	**155**	**344.7962**	**550.4708**
3340	UT San Antonio Freshmen	1152	1280	28	19	41.1429	67.3684
	UT San Antonio Sophomores	1130	1371	18	23	62.7778	59.6087
	UT San Antonio Juniors	1331	1727	21	20	63.3810	86.3500
	UT San Antonio Seniors	2553	2702	21	24	121.5714	112.5833
	TOTAL	**6166**	**7080**	**88**	**86**	**288.8731**	**325.9104**

Appendix A
Questionnaire

Appendix B
Code Sheet

COLLEGE SURVEY CODES

GRADE
1=Freshman
2=Sophomore
3=Junior
4=Senior
10=Undergrad w/degree

A2
1=Same-sex dorm
2=Co-ed dorm
3=Fraternity/Sorority
4=Co-op/Univ. group housing
5=Other university housing
6=Off-campus housing
8=DK
9=RF
10=Parents
11=Relatives

A4
1=Life sciences
2=Business
3=Education
4=Engineering
5=Humanities
6=Fine Arts
7=Physical sciences/Math
8=Social sciences
20=Undecided
21=Joint major
22=Vocational/technical
23=Agriculture
24=Communications
25=Computer Science
26=Architecture
98=DK
99=RF

A5
1=A 4.0
3=A- 3.7
4=B+ 3.3
5=B 3.0
6=B- 2.7
7=C+ 2.3
8=C 2.0
9=C- 1.7
10=D+ 1.3
11=D 1.0
13=F lt 1.0

98=DK
99=RF

C8
1=1-2 occasions
2=3-5 occasions
3=6-9 occasions
4=10-19 occasions
5=20-39 occasions
6=40+ occasions
98=DK

C13D
10=Local off-campus bar/club
11=On-campus club
12=Local liquor/grocery store
13=Gas station
14=Parties/neighbors/friends
15=Restaurant
16=Frat houses
17=Fairgrounds
18=Bowling alley
19=Sporting events
98=DK
99=RF

C14
1=Beer
2=Wine coolers
3=Wine
4=Liquor/mixed drinks
5=No usual drink
98=DK
99=RF

C22
1=None
2=Everyday
3=Several times/week
4=Several times/month
5=About once/month
6=At least once/year
7=Less than once/year
96=Everytime drank -> make answer match answer to c20
98=DK

C27
1=Family not approve
2=Accept light/not heavy drinking
3=Accepted heavy drinking
4=No agreement about drinking
10=Accepted drinking only at house

98=DK
99=RF

D4A
1=Rohypnol
2=LSD
3=Valium
4=Speed
5=Grass/hash
6=Crack
7=Alcohol
8=Ecstacy
9=Heroin
10=Cocaine
11=PCP
12=Morphine
13=GHB
14=Ketamine
15=Tranquilizer
16=Depressant
17=Psilocybin
18=Ritalin
19=Steroids
20=Barbituates
21=Nikki
98=DK
99=RF

F10
10=Miscellaneous
11=Sex bets
12=Board/dice games
13=Racing
14=Simpson trial
15=Political topics
16=Raffles
17=Dog races
18=Animal fights
19=Sporting events
20=Sports w/bookie
21=Games
22=Grades/School issues
25=Pool
26=Golf/Miniature golf
27=Video/Arcade games
28=Playing sports
29=Dares
30="Friendly bets"
31=Work issues
98=DK
99=RF

G1
1=Never married
2=Married
3=Divorced
4=Separated
5=Widowed
8=DK
9=RF

G1a
1=Both biological parents
2=One biological+step parent
3=One biological alone
4=Joint-custody
10=Grandparents
11=Adopted parents
12=Aunt/Uncle
13=Guardians
98=DK
99=RF

G3
1=White/Anglo-American
2=Native-American
3=Black/African-American
4=Asian/Pacific Islander
10=Restated "Hispanic"
11=Indian
98=DK
99=RF

G4
1=None
2=Catholic
3=Jewish
4=Moslem
5=Protestant
6=OTHER
7=Agnostic
8=Hindu
9=Buddhist
10=Bahai
98=DK
99=RF

G4A
1=Baptist
2=Methodist
3=Non-denominational
5=Disciples of Christ
6=Lutheran
7=Church of God

9=Presbyterian
10=Church of Christ
11=Methodist
12=Episcopalian
13=Pentecostal
16=Mormon/LDS
17=Jehova Witness/SDA
18=Assembly of God
20=Orthodox
21=Presbyterian
24=Church of God in Christ
25=Christian Science
26=Congregational
27=Church of the Nazarene
28=Church of England
29=First Christian
31=Missionary alliance
32=Salvationaist
34=Mennonite
35=Zoroastrianism
36=Reformed
37=None
38=Druid
39=Liberal
42=Heaven's gate
45=Unitarian
98=DK
99=RF

G8/G9
1=Lt high school
2=High school diploma
3=Some college/technical
4=Four+ years college
98=DK
99=RF

G6o1/G6B1/G6B2
1=ALABAMA
2=ALASKA
3=ARIZONA
4=ARKANSAS
5=CALIFORNIA
6=COLORADO
7=CONNECTICUT
8=DELEWARE
9=FLORIDA
10=GEORGIA
11=HAWAII
12=IDAHO
13=ILLINOIS
14=INDIANA

15=IOWA
16=KANSAS
17=KENTUCKY
18=LOUISIANA
19=MAINE
20=MARYLAND
21=MASSACHUSETTS
22=MICHIGAN
23=MINNESOTA
24=MISSISSIPPI
25=MISSOURI
26=MONTANA
27=NEBRASKA
28=NEVADA
29=NEW HAMPSHIRE
30=NEW JERSEY
31=NEW MEXICO
32=NEW YORK
33=NORTH CAROLINA
34=NORTH DAKOTA
35=OHIO
36=OKLAHOMA
37=OREGON
38=PENNSYLVANIA
39=RHODE ISLAND
40=SOUTH CAROLINA
41=SOUTH DAKOTA
42=TENNESSEE
43=TEXAS
44=UTAH
45=VERMONT
46=VIRGINIA
47=WASHINGTON
48=WASHINGTON D C
49=WEST VIRGINIA
50=WISCONSIN
51=WYOMING
52=A_ (FOR CODING CITY NAMES)
53=B_
54=C_
55=D_
56=E_
57=F_
58=G_
59=H_
60=I_
61=J_
62=K_
63=L_
64=M_
65=N_
66=O_

67=P_
68=Q_
69=R_
70=S_
71=T_
72=U_
73=V_
74=W_
75=X_
76=Y_
77=Z_
78=INDIA
79=HUNGARY
80=KOREA
81=JAPAN
82=CANADA
83=ENGLAND
84=MEXICO
85=SPAIN
86=GERMANY
87=HONG KONG
88=CYPRUS
89=COLUMBIA
90=KENYA
91=UNITED ARAB EMIRATES
92=HOLLAND
93=THAILAND
94=PUERTO RICO
95=TAIWAN
96=PAKISTAN
97=MALASIA
98=DK
99=RF
101=NORWAY
102=SOUTH AFRICA
103=HONDURAS
104=SINGAPORE
105=PHILLIPINES
106=ITALY
107=SYRIA
108=FRANCE