

ANALYSIS OF BINGE DRINKING AMONG STUDENTS AT CALIFORNIA POLYTECHNIC
STATE UNIVERSITY SAN LUIS OBISPO

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ABSTRACT

ANALYSIS OF BINGE DRINKING AMONG STUDENTS AT CALIFORNIA POLYTECHNIC STATE UNIVERSITY SAN LUIS OBISPO

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The perception of binge drinking among students is skewed to an extreme that provides an excuse for consuming excessive amounts of alcohol. Recent tragic events pertaining to binge drinking steer this study towards clarifying the clouded perceptions students have of alcohol consumption. It is important to understand variables that may affect understanding and decisions that lead to abusing alcohol. It is intended to present factors that can help prevent circumstances and situations that put students' health at risk. The objective of this study is to assess the drinking habits of students who attend California Polytechnic State University San Luis Obispo. This study aims to present possible risk factors that may lead to students binge drinking.

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Chapter 1

INTRODUCTION

“Here, have a beer”, “Another glass of wine?” It’s not easy for college students to turn down an offer like this one. Johnston et al. (1994) explains how the incoming student is more susceptible to pressures from peers, the vulnerability of independence makes this adolescent group more likely to over consume beer and wine. Erik Erikson (1980) explains in his book *Identity and the Life Cycle* how important the transition from teenagers to young adults is as teens begin to integrate past identifications, present experiences and competencies, and future aspirations into a coherent sense of self. College is a new atmosphere, uncharted waters per say, an environment that is filled with teenagers going through this transition. Incoming students are ready to experiment and desperate to fit in, making this group dangerously eager to satisfy their ego. Most of these individuals are away from home for the first time. With that eagerness to be accepted, vulnerable feeling coming from being away from home, and being too far for their parent’s over-bearing rules comes uncomfortable questions, leaving students with some serious decisions to make. Pressures from new friends and new surroundings make it hard to distinguish between too much and not enough.

Difficult questions with potentially damaging consequences turn into automatic responses when social pressures and the desire for acceptance become factors. College students at all levels are faced with difficult decisions that may affect their reputation, relationships, and health. Not all situations will feel uncomfortable; in fact most of these situations will build character.

However, it is important to make the right decision in all circumstances. The situations of concern are those resulting in the over consumption of beer and wine which involve Cal Poly students.

College students have created social acceptance for consuming excessive amounts of beer, liquor and more recently around California campuses, wine. Due to the differences of the human body, there is no universal definition for “binge drinking” that is sufficient enough for everyone. Using demographics such as gender and body mass to narrow the definition of binge drinking has proved successful in separating how many drinks per sitting is extreme. The American Journal of Public Health suggests four drinks per sitting for females and five drinks per sitting for males as an acceptable amount define excessive drinking. Binge drinking, whether intentional or unintentional, has been proven to be the gateway for more inexcusable decisions such as practicing unprotected sex and driving under the influence of alcohol. Overcrowded campuses make it easier for under aged students to acquire alcohol and more specifically beer. Cheap wines (“Two buck Chuck” and boxed wines) allow for students to consume more wine in party usually in an excessive amount due availability and affordability. Participation in creative drinking games (beer pong, flip cup, etc.) makes it is easier for students to consume large amounts of alcohol in shorter time periods without realizing exact consumed amounts. All of these reasons make it easier to drink more, but what is the alternative? Who is telling these students when enough is enough?

The public image pertaining to college being a place to party is superseding the idea of college as an institute of education. Movies like, “American Pie 2”, “College”, and “Old School” show more of a party environment than a study environment effectively drawing a line

disconnecting the two. Songs like, “I Love College” give teenagers the idea that a college party the night before is a good reason to skip class. Movies and music make it easy for graduating high school students to perceive college as an environment that values partying over academia. With these perceptions and social trends to support them, it is hard to reverse this idea that has now become acceptable to students. Rather than trying to persuade what is right and wrong to these young adults, researching who needs intervention and who is most likely to be target for peer pressure may be a better approach before taking action by intervening.

Binge drinking patterns exhibited during the college years, for some former college students of both genders, posed significant risk factors for alcohol dependence and abuse 10 years after the initial interview, in conjunction with evidence of academic attrition, early departure from college and less favorable labor market outcomes (Jennison 661). Finding the underlying reasons for why students binge drink is as important as figuring out which students drink excessively. It is important to target those who choose to consume too much beer and wine so we can research reasons why these groups choose to binge drink

Problem Statement

Who is more likely to drink excessive amounts of beer or wine and for what reasons do college students binge drink?

Hypothesis

White males and those of Greek affiliation are more likely to binge drink than other college students. I predict that the variables for nationality and gender play a role when identifying those who binge drink. Also, students with at least one parent who abuses alcohol are

more likely to binge drink. I believe that religion along with the minimum drinking age do not have an effect on California Polytechnic students who choose to binge drink.

Objectives

- 1) To assess drinking habits between those of legal drinking age and those under the legal drinking age. To also determine risk factors to incoming college students who may choose to binge drink.
- 2) To evaluate which factors can be controlled by campus authorities in preventing binge drinking on and around campus.
- 3) To present an argument that explains to the average college student the common reasons for binge drinking as well as the consequences of binge drinking.

Justification

As alcohol abuse remains an issue in San Luis Obispo (predominantly college students), it is important to underline factors contributing to this abuse as well as collect/analyze data from campus. This information may help in aiding campus authorities to prevent accidents among student and community members. Recent incidents occurring on and around campus point to binge drinking as a major cause for difficult consequences. Research in this field is necessary in preventing cases in San Luis Obispo by determining those factors that can be controlled.

CHAPTER 2

LITERATURE REVIEW

There are many arguments for what constitutes binge drinking, many cases point to a general definition, while some cases are more specific. The majority of research articles on this topic recommend that the definition for “binge drinkers” should be different for men and women alike. The American Journal of Public Health explains the reasons why women can’t consume as many alcoholic beverages as men and how this misconception needs to be addressed towards college women. Wechsler et al. (1995) elucidates reasoning for this suggestion including that women have a lower rates of gastric metabolism of alcohol and therefore higher blood alcohol levels than men for a fixed amount of alcohol. The authors suggest that four drinks should be the minimum for female “heavy drinkers” and five drinks should be the minimum for male “heavy drinkers”. The definition of binge drinking for this study includes men who drink five or more alcoholic drinks in one sitting and women who drink four or more alcoholic drinks in one sitting. This article, *A gender-Specific Measure of Binge Drinking Among College Students*, conducts surveys in 140 different 4 year colleges in 40 states and the District of Columbia requesting information on how many alcoholic drinks were consumed and progressive effects administered under intoxication. Results were based on self-reported questionnaires that women often drink as heavily as men or close to, while feeling the effects at a more significant level. College students who choose to binge drink are likely to give in to alcohol related problems while under the influence of alcohol or a future consequence thereof. Alcohol related problems included the student to: feel a hangover, miss class, fall behind in class, feel regret, forget, argue, practice

unplanned sex, practice unsafe sex, and causing injury to themselves. First-year college students are more likely to drink excessively, leaving them at a greater risk for future alcohol related problems (Geller 395).

The incoming student is more susceptible to pressures from peers, the vulnerability of independence makes this adolescent group more likely to over consume beer and wine. The period of adolescence is a time when young people face the extended developmental task of forging an independent identity (Erikson, 1980). According to Erikson, it is during the second decade of life that an individual must begin to integrate past identifications, present experiences and competencies, and future aspirations into a coherent sense of self. In a more recent study, the second decade of life has also been identified as the period when many adolescents first explore and use alcohol (Bishop et al., 1997). Since initial alcohol experimentation and use is concurrent with the central psychosocial challenge of adolescence, an exploration of the possible relation between ego identity development and alcohol use is clearly warranted. Surprisingly, only one study has explicitly attempted to link alcohol behavior and identity development. In a cross-sectional study that surveyed the substance experience of individuals in early to middle adolescence, Jones and Hartmann found that alcohol experience varied by ego identity status (1988). Young people's experimentation with alcohol may be perceived as an important step towards the adult world (Pape and Hammer, 1996). Adolescent drinking lowers itself as simply a behavioral expression of an age-typical proneness to test limits and seek excitement. The Journal of Adolescence relates the late teenage years and early adulthood years of American youth, connecting issues of identity and satisfying their ego. Bishop et al. also assert that the choices first year college students are faced with can be sensitive; as the need for excitement, the need for making people happy, and the need for satisfying their ego are major outliers. Erikson

identifies in his book entitled, *Identity and the Life Cycle*, seven important stages of human development, identifying them as decades of change. The topic of college student binge drinking focuses on the transition from the second to third decade of life and the process of decision making which involve self identity and ego satisfaction. Pape and Hammer focus their study on Erikson's *Identity and the Life Cycle* transitioning from late teenage years into early adulthood, concluding that young adults are more likely to give into experimentation phases of alcohol and other drugs.

In a study of behavior, the underlying question of why people make the decisions to act irrationally is one that is hard to answer. It is essential to provide the correct variables and areas to focus when figuring out the reasons why college students binge drink. The Society for the Study of Addiction held a study to determine whether adolescent alcohol use and/or other adolescent health risk behavior influences alcohol dependence in young adulthood. Adolescent health risk behaviors included: parental alcohol and tobacco use, intense drinking, alcohol related accidents or injuries, alcohol related sexual risk taking, tobacco use, cannabis use, antisocial behavior, psychological distress, and peer alcohol use. Intense drinking was defined as drinking an enough alcohol that they could not remember the next day about events that happened the night before. Alcohol related sexual risk taking was defined as having sex while under the influence and regretting it later, having sex without a contraceptive, and having sex without using a condom. Psychological distress was generated by asking the participant if they felt symptoms of depression or anxiety. A seven-wave study over six years on a sample of almost 2,000 individuals aged 14 and 15 were followed until age 20 and 21. Bonomo et al. (2004) conclude in this article that approximately 90% of participants consumed alcohol by age 20, 4.7% fulfilling alcohol dependence criteria of drinking three or more times a week. This study

focused on adolescents who had experienced with alcohol and were in the category for those at risk of becoming alcohol dependent. Alcohol dependence in young adults was preceded by higher persisting teenage rates of frequent drinking, binge drinking, alcohol related injuries, intense drinking, high dose tobacco use and antisocial behavior. There were no prospective associations found with emotional disturbance in adolescence. Teenage drinking patterns and other health risk behaviors in adolescence predicted alcohol dependence in adulthood. Prevention and early intervention initiatives to reduce longer term alcohol related harm are needed to address the factors, including alcohol supply, that influence teenage consumption and in particular high-risk drinking patterns.

When targeting those who are most likely to consume excessive amounts of beer and wine, it is important to understand some of the factors that lead to binge drinking. [Science Daily](#) addresses the likelihood of alcohol dependency in adults who were neglected, abused, or both (2009). Shin, Edwards and Heeren include that in addition to poor academic achievement, binge drinking has led to unprotected sexual activity, unsafe driving practices and motor vehicle accidents (2009). Maltreatment and family history with alcohol abuse are major causes for adolescent binge drinking, however these factors are very difficult to address. Other indirect reasons for binge drinking amongst college students may be easier to focus on. This article concludes that children who received any maltreatment; whether one or the other or both have shown a tendency to abuse alcohol before the age of 21.

The research, which appears in the current issue of *Addictive Behaviors*; an international, peer-reviewed scientific journal publishing human research on substance abuse, explores how binge drinking occurs more frequently when there are multiple categories of maltreatment (2009). This study includes a major risk factor for under aged drinking, especially in the

category of those between the ages of 19-21. Tharp-Taylor et al. (2009) also note that while other studies have reported that child maltreatment increases an individual's risk for alcohol abuse, only a few studies have examined the effect of childhood maltreatment on adolescent binge drinking. This article agrees that any form of physical or mental abuse leads to substance abuse and binge drinking in early adulthood. The popularity of underage drinking has been linked to a multitude of immediate and long-term adverse outcomes, most notably obesity and high blood pressure, headaches, and concentration difficulties that leads to trouble learning and remembering.

Another reason that college students binge drink is an increase in the exposure to alcohol advertisements. This may be an uncontrollable variable, but it was included in this study. The Journal of Communication suggests that alcohol ads appeal to young people because the messages stress their desired goals, such as good times, sex, and social acceptance. Alcohol ads may also contribute to the conception that drinking is a legitimate and normal activity in society. Atkins et al. (1984) explain in this article that it can be implied that the mere observation of mediated drinking may increase the observer's tendency to enact that activity. Increasing temptation to enact in these activities is especially the case when the modeled behavior is portrayed as rewarding and pleasurable, as content analyses indicate is the case with alcohol ads. This study surveyed 665 teenagers concentrating on specific genders, ethnicity, location, and occupation. The regression of the survey shows that advertisement exposure effected teens that choose to drink liquor more than beer more than wine. However, peer influence was dominant in teens that choose to drink beer and parental influence impacted those teens that choose to drink wine. Advertisements had a positive effect on all three alcohol categories indicating that teens more likely drink alcohol after being exposed to alcohol advertisements.

Researching the reasons why college students binge drink is only the beginning, it is also important to implement an alternative to over consumption. While most alcohol campaigns reiterate the importance of drinking responsibly, none define the limits of responsible drinking, nor do they suggest ways to drink responsibly. Simply saying, “drink responsibly” may not be the best way to slow down the amount any individual believes they can drink before their consumption becomes irresponsible. Many studies suggest that 5 drinks for men and 4 drinks for women per two hours is an excessive amount, we have yet to define how many drinks is a reasonable or responsible amount. Sharma and Kanekar suggest some successful ways to intervene, through group intervention and the use of motivational interviewing aimed at defining and promoting responsible drinking (2008). This method proved to be effective, yielding positive results with a decrease in problematic drinking and alcohol related violations. It is important to target only those college students who are at high risk levels for binge drinking. When randomizing the sample of college students who were chosen for intervention practices, no differences were found between the test group and control group in alcohol use and alcohol-use risk factors. Sharma et al. (2008) continue defining other successful attempts of intervention which include single session motivational interviewing and brief counseling after being hospitalized.

When researching why people do the things they do, it is important to pay attention to detail, it is also important to pool a large sample to analyze data from. When looking for the reasons why college students drink excessive amounts of beer or wine per sitting it is important to get a lot of data as well as asking the right questions. The questions asked on the survey need to narrow down the reasons anyone would drink excessively, from genetics to how many roommates one has. Wechsler et al. (1995) explains that data must come from a completely

random sample and data must specifically cater to which factors play a bigger role in the college life of alcohol abuse. Residence information, gender, ethnicity, year in school, Greek affiliation, marital status, as well as the students past drinking experiences are only some possible factors that funnel into ultimate reasons why college students drink excessive amounts of beer and wine.

The article *Alcohol in Emerging Adulthood: 7 Year Study of Problem and Dependent Drinkers* generated a sample including 270 participants between the ages of 18 and 25 (the typical age of an undergraduate at a four year university) who fall under the category of problem drinkers and alcohol dependent. Mainly dealing with the addiction and the treatment process, this article may point to the possible intervention methods after analyzing my data. Delucchi et al. (2008) explain that young adults are subject to several underlying factors of those defined as problem drinkers and alcohol dependent including: genetic influences, ethnicity, “role transition” such as marriage, health-related problems, suicide risk, and neurocognitive effects up to 8 years later. Demographics from this study conclude that 70.9% problem drinkers and 51.5% of those were alcohol dependent and also white. This statistic declares that binge drinkers are likely to be white and male. The average age of this study is 21.175 years of age (64 days over the legal drinking age). This article analyzes data from five different points: initial entry into alcohol programs, after year one, after year 3, after year 5, and after year 7. Delucchi, Matzger, and Weisner explain that the number of drinks per year decreases significantly between initial entry into an alcohol program and the first year, while continuingly decreasing gradually over the next six years (2008). This study concludes that the transition to adulthood with a dependency on alcohol and issues controlling intake vastly increase the chances of maintaining the addiction increasing the need for intervention. This article finally suggests that although treatment is an effective way to control addictions for those problem drinkers, controlling drinking habits before

becoming addicted is the best way for young adults to fight alcohol abuse before and after college.

Bachman et al. (1991) conducted a survey between 1976 and 1989 which provided information on about 130 high schools for 48 coterminous states each year, approximately 118 public and 12 private. Of the sampled seniors, generally 83 percent participate, (nearly all nonparticipation results from absenteeism) yielding samples of about 17,000 seniors in each year the survey was conducted. This survey concluded that Asian American youth tend to report very low levels of drug use relative to other groups. Black youth consistently report lower rates of drug use than White youth. Hispanic youth typically report more substance use than Blacks and only slightly less than Whites. Native American youth on average report greater use of alcohol and other drugs than any other subgroup.

Understanding the environment in which college students prefer to socialize may help suggest the appropriate setting to gather surveys. Not only deciding where to administer the surveys but also to understand which environment correlates with casual drinking, moderate drinking, and binge drinking. Geller et al. (1986) explain in the article *Naturalistic Observations of Beer Drinking Among College Students* the amounts of beer male and female college students are likely to consume in a bar setting as well as a party setting. This study is different from any survey; this study involved the observation of college students in their naturalistic drinking environment, by a completely separate and unidentified volunteer. 243 patrons were observed in a bar atmosphere (187 male, 56 female) by a volunteer across the room, unknown to those being observed. 65 college student's behavioral drinking patterns were observed at a party atmosphere (32 male, 33 female) by giving the students a numbered wristband as they entered the party and recording volume in increments of 12 oz cups that were handed out, each time they filled up. 40

oz pitchers, 12 oz bottles, and 10 oz cups or glasses were used to record consistent data in the bar room environment. Geller et al. (1984) indicate that at the bar setting: 48% were in groups of two, 68% drank from pitchers, and 77% were males, the majority of all categories. Males stayed longer at parties, while females stayed longer at bars. After the analysis of the data, this article determined that male college students are most likely to consume more ounces per minute in both settings (a mean of 30 oz each at 9.2 oz per minute for males vs. 5.6 oz per minute for females; $P < .01$). This article concludes that male college students were more at risk to drive under intoxication (DUI) than females, given that they drink more beer at a faster rate and were quicker to leave a particular bar. When college students drank out of pitchers and drank in groups of two or more, there was a greater probability of excess beer consumption.

CHAPTER 3

METHODOLOGY

Procedures for Data Collection

The purpose of this project is to analyze why college students binge drink. The best way to find what college students understand about binge drinking is to conduct a survey. The study provides a survey that evaluates student's perceptions of binge drinking as well as their drinking habits. This survey recognizes all college students; the legal drinking age was only used as variable in data collection and not as a means for punishment. Variables that were used when collecting data include: residence information, gender, ethnicity, year in school, Greek affiliation, parents marital status, high school drinking habits, container sizes frequently used when drinking, atmosphere of choice when drinking, these variables were necessary when analyzing data to point to potential groups that frequently drink excessive amounts of beer or wine.

This project required a random selection of 150 students at California Polytechnic State University San Luis Obispo. 150 respondents insured a large sample size, making room for any human error in survey responses. 150 was chosen as it is an appropriate large sample size and reasonable for the given time period. The 150 surveys were administered over a six week period to provide adequate time for data collection. To guarantee participants are students at Cal Poly SLO, these surveys were administered through online social networks. Social networking provided ease of filling out surveys as well as privacy while filling out surveys. Students who are registered on Facebook under the California Polytechnic State University of California San Luis Obispo (Cal Poly SLO) network were sent an online survey. Registering under the Cal Poly

SLO network requires a Cal Poly SLO username and email account; this was sufficient when sending the surveys to Cal Poly SLO students only. The online survey engine of choice was Survey Pirate as its requirements are not limited to a certain number of responses or questions. The majority of the questions on the survey were mandatory in an attempt to avoid any omitted questions when recording answers. The sensitive questions were filled out in private by students. This survey was rejected if the first question is answered, “have not had anything to drink in the past two weeks”.

Questions 1-24 were general questions about gender and year in school as well as perceptions of binge drinking. Nine of these questions focus on separating the demographic to identify who is consuming excessive amounts of beer and wine. Eight questions are in association with the student’s history with alcohol consumption. The other four questions cover the student’s perceptions about alcohol. Questions 25-33 are questions that have been characterized as sensitive due to content and included questions such as: does one of your parent’s abuse alcohol? These questions are set apart from the rest of the survey to reassure the student of the level of privacy.

The demographic questions ask the student what their gender is, ethnicity, Greek affiliation, residential status, parent’s marital status, major, roommates, and year in college. All of these variables are required when collecting data to assess which demographics are likely to binge drinking. These questions are separated throughout the survey strategically to keep the student involved. When asking questions about alcohol consumption history the student must think back and remember certain dates and/or amounts. However, questions about demographic

are questions that come natural for the student to answer. Spreading these questions assisted in keeping the student involved.

The alcohol history questions focus on the student's alcohol consumption trends, asking these questions: has the student consumed alcohol in the past two weeks, what was the amount of alcohol consumed in the past two weeks, when was the student's first experience with alcohol, what health risk factors pertain to the student's alcohol consumption history, what size containers are frequently used when drinking beer or wine, which substances were consumed in the past two weeks, and factors causing pressure to binge drink. These questions later represented whether or not the student is categorized as a binge drinker.

The questions that relate to the student's perceptions of alcohol include: how many drinks does the student think defines binge drinking, what category of drinker does the student perceive themselves to be, affect alcohol advertisements have had on the students overall alcohol consumption, and does the student relate the alcoholic beverages they choose to consume to their advertisements. The questions about the student's perception are included with the intention of self realization. Students need to realize that they are drinking excessive amounts of beer and wine before any interventions can occur.

Questions 25-33 were filled in private by each student. To insure accuracy when answering these sensitive questions, a randomized response technique was used. The student were given a coin to flip and the coin decide whether or not the student answers the sensitive question. This method has been proven to yield better results than pressuring the student to answer a question they feel uncomfortable or embarrassed about. Without an alternative, students are assumed to answer sensitive questions defensively and inaccurately.

Procedures for Data Analysis

After the data is collected over the six week period it was analyzed. The SPSS statistics program was used to analyze these results. SPSS will allow the researcher to compare the variables in the data collected through the surveys. These variables were compared to each other to find the demographic that are most likely to binge drink as well as the top reasons why college students binge drink. After comparing and analyzing data, the most common causes for college students to drink excessive amounts of beer and wine can be weighed and strategies to eliminate temptation for students to binge can be formed.

Depending on which variables are being compared, SPSS can run a series of tests to determine at the smallest scales how each variable data affects the other. Most of the data involved in this survey is nominal data, answers that are represented by labels or codes. For example, question #2 is nominal data because it pertains to gender, meaning that the answer is either male or female, these answers cannot be put on a scale or measured up to each other therefore it is nominal data. When nominal data is analyzed, there are only a few statistical tests to choose from. Running a Pierson Chi Square test will compare each student's responses and allow for percentages of all that is surveyed to be displayed in a matrix. For example, question 2 (gender) was compared to question 17 (type of drinker), a matrix indicated how many females were social drinkers, how many females were occasional drinkers, how many females were moderate drinkers, and how many females were binge drinkers.

Running chi square tests were important to analyze how many students of the 150 surveys are categorized under this study's definition of binge drinkers. Comparing question 2 (gender) to question 4 (amount of alcohol consumed) in a Chi Square test explained how many

females consumed four or more drinks and how many males consumed five or more drinks. Comparing the data of binge drinkers to questions 19-27 identified the most common causes for why college students are binge drinkers. When the P-Value was <0.05 between any of these questions; it was considered significant and in turn, a direct cause for binge drinking.

Frequency tests were ran for data on every question. Gathering descriptive statistics extracted the mean of each variable before comparison to any other variable. For example, a descriptive statistic on question 15 (beer container size) shows the average beer container college students typically drink from.

Descriptive statistics are used to describe the main features of a collection of data in quantitative terms. Descriptive statistics are distinguished from inductive statistics in that they aim to quantitatively summarize a data set. Descriptive statistics are generally presented to give the audience an overall sense of the data being analyzed. Descriptive statistics identified the average alcohol beverages consumed, the average size containers, as well as the average year the respondent first experienced with alcohol.

Assumptions

It was assumed that those surveyed answered all questions as accurate and truthful as possible. When analyzing the data, it was assumed that the data was a random sample and a sufficient reflection of the students attending Cal Poly SLO. The data was entered into SPSS consistently, assuming there was no bias to any individual survey. It was assumed that all data was entered into the SPSS program accurately and a significant amount of loose, omitted, or missing data will result in termination of the survey. Those being surveyed can assume their surveys will be

private withholding any personal data from the paper and analysis. It was assumed that some surveys result in human error and more than 150 surveys were needed in order to reach 150 finished, accurate, and sufficient surveys

Limitations

The surveys were limited to Cal Poly SLO students only, while this is a study of why college students binge drink, resources are limited to surveying only students on campus. Cal Poly SLO students are more likely to skew the demographic as most students are white, middle to upper class students. Survey question are close ended questions leaving no room for students to elaborate or detail any answers. Surveying students through an online program never insures that the respondent is who they say they are. Social networks can leak the link to the survey to non-Cal Poly students and results may not be completely random. Limitations needed to be placed on students taking the survey, since the survey focused on reasons for students to binge drink, although there may be numerous underlying causes that affect students choices, we are limited to causes found in secondary data.

CHAPTER 4

DATA ANALYSIS

Table 4.1 indicates those respondents that are under the legal drinking age drink more in a typical week than those respondents of legal drinking age. A Pierson Chi P-Value of .008 suggests that being of legal drinking age is related to how many drinks a week is typically consumed. This data shows the variables “legal drinking age” and “under legal drinking age” are completely unequal when determining drinks per week typically consumed.

TABLE 4.1									
How many drinks a week do you typically consume?									
	How many drinks a week do you typically consume?								Total
	0	1-3	4-6	7-10	11-13	14-16	17-20	20+	
Of Legal Drinking Age	10 8.5%	37 31.6 %	29 24.8 %	19 16.2%	10 8.5%	5 4.3%	3 2.6%	4 3.4%	117 100.0%
Under Legal Drinking Age	0 .0%	6 17.1 %	5 14.3 %	6 17.1%	5 14.3%	6 17.1%	3 8.6%	4 11.4%	35 100.0%
P-Value									.008**
*significance at the .1 level **significance at the .05 level									

Between respondents who are of legal drinking age and respondents that are under the legal drinking age there is a relationship to the target. Between the two age groups there is also a relationship between average drinks per day. 68% of those respondents under the legal drinking age drink at least once per day on average while only 38% of respondents over the legal drinking age drink at least once per day on average (Table 4.2). The differences between the two groups result in a P-Value of .002 causing the study to reject the null hypothesis. A rejection of the null

hypothesis indicates that drinking at least once per day is related to whether the respondent is over the legal drinking age or under the legal drinking age.

TABLE 4.2			
Age groups compared to those who Drink once a Day or Less Than Once a Day on average			
	Drink less than once per day (on average)	Drink at least once per day (on average)	Total
Of Legal Drinking Age	66	41	107
Under Legal Drinking Age	11	24	35
P-Value			.002**
*significance at the .1 level **significance at the .05 level			

When comparing those who are under the legal drinking age with question 18 and crossing the results with question 11f of the 35 underage respondents 30 have experienced “blacking out”. Of those 30 who’ve experienced a “black out”, 22 agreed to drinking 7 or more times in a typical week. (Table 4.3)

TABLE 4.3								
Of those under the legal drinking age, how many drinks a week do they consume and have they ever forgotten the next day about events the night before after a night of drinking?								
Have you ever forgotten the next day about events the night before after a night of drinking?	How many drinks a week do you typically consume?							Total
	1-3	4-6	7-10	11-13	14-16	17-20	20+	
I Have Not	3	0	1	1	0	0	0	5
Yes I Have	3	5	5	4	6	3	4	30

Between respondents who selected White and/or Caucasian for question 7 “What is your ethnic background”; the study shows little difference in the percentages among those who drink seven or more times a week (1/day) on average (Table 4.4). 50.5% drink less than once a day on average and 49.5% drink at least once per day on average. Comparable to those who selected an ethnicity other than White and/or Caucasian; 32.3% drink at least once per day on average while the other 67.7% drink less than once per day on average. Although it appears that there are more respondents who “White and/or Caucasian” that drink seven or more times a week than any other ethnicity, the P-Value is .171. With this P-Value we must accept the null hypothesis and assume that these two are the same and equal to each other when relating them to question 18: “How many drinks a week do you typically consume?”

TABLE 4.4	How many drinks a week do you typically consume?									Total
	0	1 to 3	4 to 6	7 to 10	11 to 13	14 to 16	17 to 20	20+		
White and/or Caucasian	6 5.10%	28 23.90 %	28 23.90 %	21 17.90 %	12 10.30 %	10 8.50 %	4 3.40 %	8 6.80 %		117 100.00 %
Ethnicity other than "White and/or Caucasian"	4 11.40 %	15 42.90 %	6 17.10 %	4 11.40 %	3 8.60% _____	1 2.90 %	2 5.70 %	0 0.00 %		35 100.00 %
									P-Value	.171
*significance at the .1 level **significance at the .05 level										

Recoding data into a different variable was necessary to extract the “white male” demographic and those respondents who are not white males. Although Table 4.5 suggests that being a white male makes respondents 73.2% likely to also be categorized as a binge drinker there is no relationship between whether a respondent is a white male and a binge drinker. Significant at the .100 level, the data is evidence that the null hypothesis was accepted.

TABLE 4.5			Binge drinkers vs Non binge drinkers	
White Males or NOT White Males	Non binge drinkers		Binge drinkers	
White Males	11 (26.8%)		30 (73.2%)	
NOT White Males	49 (44.1%)		62 (55.9%)	
P-Value			.053*	
*significance at the .1 level			**significance at the .05 level	

FACTORS LEADING TO BINGE DRINKING

Given 10 factors that may relate to binge drinking, respondents agree that at least 61% of both male and females feel that 9 of these factors directly lead to binge drinking. In most cases, the study shows that male and female interpretations of each factor are similar. Peer pressure affects males more than females while 78.2% of males indicate it as a cause for binge drinking. A P-Value of .033 is evidence that peer pressure as a factor leading directly to binge drinking is different between males and females. 58.2% of males believe that binge drinkers drink to avoid wasting alcohol while only 25% of females feel the same. A complete difference between

genders and whether they believe drinking to avoid waste is a factor relating to binge drinking with a Pierson Chi-Square P-Value of .000. (Table 4.6).

TABLE 4.6	FACTORS THAT LEAD TO BINGE DRINKING			
	Male	Female	Total	P-
Drinking as a coping mechanism DOES NOT cause binge drinking	16 (29.1%)	34 (35.4%)	50 (33.1%)	.427
Drinking as a coping mechanism DOES cause binge drinking	39 (70.9%)	62 (64.6%)	101 (66.9%)	
Celebrating DOES NOT cause binge drinking	3 (5.5%)	3 (3.1%)	6 (4.0%)	.481
Celebrating DOES cause binge drinking	52 (94.5%)	93 (96.9%)	145 (96.0%)	
Competitive drinking by volume DOES NOT cause binge drinking	12 (21.8%)	32 (33.3%)	44 (29.1%)	.134
Competitive drinking by volume DOES cause binge drinking	43 (78.2%)	64 (66.7%)	107 (70.9%)	
Competitive drinking through games DOES NOT cause binge drinking	5 (9.1%)	11 (11.5%)	16 (10.6%)	.649
Competitive drinking through games DOES cause binge drinking	50 (90.9%)	85 (88.5%)	135 (89.4%)	
Drinking for acceptance DOES NOT cause binge drinking	12 (21.8%)	35 (36.5%)	47 (31.1%)	.062*
Drinking for acceptance DOES cause binge drinking	43 (78.2%)	61 (63.5%)	104 (68.9%)	
Drinking to get drunk DOES NOT cause binge drinking	5 (9.1%)	13 (13.5%)	18 (11.9%)	.417
Drinking to get drunk DOES cause binge drinking	50 (90.9%)	83 (86.5%)	133 (88.1%)	
Peer pressure DOES NOT cause binge drinking	12 (21.8%)	36 (37.5%)	48 (31.8%)	.046*
Peer pressure DOES cause binge drinking	43 (78.2%)	60 (62.5%)	103 (68.2%)	
Avoiding to pay for drinks at a bar DOES NOT cause binge drinking	15 (27.3%)	43 (44.8%)	58 (38.4%)	.033*
Avoiding to pay for drinks at a bar DOES cause binge drinking	40 (72.7%)	53 (55.2%)	93 (61.6%)	
Avoiding to waste alcohol DOES NOT cause binge drinking	23 (41.8%)	72 (75.0%)	95 (62.9%)	.000*
Avoiding to waste alcohol DOES cause binge drinking	32 (58.2%)	24 (25.0%)	56 (37.1%)	
Stress DOES NOT cause binge drinking	12 (21.8%)	30 (31.3%)	42 (27.8%)	.213
Stress DOES cause binge drinking	43 (78.2%)	66 (68.8%)	109 (72.2%)	

*significance at the .1 level **significance at the .05 level

MISCONCEPTIONS

Tables 4.7 and 4.8 justify the need to educate students of the definition of a binge drinker proving that college students, both male and female, misunderstand the definition. While only 23% of females could correctly define “binge drinker” males hardly do better with only 25% that could select the correct definition.

TABLE 4.7	The female understanding of the definition of "Binge Drinking"	
	Females who understand	Females who do NOT understand
	N=22	N=74
	23%	77%

TABLE 4.8	The Male understanding of the definition of "Binge Drinking"	
	Males who understand	Males who do NOT understand
	N=14	N=42
	25%	75%

DEMOGRAPHIC COMPARISONS

Table 4.9 suggests that approximately 56% of female respondents fall into the target category of binge drinkers while 68% of males are categorized as binge drinkers exposing that nearly 61% of all respondents are considered binge drinkers. With a P-Value of .158 there is no relationship between binge drinkers and gender as we are forced to accept the null hypothesis.

TABLE 4.9	Males	Females	P-Value
Binge Drinkers	38 (67.85%)	54 (56.25%)	.158
Non Binge Drinkers	18 (32.15%)	42 (43.75%)	

The study asks for respondents to indicate containers typically used when drinking beer and wine. While none of the beer containers in the study proved to be related to those who choose to binge drink, one wine container is unequal to the other containers. Table 4.10 shows that respondents who preferred to drink wine out of a .75 liter bottle (standard bottle size) were binge drinkers in 91% of the 11 who selected this container as a preference.

TABLE 4.10	Comparing those who typically use a .75 liter bottle when drinking wine and Binge drinkers	
	Binge drinkers	Non binge drinkers
I use a .75 liter bottle when consuming wine	10 (90.9%)	1 (9.1%)
I do NOT use a .75 liter bottle when consuming wine	82 (58.2%)	59 (41.8%)
P-Value		.032**
*significance at the .1 level **significance at the .05 level		

PREDICTIONS

When trying to predict primary reasons for college students to binge drink three variables were extracted as leading concerns with the target (those college students who binge drink). White males, students with one parent that abuses alcohol and those of Greek affiliation were pulled as groups that were more likely to binge drink than other groups. Ethnicity and gender

were also set aside as predictions of groups who were more likely to drink excessive amounts of beer and wine. Legal drinking age was in the opposite light, as a prediction for a variable that would not have an effect on the target group.

TABLE 4.11		Comparing binge drinkers and non binge drinkers to question 27 "Does one of your parents' abuse alcohol?"		
		Yes/No	Binge drinkers	Non binge drinkers
Does at least one of your parents' abuse alcohol?	Yes		12 (63.2%)	7 (36.8%)
	No		78 (59.5%)	53 (40.5%)
			P-Value	.764
*significance at the .1 level **significance at the .05 level				

Table 4.11 above shows the target in comparison to question 27. With a Pierson Chi-Square P-Value of .764 the data points toward accepting the null hypothesis that having one parent that abuses alcohol is the same between binge drinkers and non binge drinkers.

GREEK AFFILIATION

Table 4.12 compares the target to whether or not the respondent is affiliated with a fraternity or sorority. The study shows that 28% of binge drinkers are Greek affiliated while only 11% of non binge drinkers are Greek affiliated. There is a need to reject the null hypothesis with

a P-Value of .015, evidence that binge drinking is different between those who are Greek affiliated and those who are not. This data confirms the hypothesis that respondents involved in a fraternity or sorority are more likely to binge drink than respondents who are not Greek affiliated.

TABLE 4.12		Are you involved in a Sorority or a Fraternity	
Binge drinkers/Non binge drinkers		I am NOT Greek Affiliated	I AM Greek Affiliated
Non binge drinkers		53 (44.5%)	7 (21.2%)
Binge drinkers		66 (55.5%)	26 (78.8%)
P-Value		.015**	
*significance at the .1 level		**significance at the .05 level	

GENDER AND ETHNICITY

TABLE 4.13		Binge drinkers vs Non binge drinkers				
	Males	Females	P-Value	White and/or Caucasian	Every other ethnicity	P-Value

Binge Drinkers	38 (67.85%)	54 (56.25%)	.158	76 (64.95%)	16 (45.71%)	.041**
Non Binge Drinkers	18 (32.15%)	42 (43.75%)		41 (35.05%)	19 (54.29%)	
*significance at the .1 level		**significance at the .05 level				

Gender and ethnicity are located on Table 4.13 measured against the target to see whether binge drinking is the same or different between each variable. Gender proves to be unrelated to the target with a P-Value of .158. Ethnicity was transformed data into a different variable; switching from a seven group demographic to a two group demographic: “white and/or Caucasian” and “every other ethnicity”. The classification of “binge drinker” is related to whether or not the respondent is white and/or Caucasian.

BINGE DRINKING CONSEQUENCES

Table 4.14 shows a comparison between the target, gender, and question 11. Of the nine provided consequences for the over-consumption of alcohol gender proved to be independent in all cases besides having unsafe sex. 63% of males indicated they have practiced unsafe sex while under the influence of alcohol. Only 42% of females agreed to practicing unsafe sex while under the influence of alcohol. Table 4.14 also highlights how the target answered the same effects of the over-consumption of alcohol. In all cases, less experiencing a hangover, the target answered independently to that of the non-target. Binge drinkers answered as a percentage, more as a group on each individual question besides having missed class after a night of drinking.

TABLE 4.14	Have you ever...	Have/ Have Not	Male	Femal e	P-Value	Binge Drinker	Non Binge Drinker	P- Value
	Been involved in a heated argument while under the influence of alcohol	I have not	20	39	.606	31	28	.091*
		Yes I Have	35	57		61	31	
	Experienced a hangover after a night of drinking	I have not	7	5	.100	5	7	.154
		Yes I Have	48	91		87	52	
	Felt like you were falling behind in class as a result of drinking	I have not	38	72	.432	61	49	.024**
		Yes I Have	17	24		31	10	
	Forgotten the next day about events the night before after a night of drinking	I have not	12	21	.994	11	22	.000**
		Yes I Have	43	75		81	37	
	Had unprotected sex while under the influence of alcohol	I have not	19	55	.007**	39	35	.042**
		Yes I Have	36	41		53	24	
	Regretted making a decision while under the influence of alcohol	I have not	16	32	.590	23	25	.025**
		Yes I Have	39	64		69	34	
	Missed class after a night of drinking	I have not	25	38	.481	35	28	.000**
		Yes I Have	30	58		24	64	
	Had sex while under the influence of alcohol and regretted it later	I have not	30	51	.866	41	40	.005**
		Yes I Have	25	45		51	19	
	Caused injury to yourself or others while under the influence of alcohol	I have not	24	45	.701	37	32	.092*
		Yes I Have	31	51		55	27	

*significance at the .1 level **significance at the .05 level

BINGE DRINKING STARTS EARLY

Table 4.15 of the study shows that binge drinking starts with early drinking habits. Those respondents that consume alcohol in high school are 73.3% likely to be classified as binge drinkers when they're in college. Those respondents who waited until college for their first alcoholic beverage are only 32% likely to be classified as binge drinkers once they're in college. With a Pierson Chi-Square P-Value of .000 the null hypothesis can be rejected when comparing the study's target to non-target and question 10.

TABLE 4.15		First Consumed in High School vs After High School Compared to Binge drinkers vs Non binge drinkers	
		Binge drinkers	Non binge drinkers
First consumed alcohol in high school		77 (73.3%)	28 (26.7%)
First consumed alcohol after high school		15 (31.9%)	32 (68.1%)
		P-Value	.000**
*significance at the .1 level		**significance at the .05 level	

PERSONAL QUESTIONS

Personal questions were included as a representation of sensitive outliers that may be related to reasons for binge drinking. The majority of the personal questions in the study shows that in comparison to the target, those students who binge drink answer the same as those who do not binge drink (Table 4.16). The study also shows a difference in the target variables and unequal values in questions 28, 29, 32, and 34. With a P-Value less than .050 the study indicates that these question's variables are different and unequal to the answers between the target and non target. Drinking under the influence of alcohol (question 28), smoking cannabis (question

32), and practicing unsafe sex (question 29) are answered “yes” a significant amount more by those who binge drink. Although the null hypothesis is rejected, question 34 indicates reverse data showing an even greater difference in respondent tendencies. Question 34 asks, “if you were classified as a binge drinker would you seek professional help”, more respondents classified as non binge drinkers answered yes than those respondents classified as binge drinkers 35-31.

TABLE 4.16	Personal Questions	Yes/No	Non Binge Drinker	Binge Drinker	P-Value
	Do you feel like you were treated unfairly as an adolescent?	Yes	8	13	.921
		No	51	79	
	Does one of your parents abuse alcohol?	Yes	7	12	.764
		No	53	78	
	Have you ever driven under the influence of alcohol?	Yes	30	63	.017**
		No	30	28	
	Had unprotected sex while under the influence of alcohol?	Yes	25	59	.006**
		No	35	33	
	Is there a history of alcohol dependency in your family?	Yes	20	37	.449
		No	38	54	
	Have you experienced symptoms of depression in the past six months?	Yes	20	38	.308
		No	39	52	
	Have you smoked marijuana in the past 2 months?	Yes	17	47	.005**
		No	43	45	
	Would you consider yourself a “Problematic Drinker”?	Yes	2	7	.275
		No	58	85	
	If you were classified as a binge drinker would you seek professional help?	Yes	35	31	.002**
		No	24	61	
*significance at the .1 level **significance at the .05 level					

CHAPTER 5

SUMMARY

A self administered survey with computer assistance was sent out in January of 2010 that resulted in data from 152 Cal Poly students. The sample size is sufficient enough to compare ratios to the Cal Poly population. The data was entered in to a mathematical statistic analysis engine (SPSS) and compared horizontally between questions (variables). Recoding data into a target variable, a demographic variable, and a “past experience tendency” variable allowed the study to run a series of statistical tests and observations established some conclusions to why Cal Poly students binge drink.

When trying to predict primary reasons for college students to binge drink three variables were extracted as leading concerns with the target (those college students who binge drink). White males, students with one parent that abuses alcohol and those of Greek affiliation were pulled as groups that were more likely to binge drink than other groups. Ethnicity and gender were also set aside as predictions of groups who were more likely to drink excessive amounts of beer and wine. Legal drinking age was in the opposite light, as a prediction for a variable that would not have an effect on the target group.

After the data was analyzed, the results were compared to the hypothesis. Completed data was also observed in order to derive recommendations for school officials in decreasing the number of Cal Poly students who binge drink.

CONCLUSIONS

Analyzing the data through the SPSS program using mostly Pierson Chi-Square Crosstabulations has provided some conclusions can be drawn for reasoning behind why Cal Poly college students binge drink. Similarities in large sample responses have helped in determining whether respondents are likely to binge drink or not. The target in the study was those college students, regardless of knowing, who binge drink. The study compiled 92 students of the 152 surveyed to fall into the target category.

Year enrolled in Cal Poly SLO was a statistic that was related to the target (question 6), as well as being white and/or Caucasian (question 7), year that respondent started consuming alcohol (question 10), males who are peer pressured (question 25a), Greek affiliation (question 12), driving under the influence of alcohol (question 28), smoking cannabis (question 32), and practicing unsafe sex (question 29). Variables that were unrelated to the target include, but weren't limited to: gender (question 3), definition of binge drinking (question 4), relating advertisements to drinks (questions 8 & 9), container size preference for beer (question 16), and preference in drinking environment (question 19).

Respondents that are under the legal drinking age typically drink more in a week than those respondents of legal drinking age. Being of legal drinking age is related to how many drinks a week is typically consumed there is also a relationship between average drinks per day. Legal drinking age and respondents that are under the legal drinking age there is a relationship to the target. 68% of those respondents under the legal drinking age drink at least once per day on average while only 38% of respondents over the legal drinking age drink at least once per day on average.

binge drinking starts with early drinking habits. Those respondents that consume alcohol in high school are 73.3% likely to be classified as binge drinkers when they're in college. Those respondents who waited until college for their first alcoholic beverage are only 32% likely to be classified as binge drinkers once they're in college.

The study shows that 28% of binge drinkers are Greek affiliated while only 11% of non binge drinkers are Greek affiliated. A P-Value of .015 determines that the study rejected the null hypothesis and the relationship between being in a fraternity or sorority is related to whether or not the respondent is likely to binge drink.

The study concludes that being a white male makes respondents 73.2% likely to also be categorized as a binge drinker there is no relationship between whether a respondent is a white male and consumes at least one alcoholic beverage per day. Although there is no indication that binge drinking is related to ethnicity when comparing “how many drinks in a typical week”, comparing the demographic with “peak amount consumed on any given day in the past two weeks” the survey indicated that white and/or Caucasian respondents were more likely to binge drink. The classification of “binge drinker” is related to whether or not the respondent is white and/or Caucasian.

The gender variable was not an indication of whether the respondent was a “target” respondent with a P-Value of .158. 56% of female respondents fall into the target category of binge drinkers while 68% of males are categorized as binge drinkers exposing that nearly 61% of all respondents as “binge drinkers”. Peer pressure affects males more than females while 78.2% of males indicate it as a cause for binge drinking. 58.2% of males believe that binge drinkers drink to avoid wasting alcohol while only 25% of females feel the same. Both male and female

misunderstand the definition. While only 23% of females could correctly define “binge drinker” males hardly do better with only 25% that could select the correct definition. There is no relationship between binge drinkers and gender as the study accepts the null hypothesis.

The study does not relate container size of preference when consuming beer, however respondents who preferred to drink wine out of a .75 liter bottle (standard bottle size) were binge drinkers in 91% of the 11 who selected this container as a preference. A P-Value of .032 suggests that the null hypothesis was rejected, relating the target to container size of preference when consuming wine (question 17).

Personal questions were included as a representation of sensitive outliers that may be related to reasons for binge drinking. The majority of the personal questions in the study show that in comparison to the target, those students who binge drink answer the same as those who do not binge drink (Table 4.16). Three questions were related to the target to at least one gender. Whether the respondent selected “yes” question 27 (having one parent that abuses alcohol) is the same between binge drinkers and non binge drinkers and therefore the variables are unrelated. 63% of males indicated they have practiced unsafe sex while under the influence of alcohol (question 29). Only 42% of females agreed to practicing unsafe sex while under the influence of alcohol. The target is related to whether or not the respondents selected “yes” to question 28 (driving under the influence of alcohol) with a P-Value of .017. Smoking cannabis was also related to the target with a P-Value of .005.

Although the null hypothesis is rejected, question 34 indicates that the non target was more likely to seek professional help if classified as a binge drinker. Binge drinkers have chosen to seek professional help less as a percentage and as a whole number 34%-58% or 31-35. This

concludes that providing counseling for those classified as binge drinkers will prove ineffective in slowing down the likelihood of Cal Poly student's binge drinking habits.

RECOMMENDATIONS

In order to sufficiently recommend a strategy for minimizing the target for Cal Poly SLO, it is important to understand the variables that relate to those who consume excessive amounts of beer and wine. The variables that related to the target are: question 7, question 10, question 25a, question 12, question 28, and question 29. Most of these variables are controllable through regulation. Informing the target of the relationship these variables have with binge drinking is the main focus when addressing Cal Poly Students. The study shows that neither males nor females understand the definition of binge drinking and it is in the institutions best interest to inform them. Marketing "responsible drinking" as opposed to "absence of drinking" is another strategy. Students enrolled in their first two years at Cal Poly are more likely to binge drink than students in the third year or higher. Beating down dorm room doors in an attempt to remove alcohol from students will only force students off campus and out of control of what they drink and how much. Public awareness that 61% of Cal Poly students binge drink and only 24% of students are knowledgeable of what binge drinking is needs to be addressed through: emails, flyers, and social networks. College students have created social acceptance for consuming excessive amounts of beer, liquor and more recently around California campuses, wine. Binge drinking during the college years, for both genders, posed significant risk factors for alcohol abuse and dependency 10 years later. Student awareness of the consequences for binge drinking

as well as the effects is essential in preventing binge drinking on and around campus.

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APPENDIX

CONSUMER SURVEY

Respondent Id:

College Drinking Patterns

1. Create a random respondent ID that consists of 5 digits (avoid using patterns; ie: 12345, 12121, 44444)

2. Have you consumed an alcoholic drink in the past two weeks?
- a) Yes.....1
 - b) No.....2

Terminate if no was selected.

3. Are you...
- a) Male.....1
 - b) Female.....2

4. What is your definition of binge drinking? (Circle closest answer)
- a) 4 or more drinks in one sitting.....1
 - b) 5 or more drinks in one sitting.....2
 - c) 6 or more drinks in one sitting.....3
 - d) 7 or more drinks in one sitting.....4
 - e) Drinking until you are blacked out.....5

5. In the past two weeks on any given day, what was the peak amount consumed?
- a) 1-2 drinks.....1

- b) 3-4 drinks.....2
- c) 5-6 drinks.....3
- d) 6-7 drinks.....4
- e) 8+ drinks.....5

6. What is your current year in college?

- a. 1st year.....1
- b. 2nd year.....2
- c. 3rd year.....3
- d. 4th year.....4
- e. 5th year.....5
- f. Grad Student.....6

7. Would you describe yourself as...

- a) White and/or Caucasian.....1
- b) Black and/or African American.....2
- c) American Native (Eskimo, Aleut, or Native Hawaiian).....3
- d) Asian-Indian (India, Pakistan, or Bangladesh).....4
- e) Asian-Pacific.....5
- f) Latin American6
- g) Other.....7

8. How much do alcohol advertisements effect your decisions to purchase that product?

Never Not Often Sometimes Often Always

9. How often do you relate an alcoholic product that you are consuming to advertisements?

(For example: Coors Light and the label turning blue or Captain Morgan “got a little captain in you?”)

Never Not Often Sometimes Often Always

10. When did you first start consuming alcohol? (Circle one)

- a) Prior to sophomore year in high school.....1

- b) In your junior or senior year in high school.....2
 - c) First year in college.....3
 - d) Second year in college.....4
 - e) After your second year in college.....5
11. Have you ever...(circle all that apply)
- a) Had sex while under the influence of alcohol and regretted it later.....1
 - b) Had unprotected sex while under the influence of alcohol.....2
 - c) Experienced a hangover after a night of drinking.....3
 - d) Missed class after a night of drinking.....4
 - e) Felt like you were falling behind in class as a result of drinking.....5
 - f) Forgotten the next day about events the night before after a night of drinking....6
 - g) Caused injury to yourself or others while under the influence of alcohol.....7
 - h) Been involved in a heated argument while under the influence of alcohol.....8
 - i) Made a decision while under the influence of alcohol that you would later regret..9
12. Are you involved in a sorority or fraternity?
- a) Yes.....1
 - b) No.....2
13. What is your residential status? (Circle only one).
- a) Live on campus.....1
 - b) Live off campus.....2
 - c) Live at home.....3
14. Which of the following substances have you consumed in the past two weeks? (Circle all that apply).
- a) Beer.....1

- b) Wine.....2
 - c) Liquor.....3
 - d) Tobacco.....4
15. What is your parent’s marital status?
- a) Married.....1
 - b) Widowed.....2
 - c) Divorced.....3
 - d) Separated.....4
 - e) Never Married.....5
16. What container size do you use most when drinking beer? (Circle all that apply)
- a) 12 oz. can or bottle.....1
 - b) 16 oz party cup.....2
 - c) 24 oz can or 32 oz bottle.....3
 - d) 40 oz bottle or pitcher.....4
 - e) Do not typically consume beer.....5
17. What container size do you use most when drinking wine? (Circle all that apply)
- a) Standard 4.1 oz wine glass.....1
 - b) 8-12 oz cup.....2
 - c) Standard 0.75 liter bottle.....3
 - d) Boxed wine.....4
 - e) Do not typically consume wine.....5
18. How many drinks a week do you typically consume? _____
19. Where do you choose to drink? (Circle all that apply)

- a) Restaurant.....1
- b) At home.....2
- c) In a bar.....3
- d) Friends house.....4
- e) At a party.....5

20. Do you live with a roommate?

- a) Yes.....1
- b) No.....2

21. What Cal Poly college are you affiliated with?

- a) College of Liberal Arts.....1
- b) College of Architect and Environmental Design.....2
- c) College of Education.....3
- d) College of Science and Math4
- e) College of Engineering5
- f) College of Agriculture6
- g) College of English7
- h) College of Business8
- i) Other9

22. What is your drink preference? (Circle one)

- a) Beer.....1
- b) Wine.....2
- c) Liquor (mixed drinks).....3

23. Do you hang out with a social group of five or more?

- a) Yes.....1
 - b) No.....2
24. Would you consider yourself... (Circle one)
- a) A social drinker.....1
 - b) An occasional drinker.....2
 - c) A moderate drinker.....3
 - d) A binge drinker.....4
25. What factors (that you've witnessed) cause your peers to binge drink? (Circle all that apply).
- a) Peer pressure.....1
 - b) Drinking for social acceptance (satisfy ego: to prove something).....2
 - c) Competitive drinking for volume.....3
 - d) Competitive drinking games.....4
 - e) To relieve stress from school.....5
 - f) As a coping mechanism ("drown your sorrows").....6
 - g) Celebrate (birthdays/special holidays: St. Patrick's Day, Cinco de Mayo).....7
 - h) Drinking to get drunk.....8
 - i) To avoid paying too much downtown.....9
 - j) To avoid wasting alcohol.....10
 - k) Other please indicate _____.....11

Personal Questions.

When answering these questions I must urge you to be as honest as possible. These questions will remain completely anonymous to insure privacy.

- 26. Do you feel like you were treated unfairly as an adolescent?
 - A.)Yes.....1
 - B.)No.....2

- 27. Does one of your parents abuse alcohol?
 - A.)Yes.....1
 - B.)No.....2

- 28. Have you ever driven under the influence of alcohol?
 - A.)Yes.....1
 - B.)No.....2

- 29. Have you ever had unprotected sex under the influence of alcohol?
 - A.)Yes.....1
 - B.)No.....2

- 30. Is there a history of alcohol dependency in your family?
 - A.)Yes.....1
 - B.)No.....2

- 31. Have you experienced in the past six months symptoms of depression?
 - A.)Yes.....1
 - B.)No.....2

- 32. Have you smoked cannabis in the past two months?
 - A.)Yes.....1
 - B.)No.....2

- 33. Would you consider yourself a “Problematic Drinker?”
 - A.)Yes.....1
 - B.)No.....2

- 34. If you were classified as a binge drinker would you seek professional help?
 - A.)Yes.....1
 - B.)No.....2