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Alcohol Use and Perceptions of Alcohol Use Among Biology, Criminal Justice, Health Science, and Psychology Capstone Students at Grand Valley State University

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**ALCOHOL USE AND PERCEPTIONS OF ALCOHOL USE AMONG
BIOLOGY, CRIMINAL JUSTICE, HEALTH SCIENCE, AND PSYCHOLOGY
CAPSTONE STUDENTS AT GRAND VALLEY STATE UNIVERSITY.**

By

Rebecca Postma

GRADUATE RESEARCH PROJECT

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ABSTRACT

This study brought the widely used Rutgers PRSP survey to upper level students in biology, criminal justice, health science and psychology capstone classes in the academic year of 2000/2001. The survey explores student perceptions of their own alcohol use, of their friends' use, and that of other students. Data from 291 participants reveals gender differences in perception, differences in self-reported drinking habits among the four capstone groups, and differences between this group of participants and their expectations of other students' drinking. These areas of information along with other interesting findings give important insight into the upper level students of Grand Valley State University.

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CHAPTER 1

INTRODUCTION

Background to the Problem

Out of concern for the youth, attention is consistently drawn to the dangerous drinking among the 18 to 24 year age group (Sheffield et al., 1999). During the 1990s, research revealed a trend of a decreasing total number of college students who drank modest amounts of alcohol regularly and a greater number of students who abstained from drinking alcohol entirely. However, there was also a notable increase in the number of frequent heavy drinkers (Wechsler et al., 1998). Drinking alcohol is known as traditional in college environments (Rubin et al., 1998; Smith et al., 1999; Wechsler et al., 1996) and news reports highlight times of heavy drinking among undergraduate students, broadcasting film footage of spring break in the legendary hot spots along the southern coast of the United States (Wechsler et al., 1998). The public is aware of the existence of heavy drinking on campuses and of the repercussions, including the loss of life.

Incidents linked to heavy drinking include numerous alcohol-related deaths (Rubin et al., 1998; Mosier, 1999). Consequences of the use of alcohol by college students extend further to include sexual misconduct, health problems, fights and other acts of violence (O'Hare et al., 1998). In a study by Feigelman, Gorman, and Lee (1998), alcohol abusers and poly-drug users were found to be at a significantly greater risk for alcohol-related auto accidents, engaging in risky sexual behavior, involvement in violent incidents, and for getting in trouble with the law.

High alcohol consumption among college students has raised alarm though some monitoring the research protest against the way drinking among college students has been depicted in the media (DeJong & Linkenbach, 1999). Though commonly the focus of newspaper articles and news broadcasts, campus-wide heavy drinking among college students may not be as prevalent as one might assume. Scrutiny of the population reveals that one third of students actually choose to abstain from drinking any alcohol at all. However, there is a reason for concern as studies have shown that students who choose to drink are consuming higher quantities of alcohol in each sitting and doing this at a greater frequency (Wechsler et al., 1998). To summarize the current situation: there are higher percentages of students on the extreme ends of the continuum and a decreasing number of students who may be regarded as moderate drinkers.

Misperceptions exist among students regarding the amount of alcohol that is consumed on university campuses. In anonymous studies, in nationwide surveys during 1998 and 1999, students grossly overestimated the average amount of alcohol their peer group reported consuming and the number of people who drank heavily (Perkins et al., 1999). Applying the idea that the perceived extent of alcohol use among peers ultimately influences student decisions regarding his or her own alcohol consumption, preventative programs on campus are aimed at educating students about reported alcohol consumption norms. Nineteen percent of students surveyed nationwide abstain from drinking alcohol (Wechsler, 1996). Recent prevention programs are designed to educate students about their peer group's abstinence rates, in the hope that they reduce their alcohol consumption according to the norm (Sands et al., 1998; DeJong & Linkenbach, 2000).

Corresponding with the results of national surveys, data gathered from freshman students at Grand Valley State University [GVSU] shows a significant discrepancy between perceived amounts of drinking and reported drinking within the freshman population (Harper et al., 1999). As information is collected regarding the GVSU student body, greater insight will be gained into student needs. The Alcohol, Education, Research, and Training [ALERT] Laboratories actively elicits information from the students and the study team responds with programs appropriate for identified needs. The ALERT Labs has instituted programs such as the Passport Program, which sets up a mentoring system of freshmen with older students who contract to abstain from alcohol. ALERT Labs is involved in creating environments where students can socialize without alcohol being present. ALERT Labs has also developed video presentations to educate incoming freshmen about the large number of students who abstain from drinking alcohol. Using data collected from students, ALERT Labs also participates in adjusting campus policies, aiming to decrease the frequency of dangerous drinking among students.

Up to this time, the majority of studies at GVSU have focused on prevention programs for the incoming freshman students at GVSU. Though some work has been done to collect campus-wide data, there have not been studies focusing on the upper level students. Currently, there is no available data pool for forming a baseline against which to consider the long-term efficacy of instituted programs. Nation-wide studies show that excessive drinking of undergraduates decreases with age (Sheffield et al., 1999). The 21-25 year age group reports a significantly lower number of drinks per sitting in comparison to the 18-20 year age group. There is also no information currently available on the perceptions of alcohol use among upper-level students at GVSU and how this

correlates to reported alcohol consumption in this group. Gaining insight into this population will further efforts to tailor appropriate programs aimed at prevention of dangerous alcohol consumption and may contribute to promoting more healthy lifestyles for students beyond graduation.

Problem Statement

The college students involved in binge drinking put themselves and others at risk. Binge drinking and high alcohol consumption rates are related to several negative physical and social consequences (Rubin et al, 1998; Turisi, 1999). Embedded in the university culture, student perception of peer alcohol consumption plays a large role in influencing individual's choices of how much alcohol to drink. Studies exhibit a discrepancy between how much college students perceive others drinking and the actual quantity of intake reported by the student population (Miller, 1996; Prentice, 1993). Further, studies have shown a correlation between involvement in particular social organizations, such as fraternities and sororities, and a greater amount of alcohol consumption than the general student body (Smith et al., 1994; Rubin et al., 1998). It is important for student perceptions of alcohol use to be addressed and researched. Research has already begun and continues to be done in the freshman population at Grand Valley State University. However, little data has been collected at GVSU for the analysis of perceptions of alcohol use and self-reported consumption among upper level students or among students involved in social organizations. Alcohol consumption and the related negative consequences are a long-term problem. Most chronic alcohol abuse problems begin between the ages of 20 and 40 (Sheffield et al., 1999). The additional

information gathered about the upper level students will broaden the base for understanding student perceptions and allow program managers to better tailor preventative programs in response to the particular features of the Grand Valley State University student body (Sands et al, 1998).

Purpose

American collegians need resources for developing appropriate patterns of alcohol use. The current strategy is to raise awareness of alcohol use and perceptions of alcohol use among students so that program decisions can be based upon patterns of behavior and the particular needs of GVSU students. The purpose of this study is twofold. First, a goal of this study is to provide a baseline to allow a comparison of upper level student perceptions of alcohol use on GVSU's campus with self-reported rates. This will be compared to research findings that students nation-wide tend to perceive their peers as drinking large quantities of alcohol more frequently than is reportedly the case (Miller et al., 1996). This misconception surrounding alcohol usage might be contributing to greater use of alcohol than if students' perceptions were congruent with reported norms (Sands et al., 1998; Fillmore, 2001). The establishment of norms can be useful in educational campaigns directed at exposing and correcting misperceptions on campus. In addition, the data allow for consideration of the unique character of the upper level population at GVSU. There are several sub-groups in this population. A second goal of this study is to determine if there is a significant difference in reported alcohol use between GVSU upper level students in four chosen areas of study. Gender differences can be determined. The collected data may make it possible to compare those involved in

a fraternity or sorority versus the GVSU upper level students not part of this subpopulation. It has been proposed that fraternity and sorority affiliates in the United States have higher levels of alcohol use than campus-wide averages and, because they may have greater visibility in campus culture than other students, they have the potential to further distort perceptions of what is characteristic of the general student body (Cashin et al., 1998). Recently, ALERT Labs has begun to gather information regarding the alcohol use among the Greek organization members at GVSU. This study may assist in that effort.

Significance of the Problem

In the health care system, alcohol consumption is of particular interest because of the number of conditions that are related to, or exacerbated by its abuse. Liver disease, hematological disorders, pancreatitis, immune deficiency, B12 and folate deficiency, and a number of other serious health problems commonly find their roots in alcohol abuse. More immediate physical consequences of alcohol use include car accidents, injuries from falling, fights, alcohol toxicity, and overdose. The collegiate population has a higher prevalence of alcohol abuse and associated consequences than any other age group of the United States (Sands et al., 1998). Stated by Henry Wechsler, a researcher studying the changing trends of drinking among American college students: "Students' heavy episodic alcohol use, or binge drinking, is by far the single most serious public health problem confronting American colleges" (Wechsler et al., 1998, pp57). Among students at a community college, a recent study found the highest amount of alcohol consumption in the 18-20 year age group with 21-25 year olds reporting slightly lower

and successive age groups showing progressively decreasing alcohol intake (Sheffield et al., 1999). Alcohol intoxication and binge episodes resulting in emergency room visits make understanding alcohol consumption trends in this population a necessity.

Insight into student perceptions may allow healthcare workers to communicate better with this group of patients and inform them of the potential risks of excessive drinking. As we learn about how perceptions of peer alcohol consumption affect individual choices to drink, we become more aware of which populations are at a higher risk for alcohol abuse. Knowing that a patient's social situation may effect his/her perceptions of "normal" alcohol consumption will help the health care provider obtain accurate patient histories more effectively. An individual's perception of what is "normal" alcohol consumption and how he/she compares to that norm is a key to understanding and good communication between the health care provider and the patient.

American collegians need assistance to develop appropriate patterns of alcohol use. In order to continuously produce effective programs that make this possible, accurate information has to be made available to faculty, administrators, healthcare workers, and students (Wechsler et al., 1999). Student perspectives and behavior changes from year to year during undergraduate study. A better understanding of the perspective of upper level students will enable all those involved to increase their effectiveness in meeting educational and programming needs aimed at preventing the long-term abuse of alcohol and associated damaging consequences.

Hypotheses

As found in previous studies where students have been shown to estimate other students drinking levels as higher than their own (Perkins et al., 1999; Wechsler et al., 2000), we expect to see the same in our population. The self-reported abstinence rates will be compared to the abstinence rates these students state they expect of other students. The self-reported rates of heavier drinking will also be compared to the percentage of students these participants believe will drink five or more drinks in one sitting. The first hypothesis is that upper level students surveyed at GVSU view themselves as drinking significantly less than they believe other students drink.

Dissecting the student population into smaller groups facilitates a better understanding of the student body at GVSU. This study focuses on upper level students in the four specific capstone courses of biology, criminal justice, health science and psychology. The second hypothesis is that the subpopulations of upper level student courses will show consistent results regardless of the course of study.

Typically, men have been found to drink more frequently and larger quantities of alcohol in a sitting. Over the past decade, the gap between men and women has become smaller. Women have increased their drinking. Still, a difference between the genders persists. The third hypothesis is that this study will reveal a higher amount of alcohol use among males than among females.

CHAPTER 2

LITERATURE REVIEW

Introduction

Undergraduate institutions have ample cause to be concerned about the alcohol use among their students (Turrisi et al., 1999). The literature extensively testifies to widespread drinking and associated consequences among the collegiate population (Marlatt et al., 1998; Smith et al., 1999; Reisberg, 1998). A survey completed by 25,627 students revealed that 47 percent of those consuming five or more alcoholic drinks in one sitting experienced five or more repercussions. The list of repercussions included hangovers, regretted actions, missed classes, memory loss, late assignments, arguments with friends, unplanned sexual activity, unprotected sex, physical injury, property damage, trouble with the police, loss of consciousness, and treatment for overdose (Lederman et al., 2000; Rubin, 1998; Wechsler et al., 1998; Weingardt et al., 1998). Studies have shown that there is a correlation between heavy drinking and high-risk sexual behavior (Poulson et al., 1998). One study suggests that up to 90 percent of rapes involve alcohol ingestion (O'Hare, 1998).

The dangers associated with alcohol use are widely known and authorities have attempted instituting regulations and prevention efforts to decrease its influence. Controversy surrounds the issue of how to focus on the problem of dangerous drinking and what approach should be taken to prevent alcohol abuse. Researchers continue to gather information on the changing trends of alcohol use among undergraduate students

and the efficacy of prevention efforts now in place. Much more research is necessary to truly understand the needs of university students and which prevention strategies are most effective for various groups of students.

Defining “binge drinking”

“Binge”: (binj) *n. Slang* A drunken carousal; spree (Funk & Wagnalls, 1981, pp63).

“Binge”: a spree, a pattern of heavy use, more than 1 day of drinking, time specifically set aside for the activity, loss of control, uncontrolled, related to consequences, drinking with drunkenness as a goal (Weingardt et al., 1998, pp156).

It is important in this discussion to define binge drinking. In the literature there is significant debate as to how the term “binge drinking” should be applied. Research on alcohol consumption among university students first began in the late 1960s. Some studies at the time used the designation of five or more drinks in a sitting or three or more drinks several times per week as being “heavy alcohol intake” (Weingardt et al., 1998). During that decade and the 1970s, research on alcohol use had just begun.

The study of alcohol use became high profile in the late 1980s and the 1990s. In the early 90s, Dr. Henry Wechsler, who spent years studying the drinking habits of college students and was instrumental in developing the CORE Institute survey was the first to apply the term “binge drinking” in a report. The published results of the survey

given to 93,679 students at 197 institutions of the United States in 1997 offer a baseline estimate of undergraduate results. Dr. Wechsler and his research team performed a study showing a correlation of an increased risk of negative consequences with an intake of five or more alcoholic drinks on at least one occasion over a two-week period. In the mid 90s, Wechsler adjusted his definition of binge drinking for gender differences in alcohol tolerance by dropping the number of drinks for a female to three or more in one sitting, shortly after raising the number to four or more drinks in one sitting (Weingardt et al., 1998). Many researchers still approve of and utilize the definition of binge drinking referring to consuming at least three drinks in one sitting for women and at least five drinks or 70 grams of ethanol in one sitting for men (Wechsler et al., 1998; Weingardt et al., 1998). According to the ICAP report, and throughout the research up to 1997, binge drinking was most commonly defined as five or more drinks (70g of ethanol) in one sitting.

Protesting Wechsler's definition of binge drinking, DeJong and Linkenbach published a paper detailing their concerns about the effect that using this definition might be having on the student population (DeJong et al., 1999). Their main point was that "increased attention to the problem, if talked about in the wrong way, might actually make things worse." (DeJong et al., 1999, pp11). Several studies have indeed found that students overestimate the frequency and the amount that their peers drink (Jeffrey et al., 1997; DeJong et al., 1999). DeJong and Linkenbach worry that the national publicity about alcohol-related incidents has caused an exaggerated idea of how much drinking actually occurs on university campuses. They view Wechsler's statistics and use of the term "binge" as feeding into the flawed perception students have. They consider three

and five drinks defining “binge drinking” as being too liberal, including a number of students who do not experience noteworthy physiological effects from drinking five beers. They believe the number of drinks defined as dangerous should be set higher and that the term “binge drinking” should be avoided because it is misleading. Because of the high number of students who drink three, four, or five drinks in a sitting, which by Wechsler’s definition is considered “binging”, DeJong and Linkenbach feel the statistics warp the view of what students perceive is actually happening on campus. Since a student hearing the statistics might assume a much higher number of drinks is associated with “binging”, they may believe students drink at much higher levels than they actually do. DeJong and Linkenbach assert that if the term “binge drinking” is dropped, students will have a more realistic understanding of the norm, influencing a decrease in high-risk drinking. They believe that students will adjust their drinking habits to fit in with what they think their peers are doing. The researchers cite an effort at the University of Arizona to approach prevention by changing student perspectives. The annual surveys at the university revealed a drop from a 43 percent high-risk drinking rate in 1995 to a rate of 36 percent in 1997 following its implementation. DeJong and Linkenbach conclude that this is proof of the efficacy of that approach and point to it as support for their crusade against the use of the term “binge drinking” (DeJong, et al., 1999).

Wechsler responds to the criticism of his use of the term ‘binging’ by stating that his definition is based on the extensively researched levels of drinking that are significantly associated with the danger of adverse consequences. He says that it is appropriate to report statistics reflecting the number of students who drink quantities of alcohol that put them at increased risk. He cautions that students are often unaware of the

risks related to drinking at these levels (Rubin, 1998). In 1992, a study reported by Myers and Stolberg found that of 5,750 participants, 20 percent of the students reported having memory loss due to drinking or drug use in the previous year and 22.7 percent reported driving a car while under the influence of alcohol (Jeffrey et al., 1997). Another national survey reported that of 3,375 college students surveyed, 20 percent of them drank six or more drinks at a sitting more than once per week and 49 percent admitted to driving a car when they knew they had too much to drink (Kivlahan et al., 1990). Wechsler reminds us that alcohol is a poison. He asserts that downplaying that fact is not doing anyone any favors.

Analyzing the issue, another authority on the subject, Dr. Weingardt gives some credence to Wechsler's definition of binge drinking. A recent study by Weingardt showed that the definition Wechsler uses for "binge drinking" is highly sensitive – meaning that it does indeed correctly identify those individuals who experience negative consequences associated with drinking. However, the definition is not very specific – meaning that fewer individuals who do not experience those consequences are identified as non-binge drinkers. Weingardt makes a point of differentiating between occasional heavy drinking and chronic, having found that chronic heavy drinkers are more at risk for consequences. This study showed that using measures based on typical weekend or daily alcohol intake instead of during a two week period of time produce results which are much more specific but not as sensitive as Wechsler's studies.

Another approach, as suggested by researchers critical of Wechsler's definition may be to increase the level of alcohol intake to five or more drinks for women and maybe higher for men. Weingardt makes the point that depending on the focus of a

study, a researcher may choose one or the other measure to reduce the number of false positives of students at risk of adverse consequences at the cost of a higher number of false negatives (Weingardt et al., 1998). Weingardt agrees with Wechsler's use of gender specific quantities and recognizes the benefits and drawbacks of a change but suggests the increased minimum as a possible solution to the controversy (Weingardt et al., 1998).

Another criticism of the Core Institute Survey is that the survey requests data from participants' recollection of the two-week period previous to the survey. This merely measures the behavior of that particular time frame. The responses to the survey are not reflections of a chronic condition (Fillmore, 2001; Ruizen, 2001). Weingardt also encourages broadening the testing to include frequency as well as quantity of alcohol consumption.

He applied this recommendation to his own research by conducting a point study once and then at a later date. In his study on frequency, he noticed a distinction between two groups: those who fit the criteria of binge drinkers at more than one point of time and those who were only binge drinkers once in the two-point study. The group of repeat-bingers reported experiencing a much higher and broader range of adverse consequences while the other group was almost indistinguishable from the university population (Weingardt et al., 1998).

For the purpose of our paper, "binge drinking" will refer to four or more drinks for women and five or more drinks for men as per Wechsler's definition though the term will be largely avoided in this report because of the longevity and ferocity of the dispute over its use.

Effects on the University

University concerns about alcohol abuse have increased the efforts to support preventative programs. Administrators also recognize alcohol use as a contributing factor for 29 percent of college students who dropout (Rubin, 1998). Students who drink higher quantities of alcohol miss more classes and tend to have lower grade point averages. Due to alcohol abuse among students, universities also sustain indirect costs in the areas of security, insurance, vandalism, as well as a decrease in the general quality of the education experience (Haley et al., 1994). Many universities receive federal funding for efforts to gain understanding and institute preventative efforts toward student drinking. The federal funding for these programs as well as for grants and research is contingent on the adherence of the institution of higher learning to part 86 of EDGAR (34 CFR Part 86) (Crohn, 1987). This Drug-Free Schools and Campuses Act demands that schools have well-defined policies in regards to alcohol and drug possession, use, or distribution. Further, the institutions must provide information to students about health risks associated with these substances, the treatment programs available, the expectations for student and faculty conduct, legal restrictions for alcohol consumption, and the consequences for violations of institutional stipulations and the consequences for legal violations. This mandate also requires educational facilities to assess the effectiveness of their drug and alcohol programs in a written review that must be available to anyone who requests a copy (Wechsler et al., 1996).

Though the federal pressure to maintain a temperate campus is influential, universities also keep an eye on parents of potential in-coming students. Safety is one of the top factors in selecting a college for parents in the United States and a recent study

indicates that 90 percent of all surveyed parents believe alcohol consumption among college students is the highest threat to their children's safety (Haley, 1996; Odo et al., 1999; Birch et al., 1997). There is evidence to support this concern. Studies show students owning weapons are more likely to drink and then more likely to fight if they drink large quantities in one sitting (Courtenay, 1998). Administrators surveyed at the University of Wisconsin in Madison acknowledge that students are injured every year because of the use and abuse of alcohol, estimating that alcohol is a factor in 38 percent of academic problems (Rubin, 1998).

Long-term Effects on the Student

Although most students decrease their drinking with age, there is still a significant number who continue to drink multiple times per week (Kivlahan, et al., 1990; Mosier, 1999; Ruizen et al., 2001; Vaillant, 1996). One study found that alcohol intake was the highest in 18-20 year olds with lower quantities reported in the 21-25 year old age group (Sheffield et al., 1999). However, another study of over 45 thousand participants showed no significant difference in the number of drinks per week when comparing freshmen, sophomores, juniors and seniors (Presley et al., 2000). The majority of long-term drinking problems begin to develop in the 20s (Mosier, 1999). Only a small number of students consider themselves as having a problem with alcohol and the majority of students who drink in college do not become alcohol dependent as adults (Kivlahan et al., 1990; Marlatt et al., 1998). However, one source asserted that 50 percent of people who drink more than two servings of alcohol per day or who drink more than four servings over 24 hours eventually progress to alcohol dependency (Mosier, 1998).

Students' environment has an effect on their opportunities for developing a healthy lifestyle (Paffenbarger, et al, 1997). In spite of efforts to raise awareness of the negative effects of alcohol, those who qualify as binge drinkers consider themselves to be "moderate drinkers" and few students see themselves as participating in problem drinking (Kivlahan et al., 1990). Further efforts to educate university students about alcohol use may offer students a chance to avoid alcohol-related consequences and alcohol dependence.

Health care workers have the task of treating patients for alcohol-related injuries and illnesses. They also have the opportunity to communicate with students about the reality of their risk for behavioral and physical consequences. If the immediate, sometimes tragic consequences are not bad enough, habitual drinking is related to a myriad of physical problems. In the chronic abuser, the central nervous system adapts to the presence of alcohol and this leads to physical tolerance and dependence (Mosier, 1998). The physiology of the brain adapts to the chronic presence of alcohol and decreases the production of particular neurotransmitters (Tabassum et al., 2001). After chronic use of alcohol, absence of the substance is uncomfortable to the individual. A person who is dependent on alcohol may crave the substance like people crave food and water.

Alcohol affects many other organs as well. As alcohol is metabolized and cleared from the body, the chemical changes and toxicity cause damage to the liver, pancreas, and kidneys (Whittemore et al., 1983; Ammor et al., 1998). Coronary Heart Disease and atrial fibrillation known as "holiday heart" increases the risk of stroke, and tumor metastasis (Fauci et al., 1998). Liver disease, hematological disorders, pancreatitis,

ascites, vascular disorders, impotence, immunodeficiency, B-12 and folate deficiency, fetal alcohol syndrome, osteoporosis, heart disease, and many other serious and chronic health problems often result from chronic alcohol abuse (Paffenbarger et al, 1997; Leslie, et al., 1999; Tabassum et al., 2001; Lazarevic et al., 2000). Many health complications and emergency room visits could be avoided if alcohol abuse decreased (Soderstron, et al., 2001).

The Truth

College students drink more frequently and in greater quantities than people their age who have jobs and do not attend school (Courtenay, 1998). This is the highest alcohol-consuming group of all age groups across the nation (Sands et al., 1998). Students have been found to enjoy talking about their “drinking adventures” and they reportedly perceive drinking as a key component of a college social life, sometimes carrying around a can of beer when they do not want to drink, just to make it look like they are (Roper, 1998). Tailgating parties, spring break, social mixers, and celebrations are widely known opportunities for heavy drinking (Rubin, 1998).

Recent research among college students has revealed changing trends in alcohol use and the effect of expectations and perceptions have on the choice to drink (Barnett, 1996). During the 1990s, researchers found that there were decreasing numbers of students who reported moderate amounts of drinking. There was an increase of students who drank heavily or abstained from drinking altogether (Wechsler et al., 1998). In 1993, Wechsler’s study found that two out of five students fit his definition of binge drinkers. In the 1997 survey of the same 130 colleges, the percentage of heavy drinkers

stayed the same, however, the number of abstainers increased significantly as did the number of people who fell into the category of students who drank heavily several times per week. More students chose not to drink and more students were found to be drinking with the intent of getting drunk. There was also an increase of alcohol-related problems identified by the students in the latter study (Wechsler et al., 1998).

A recent report in a series by the Core Institute published results of surveys collected from 93,679 students attending 197 institutions across the country revealed that 36 percent of students abstained from drinking alcohol (Presley et al., 1998). Because this constitutes a large percentage of the student population, many modern preventative efforts have been aimed at informing students of this reality. The theory is that since students are so influenced by expected norms, learning that a third of their peers choose not to drink alcohol will increase the likelihood that they will also choose not to consume large quantities of alcohol. This is a model for prevention using peer pressure to encourage abstinence.

This approach only focuses on half of the story. The Harvard School of Public Health study in 1997 found that 43 percent of college students admitted to binge drinking in the preceding two weeks (Rubin, 1998). According to this study, 48 percent of college men and 39 percent of college women fell into the category of binge drinkers by Wechsler's definition (Rubin, 1998; Wechsler et al., 1998). A prominent 45.5 percent of students admitted to having had at least one binge-drinking episode in the two weeks prior to the survey. A lesser 21.5 percent of the total population admitted to having had at least three binge drinking episodes in those two weeks (Presley et al., 1998). This research indicates a severe level of heavy drinking.

Though studies have found a trend toward a higher percentage of students who abstain from drinking alcohol altogether, it has also been discovered that students who choose to drink are drinking larger amounts and more frequently than in the past. Those considered to be 'moderate drinkers' are the minority, only comprising approximately 20 percent of the participants in Wechsler's nation-wide study in 1998.

Groups

Particular groups on campus are known to have higher alcohol intake. Athletes and Greek organizations have been under scrutiny for their drinking behavior. Being part of these high-profile groups on campus appears to be directly linked to a higher average of alcohol intake. Greek organizations have been spotlighted as environments of raucous parties, "hazing", and binge drinking. There are secondary effects to those living in fraternity and sorority houses. For students living in fraternity houses who abstain from drinking alcohol, there is a documented increase risk of experiencing negative consequences associated with alcohol intake when in close proximity to those who are consuming alcohol (Wechsler et al., 1998).

In 1993, using the Core Institute Survey, Presley et al. found that fraternity house residents reported an average of 20.3 drinks per week, and students living in sorority houses reported an average of 6.2 drinks per week. Compared to the average of 7.5 drinks per week for campus-wide male students and the average of 3.2 drinks per week reported by the general population of female students, the numbers showed that fraternity members drank triple and sorority members drank almost double the amount of their non-Greek peers. A greater percentage of Greek house residents were found to do poorer on

tests, miss more classes, and have a greater number of arguments or fights than the general population of students.

Numerous studies have been conducted supporting the conclusion that members of Greek organizations have higher drinking rates than the rest of the collegiate population. In a Harvard study, 65 percent of fraternity and sorority members were found to be heavy drinkers under Wechsler's definition of binge drinking (Rubin, 1998). A study of 72 Greek students and 228 general university students at the University of Arkansas found that Greek students were more likely to drink for social reasons and for coping with stress than non-Greeks (Smith, et al., 1999). In the same study, Greek members reported a significantly higher number of drinking days than non-Greeks.

In a study on leadership in Greek organizations, Cashin et al. duplicated the finding that Greek students drink substantially more alcohol and suffer a significantly higher number of the consequences of drinking than students not involved in fraternities and sororities. The researchers continued the study to determine how the level of involvement in Greek organizations correlated with heavy drinking. They took the 20 percent of the 28,341 Core Institute Surveys completed by members of Greek organizations and further separated them according to the participants' level of involvement in Greek organizations. It was found that the 1,530 organization leaders were, on average, the heaviest drinkers of all of the members surveyed (Cashin et al., 1998).

To combat the drinker image and protect the reputation of the organizations, many chapters and entire societies have written laws for the conduct of their members. Some fraternities and sororities do not allow drinking at any of their parties and some

sororities do not even allow their members to attend organized Greek parties where alcohol is present. Hazing rituals using alcohol are strictly prohibited in many groups. The practices may be changing but there is still a concern that the stigma on Greek organizations as being a heavy drinking student group will continue.

Gender

Research studies must take gender differences into consideration. Men drink greater quantities than women (Rubin, 1998; Wechsler et al., 1997). A study at Harvard found 48 percent of men and 39 percent of women fit Wechsler's definition of binge drinkers, that being five or more drinks for men and four or more drinks consumed by women (Wechsler et al., 1997). Studies dealing with social expectations on men conclude that college men view drinking excessively as part of their traditional masculine identity. Traditionally minded college men are more likely to be involved in risky behaviors and are less likely than women to pursue treatment for both physical and behavioral problems (Courtenay, 1998). They are also more at risk for disease, injury, and death than college women. Men are more likely to drive after drinking than women. Violence is more common among students who carry weapons drink alcohol versus students who carry weapons but do not consume alcohol. Binge drinker carrying weapons are particularly more likely to fight (Presley et al., 1997).

College men are more likely to think of themselves as being immune to alcohol related risks than women. On the contrary, college men experience more negative consequences of drinking than women and are eight times more likely to be treated for alcohol-related injuries according to college health center statistics. In a report by the

Centers for Disease Control in the United States, from 1982 to 1993, driving while drunk was the leading cause of death for men under 25 years of age (Courtney, 1999). Literature on the subject recognizes a socially cultivated attitude among young men that drinking is inherent to their masculinity (Courtenay, 1998).

Men drink more heavily than women in all age groups (Sheffield et al., 1999) but that does not mean women who drink alcohol are spared from risk. A study at the University of South Florida found that alcohol use was highest among male students between 18-20 years of age whereas the highest alcohol consumption among women was found to be between the ages of 21 and 25 (Sheffield et al., 1999). Men tend to view drinking women as more likely to engage in sexual behavior and are more likely to take risks (O'Hare et al., 1998). Women tend to view alcohol-related sexual encounters negatively but are more likely to initiate sex and are more at risk for being victims of assaults and rapes when they drink. O'Hare's study on the attitudes college students have toward alcohol finds that students who think alcohol enhances their sexuality are more at risk to drink excessively and to be involved in risky sexual behavior (O'Hare et al., 1998).

Religion

GrandValley State University is located in western Michigan. The culture in this region of the Midwest is influenced by a number of area churches, primarily Christian churches. A study in 1998 found that students with strong religious convictions were less likely to binge drink in comparison to those who did not consider religion to be important in their lives. A study comparing religious attitudes toward alcohol among Protestants,

Jews, and Catholics found that strong religious messages about alcohol abstinence can have a significant impact on individual rates of alcohol intake (Calucci et al., 1993). This study also found the average drinks consumed by students at a university strongly influenced by the Christian church to be significantly lower than the national average found through Core Institute survey studies.

Perceptions

Wesley Perkins, a sociology professor at Hobart University suggested as early as 1986 that a perceptions approach to prevention might be effective. He observed the incongruence between what students reported others drank and the nation-wide university norms (Zernike, 2000). In spite of efforts to educate students on the dangers of alcohol abuse, though students abstain from drinking alcohol in increasing numbers, the incidence of heavy drinking has also increased and alcohol remains a problem on campuses (Sands et al., 1998).

Observing student trends, DeJong and Linkenbach feel that it is not helpful to focus on the negative aspects of collegiate drinking if focusing on the worst cases increases rather than decreases risky behavior. In the late 80s, most prevention programs emphasized the danger of alcoholism and the negative effects of alcohol on the body (Kivlahan et al., 1990). While it is important to realize the long-term effects of alcohol, focusing on these aspects has not been found to prevent long-term abuse of alcohol (Sands et al., 1998). Rather than recommending abstinence, programs aimed at reducing risk have shown more success (Kivlahan et al., 1990). These programs: educating students on the risks of alcohol-related problems along with primary prevention programs

which modify the environment to make the acquisition of alcohol more difficult, are still found to be limited in their effectiveness in preventing harmful drinking (Marlatt et al., 1998).

Brief intervention during the freshman year can decrease alcohol abuse and related consequences for college students (Marlatt et al., 1998). It was found that this brief discussion about alcohol ingestion was most effective for students who drink more heavily. Students have many reasons for drinking and studies have focused on coping skills, socialization, fear of failure, and family role models. When asked, some students expressed doubts of acceptance if they chose not to drink alcohol and mentioned a feeling of a limited social life if abstaining (Sands et al., 1998). When the coping strategies of self-blame, detachment, wishful thinking, and isolation are utilized during stressful situations, there is a higher chance of increased alcohol use and related negative consequences (Karwacki et al., 1996). It may be helpful to identify those at risk for long-term alcohol abuse based on these variables and gear programs toward developing healthy coping skills in students. A study comparing cognitive-behavioral skills training, information, and a monitoring system found that the skills/coping training was the most effective approach (Kivlahan et al., 1990). In another study of the variables of personal awareness, self-efficacy scores were stronger predictors of moderate alcohol intake than student concerns about social influences, perceptions of barriers, or their expectations of alcohol effects (Sands et al., 1998).

Students often do not realize how much they are drinking. A glass of wine, a shot of liquor, and a bottle of beer all contain a similar amount of alcohol (Rubin, 1998). At a blood alcohol level of 0.03 percent most individuals experience a relaxed feeling. At

0.05 percent there is often a decrease in motor skills progressing to delayed reaction time and slurred speech at 0.09 percent and then further to blurred vision, unsteadiness and impaired coordination at 0.15 percent. At 0.18 percent individuals becomes very sleepy and at 0.30 percent this difficulty staying awake drops into a semi-stupor which can progress to coma and a risk of death at 0.50 percent (Rubin, 1998).

Prevention

Prevention of dangerous drinking has long been a key in promoting safety on university campuses (Sands et al., 1998; Zernike, 2000; Kivlahan et al., 1990).

Administrators have employed a myriad of approaches to reach this goal. Studies have found that relaying the frightening fact of negative consequences related to alcohol consumption is an effective tool to deter heavy alcohol use (Moscatto et al., 2001).

Communication and beliefs about the effect of alcohol on a person also influences how much student use (Turrisi et al., 1999). More recently, several universities have begun to try a “social norming” approach with impressive success (Lederman et al., 1998; Barnett et al., 1996; Carter et al, 2000).

At Grand Valley State University, the ALERT Labs is entering its fourth year as a research and program center for the care of the university students. The ALERT Labs, led by Dr. Nancy Harper, is dedicated to the collection of data on student drinking patterns. This data is then used to assess the efficacy of prevention efforts aimed at changing student perceptions of alcohol consumption on campus. In this way, it is the hope that when students realize that many of their peers abstain from drinking alcohol, students will choose to drink less often and in lower quantities.

Health care professionals can easily conduct brief interventions that are of great benefit to young adults (Marlatt et al., 1998). College students' health behaviors are sometimes found to be worse than nonacademic peers (Courtenay, 1998). Since men are less likely to seek health care in America, it is important to bring up the issue of alcohol use, especially with college students. The earlier alcohol dependency is recognized, the greater the possibility that prolonged heavy drinking and the severe health consequences may be avoided (Mosier, 1998). People who abuse alcohol require a substantial portion of our medical resources. As high as one third of patients at primary care facilities seek treatment for alcohol related problems (Fleming et al., 1992). Clinicians' understanding and empathy is extremely important to the success of intervention. The more knowledgeable a clinician is about alcohol use and its effects on the body, the more effective the clinician can be with that patient. As Mosier stated: "Many patients who abuse alcohol do not recognize that their current medical problem may be caused or complicated by alcohol consumption." (Mosier, 1998).

Summary

The literature is extensive in this area of study, reflecting the concern of the college community, of parents, and of society at large. Regardless of the controversy over the use of the term "binge", it is clear from Weschler's, Weingardt's, DeJong and Linkenbach's, Jeffrey's, and many other quantitative studies that at least a third of college students nationwide drink at levels that have been linked to a significantly increased risk of negative consequences. Thousands upon thousands of students have been surveyed, giving a reasonably complete picture of drinking trends among students

particularly undergraduates in the 1990s. This picture reveals a need for continued efforts in developing programs to help students develop healthy habits and avoid the dangers associated with high levels of alcohol consumption. Some longitudinal studies have been done to detect successfulness of particular prevention programs with particular groups of students. These should be continued and expanded to increase understanding of the ever-changing student population needs.

The literature focuses on concerns over and the prevention of short-term problems associated with high alcohol intake and though there is some mention of the long-term repercussions of habitual alcohol intake, there is scant literature provided with an aim towards developing programs among collegiate populations to deal with the students at high risk of becoming alcoholics. The prevention efforts for these students may have to be tailored differently from those directed toward decreasing the dangerous drinking among freshmen populations at universities. Though there is a drop in heavy drinking when comparing the statistics of freshmen and sophomores with those of junior and senior students, there are still a large number of upper level students who drink large quantities of alcohol.

CHAPTER 3

METHODS

Study Design

This experimental research project utilized the Personal Report of Student Perceptions [PRSP] (Lederman et al., 1998), a survey developed by Rutgers University. The survey was given to 292 upper level students enrolled in capstone classes at Grand Valley State University in the fall semester of 2000 and the spring semester of 2001. The data obtained was analyzed for the purpose of gaining recent data to improve understanding of the amount of reported alcohol consumption and the perceptions of peer alcohol consumption in this population.

Study Site and Subjects

The research participants were 126 students in selected capstone classes out of the total 449 students enrolled in all capstone classes during the fall semester of 2000 and 166 students of over 500 students enrolled in corresponding capstone classes of the total students enrolled in capstone classes offered during the winter semester of 2001.

Capstone course completion is required for obtaining a degree in each chosen major of study, therefore this population includes male and female students of primarily senior status at Grand Valley. Capstone course description in the university catalog includes the prerequisite of senior status or the written permission of its specific department in order for a student to be eligible for enrollment. This made it possible to

survey almost entirely upper-class students. There were 31 capstone courses offered in total. Fourteen of these, segmented into 27 sections, were offered during the fall semester of 2000. All 31 capstone courses were offered during the winter semester, with the number of sections double that of the fall. Though capstone courses were also offered in the spring/summer semester, attendance is greatly reduced in that season and the survey was not offered to those students.

The survey was given twice during the academic year: once in the first week of December 2000 and once during the first week of April 2001. The two separate collection times allowed for scrutiny of the internal validity of the study and consistency of results between the capstone courses and between the two times of administration. The capstone courses selected for this study were from the departments of Biology, Psychology, Health Science, and Criminal Justice. Previous studies have shown that personality type impacts the choice of study to some degree. Comparing the attitudes of these selected subpopulations allows detection of variety within the capstone population at large.

These particular four departments were chosen based on the possible exposure these students have had to information regarding the potential consequences of alcohol use. Psychology students are likely to be aware of the social and psychological impact of alcohol use. Health Science students may be aware of the effects of alcohol on the body and the impact of long-term use. Criminal Justice students learn of how the legal system views alcohol use and the punitive consequences for breaking the law. The Biology student population perhaps has lesser scholastic exposure to the effects of alcohol use,

perhaps limited to chemical interactions of alcohol with other substances at the cellular level. The speculation about the different philosophies of students in particular areas of study is not deeply relevant to this research. However, whether or not there are differences among subpopulations within the greater population of all capstone-enrolled students is important. If variability exists in subpopulations, it cautions the research team to take greater care in handling the data collected from representative samples of the entire population.

The results of this survey cannot be confidently generalized as a reflection to all upper-class students at Grand Valley State University. With less than 300 participants, it is not reasonable to speculate about the thousands of students enrolled as juniors and seniors at GVSU. However, we can begin to view a piece of the population with the information we have gained from this sample. Continuing study in this area will further efforts to reach the goal of understanding the varying needs of the GVSU campus.

With the survey, demographic questions were asked regarding fraternity and sorority membership, academic year status, gender, ethnicity, and marital status. No student survey information was disqualified due to these factors. These data were only used for description purposes of the group of participants.

There exist 19 Greek associations at Grand Valley State University. Nine are fraternities and ten are sororities. Twelve of the organizations are purely social. Six of the 12 are fraternities and six are sororities. The remaining seven of the organizations' memberships are historically of a particular ethnic group or career pursuit; business, for example. There are eight chapters that offer official or unofficial housing for the

members. All of the other groups have meeting places but the members do not reside on the property. The Greek organization members are an estimated three percent of the entire university population. An estimated one third of the Greek members are seniors. It is an interest of the ALERT Labs to learn more about this particular group so the results specific to this group of students were noted.

To ensure confidentiality, the surveys were anonymous with no specific identification requested. Though the survey forms requested the last six digits of participants' social security numbers, this question was crossed out and the participants were instructed in writing as well as verbally not to answer that question. Only general demographic questions were asked. The surveys were kept at the ALERT lab office in a locked file cabinet and destroyed upon completion of the project.

Expedited approval for this research to be conducted on Grand Valley State University's campus was requested and received from the IRB, the Institutional Review Board of GVSU, in December of 2000 (see Appendix A).

Equipment and Instruments

Grand Valley State University received approval from Rutgers University to use the Rutgers Personal Report of Student Perceptions [PRSP] survey, written by the Communication and Health Issues Research Group (CHI) in 1997 (Lederman, et.al, 1998). ALERT Labs has permission to use the survey on Grand Valley State University's campus among freshman and for random sampling of students of all levels. ALERT Labs requested and received further approval from Rutgers for the purpose of

ALERT laboratory campus wide research in 1998. This study was acceptable under the guidelines stipulated by Rutgers in their permission statement. ALERT Labs also requested and received assent via email specifically for the use of the survey for this project in November of 2000 (see Appendix B).

The PRSP survey was adjusted to a format that ALERT Labs uses for the collection of data among the freshman (see Appendix C). It contains questions regarding how participants view their use of alcohol and their perception of how their friends and other students use alcohol. The changes to the survey included additional demographic questions on the first page. Questions two and three pertained only to freshmen students were on the survey but were not used for this study. Students taking the survey in the capstone classes were instructed in writing as well as verbally not to answer those questions. They were told that these questions, which were crossed out on the survey, were not relevant to this project.

The central questions for this study are questions 11, 12, 13, 21, 22, 23, 24, 25, 26, 29, and 30. Questions 11 and 12 are perception questions, revealing what percentage of students participants believe abstain from drinking alcohol and what participants perceive to be the percentage of students who drink 5 or more drinks within a two week period of time. Question 13 allows detection of how many participants report abstaining from drinking and the average number of drinks they report consuming. Questions 21 thru 25 allows for a recheck of the number of people who report abstaining from alcohol and further dissects the participants' perceptions of their peer group, detailing their perceptions of friends' drinking, student consumption in general, male drinking patterns,

and female alcohol consumption. Question 26 is another question allowing for a recheck of the number of people who report abstaining and reveals self-reported alcohol intake. Questions 29 and 30 touch again on the perceptions this group of participants of the differences between male and female alcohol consumption.

Validity/Reliability

The Rutgers survey, developed at Rutgers University, has been used to collect data at GVSU since 1998. The Rutgers survey collects the data of self-reported drinking and further, asks questions with regard to participant perceptions of drinking among peers (Lederman et al., 2000). The validity and reliability of self reported alcohol consumption has been substantiated through studies in the past. Participants are found to be honest and accurate in their responses to questions about their own alcohol consumption (Freier, et al., 1991; Hesselbrock, et al., 1983; Midanik, 1988). The Rutgers survey is a widely used to collect data from thousands of university students (Lederman et al., 2000; Jeffrey & Negro, 1996).

It is helpful to compare results of some questions on the Rutgers PRSP to the Core Institute survey, which also explores recreational substance use among college students and the consequences experienced by this group of people. The survey was used to gather data from 28,709 students at 140 four-year universities across the nation in 1993 (Wechsler et al., 1996). The survey was also given to 93,679 students at 197 institutions of the United States in 1997 (Wechsler et al., 1998). The questions on this survey revolve around self-reported drinking rates and consequences experienced due to alcohol

consumption. The results offer a baseline estimate of undergraduate drug and alcohol use. The Rutgers survey and the Core Institute Survey have detected similar rates of heavy drinking among university students over the past few years. The results of a recent collection of data from the Rutgers survey showed that 35.8% of university students drink at dangerous levels. The quantity used to determine this percentage corresponds with Dr. Henry Wechsler's definition of binge drinking with a cut-off of 4 drinks per sitting for women and 5 drinks per sitting for men (Lederman et al., 2000). The Core Institute survey found the heavy drinking rate to be 44% of all students (Wechsler et al., 1998). These results were reported with the gender adjustment of men drinking 5 or more drinks in one sitting and women drinking 4 or more drinks in one sitting.

Procedure

A letter was sent to the directors of each of the four departments of psychology, biology, criminal justice, and health science, introducing them to the project and giving them contact information for the researchers and the supervising committee (see Appendix D). Each of the instructors of the chosen capstone sections was contacted in person as well as given a brief letter confirming the arranged time for the survey in each specific class (see Appendix E). The project was explained and they were asked to allow their students to participate. The class time required for administration of the survey was approximately 15 to 20 minutes.

At the time agreed upon by the instructor, the research team member administering the survey distributed the surveys and instruction sheets to the students in the class. The instruction sheet included a short introduction to the survey indicating that questions two and three should be ignored for the purposes of this study (see Appendix F). This introduction also stated that by filling out the survey, the student was consenting to participate in the study. The introduction also assured confidentiality of the information gathered in the survey, and gave contact information for the research team, and the IRB. The research team member administering the survey verbally explained that the survey included questions about alcohol and that if any student did not wish to participate he or she was free to choose not to fill out the survey. The research team member also stated that questions number two and three were not to be answered. The students were given 15 minutes at the designated time in the class period to complete the survey and all completed surveys were deposited in a manila envelope, sealed by the research team member, and locked in a file cabinet at the ALERT Labs headquarters. All students present in class on the days the survey was given were included in the study. If a student had already participated in the study, he or she was told not to fill out a survey to avoid duplication. No surveys were excluded from the study after the data was collected.

CHAPTER 4

RESULTS

Data

The data was entered on a computerized spreadsheet and analyzed using frequencies, T-tests, Chi square analysis, ANOVA with Bonferroni analysis as well as basic descriptive analysis. On the rare occasion that a participant left any answer incomplete, the program automatically excluded that subject from the analysis of that specific piece of information.

The two collection times in December of 2000 and spring of 2001 are compared for consistency. The rates of drinking in the four separate capstone courses are also compared to see if there is significant variance between the student responses in the four areas of biology, criminal justice, health science, and psychology.

Analysis includes comparisons between the female and male perspectives on alcohol consumption and their self-reported consumption. There was also consideration in the data analysis given to the number of reported drinks consumed by women and men when considering the percentage of students reporting consuming amounts of alcohol consistent with dangerous drinking.

Demographics

There were 126 participants who filled out the survey in the fall of 2000 and 166 participants in the spring of 2001 for a total of 292 participants. Almost two thirds of the

participants were female with 101 males and 191 females completing the survey (see Figure 1 for pie graph). Two hundred thirty four of the students are known to have been seniors, three stated that they were juniors, and five answered “other”. Fifty participants did not answer the “academic status” question. Of the capstone classes surveyed, 72 participants were attending the biology capstone, 74 were attending the criminal justice capstone, 73 were attending the health science capstone, and 72 were in the psychology capstone.

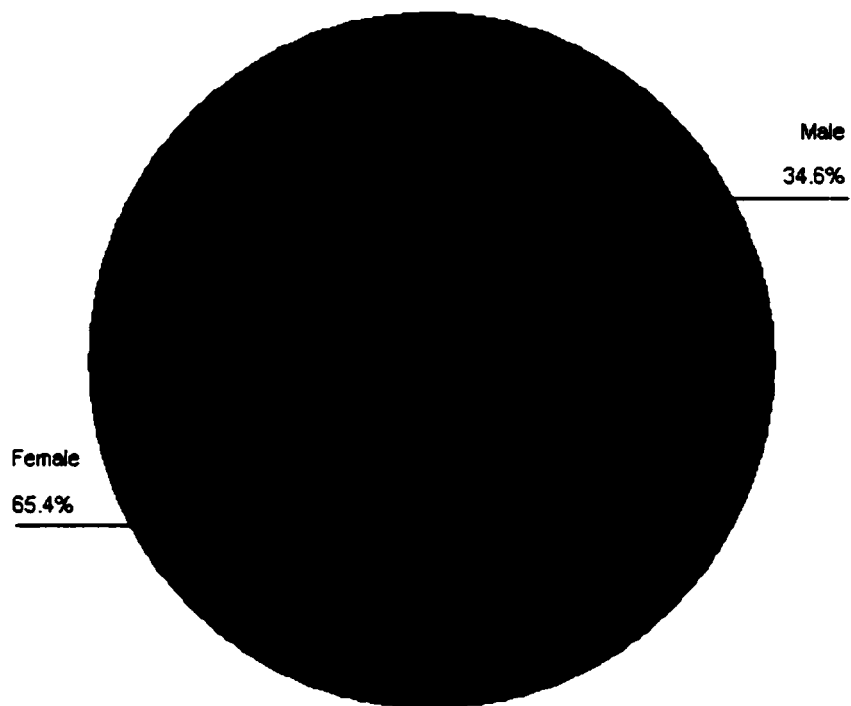


Figure 1: Pie graph of gender distribution of research participants.

The ethnicity of this group of participants was primarily White/Non Hispanic with a total of 261. Hispanic was the next most numerous ethnic group comprised of six participants. Five participants identified themselves as Black/Non Hispanic, four as

American Indian/Alaskan Native, and three as Asian/Pacific Islander. Eight participants answered “other”.

Only nine participants said that they were involved with an athletic team though 26 were involved with an athletic club. Thirty-three of the participants said that they were married, and 23 indicated that they had children. Sixty-seven participants had full-time employment at the time of the survey. Most participants said that they lived off campus with 31 filling out that they had on-campus housing. Twenty-nine participants were involved in a fraternity or sorority and only eight said they lived in a fraternity or sorority living area.

Internal Reliability

T-tests of the spring and fall survey collections with questions 26-30 showed no significant difference in the responses of these groups to any of the focus questions including 14-16 and 26-30. This reveals a consistency of answers between the spring and fall groups and supports the reliability of the survey regardless of the time it was given.

Abstinence

There are several questions that delineate the rate of abstinence in this group. On question 14, when asked to compare their consumption to that of their best friend 13.7 percent of participants answered that they do not drink. On question 15, when asked to compare their consumption to that of their other friends 14.1 percent answered that they do not drink. For question 16, when asked to compare their consumption to other

students 13.7 percent answered that they do not drink. For question 17 with regards to their change of alcohol use over the last year, 12.7 percent of the participants answered that they do not drink alcohol. The results of question 26 reflect similar findings to previous questions pertaining to abstinence from alcohol. 14.3 percent of participants reported not consuming any alcohol at parties or bars. There was no correlation between whether the participant was male or female and what percentage abstained from drinking alcohol on two-tailed t-tests of all questions. Figure 2 shows the abstinence rates of male and female participants for question 26 of the survey.

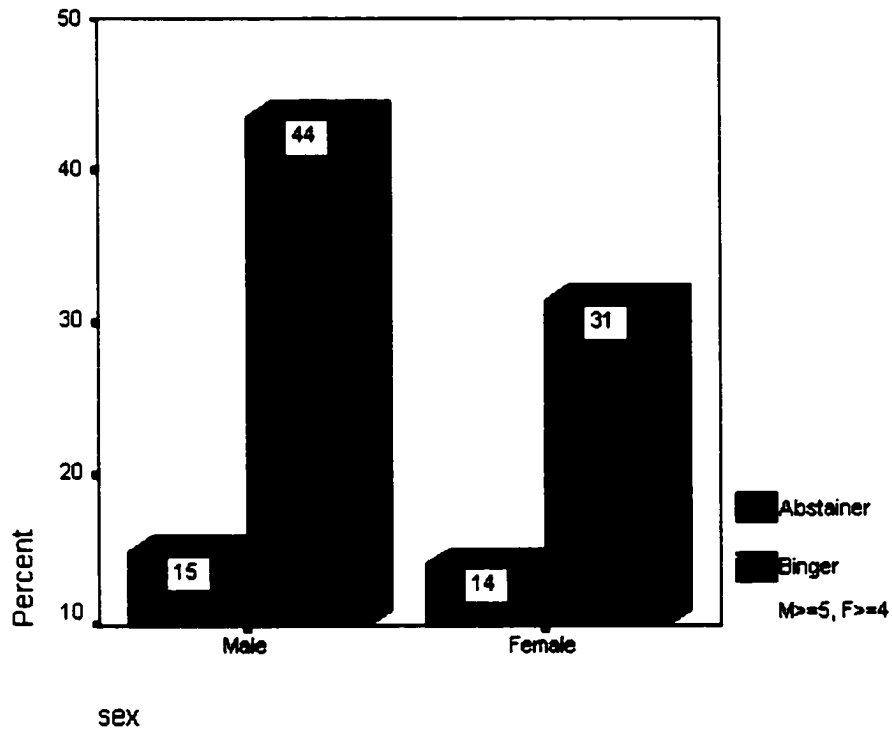


Figure 2: Percent of male and female participants who say they abstain from drinking alcohol. Percent of male and female participants who drink greater than or equal to five and four drinks respectively.

Dangerous Drinking

Using Dr. Henry Wechsler's definition of binge drinking, 34.9 percent of participants fit into the category of males who drank five or more drinks and females who drank four or more alcoholic drinks (See Figure 2 for "binge" rates of male and female participants). Answering question 32 in regards to whether participants viewed themselves as "binge drinkers", 13.1 percent of participants answered that they do not drink, and 88.6 percent of participants were neutral, disagreed or strongly disagreed with that possibility. Using a t-test to compare the participants who fit Wechsler's definition of binge drinkers to the participants who drink less, there exists a significant difference in how they view themselves in the answer to question 32. Those participants who do not state drinking 4, 5, or more alcoholic drinks in a sitting answered question 32 with a mean of 1.43 which falls between "very strongly disagree" (1) and "strongly disagree" (2). Participants who admit to higher alcohol consumption have a mean answer of 3.05, which is closest to "disagree"(3). This means they are less emphatic about not being binge drinkers though they still do not as a group view themselves as bingers. The difference in the mean responses of the two groups is significance with a p value of .001. The answers to question 36 regarding whether the participant felt he or she had a drinking problem were analyzed similarly. The difference in the groups' responses tended toward significance also but the p value was a less noteworthy .056.

Frequency

For question 21, which asks how frequently the participant drinks alcohol, 10.3 percent of the participants answered that they never drink. A combined 18.6 percent of the participants answered that they drink two or less times per year. A combined 52.9 percent of the participants said they drank once a month or less. Thirty three percent of the participants said they drank about once per week and 14.1 percent of the participants admitted to drinking between three and five times per week.

The participants were also asked several questions about they perceive their friends' and fellow students' alcohol consumption. For question 22, 40.0 percent of the participants view their friends as drinking approximately once per week, 26.6 percent estimate that their friends drink three times per week, 17.2 percent estimate that their friends drink once per month, and the remaining 16 percent had other answers. On question 23, participants reported that they felt 47.6 percent of the students in general drank once per week and 40.0 percent of the participants answered that they felt students in general drank at least three times per week leaving only 12 percent answering in the other categories. For question 24, 52.4 percent of participants answered that they felt males typically drink three times per week, 33.2 percent felt that males typically drink once per week, 9.7 percent felt that males drank five times per week, leaving less than four percent of the participants answering in the other categories. For question 25, 59.2 percent of participants answered that they thought women typically drank once per week, 26.6 percent of participants viewed females as drinking three times per week, 9.3 percent

felt females drank only once per month, leaving less than five percent answering in the other categories.

Means

Using descriptive statistics, the means were acquired for the answer to several questions. For question 11 specifically, participant answers to what percentage of students they expect abstain resulted in a mean of 22.99 percent. Participants reported drinking a mean number of 3.37 drinks at parties or bars. Participants expected their friends to drink a mean number of 4.87. Participants expected other students to drink a mean number of 5.31 drinks. This step-progression from questions 26, 27, and 28 is depicted in Figure 3. Participants reported they believed males to consume 6.61 and females to consume 4.26 drinks at parties and bars.

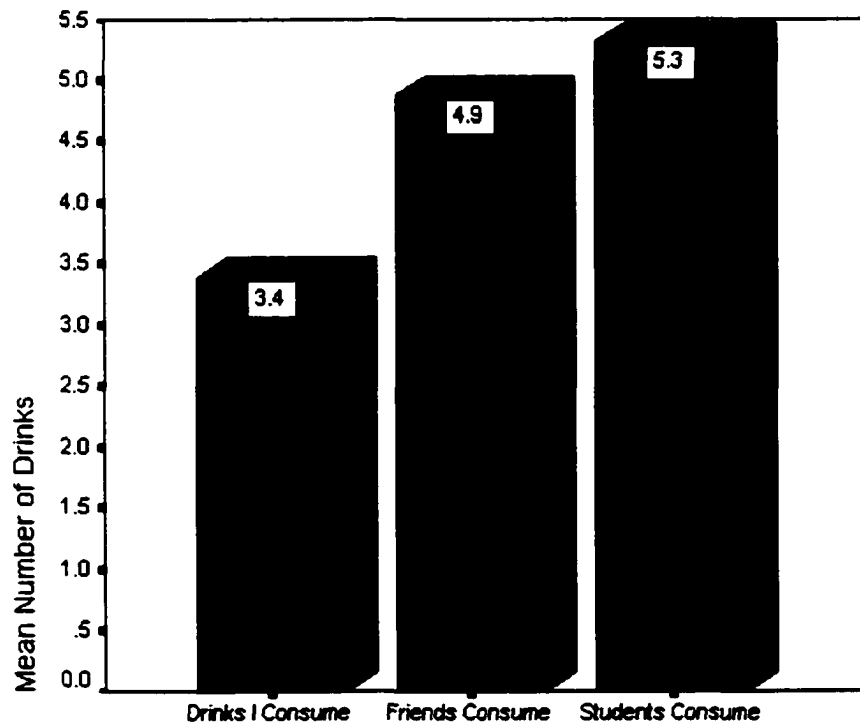
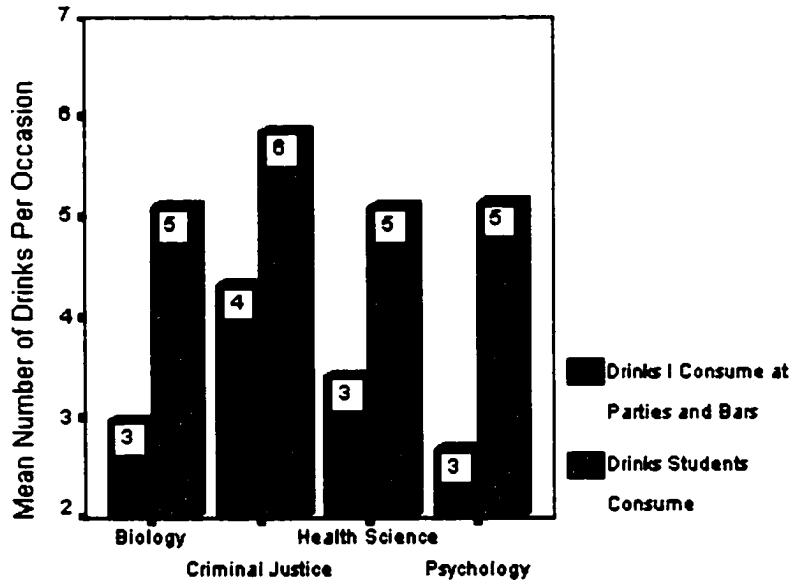


Figure 3: Means of questions 26, 27, and 28 of the survey: Drinks the participants consume, drinks they believe their friends consume, and drinks they believe other students consume.

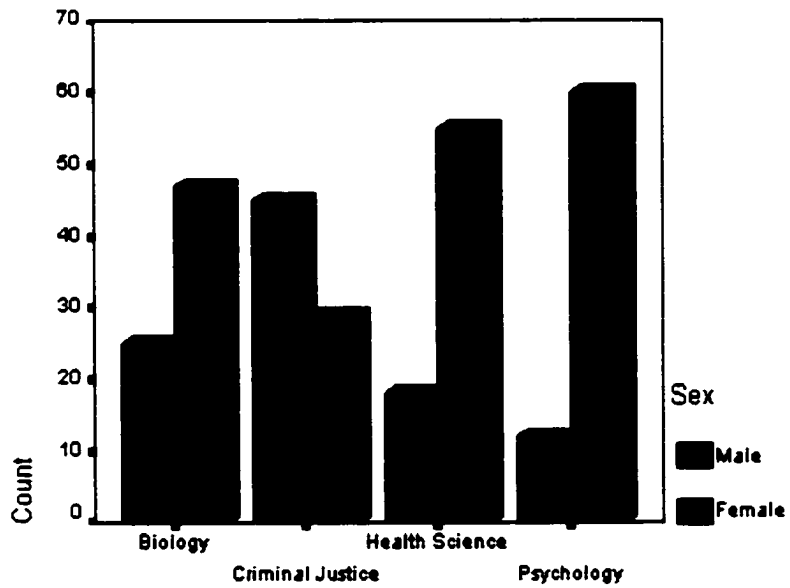
Capstone Classes

Using ANOVA and Bonferroni analysis to compare the answers of questions 11-13 and 26-30 between the four capstone courses, criminal justice students stood out as significantly different than the students surveyed from the other capstone courses on some of the questions. When asked what percentage of students drank five or more drinks in a row on one occasion in the last two weeks, criminal justice students answered with a mean difference from the health science students of 10.04 and a p value of .051. This indicated a trend toward significance on question 12. Criminal justice students expected a lower percentage of heavy drinking. The criminal justice students answered significantly different from both biology and psychology students on how much they reported drinking at bars or parties (question 26). The criminal justice students reported drinking on average 1.35 drinks more than biology students and 1.64 drinks more than psychology students with p values of .010 and .001 respectively (See figure 4). Also, criminal justice students also answered that they felt their friends drank more than psychology students believed their friends did (question 27). The mean difference was 1.36 with a p value of less than .05 (See Figure 4 for capstone means of question 28). There was no other significance found between the other answers of the capstone courses on these questions.



Capstone Major

Figure 4: Mean number of drinks consumed by participants at parties or bars from question 26 on the survey and mean number of drinks participants expect that other students consume at parties or bars.



Capstone Major

Figure 5: Male and female distribution of capstone class participants.

When comparing the gender distribution among capstone participants, it was discovered that the criminal justice capstone participants were primarily male while the other three capstone groups were primarily female. There were 45 males and 29 females in the criminal justice capstone group compared to 25 males and 46 females in the biology group, 18 males and 55 females in the health science group, and 12 males and 58 females in the psychology group.

Analysis of the mean averages of the males and females in these groups for question 26 showed very little difference between the mean average of the females in the four capstone groups. There was not a significant difference in the mean average of the males in the capstone groups either but this is mainly due to the low number of participants in the groups compared and it is clear that the variation of male means in the capstone classes is what influences the mean difference between the four groups (see Figure 6 for graph of male and female means in capstone groups).

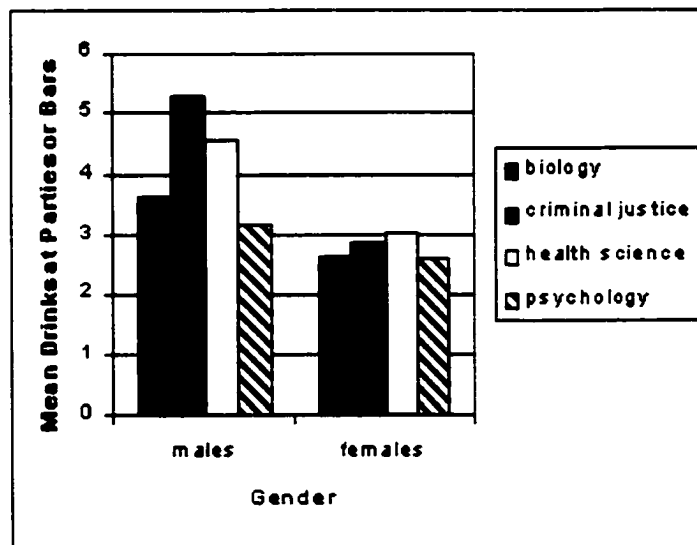


Figure 6: Graph of mean answers to question 26 regarding participant consumption by gender and capstone.

Gender

Using T-tests to compare male and female participant answers to questions 27 and 28, male participants reported that they believed their friends consumed 5.95, an average of 1.65 more drinks at parties and bars than females believed their friends drank (4.30 drinks). Males also reported they believed other students consumed an average of .85 more drinks than female participants believed other students drank at parties or bars (5.87 versus 5.02 drinks). Both of these differences were significant with p values of .001 (See Figure 7).

For questions 29 and 30, males and females reported similar expectations of other male and female student group drinking (see Figure 7). For questions 11-12, males and females also reported similar expectations of the percentage of students who abstain (22.39 and 23.31 percent respectively) and similar percentages of heavier drinking, meaning five or more drinks at parties or bars (46.71 and 47.50 respectively). There was no significant difference in the answers of males and females for any of these questions.

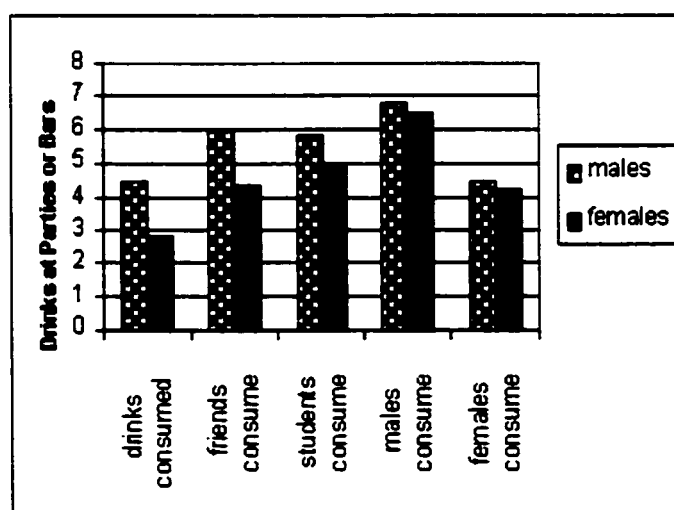


Figure 7: Significance difference between genders for questions 26, 27, and 28 with p values of .001. No significance q. 29 or 30.

However, when asked how much they last drank in question 13, males reported drinking significantly more than females, with an average of 1.73 more drinks than females and a p value of less than .001. Further, for question 26, men reported drinking a mean average of 4.47 drinks at parties or bars while women reported a mean average of 2.77 drinks for a mean difference between the genders of 1.69 with a p value of less than .001 (see Figure 7). Figure 2 shows very clearly that 44 percent of male participants fit into the category of “bingers” while 31 percent females fit into the category of “bingers” with four or more drinks at parties of bars on question 26. This difference was also significant with a p value of less than .001.

CHAPTER 5

DISCUSSION

Discussion

This study expands the conversation about alcohol consumption and perceptions of alcohol consumption to the upper level students at Grand Valley State University.

This research compliments the information that campus organizations, most specifically ALERT continue to gather at GVSU. The results will be helpful in the effort to develop appropriate programs for this university so that the students not only leave with a great education but also with skills to achieve a healthy life style.

The survey results show the reliability of the study regardless of when the survey was administered. The answers of the participants from the two semesters have consistent statistics with no significant difference when comparing questions 11-13, and 26-30. The consistency of the percentage of students reporting themselves as abstainers in questions 14, 15, 16, 17, and 26, lends confidence in the participants' responses to questions regarding alcohol consumption. The apparent consistency in the interpretation of the questions bolsters confidence in what these questions measure.

Hypotheses Results

The first research hypothesis that the upper level students surveyed would report drinking lower quantities of alcohol than they perceive other students to drink held true. In question number 26 when asked how much they drink at parties or bars, participants

responded with a mean average of 3.37 while estimating in question 27 that friends drink a mean average of 4.86 and in question 28 that other students consume a mean average of 5.31. Taking out the participants who stated they abstain from drinking alcohol for question 26, the mean averages of questions 26, 27, and 28 are 3.9, 5.2, and 5.5 respectively. These results show the step progression of increasing rates of perceived alcohol consumption as questions refer to students in groups further away from the inner social circle of the person participating in the study.

Using Bonferroni analysis to detect significance between groups, the second hypothesis that all capstone classes would answer equally was not found to be entirely true. The analysis detected a significant difference between the responses of particular groups of capstone students in questions 12, 26, and 27. Criminal Justice students stood out from Health Science students on question 12 with a significant p value of .051, saying that they expected students to drink greater quantities of alcohol than Health Science students expected. There is also a significant difference in the responses of the criminal justice students and biology students ($p=.001$) on question 26. For question 27, criminal justice students believed that their friends drank slightly less than psychology students said their friends did with a p value of less than .05. There was no significant difference between any of the capstone groups in the responses to questions 11, 28, 29, and 30.

Using cross tabulation, it was discovered that the criminal justice group consisted a larger percentage of male participants. Overall, the total pool of 292 participants was 65.6 percent female but the criminal justice capstone group was only 39.2 percent female compared to the biology, health science, and psychology capstone groups, which

contained 65.3, 75.3, and 83.3 percent female participants respectively. So, it is reasonable to consider whether the gender distribution in the group was a factor, particularly on question 26, which asks the participant to state how many drinks he or she consumes at parties or bars. However, when comparing means between the capstone groups within each gender, there were not enough participants to prove significance between the amount criminal justice males drank and the males of the other capstones though it was obvious through the comparison studies that the males were the contributing factor to the variation of means between the four capstones. The hypothesis that there would be no significant difference in the reported drinking rates between the four capstone courses was true to some degree though there were subtle differences between participants in criminal justice capstone classes and the group of participants from the psychology capstone classes with the gender discrepancies as discussed.

The resolution of the third hypothesis supports this consideration. As hypothesized, men as a group in this study reported drinking greater quantities of alcohol than women. As expected, male participants were found to drink significantly higher quantities of alcohol with a p value of less than .001. Male participants reported that they drink an average of 1.69 more drinks than females, for a mean average of 4.47 drinks at parties or bars.

Comparing GVSU Students to National Averages

The percentage of participants in this study who say that they do not drink alcohol ranges from 12.7 percent to 14.3 percent in questions 14, 15, 16, 17, and 26. This is

substantially lower than the 19 percent nation-wide undergraduates who reported abstinence from alcohol in the Core Institute report of 1998 (Presley et al., 1998). The results of this survey revealed a number that is half of the national average.

The percentage of participants who fit Dr. Henry Wechsler's definition of "bingers" is also lower than the national average. When correcting for gender on question 26, 35 percent of the participants in this study fit the "binge" definition of women who drink four or more drinks in a sitting or men who drink five or more drinks in a sitting. The national study in 1998 showed that 44 percent of the collegiate population fit the definition (Wechsler et al., 1998). So, interestingly, though the capstone students surveyed for this research revealed a lower number of people who abstained from alcohol, they also had a lower number of "binge" drinkers. This provokes the consideration that though national studies show a trend toward a decreasing percentage of moderate drinkers along with a greater percentage of students who binge or abstain, this particular group of capstone students at GVSU do not show as much of the pattern.

The sample for this research was a selected group from the upper-level students at GVSU and it is wise at this time to remember that this group of participants is not representative of the entire student body at the university. The results may be compared with the national average with the consideration that any conclusions are limited to this particular group of capstone students at Grand Valley State University. Since the majority of capstone students at GVSU are senior level, they represent a sample that is heavily populated by older students. As previously discussed, student populations may

possibly decrease their “binge” drinking with maturation. A longitudinal study at GVSU would be helpful in sorting out how much of this might play a role in the results of the study.

Expectations

Interestingly, in answering question 11, participants expected that a mean percent of 22.99 percent of students abstain from drinking alcohol, which is at least seven percentage points higher than their own group reported abstinence rate. This is remarkable in light of other studies that have shown students in undergraduate universities typically expect a lower percentage of students abstain than their own self-reported abstinence rate. The results of this study revealed the opposite among the selected population. Question 11 refers to “students in general” and may be read by participants to mean students beyond those enrolled in the capstone classes thus the interpretation of the results is different than that of previous studies comparing the expectations on the entire student body to the entire student body’s self-reported norms. In contrast, this study compared the expectations on the entire student body to the capstone students’ self-reported norms. These comparisons are not equivalent.

Study Limitations/Suggestions for Further Research

The results of this study are discussed in reference to nation-wide statistical results in the Rutger’s survey in 1998 and the Core institute survey in 1998 but nothing more recent. As discussed, during the 1990s the trend of drinking among undergraduate

students was an increasing number of students abstaining from alcohol and increasing rates of binge drinkers. It would be of worth to inspect for a change in the national trend over the past three years. The more recent changes have not been available to be discussed. Since our pool of participants shows a lesser polarization of alcohol consumption rates among students, it would be worthwhile to continue to follow the national trends and compare them for a growing understanding of GVSU's population.

Also, it would be helpful if this study was repeated and expanded to include more upper level students at GVSU over the next few years. This study was limited to 292 students and though that is more than an acceptable number for the purposes of this research, it is a mere glimpse into the upper level students at GVSU. Longitudinal studies would also help to understand trends in the student population over the four years of undergraduate school. Prevention of health problems resulting from chronic alcohol use is as important as preventing the more immediate tragic consequences of heavy alcohol consumption. It would be a great benefit to the students of GVSU to continue to improve prevention programs of alcohol abuse with greater emphasis on aiding students in developing life-long skills for healthy living

Conclusion

The research shows that over one third of our group of participants in capstone classes (35 percent) reported drinking at levels that the literature relates to increased risk of negative consequences. The students surveyed in this study are nearing the end of

their undergraduate study at GVSU. The college administration and healthcare workers should maintain vigilance in their awareness of the need for prevention efforts with this group of students. More research is necessary to add to our understanding of the upper level students at GVSU to continue this discussion and so that preventative efforts may be tailored to assist students in developing skills necessary for a healthy life style beyond their undergraduate years.

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APPENDIX A
IRB APPROVAL



**GRAND VALLEY
STATE UNIVERSITY**

1 CAMPUS DRIVE • ALLENDALE, MICHIGAN 49401-9403 • 616/975-6611

November 20, 2000

Rebecca Anne Postma
1219 Boston SE
Grand Rapids, MI 49507

RE: Proposal #01-90-H

Dear Rebecca:

Your proposed project entitled **A Study of Self-reported Alcohol Consumption and Perceptions of Peer Alcohol Consumption** has been reviewed. It has been approved as a study, which is exempt from the regulations by section 46.101 of the Federal Register 46(16):8336, January 26, 1981.

Sincerely,

[REDACTED]

Paul A. Huizenga, Chair
Human Research Review Committee

APPENDIX B
PERMISSION TO USE PRSP

Subject: Re: Formal Permission to use PRSP
Author: "Linda Lederman" <*** > at OFFICE**
Date: 11/06/2000 3:57 PM

To: Dr. Nancy Harper
Director, Alert Labs

From: Linda Lederman,
Director, CHI

Subject: PRSP

On behalf of CHI, I give permission to use the PRSP for the project to study alcohol use and perceptions about alcohol use among students who are taking Senior Seminars in their academic majors. I agree to allow this group, headed by Rebecca Postma, to use the PRSP, with some added demographic questions, to survey this population. Please be sure to cite the PRSP and its authorship.

We would appreciate learning the results of the data collected, and to be able to make reference to them, if possible, in our continued work.

Linda Lederman

APPENDIX C

SURVEY

Personal Report of Student Perceptions

Senior Seminar Cover Page
November/December 2000

Your participation in this project is voluntary. If you choose not to participate in this research project simply do not fill out the survey. Completing the survey implies your consent for research participation. The results will be kept confidential.

- 1) For each item, fill in the blank or check the option that most correctly represents your answer.
- 2) When you are finished, please put the survey in the manila envelope provided.

Thank you very much for your time and cooperation,
The Graduate Research Team in collaboration with GVSU's ALERT Labs
Rebecca Postma, Student email: postman@river.k.gvsu.edu

A. Please indicate your MAJOR _____

B. Ethnic origin

- American Indian/Alaskan Native
- Hispanic
- Asian/Pacific Islander
- White/Non Hispanic
- Black/Non Hispanic
- Other

C. Which of the EXTRACURRICULAR ACTIVITIES below are you currently involved in?

(Check box for all that apply):

- | | Yes | No |
|---|--------------------------|--------------------------|
| I am currently on an intercollegiate athletic team. | <input type="checkbox"/> | <input type="checkbox"/> |
| I am on a club team. | <input type="checkbox"/> | <input type="checkbox"/> |
| I am married. | <input type="checkbox"/> | <input type="checkbox"/> |
| I am a member of (or hope to join) a social fraternity or sorority. | <input type="checkbox"/> | <input type="checkbox"/> |
| I reside in a fraternity or sorority living area. | <input type="checkbox"/> | <input type="checkbox"/> |
| I reside off-campus. | <input type="checkbox"/> | <input type="checkbox"/> |
| I have children. | <input type="checkbox"/> | <input type="checkbox"/> |
| I am employed full-time. | <input type="checkbox"/> | <input type="checkbox"/> |

D. Are you in recovery from alcohol or other drug addiction? (Circle One) Yes No.

IF YOU ANSWERED 'NO' PLEASE SKIP TO THE END
IF YOU ANSWERED 'YES', PLEASE COMPLETE THE FOLLOWING.

- | | | |
|---|-----|----|
| E. Are you in a 12-step program? | Yes | No |
| F. Do you see a need for special group housing at GVSU for recovering people? | Yes | No |
| G. Would like to have 12-step/ group sessions available at GVSU for support? | Yes | No |
| H. Are you now in relapse? | Yes | No |

I. My Academic Status is:

- Junior
- Senior
- Other _____

Turn the page and continue the attached survey.

NOTE: Do NOT answer questions 2, 3 or 4 on the following page.

Questions 2, 3, and 4 are not relevant to this research project.



Personal Report of Student Perceptions

Please take about 10 minutes to fill this survey out as accurately as possible. The results will be kept confidential. There is no way your answers can be linked to your name. The last 5 digits of your social security number are being collected only for the purpose of comparing data analysis. Please check or circle the appropriate number that correctly represents your answer. Thank you for your time and cooperation.

1. Today's date: _____
Month Day Year

The last 5 digits of my social security number are:

I am currently enrolled in Freshman Seminar.

No Yes, my section number is (instructor will tell you):

Have you taken the Freshman Seminar?

No, never took Freshman Seminar

Yes, in Fall 1999

Yes, in Fall 1998

Yes, took it prior to Fall 1998

5. Are you in the Passport Program?

No Yes, I am a freshman mentee. Yes, I am a mentor/diplomat.

6. Have you seen the ALERT video, "No Everybody Doesn't"?

No Yes

7. Have you seen the Student Theatre production entitled, "The Date"?

No Yes

8. I am (please circle one) Male Female

9. I usually know when I've had enough to drink when I: (check only one)

have had my set number of drinks

embarrass myself

feel physical signs (can't walk, the spins)

pass out

doesn't apply, I don't drink

Continues on next page.

Page 1

19. Other students' drinking interferes with my life on or around campus in the following ways (check all that apply):

- interrupts my studying
- makes me feel unsafe
- messes up my physical living space (neatness)
- adversely affects my involvement on a team
- prevents me from enjoying events (sports, concerts)
- makes me feel left out
- changes in personalities and then loss of friendship
- interferes in other ways
- doesn't interfere with my life

20. The social atmosphere on campus promotes alcohol use: (please circle appropriate number).

1. very strongly disagree 2. strongly disagree 3. disagree
4. neutral 5. agree 6. strongly agree 7. very strongly agree

For questions 21-25: how often do you think students in each of the following questions typically consume alcohol (including beer, wine, wine coolers, liquor, and mixed drinks.) Just give your best estimate for each category.

21. Yourself:

- never 1-2 times/year 6 times/year once/month
 once/week 3 times/week 5 times/week every day

22. Your friends:

- never 1-2 times/year 6 times/year once/month
 once/week 3 times/week 5 times/week every day

23. Students in general:

- never 1-2 times/year 6 times/year once/month
 once/week 3 times/week 5 times/week every day

24. Males:

- never 1-2 times/year 6 times/year once/month
 once/week 3 times/week 5 times/week every day

25. Females:

- never 1-2 times/year 6 times/year once/month
 once/week 3 times/week 5 times/week every day

Continues on next page.

Page 3

26. How many alcoholic drinks, on average, do you typically consume at parties and bars? Enter 0 if you do not drink. (a drink is a bottle of beer, a glass of wine, a wine cooler, a shot glass of liquor, or a mixed drink.)

27. How many alcoholic drinks, on average, do you think your friends typically consume at parties and bars?

28. How many alcoholic drinks, on average, do you think students in general typically consume at parties and bars?

29. How many alcoholic drinks, on average, do you think males typically consume at parties and bars?

30. How many alcoholic drinks, on average, do you think females typically consume at parties and bars?

For questions 31-36 please answer by circling the appropriate number in the right column.

0. doesn't apply, I don't drink 1. very strongly disagree 2. strongly disagree 3. disagree
4. neutral 5. agree 6. strongly agree 7. very strongly agree

31. I think it is fun to drink a lot.	0	1	2	3	4	5	6	7
32. I consider myself a binge drinker.	0	1	2	3	4	5	6	7
33. I deserve to blow off steam by drinking a lot.	0	1	2	3	4	5	6	7
34. I don't drink as much as I used to because of the consequences of drinking.	0	1	2	3	4	5	6	7
35. I am concerned about the dangers of drinking too much.	0	1	2	3	4	5	6	7
36. I think I have a drinking problem.	0	1	2	3	4	5	6	7

For questions 37-40, this is how I think most of my close friends would feel about me doing each of the following: Once again, please circle the appropriate number in the right column based on the answers listed below.

1. very strongly disapprove 2. strongly disapprove 3. disapprove 4. neutral
5. approve 6. strongly approve 7. very strongly approve

37. Having one or two drinks of an alcoholic beverage (beer, wine, liquor) occasionally	1	2	3	4	5	6	7
38. Having one or two drinks nearly every day.	1	2	3	4	5	6	7
39. Having four or five drinks nearly every day.	1	2	3	4	5	6	7
40. Having five or more drinks in one occasion.	1	2	3	4	5	6	7

Continues on next page.

Page 4

For questions 42-53 please answer the following by circling the correct number in the right column based on what you would expect to experience after a few drinks. We are interested in what YOU might think about alcohol, regardless of what other people might think:

If you **DON'T DRINK**, answer the following questions based on what you would **EXPECT** to happen if you **DID** drink.

- | | | |
|----------------------|------------------------|----------------------|
| 1. Disagree Strongly | 2. Disagree Moderately | 3. Disagree Slightly |
| 4. Agree Slightly | 5. Agree Moderately | 6. Agree Strongly |

- | | | | | | | |
|---|---|---|---|---|---|---|
| 42. Drinking makes the future seem brighter to me. | 1 | 2 | 3 | 4 | 5 | 6 |
| 43. Drinking makes me more aggressive. | 1 | 2 | 3 | 4 | 5 | 6 |
| 44. Drinking makes me feel good. | 1 | 2 | 3 | 4 | 5 | 6 |
| 45. If I have a couple of drinks it is easier to express my feelings. | 1 | 2 | 3 | 4 | 5 | 6 |
| 46. A few drinks make it easier for me to talk to people. | 1 | 2 | 3 | 4 | 5 | 6 |
| 47. Drinking adds a certain warmth and friendliness to social occasions for me. | 1 | 2 | 3 | 4 | 5 | 6 |
| 48. Alcohol makes me worry less. | 1 | 2 | 3 | 4 | 5 | 6 |
| 49. After a few drinks, I am more sexually responsive, that is, more in the mood for sex. | 1 | 2 | 3 | 4 | 5 | 6 |
| 50. Drinking makes me less efficient. | 1 | 2 | 3 | 4 | 5 | 6 |
| 51. I can't think as quickly after I drink. | 1 | 2 | 3 | 4 | 5 | 6 |
| 52. Alcohol makes me careless about my actions. | 1 | 2 | 3 | 4 | 5 | 6 |
| 53. I'm more likely to say embarrassing things after I drink. | 1 | 2 | 3 | 4 | 5 | 6 |

You have completed the survey. Thank you for your time and cooperation.

APPENDIX D
LETTER TO DEPARTMENT HEADS

[Date]

To the Department Head:

Expanding the research already being conducted by the ALERT Labs on Grand Valley State University's campus, a graduate research team from the Grand Valley State University Physician Assistant Studies master's program would like to conduct thesis research regarding perceptions of alcohol use among students. Data collection will occur during the last week of [November/March] and the first week of [December/April]. We would like to conduct the survey through regularly scheduled classes. Experience has shown that administration of the survey is most successful when the in-class survey has the endorsement of high-ranking academic officials such as you. We will be making personal appeals to the capstone instructors of your department to donate 15 minutes of class-time for the administration of the Rutgers Personal Report of Student Perceptions [PRSP] Survey.

The PRSP survey was created by Rutgers University to assess the perceptions of students regarding the use of alcohol by their peers. High alcohol consumption can result in tragic consequences. This continues to be a major problem on campuses nation-wide. This survey will help to address this issue on our own campus. Further, colleges and universities who receive federal support in the form of grants and scholarships must comply with mandates to maintain campus drug and alcohol programs and policies. The survey contributes to meeting that requirement.

This survey will provide valuable information to the college about use and attitudes regarding alcohol use by GVSU students. This information will be beneficial to Grand Valley State University, Dr. _____, and the efforts of the ALERT Labs. The project results will help further efforts to tailor programs according to the needs of this particular population. We wish to enlist your support in making this survey project a success. If you have any comments or questions please do not hesitate to contact Rebecca Postma.

Sincerely,

The graduate research team in collaboration with the ALERT Labs

Rebecca Postma, PA-student

Email: _____

Phone: _____

Research committee:

Dr. _____, committee chair, SHP

Dr. _____, ALERT Labs

Dr. _____, Dept. of Psychology

Physician Assistant Studies Program
Grand Valley State University

APPENDIX E

LETTER OF CONFORMATION TO PROFESSORS

[Date]

Dear Capstone Professor,

Thank you for allowing your students the opportunity to participate in this research project. I plan to administer the survey in the 15 minute block of time beginning at [time] in your capstone class on [day], [date]. If for any reason there is a conflict with the scheduled time, please call me so I can try to reschedule.

Participating in this research project is an opportunity for your students to assist a fellow student in research. It also benefits the university in adherence to federal mandates for maintaining campus drug and alcohol programs. With the information obtained in this research, the ALERT Labs and university administrators will be able to continue tailoring programs and policies to the particular needs of GVSU students.

The procedure is as follows:

- 1) Each student will be given a Rutgers' Personal Report of Student Perceptions survey.
- 2) The research team member will read a short introductory statement about confidentiality, the voluntary nature of participation, and an explanation of the survey.
- 3) The research team member will place the manila envelope in a central location so the participating students may insert the completed surveys inside.
- 4) When the surveys have been collected, the research team member will seal the envelope and depart.

We realize that class time is limited and valuable. Please accept our most sincere thanks for your cooperation,

The graduate research team in collaboration with the ALERT Labs

Rebecca Postma, PA-S

Email: _____

Phone: _____

The Research Committee:

Dr. _____, Committee chair, SHP

Dr. _____, ALERT Labs

Dr. _____, Dept. of Psychology

APPENDIX F

INSTRUCTION SHEET FOR PARTICIPANTS

Important Information

Research Representative: Rebecca Postma

I am a graduate student in the Physician Assistant program here at Grand Valley State University. I am representing a research team working in collaboration with the ALERT Labs. This survey includes questions concerning alcohol use. The information obtained will be used to gain better insight into student alcohol consumption for the purpose of developing programs more specifically tailored to the needs of the GVSU student population.

Your participation is completely voluntary. If you do not wish to participate, do not fill out the survey. There are no consequences for choosing not to participate. Completing the survey implies your consent to participate in this project. The information collected from the survey will be kept confidential. No one outside of the research team and ALERT Labs will have access to the surveys.

If you have any questions, you may contact me through email: _____. If you have any concerns about your rights as a participant, you may contact Professor _____, the chair of the VGSU Human Research Committee, by calling ph. _____,

Please check the box of the option that most correctly represents your answer. Please DO NOT answer questions 2, 3, or 4 on the second page. When you are finished, please put the survey in this manila envelope. When all of the completed surveys are collected, I will seal the envelope and take it to the ALERT labs.

Our genuine thanks for your participation.