Alcohol Abuse at a Mid-Sized Institution in the Southeastern United States

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ALCOHOL ABUSE AT A MID-SIZED INSTITUTION IN
THE SOUTHEASTERN UNITED STATES

by

Michael Anthony Mitchell

Abstract of a Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

May 2011
ABSTRACT

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Each year thousands of students abuse alcohol on college campuses across the country. After a review of the literature, this study detailed the results of a two-phase study conducted at a mid-sized university in the southeastern United States. The focus of the study was threefold. First, it sought to determine if there were any significant differences between males and females with regard to alcohol abuse and violent and aggressive behaviors. Second, it aimed to learn more about a specific category of students, specifically those who were hard workers in the academic setting but also hard drinkers when not in class or studying. Finally, it sought to uncover more about the relation between alcohol abuse and where students lived on or near campus. The study used the CORE Alcohol and Drug Survey. Results were collected in 2007 with N=607 and in 2010 with N=473 as sample sizes. The findings suggest that males and females are not significantly different in relation to aggression and acts of vandalism reported while using alcohol. The findings also suggest that campus residency may not have an effect on the drinking behaviors of college students. Lastly, the findings suggest that though some college students believe they can “work hard/play hard” as it relates to academics and alcohol, this behavior does not appear to lead to academic success.
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May 2011
ACKNOWLEDGMENTS

The writer would like to thank the chair of the committee, Dr. Mary Nell McNeese, and the other committee members, Dr. Terrell Tisdale, Dr. William Pierce, Dr. Thomas O’Brien, and Dr. Richard Conville, for their time, recommendations, and support throughout this project. Special thanks go to Dr. McNeese for all her words of encouragement and for keeping my spirits high.
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CHAPTER I
INTRODUCTION

In 2000, Adrian Heideman enrolled in California State University, Chico, as a freshman. During those first few weeks of school, he kept a diary as he attended classes and joined Pi Kappa Phi fraternity. Heideman expressed reservations about alcohol and fraternities but wrote that he believed his fraternity was different.

On the night that Heideman was introduced to his big brother in the fraternity, he was also given a bottle of brandy and a pitcher of beer and told to finish the brandy. When he became too drunk to walk, he was taken to a basement room by fraternity members to lie down. Heideman died that night, alone, as he aspirated on his own vomit (Wechsler & Wuethrich, 2002).

Theories on Alcohol Use and Abuse

There are five theoretical models that help explain alcohol abuse on American campuses:

1. Sociocultural Theory
2. Disease Theory
3. Public Health Theory
4. Contingent Consistency Peer Influence Model
5. Alcohol Myopia Theory.

The sociocultural theory proposes that it is the misuse of alcohol, and not the alcohol itself, that is the problem. This theory focuses on normalizing drinking as a healthy social pattern, while at the same time creating intolerance for drunkenness. With European culture as its basis, sociocultural theory does not associate drinking with rites
of passage, masculinity, or drunkenness. The theory views drinking as an activity that can be enjoyed in moderation within a social and/or family context.

The disease theory proposes that some people are genetically more susceptible to alcohol abuse and that for these people abstinence is the single solution. This model encourages that high-risk drinkers be identified early and tracked into recovery support programs and/or mandatory alcohol programs (Sullivan & Risler, 2002).

Madson, Bullock, Speed, and Hodges (2008) write that the traditional treatment model for substance abuse is referred to as a disease model, which focuses specifically on the substance use problem and neglects other mental and social issues. This model often emphasizes confrontation, which can create a lack of trust and the belief that substance use is immoral.

The traditional model creates a stigma around those who abuse substances. This model also allows counselors to be susceptible to their own personal beliefs related to substance abuse, and may affect the counselor’s behavior with the client. As a result, many individuals at risk for substance abuse issues do not receive services and avoid entering traditional treatment programs. The ability to express empathy is an important part in new treatment approaches. Clients who perceive their counselors as warm and empathetic are reported to have more positive outcomes in treatment. No substance abuse occurs in isolation and often impacts other areas of a person’s life (Madson et al., 2008).

A third theory, the public health explanation, identifies three factors which determine alcohol consumption—the agent, the host, and the environment. The agent is alcohol. The host is the person and their individual susceptibility to risk. The
environment is context in which the agent and the host meet. For many students, the combination has been fatal (Walters & Baer, 2006). A recent publication estimated that 1,700 students each year die due to alcohol (“Avoiding Alcohol,” 2006). In addition, studies indicated that 23% of administrators report that alcohol abuse was involved in at least 40% cases where students did not complete college (Sullivan & Risler, 2002, p. 115). Can a relationship be made between alcohol use and abuse and academic performance? If the relationship exists, is it always negative (Sullivan & Risler, 2002, p. 11)?

Related to the public health theory is the contingent consistency peer influence model. This fourth model focuses on the environment and “shows that actual peer norms, perceived norms and personal attitude may contribute independently to a student’s use of alcohol.” (Perkins, Haines, & Rice, 2005, p. 2). A key component of this model is that the strongest peer influence is indirect through perceived peer norms regardless of the accuracy of this perception. The theory contends that the perception of high-risk behaviors, especially heavy drinking and other drug use, affects actual behavior by creating “imaginary peers.” (Piane & Safer, 2008, p. 70)

A fifth theory, alcohol myopia theory (AMT) may be extremely important in understanding the relationship between alcohol use and risky sexual behavior.

AMT was originally presented in 1990 by Steel and Joseph and suggests that as a person consumes alcohol, his/her cognitive abilities to process and discriminate between stimuli or cues to behavior begin to decrease. This cognitive impairment causes the person to focus on the most salient cues and to ignore others, making them “myopic” or “nearsighted.” When a person is faced with a decision of
whether to perform a risky act, he/she processes 2 types of cues: impelling and inhibiting cues. Impelling cues are those that appeal to one’s most immediate desires or impulses and inhibiting cues are those that help monitor impulse and uphold social mores or norms. (Griffin et al., 2010, p. 524)

When a conflict exists between the impelling cues and the inhibiting cues, inhibition response conflict (IRC) is created. During IRC, an individual’s behavior is seen by those around him/her as uncharacteristic or extreme (Griffin et al., 2010).

This study draws most heavily on alcohol myopia theory because this theory connects most directly with issues of gender and aggression and gender and vandalism and is most useful in identifying any differences in how men and women behave in these areas, when they consume alcohol.

Statement of the Problem

The purpose of this study was to identify the relationship between alcohol abuse as it relates to the academic performance and behavior of college students at a mid-sized southeastern university. The identification of patterns of use and academic consequences has allowed administrators to evaluate alcohol education and programming efforts for students. However, our identification of students as binge drinkers or non binge drinkers may be pushing away the very students that need the most help.
Hypotheses

Hypothesis 1: Is there a significant difference in the number of times vandalism acts were reported based on gender?

Hypothesis 2: Is there a significant difference in the number of times acts of aggression were reported based on gender?

Hypothesis 3: Is there a significant difference in the student’s age based on the work hard play hard groups (i.e. High GPA/Heavy Drinker, Low GPA/Heavy Drinker, Low GPA/Light Drinker, High GPA/Light Drinker and the phase of the study (i.e. 2007 or 2010)?

Hypothesis 4: Is there a significant difference in the average number of drinks per week based on where and with whom the students live?

Definition of Terms

Academic performance – measured by the reported cumulative grade point average (Sullivan & Risler, 2002).

Low GPA – students who reported a cumulative grade point average of “C” or less.

High GPA – students who reported a cumulative grade point average of “B” or better.

Binge drinking – consuming 5 or more drinks in a row for men and four or more drinks in a row for women (Wechsler & Kuo, 2000).

Heavy episodic drinking – alternate term used for binge drinking.

Drinking behavior – average number of drinks consumed in a week.

Non-drinker – consumes an average of zero drinks a week.
*Average drinker* – consumes an average of one to four drinks a week.

*Moderate/Heavy drinker* – consumes an average of five or more drinks a week.

*Negative consequence* – alcohol-related injury or death.

**Delimitations**

This study was limited to undergraduate and graduate students who attend The University of Southern Mississippi, Hattiesburg campus. Approximately 5,700 students were randomly selected by the Southern Miss campus email system to receive the survey. The survey was distributed on-line to students via the campus email system. A paper version of the survey was not made available. Students under the age of 18 were asked not to complete the survey since parental consent would be required for those students to complete the survey. This online survey did not provide the opportunity for acquiring parental consent. The designation of moderate/heavy drinker as a person who consumes five or more drinks a week may have also been a limitation of this study, as this number may not have drilled deep enough into the population to identify problematic drinking behaviors.

**Assumptions**

Two assumptions were made relating to this study:

1. The student honestly completed the survey with no outside influence.

2. The students who completed the survey were representative of the student population of The University of Southern Mississippi in their actions and beliefs concerning alcohol use.
Justification

Temple (1986), Wechsler and Davenport (1994), and Wechsler, Lee, Kuo, and Lee (2000) have evaluated college alcohol studies conducted to determine the patterns of consumption and effects of drinking. These reviews indicate that students have higher limits on what they define as binge drinking. However, because student retention is a central criterion for accreditation (Sullivan & Risler, 2002, p. 115), more data should be gathered in the area of alcohol use and its academic consequences. When a student leaves an institution due to alcohol, the school loses valuable tuition revenue and the student loses an opportunity to achieve an advanced education. With student retention as a primary goal for universities across the nation, studies on alcohol use and academic performance could inform administrators on how to decrease dropout rates in this particular area. This study may also provide students with a reference point when making decisions about alcohol in relation to their overall academic goals. More information needs to be collected in reference to the work hard/play hard groups analyzed in this study. There is very little information available on students who adopt the concept of partying just as hard as they study. A study of this nature will add to the literature of the field by potentially providing data linking alcohol use and abuse to decreased academic performance.
CHAPTER II

REVIEW OF RELATED LITERATURE

The articles collected for this review were obtained by performing database searches using ERIC (Education Resource Information Center) and searching for peer reviewed articles relevant to the topic of alcohol and college students. Texts used in this review were located by searching college library catalogues for holdings relevant to the topic of alcohol and college students. The analysis of this data will add to the literature presented in this current chapter.

Historical Context: Alcohol Abuse in Higher Education in the United States

Problems in the United States with students and alcohol can be seen as far back as America’s first colonial college--Harvard. Though punishments were often severe, some early Harvard students consumed alcohol and caused problems for their community--often sharing rum and skins of wine with each other and with local residents. From those times until now, students have viewed alcohol consumption as a rite of passage. It is reported that Dutch visitors to the college campus during the 17th century entered student quarters and saw so much tobacco and wine that they believed they had mistakenly entered a tavern (Nuwer, 1999). “Even future politicians used alcohol to celebrate at Harvard. After his Porcellian initiation on November 2, 1878, Theodore Roosevelt (also claimed as a member by Delta Kappa Epsilon) celebrated until he became uncharacteristically drunk” (Nuwer, 1999, p. 58).

By 1933, fourteen colleges were calling for campus reforms and signed agreements to eliminate harmful Greek practices such as hazing, booze parties, and hell-week parties. Media of the day criticized fraternity alumnus for returning to their
fraternity houses to obtain alcohol during Prohibition. During Prohibition, alumnus not only visited fraternity houses to obtain alcohol, many visited and brought their own corn liquor and spiked beer (Nuwer, 1999).

In 1940, seven years after Prohibition had ended, a highly-publicized fraternal alcohol-overdose death took place while future columnist James Kilpatrick was a student at the University of Missouri. The incident occurred in a drinking-oriented fraternity, Theta Nu Epsilon, which was not recognized by the school or by the NIC (National Interfraternity Conference). Begun in 1870 at Wesleyan University as a fraternity of males who were already in a fraternity, Theta Nu Epsilon was often condemned by college presidents for its members’ dissoluteness. (Nuwer, 1999, p. 60)

In 1947, as a part of a larger study connected with alcohol and drinking customs in America, a group of college students was selected to be surveyed. This 1947 effort became the nation’s first national alcohol study with results published in Straus’ and Bacon’s *Drinking in College* in 1953 (this study was first published in 1953, but appeared nine years later in an edited form). Seventeen thousand college students from 27 different colleges and universities were surveyed. College students were the focus of the original study because it was generally believed that most people began drinking alcohol in their college years. The researchers proposed that it would be easier for college students to remember and report on their behaviors, as older people may have forgotten the purposes, pressures, sanctions, and reactions that were attached to the beginnings of their drinking patterns (Straus & Bacon, 1962, p. 246).
The Straus and Bacon survey served to dispute the myth that all college students drink, drink frequently, and drink to get drunk just because they are college students. This myth had been fed by early media, some parents, and even college administrators. However, results showed the majority of students at the time of the survey were neither frequent nor heavy drinkers (Straus & Bacon, 1962).

Straus’ and Bacon’s *Drinking in College* is an important early source on college drinking. Unfortunately, there were few studies that followed Straus’ and Bacon’s work. It was not until Blane and Hewitt’s literature review in the late 1970s that analysis of alcohol abuse among college students was revisited. In their study, Blane and Hewitt found that students were drinking even more between 1960-75 than they had been earlier (O’Malley & Johnston, 2002, p. 23).

The rash of alcohol-related deaths in national fraternities goes back to at least 1971, when seventeen year-old Wayne P. Kennedy drowned as a result of what was termed “horseplay” in Lake Pontchartrain during a Delta Kappa Epsilon rush event at Tulane. In 1974 a drunken Tau Kappa Epsilon ritual at Bluefield State College in West Virginia ended with the shooting death of one member and the wounding of another; the fraternity’s graduate adviser was imprisoned for manslaughter. Three drinking deaths claimed young men in local student clubs at the University of Nevada, Reno, the University of Wisconsin-Stevens Point, and Northern Illinois University in 1975. (Nuwer, 1999, p. 61)

During the 1980s, available studies on college drinking increased significantly. Trend data for the almost 20 years between 1980 and 1999 showed that unlike the period
between 1960-75, in the 1980s students were drinking less (O’Malley & Johnston, 2002, p. 23).

In 2002, Wechsler and Wuethrich estimated that college students spend over $5.5 billion a year on alcohol (p. 4). That figure was more than what they spent on textbooks and all other types of drinks combined. Drinking may be centered around Greek systems, athletics, or may even be wrapped up in the traditions of a school. A system of bars and liquor stores are often easily found surrounding most college campuses. “Seventy-three percent of fraternity and 57% of sorority members are binge drinkers. Fifty-eight percent of male athletes and 47% of female athletes are binge drinkers” (Wechsler & Wuethrich, 2002, p. 6).

Caudill, Crosse, Campbell, Howard, Luckey, and Blane (2006) conducted a study of 3,406 members of one national fraternity in an effort to evaluate high-risk drinking among college fraternity members. As they completed their research, the authors noted that drinking has become the standard in fraternity culture. This culture may also be attracting college-bound students who are or want to be heavier drinkers. The authors conducted Audio-Enhanced Computer Assisted Self-Interviewing over a 6-week period. Students were classified as non-drinkers, weekday drinkers, heavy drinkers, binge drinkers, and frequent binge drinkers. Ninety-seven percent of the students who responded labeled themselves as drinkers. Nuwer (1999) affirms the serious level of drinking taking place in Greek organizations in Wrongs of Passage. “All current studies of alcohol use among men and women attending institutions of higher education point to binge drinking as the major social problem, particularly among fraternity and sorority members” (Nuwer, 1999, p. 57).
The now permanently suspended Texas A&M Bonfire was a campus tradition that had become associated with alcohol. The completely student-run project would be finished when a six story, two million pound stack of enormous logs were stacked and ready to be burned in celebration of school spirit. It was common for students to drink during the construction process, and in November of 1999, during the construction process the bonfire structure collapsed, killing 12 students and injuring 27 more. At least two of the victims had high levels of alcohol in their systems when they died (Wechsler & Wuethrich, 2002).

Football games and tailgating are examples of campus traditions that can involve high levels of alcohol consumption for students. Glassman, Dodd, Sheu, Rienzo, and Wagenaar (2010) surveyed 740 18-24 year-old students via email to examine their drinking habits on football game days. The researchers defined extreme ritualistic alcohol consumption as 10 or more drinks on game day for a male and 8 or more drinks on game day for a female. Their results indicated that 16% engaged in extreme ritualistic alcohol consumption, while 36% of respondents had 5 or more drinks. Greek members who were white males reported consuming alcohol at high rates.

Gender and Alcohol on College Campuses

While many researchers have tended to focus on alcohol abuse on college campuses among males, recently there is more attention being paid to alcohol abuse among college females. A 2002 article in *Time*, for example, suggested that the drinking gap between college men and college women was closing. Syracuse University administrators, during 2002, saw twice as many women as men being rushed to the hospital for acute intoxication. Women are drinking just as much as men, but suffering much more damage
as a result—stomach pumping, broken bones from falls, and sexual assaults (Morse et al., 2002). A University of Arizona survey found that 75% of assailants and 55% of victims of sexual violence on college and university campuses had been drinking prior to the incident (Wechsler et al., 2002). Georgetown University reported a 35% increase in women sanctioned for alcohol violations from 1999 to 2002. The University of Vermont reported that the blood alcohol level of women treated at the hospital averages to be .20 or 10% higher than males treated (Morse et al., 2002). Science also tells us that women tend to get drunk faster than men due to higher ratios of fat to water, making the alcohol more potent when it enters a woman’s bloodstream. Women also have lower levels of the enzymes that help the body break down alcohol. Chronic female drinkers also tend to develop liver disease 10 to 15 years earlier than their male counterparts (Morse et al., 2002).

However, Wechsler et al. (2002) report that the gap between the drinking habits of men and women isn’t closing as fast as some might say. In a 2002 study, Wechsler examined students who attended all-women’s colleges and women who attended coeducational colleges over the time of the study. Alcohol abstinence actually was higher amongst females who attended coeducational institutions. The study noted no change in binge-drinking rates among women who attended coeducational institutions and only a slight increase in binge-drinking rates among students at all-women’s colleges.

Piane and Safer (2008) conducted research that offers a different perspective than the 2002 study conducted by Wechsler et al. After surveying 935 California State University, Long Beach students, the authors reported that females have lower perceptions of drinking norms in their community. Caucasian women in this study also
reported heavy drinking at the same levels reported by Caucasian males. As a result, the health risks of heavy drinking are the same for Caucasian women and Caucasian men. In the 2008 study, women did differ from men in the area of adverse affects from drinking. Women were less likely to miss class, have a police incident, or experience an alcohol overdose than their male counterparts. Females also associated drinking more with social enhancement and tension reduction than males. Though we know that women are at higher risk to suffer health consequences from alcohol abuse than men, more studies are needed to determine if aggression and acts of vandalism occur at different rates for men and women, once they have consumed alcohol. This study attempted to expand on the findings cited above with regard to gender and alcohol use on college campuses. Specifically, it sought to determine if there were any significant differences between males and females with regard to alcohol abuse and violent and aggressive behavior.

Research on Alcohol Abuse on College Campuses

*Alcohol Abuse and Academic Performance*

In the area of academics, there is a great deal of research that indicates a relationship between alcohol use and negative academic performance (Perkins, 2002). Among 41,581 students responding to the Core Alcohol and Drug Survey in representative mail and classroom administrations at 89 institutions holding FIPSE drug prevention program grants nationwide in 1992-94, 22% indicated that they had performed poorly on a test or project (26% of drinkers), and 28% had missed a class during the last year (33% or one-third of drinkers) due to alcohol or other drug use. (Perkins, 2002, p. 92)
The 1996 Core Survey also showed an association between self-reported grades and the number of drinks per week students consume. “A” students reported drinking an average of 3.4 drinks a week, while “D” and “F” students drank an average of 9.8 drinks a week (Perkins, 2002). Results from the 1998 College Alcohol Studies showed similar negative effects on academics from alcohol use when a representative sample of over 14,000 students showed that 24% reported missing a class within that academic year due to drinking and 19% reported getting behind in their studies as a result of alcohol use (Perkins, 2002). A recent study of 10,000 students from 14 Minnesota universities confirms that alcohol abuse has a negative impact on academics, with binge drinking linked to decreasing GPAs from 3.31 to 2.99 (“Smoking, Drinking Harmful,” 2008). Males and females who binge drink are 3 times more likely to get behind in school, miss class due to alcohol, and receive a lower grades because of drinking (Miley & Frank, 2006). Because of the impracticality of obtaining transcripts for students who participate in research, self reported grades are often used for the purposes of research (Kuncel, Crede & Thomas, 2005). Cassady (2001) reports that though imperfect, self-reported grades are adequate for research and practical purposes.

Other Studies of Alcohol Abuse on College Campuses

In addition to the relationship between alcohol and academics, there are additional empirical studies on alcohol abuse on college campuses. In a longitudinal study, Theall, DeJong, Scribner, Mason, Scheider, and Simonsen (2009) conducted an annual survey from 2000-2004 of students attending 32 institutions (N = 15,875). The goal of the study was to determine if certain types of campus activities were related to drinking and alcohol-related harm. Each year, 300 students from each institution were randomly
chosen to receive the Survey on College Alcohol Norms and Behavior by mail. A total of 19,838 students responded to the survey, and the data used for the study was based on those students who had consumed at least one drink in the last month (N = 15,875), or 80% of students who responded to the survey. The researchers defined campus activities in five categories: community service, Greek membership, campus media participation, religious group, and varsity athletics.

Results indicated that students who were involved in community service, volunteerism, and religious organizations were less likely to report alcohol abuse, and that the more time they spent in the activities the fewer number of alcohol related harms were reported. In contrast, students involved in Greek organizations and varsity athletic programs reported greater consumption and more problems related to that consumption (Theall et al., 2009).

Another study by Dowdall and Wechsler (2002) looked not at campus activities, but rather at the reputation of the college and the aptitude of students. Their findings indicated that neither the academic standing of an institution nor its average SAT scores were related to the level of binge drinking at a university or college. In fact, the researchers found that some students enrolled at academically challenging institutions actually site the stress associated with the curriculum as a reason for using alcohol (Wechsler & Wuethrich, 2002). The researchers concluded that a “whole range of important educational issues remain to be studied, such as the effects of alcohol policy or program changes on size and quality (SAT scores) of future applicant pools, the dropout or completion rate, and academic achievement” (Dowdall & Wechsler, 2002, p. 18).
The image of excessive drinking and college life as inseparable has been perpetuated through various media including news reports, movies, and reality television. College culture itself can even reinforce the idea that excessive drinking is the standard and that it is a very important part of the college experience (Lederman & Stewart, 2005, pp. 4-5). Presley, Meilman, and Leichliter (2002) compiled survey results from a 10-year period to examine how the college culture can influence drinking behavior. Results indicated that some campus environments are powerful enough to sway almost every student’s drinking behavior.

Because campuses tend to be separated from the outside world, students may get to a college campus and not remember the real world lessons that they have been taught about alcohol. The CORE Alcohol and Drug Survey of 1996 supports this concept in that 20% of the students responding took their first drink after age 18. The compilation of the research points to the following conclusions:

- Black students are much less likely to binge drink than white students.
- Belonging to a Greek organization or living in Greek housing increases the likelihood for binge drinking.
- Athletes are more likely to binge drink.
- Athletes who are also Greek have an even greater risk of bingeing.
- Students attending smaller schools consume greater amounts of alcohol.
- Price and availability of alcohol in the immediate area of a campus affects consumption rates (Presley et al., 2002).

Theall et al. (2009) also confirmed the research points related to Black students, Greek membership, and participation in varsity athletics. Still, less is known about college
students who do not fall easily into the categories of race, Greek membership, and athletes. This study sought to learn more about those who could be categorized as students who worked hard and played hard.

Work Hard/Play Hard

As stated, we know little about the work hard/play hard groups. Wechsler, Wuethrich and a team of researchers lead by Caudill are the few researchers who have addressed this topic. Wechsler and Wuethrich found that some students pride themselves on the motto “Work hard, play hard” as it relates to alcohol and academics. However, their research indicates that students who play hard are likely to face the consequences in the classroom (Wechsler & Wuethrich, 2002, p. 19).

- Drinking reduces the number of hours spent studying per day. Each additional drink per occasion is associated with fifteen minutes less studying per day.
- Drinking is associated with lower grades. Approximately five drinks per occasion are associated with a GPA lower by half a grade.
- Each additional drink consumed per occasion increased the probability of missing a class by 8 percent and getting behind in school by 5% (Wechsler & Wuethrich, 2002).

Caudill et al. (2006) reported some interesting results that related to the concept of “work hard, play hard” (p. 148). Of the fraternity men surveyed, GPA proved to be a significant predictor of their drinking patterns. Those men who were A students had the lowest self-reported drinking scores, with drinking score increasing as you examine the B and C students. However the drinking behaviors of the A students are of concern in this
study because on 4.5 days of the 28-day study, A students consumed 8 or more drinks in a single event. Furthermore, 82% of the A students in this study can be considered binge drinkers, according to their drinking behaviors. However, more research is needed to fully understand the work hard/play hard groups, and if students who report above average grades and moderate/heavy drinking behaviors are likely to do so without academic consequences. More research is also needed to determine if there is a difference in the work hard/play hard groups based on the students’ age.

Drinking During the First Year of College

College students and their abuse of alcohol are of paramount importance for administrators in higher education (Oster-Arland & Neighbors, 2007). Drinking in college is a national problem. College students demonstrate an increase in excessive drinking during their college years, unlike their non-college counterparts. Research indicates that this increase does not decrease until after students complete their degrees. Research also indicates that the transition between high school and college can be marked by academic, social and developmental challenges for first-year students (LaBrie, Lamb, & Pendersen, 2009).

Recent data on college freshman drinking patterns indicates that drinking among freshman actually varies from week to week during the academic year, most likely due to class requirements and holiday schedules. This unique study followed the same students throughout an academic year and it measured the students’ weekly behavior as opposed to their behavior for the year. The data show increased drinking for freshmen during all major holidays, including Thanksgiving, Christmas, New Year’s and Spring Break, suggesting that most drinking occurs off campus. Because the survey was small and
applied to one college, whether these exact patterns occur at every college and university is unknown (U.S. Department of Health, 2007).

Neal and Fromme (2007) conducted a study using 1,133 first-year students who completed a 30-day web-based self-monitoring tool to track their alcohol use and their engagement in 10 behavioral risks (illicit drug use, drinking and driving, sexual behavior, unsafe sex, victimization of sexual coercion, perpetration of sexual coercion, aggression, gambling, theft, and vandalism). The researchers for this study were particularly interested in determining if individuals who drink in excess are more likely to engage in the 10 behavioral risks or if individuals become more likely to engage in the 10 risky behaviors as they become more intoxicated.

During the summer prior to their freshman year, 6,378 students were invited to participate in the study. The initial survey was completed by 2,247 of the students, with 1,113 students being used in the final sample size. The students provided data covering 30,224 usable days (days when they consumed alcohol). The data indicated that alcohol use was related to all of the behavioral risks studied, with the exception of theft.

Significant event-level associations between alcohol use and behavioral risks were noted for unsafe sex, coerced sex as a victim, coerced sex as a perpetrator, aggressive behavior and vandalism. These behavioral risks were more likely to occur as individuals increased their level of intoxication above and beyond their average level of intoxication. (Neal & Fromme, 2007, p. 300)

Behavior risks that were more likely to occur as level of intoxication increased included unsafe sex, sexual coercion, aggressive behavior, and theft. The data also indicated that the level of intoxication is not a predictor of sexual behavior, but that is a predictor of
unsafe sex, should the student engage in sexual contact. As for driving while intoxicated, the data suggested that heavy drinkers are more like to drive when intoxicated, regardless of how much they drink (Neal & Fromme, 2007).

LaBrie et al. (2009), completed research using 239 first-year male students at a private institution to gauge their drinking behavior and attitudes towards drinking. The data indicated that drinking slightly increased during the first month of the high school/college transition. There was also an increase in the number of drinking days per month and the number of drinks consumed per occasion. There was a noted significant increase in the number of binge drinking episodes reported. Forty-seven percent of those who did not consume alcohol in the month prior to entering college did so in the first month college and pre-college drinkers drank more than pre-college non-drinkers. As in previous studies, Caucasian males were at risk, showing a significant increase in drinking during the beginnings of their college careers. “It appears that students who have had little or no contact with alcohol prior to college are most at risk for large increases in drinking behavior.” (LaBrie et al., 2009, p. 10)

Tremblay, Graham, Wells, Harris, Pulford, and Roberts (2010) further explored the phenomenon of first-year college drinking by conducting research designed to identify the times of year that first-year students drink the most. Their study used 26 weekly internet based surveys with students from a large university in Ontario, Canada (N = 415) from the beginning of fall 2006 until the end of spring 2007. The data indicated that drinking increased as the week ended (Thursday, Friday, and Saturday). The researchers also discovered that drinking was also a function of the time of year. First year students reported drinking more during the beginning of semesters and less
during exam periods, with spikes in drinking at Halloween, New Year’s Eve, and St. Patrick’s Day.

The study by Tremblay et al. (2010) corroborates results reported in an earlier study by Del Boca, Darkes, Greenbaum, and Goldman (2004). The authors of this study wanted to extend existing research on college drinking by examining drinking during the freshman year of college and the relating factors for heavy drinking during this time. Participants in this study were 301 University of South Florida freshmen randomly selected over a three-year period (N = 95, 117, and 89). In addition to reporting that levels of drinking varied by day of the week and by time of the year, the study also suggested that the timing of academic requirements may also have an effect on drinking patterns for first year students. When first year students consume alcohol, they are more likely than others to consume it in excess. However, more study is needed in this area with regard to first year students who work hard and play hard and if their age has a significant effect on drinking behavior.

Binge Drinking

Binge drinking, also called heavy episodic alcohol use, gained national attention in the 1990s as an extreme health concern for college students (Wechsler et al., 2002). Data from the College Alcohol Study was used to determine how students define the term binge drinking, to gauge students’ perception of drinking on campus, and to compare student perceptions with self-reported alcohol use (Wechsler & Kuo, 2000). Though the researchers defined binge drinking to be five or more drinks in a row for men and four or more drinks in a row for women, students who actually completed the survey defined binge drinking as six or more drinks in a row for men and five or more drinks in a row for
women. Using the College Alcohol Study, students estimated that 35% of all students were binge drinkers (Wechsler & Kuo, 2000).

Since the release of the first Harvard School of Public Health College Alcohol Study (CAS), increased awareness of this problem has resulted in major governmental and national actions. The Centers for Disease Control and Prevention (CDC) now provides measures of binge drinking in their state-by-state reports. Both houses of Congress have passed resolutions asking college presidents to take steps to address this problem, and the US Surgeon General established a national health goal of reducing binge drinking by 50% by the year 2010. The National Institute on Alcoholism and Alcohol Abuse (NIAAA) formed a special task force to make recommendations to address the problem. Binge drinking has even received global attention from the World Health Organization, which convened a conference to address the topic. (Wechsler et al., 2002, p. 203)

Other organizations like, Mothers Against Drunk Driving and local and regional groups, have formed to develop ways to help reduce heavy drinking among college students (Wechsler et al., 2002).

Marczinkski, Grant, and Grant (2009) underscored the importance of differentiating between social drinking, binge drinking, and alcoholism. The authors defined social drinking as having one to three drinks with no negative consequences. Research indicates that moderate alcohol consumption may actually be healthy for some people, increasing cardiovascular health. Chronic drinking or alcoholism lies at the opposite end of the spectrum. The negative consequences and health risk are substantial, and individuals become physically and psychologically dependent on alcohol. The
problem may be found in the fact that there are no clear lines between the three categories. It can be difficult for students to know when social drinking might become binge drinking and when binge drinking might border on alcohol dependence.

However, there are some researchers who believe that the term “binge” should be phased out as a way to describe heavy drinking. Lederman and Stewart (2005) are two researchers who believe that even when college students’ behaviors meet the definition of binge drinking, they often do not relate to the term or see themselves as binge drinkers. This research says that students do not focus on the quantity when they drink, but rather the different feelings they experience when they drink. These “feelings” of drinking were expressed in four categories by students in a 1991 Rutgers survey. The first problem category reported by students is “Drinking Until You Are Out of Control.” In this category, there is an inability to stop drinking or there is a loss of control. The second category reported is “Frequency.” This category is identified by a person who appears to be drinking all the time or has something to drink every night. The third category is “Hurtful to Themselves or Others.” This category describes those behaviors which are physically, emotionally, or academically hurtful to self or others. The fourth problem category is “Motivation or Attitude Problem.” This final student-described category includes the person who drinks with no real motive. However, students in the survey believe it is acceptable to drink to relieve stress, regardless of the amount consumed (Lederman & Stewart, 2005). Results from the 2002 National Survey on Drug Use and Health showed the 25% of young adults aged 18-24 thought that weekly bingeing was a very risky behavior. Unfortunately, college students in that same age group were less likely to see the great risk in weekly bingeing. In particular, those
college students who were 19, 20, and 21 saw the least risk in weekly bingeing (Office of
Applied Studies, Substance Abuse and Mental Health Services Administration,
Department of Health & Human Services, 2003).

“How students define heavy and problematic drinking has clear implications for
prevention efforts, especially to the extent that those implicit definitions may be at odds
with definitions used in prevention campaigns” (Segrist & Pettibone, 2009, p. 37).
Segrist and Pettibone (2009) conducted a survey of 212 students from a mid-sized
university, with the goal of determining how students themselves defined heavy or binge
drinking. Students were asked to read one of four vignettes involving a 21 year-old man
who is either a senior in college or a full-time management trainee who is in a bar
drinking alone or drinking with friends. After reading the vignettes, students were asked
questions about how they would identify Kevin’s drinking to be heavy or problematic.
Results indicated that students on average identified heavy drinking as having at least six
drinks, a number higher than the current definition of binge drinking. The study also
suggests that students’ perceptions of problem drinking can be affected by gender, target,
and drinking environment (Segrist & Pettibone, 2009).

Lederman and Stewart (2005) support using the term “dangerous drinking” as
opposed to the terms “binge drinking” or “high-risk drinking” to describe problematic
drinking among college students. In the Rutgers survey, 92% of students did not classify
themselves as binge drinkers although 35% of them participated in activities that
researchers would classify as bingeing. Students often saw the binge drinker as someone
who drinks a great deal more than they did and that high-risk drinking was understood to
be “cool” in a risky way. Those surveyed felt that the term “dangerous drinking” was a
term that allowed them to focus on the consequences of their drinking and the quantity of alcohol that they consume.

Excessive drinking by college students has recently been viewed from yet another perspective. Extreme drinking goes above and beyond the parameters used to describe binge drinking – by sometimes double or triple those amounts. White, Kraus, and Swartzwelder (2006) conducted an on-line study of 10,424 first-year students at 14 universities and colleges. The on-line survey was a prerequisite for taking an alcohol course. The results of the survey showed that 20% of the men reported drinking 10 or more drinks in one day, and that 10% of women reported drinking 8 or more drinks in one day. Almost 8% of the men reported drinking 15 or more drinks in one day. The study reported that extreme drinking was more prevalent in men (White et al., 2006).

Data from a 1995 National College Health Risk Behavior survey indicate that students who binge drink are also likely to abuse other substances. The survey was completed by students ranging from 18 to 24 years old from 148 colleges and universities. Students who identified themselves as having five or more drinks in a row 30 days prior to completing the survey were identified as binge drinkers. In the study, binge drinking was significantly related to the use of other substances. Students who reported binge drinking were more likely to report lifetime and/or current cigarette, marijuana, cocaine, or other illegal drug use (“Binge Drinkers,” 2002).

The 2005 National Survey on Drug Use and Health indicated that students aged 18-22 who were enrolled in college full-time were more likely than their non-enrolled peers in the same age range to drink and binge drink. Once again, males were more likely than females in this age group to drink. Full-time college students who lived
separately from their parents were more likely to drink or binge drink, than full-time students who lived with their parents (Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Department of Health & Human Services, 2006). In addition, studies also suggested that young adults are more likely to engage in binge drinking than older adults. Binge drinking was stronger among young adults who enrolled in school full-time than young adults who were non-students. Results showed that binge drinking rates reached their highest at age 21 for both students and non-students (Office of Applied Studies, 2003). A 2009 study also reported that younger respondents reported more alcohol abuse and dangerous drinking patterns (Theall et al., 2009). By the age 22, the rate for binge drinking decreased for both students and non-students (Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Department of Health & Human Services, 2002).

A survey of 52 campuses offering alcohol or substance-free housing found that students who live in these types of on campus housing were less likely to experience the annoying and harmful secondhand effects of alcohol abuse from other students. The study also found that students who were not binge drinkers in high school were less likely to exhibit these characteristics in college if they lived in substance-free housing (“Is Substance-Free,” 2001). Nevertheless, more study is needed on where one lives campus and residential policies that discourage excessive drinking. Researchers still do not fully understand how residency (where and with whom students live) and residential policies play into drinking behaviors during the first year of college and beyond.
Consequences for Alcohol Misuse

Consequences for college students as a result of alcohol misuse can be found in police and hospital records, property damage, and media reports. The types of damage are broken down by Perkins (2002) in an analysis of anonymous student surveys completed and published beginning in the 1980s. These studies included national surveys and surveys conducted at individual colleges. Because the types of consequences from alcohol misuse can be broad, this particular review delineates the negative consequences into the categories of: damage to self, damage to other people, and institutional costs (Perkins, 2002, p. 92).

Magna’s Campus Legal Monthly (2006) lists several consequences that colleges, universities, and students should consider when dealing with alcohol misuse and abuse:

- The deaths of nearly 1,700 college students between 18 and 24 years of age due to alcohol each year (that represents one student out of every 10,000 enrolled nationally)
- Almost 600,000 alcohol-related student injuries a year
- Approximately 100,000 sexual assaults annually
- Nearly 25% of all students each year reporting that alcohol has had a negative effect on academic performance
- Over 150,000 students a year develop health problems associated with alcohol abuse, and
- An estimated 2 million students a year saying they drove a car under the influence of alcohol. (“Avoiding Alcohol,” 2006).
The physical damages to self as a result of alcohol abuse can include blackouts, personal injuries, unintended and unprotected sex, suicide, sexual coercion, impaired driving, and legal repercussions (Perkins, 2002). The U.S. Department of Health and Human Services (2002) detailed many of the medical concerns that are typically associated with alcohol abuse. According to the U.S. Department of Health and Human Services, “more than two million Americans suffer from alcohol-related liver disease” (U.S. Department of Health, 2002, p. 4). Heart disease, cancer, and pancreatitis risk factors are all increased in heavy drinkers. Less serious physical consequences of drinking include nausea, vomiting, and hangovers. The Core Survey indicated that 40% of students reported having at least one hangover and 47% reported having nausea and vomiting as a result of drinking during that year (Perkins, 2002).

A blackout is a warning signal that damage is being done to the brain and that fundamental changes in the brain are happening. Some changes in the brain indicated by blackouts may be temporary, but some may be permanent. During blackouts brought on by alcohol, the drinker is conscious but has no memory of events. The alcohol completely shuts down the part of the brain that is critical to learning and memory—the hippocampus. Students surveyed about their blackouts reported being told by friends of spending sprees, sexual activity, driving vehicles, and vandalizing. As many as 25% of students who drank reported having some symptoms associated with blackouts (Wechsler & Wuethrich, 2002).

Studies have shown that binge drinkers are three times more likely to engage in unplanned sexual experiences. Eighteen percent of respondents in the College Alcohol Survey reported having unplanned sex during that year as a result of drinking. In another
survey of 12 universities, 33% of men and 17% of women reported drinking more than they normally would in order to make sex easier. Of that number, 25% did not use condoms (Perkins, 2002). It is a common myth among students that alcohol increases sex drive and sexual appeal. Though there may be an initial increase in sexual desire in women with smaller amounts of alcohol, larger amounts of alcohol actually decrease their ability to have orgasms. In men, large amounts of alcohol and habitual bingeing can eventually lead to impotence, among other sexual dysfunctions (Wechsler & Wuethrich, 2002).

Griffin, Umstattd, and Usdan (2010) state that the Centers for Disease Control (CDC) and Prevention identify alcohol consumption as a factor in the leading causes of death (unintentional injury, homicide, and suicide) among students aged 12 to 20 years old. The CDC also relates alcohol to risky health behaviors such as high-risk sex. Other studies have indicated that as many as 400,000 college students each year have unsafe sex after consuming alcohol and that as many as 100,000 students each year are too intoxicated to give consent for sex (Griffin et al., 2010, p. 523).

Studies have indicated that student alcohol consumption is also related to negative academic performance and higher rates of attrition (Sullivan & Risler, 2002). As a college dropout, a person will be less educated and less likely to reach his or her potential. He or she is also less likely to be prosperous (Cutolo & Rochford, 2007). There is also a cost to the institution in higher rates of attrition, as student retention is directly related to institutional effectiveness and a central criterion for accreditation. For institutional survival, it is important to study substance abuse on college campuses (Sullivan & Risler, 2002). But the literature is still somewhat unclear about whether
there are any significant differences between males and females with regard to alcohol abuse and its consequences. Also while much has been studied about alcohol abuse and the freshman year in college, fraternities, and student-athletes, less is known about other student categories such as “work hard play hard” groups. Finally, location on campus and proximity to campus is another understudied topic in the literature on alcohol abuse. This study is important because it attempts to fill these gaps. In doing so it may help lead to more effective ways to combat the problem of abuse in the college student community.

Sexual victimization has also been linked to both the victim’s and assailant’s abuse of alcohol. Twelve percent of females who participated in the Core Survey reported being taken advantage of sexually during that year as a result of their alcohol abuse (Perkins, 2002).

Frintner and Rubinson (1993) found that 27% of a random sample of female undergraduates at a midwestern university were victims of sexual assault, attempted sexual assault, sexual abuse or at least one incidence of battery, intimidation or illegal restraint. Of the women who were victimized, 55% had been drinking at the time. Among drinking women who had experienced sexual assault or attempted sexual assault, 60% reported their judgment had been moderately or severely impaired at the time due to drinking. (Perkins, 2002, p. 94)

Increased risk of sexual violence for women, as it relates to drinking, is often explained by alcohol causing casual sexual behaviors that might be misread by men, the stereotype of a drinking woman as promiscuous, the woman’s inability to communicate clearly after she has been drinking, and the inability of the victim to defend herself or escape after
drinking too much (Perkins, 2002). “Nearly every college woman has either experienced, or knows somebody who has experienced, unwanted sex associated with alcohol” (Wechsler & Wuethrich, 2002, p. 191). College women are more susceptible to sexual violence, sexually transmitted diseases, and injuries as it relates to their use of alcohol (Piane & Safer, 2008).

Lawyer, Resnick, Bakanic, Burkett, and Kilpatrick (2010) surveyed 314 college women to determine the prevalence of drug and alcohol-related sexual assaults among women following their voluntary or involuntary use of drugs or alcohol. The women completed the web-based survey in a computer lab that had been designated specifically for the purpose of this research. Of the women who participated in the study, almost 30% reported a drug-related sexual assault. Five percent reported a forcible sexual assault. Ninety-six percent of the drug related sexual assaults were preceded by alcohol use. This study indicates that college women are far more likely to be victims of an alcohol-related sexual assault than they are to be victims of a forcible attack.

In addition to sexual violence, students may also encounter legal issues as a result of drinking. One-third of the students surveyed nationally reported driving under the influence of alcohol at least once during the year of the survey. And the more frequently students drink, the more likely they are to drive under the influence, with 56% of men and 43% of those who identified themselves as relatively heavy drinkers reporting that they have driven while drunk (Perkins, 2002). Studies indicate that binge drinkers account for 84% of alcohol-impaired drivers and are 14 times more likely to drive while drunk than non-binge drinkers (Marckinski et al., 2009). According to the U.S. Department of Health and Human Services (2002), a person does not have to drink a
great deal of alcohol before their driving skills are affected. Skills can be impaired by a blood alcohol concentration as low as 0.02 percent. Though most states have set blood alcohol content limits at 0.08 percent for adults, lower levels will affect a driver’s skills and abilities. Perkins (2002) reported that between 5% and 12% of students who responded to national surveys reported having had an incident with police or campus officials as a result of drinking. “More than 1,700 college student die every year from alcohol related causes, with more than 1,300 of these deaths involving drinking and driving” (Kapner, 2008, p. 1).

In addition to harming themselves, students who drink can also cause harm to others (Perkins, 2002). Students who do not drink or are light drinkers often have to deal with the fallout of those students who abuse alcohol. More than 75% of students living in residence halls and Greek housing report having experienced the effects of another student’s use or misuse of alcohol. The most common disturbances reported by nondrinkers and moderate drinkers included: having study or sleep interrupted (60%), having to be a caretaker for a drunk friend (47.6%), and being humiliated or insulted (29.2%) (Kapner, 2008).

Property damage and vandalism were reported at relatively low rates during national surveys for students who were “low-risk” drinkers, with only 6% of males and 2% of females saying that they committed vandalism or property damage. However, 33% of male and 13% of female “high-risk” drinkers reported the same behavior. Overall, 12% of students claimed to be the victims of property damage or vandalism due to the drinking of other students (Perkins, 2002, p. 95). The communities in which college campuses are located also report feeling the effects of alcohol use, with those
residing within one mile of campuses reporting higher instances of litter, noise, vandalism, drunkenness, fighting, and public urination than those who live more than one mile away from campus (Kapner, 2008).

In the fall of 2006, Boekeloo, Bush, and Novik (2009) conducted a web-based survey with 509 college freshman who were residing in freshman residence halls. The results indicated that college freshman often experience the secondhand effects of drinking on their campuses. Eighty percent of those students surveyed reported having experienced the effects of their colleagues’ alcohol use within the first two months of school.

The most commonly reported secondhand effects included having sleep or study interrupted (52.3%), being inconvenienced by vomit in common places (49.2%), having to take care of a student who had been drinking (46.2%), and being generally affected by drinking guests on the wing (45.7%). (Boekeloo et al., 2009, p. 623)

Institutions also pay the price for student drinking. Campus property destroyed or vandalized by drinking students has a cost that is most times incurred by the universities. Students who drop out because of alcohol or substance use add to the attrition rates for a university and lower the amount of revenue generated by tuition dollars. Students who drink and cause problems in the community create a negative perception of the university there and can impact the university’s academic image. Lastly, universities are often burdened with the legal cost of defending themselves in suits for liability when students are hospitalized or die as a result of the misuse of alcohol and other substances (Perkins, 2002). In 2000, Massachusetts Institute of Technology agreed to pay the family of Scott
Kruger $6 million to avoid a lawsuit in Kruger’s death. Krueger died after drinking himself unconscious during a hazing ritual at an off campus fraternity house (Clayton, 2000).

Though we know that women are at higher risk to suffer health consequences from alcohol abuse than men, more studies need to be conducted to determine if aggression and acts of vandalism occur at different rates for men and women, once they have consumed alcohol.

Reducing Alcohol Abuse

In April of 2005, The University of Southern Mississippi conducted six student focus groups designed to give university officials qualitative data regarding students’ beliefs, attitudes, and behaviors regarding alcohol. Of the six groups, two were male, two were female, and two were mixed in order to provide gender dynamics and insight on behaviors. Researchers gathered the following non-generalizeable data from the groups:

- Students believed that alcohol consumption was common on campus.
- Most alcohol was consumed off campus in clubs/bars on the weekends (Thursday through Saturday).
- Price and affordability dictated what, when, where, and how much students drink.
- Students did not have clear ideas about how to help a friend for whom they had concern.
- Peer pressure played a major role in drinking decisions (Felder, 2005). Felder (2005) recommended, among other things, that Southern Miss increase alcohol awareness through providing information to students, provide consistent information
across campus regarding alcohol policies, and provide hands-on alcohol education for freshman, members of Greek organizations, and other special interest groups.

“One such multicomponent approach, the ‘A Matter of Degree’ program (AMOD) was launched in 1997 at 10 colleges in the United States. AMOD focused on reducing alcohol availability, raising prices, and limiting alcohol promotions and advertising on and around campus” (U.S. Department of Health, 2007, p. 6). Schools that implemented the program saw improvements in the percentages of students who missed class or reported driving after drinking. Researchers also found that the more interventions an institution puts in place, the more success the institution saw in reducing problems such as binge drinking and alcohol-related assaults (U.S. Department of Health, 2007).

Some colleges and universities are choosing to fight the battle of alcohol abuse by correcting the misconceptions that many college students have regarding alcohol use on campuses. H. Wesley Perkins was a pioneer in the field of social norms in the mid-1980s (Lee, 2008). Social norming is defined as:

- media-based marketing campaigns aimed at correcting the misperceptions that foster high-risk drinking. By educating students about the true environmental norm, campuses can create a culture that gives permission for abstinence as a choice, and empowers the majority of students to act in accordance with their healthy attitudes and values (e.g. presentations, campus advertising). (Oswego State University, 2009, p. 1)

According to data, social norms interventions are most effective when they are combined with other methods to reduce alcohol abuse. A social norms project may be
least effective at an institution where there is a very high rate of drinking or at a school located in a community where alcohol is highly available through local outlets. More intense social norms campaigns yield the greatest effects on alcohol consumption by students (U.S. Department of Health, 2007). Social norming has also been used to target high-risk populations like student athletes on college campuses. These types of programs have been shown to remove misconceptions of alcohol use and reduce the negative effects of alcohol misuse and reduce personal misuse of alcohol (Marczinski et al., 2009).

The University of Virginia (Lee, 2008) and the University of South Alabama are two institutions using social norms as a way to change the way students think about alcohol and college. In 2007, the University of South Alabama surveyed students who were 19 and older regarding their use of alcohol. When the results were analyzed, staffers were surprised to find that 77% of students reported having 0-3 drinks per week. South Alabama has taken this surprising message and converted it into flyers, posters, and billboards around the campus and in the community. Student affairs professionals at South Alabama hope the message will make it more difficult for heavy drinkers to rationalize their behaviors of misuse, and will validate those students who are nondrinkers. In fact, 42% of the students who were surveyed at South Alabama identified themselves as nondrinkers (Busby, 2009).

The University of Virginia collected data from approximately 15,000 student surveys completed from 2001 to 2006 and used it to correct misconceptions about drinking on their college campus through another example of social norms marketing. When University of Virginia staffers compared the 2001 numbers to the 2006 results, they found several interesting points. Among them, 2000 fewer students reported being
injured while drinking and 550 fewer students had unprotected sex after drinking. The number of students driving under the influence of alcohol was also lower during the 2006 survey. Similar to the South Alabama study, more than 70% of the students who participated in the UV survey described themselves as being low-risk drinkers, with 25% describing themselves as being nondrinkers. UV has produced fliers and posters with the social norming information gathered from the surveys, and has also distributed more than 30,000 cards that help card holders keep track of their alcohol intake (Lee, 2008).

The Center for Science in the Public Interest is encouraging student advocacy by attracting attention to the negative secondary effects of alcohol abuse. The Center has launched major campaigns on several campuses aimed at reminding students of the negative impact and consequences of others students’ drinking. The campaigns are designed to help students become vocal about wanting to be on a safe and improved campus (Kapner, 2008). According to new studies, programs where students are forced to participate in one-on-one counseling that highlights the risks of drinking and learn how to monitor their drinking, actually have reduced alcohol-related problems. However, the students who are most in need of help with alcohol abuse may be the least likely to take advantage of opportunities to make a positive change and are most likely to cause alcohol-related issues at their institutions (U.S. Department of Health, 2007).

The National Institute on Alcohol Abuse and Alcoholism Task Force on College Drinking found that universities with successful interventions against alcohol abuse made strides on three levels--the schools reached the individual student, the student body, and the outside community all at once, with the same message. The task force also grouped
commonly used methods into a four tier system, depending upon the scientific evidence supporting them (U.S. Department of Health, 2007).

Tier 1 represents the most effective strategies to prevent and reduce college drinking. Tier 2 represents the strategies that have been successful with the general population and which could be applied to college environments. Tier 3 represents the strategies that show logical and theoretical promise but require more comprehensive evaluation. Finally, Tier 4 focuses on the need to evaluate these approaches, in particular to identify those that are not proving useful. (U.S. Department of Health, 2007, p. 6)

The earliest works in the research of alcohol and college students indicated that students’ decisions to drink or abstain were closely related to their parents’ examples of drinking behavior. The study also showed that students were more affected by sanctions from their parents’ than they were by formal sanctions issued by institutions for violating expectations around alcohol (Straus & Bacon, 1962). Today, many colleges and universities are returning to the findings of this early study and instituting parental notification policies for alcohol violations. In 1998, Congress passed legislation which amended the Higher Education Act to allow schools to notify parents when a student under 21 violated alcohol or drug laws. Colleges hope to use parental notification not as a way to “snitch” on students to parents, but as a way to involve parents in solutions to campus alcohol abuse. A study involving campus judicial administrators at 189 institutions indicates that most schools that are notifying parents of alcohol and substance violations are seeing decreases in repeat offender rates. Fifty-two percent of colleges
reported that recidivism was down for students who had their parents notified of alcohol and substance violations (Reisburg, 2001). Though research seems to suggest that parental notification policies help to reduce recidivism rates on colleges campus, there is a gap in what we know about those students who actually live at home with their parents and/or commute to their campuses, and how these living arrangements impact alcohol abuse.

Summary

This study attempts to fill gaps identified in this chapter by assessing college students attending a mid-sized university in the southeastern United States and comparing their responses related to alcohol abuse over time. First, it seeks to determine if there are any significant differences between males and females with regard to alcohol abuse and violent and aggressive behavior. Second, it aims to learn more about a specific category of students, specifically those who are hard workers in the academic setting but also hard drinkers when not in class or studying. Finally, it seeks to uncover more about the relation between alcohol abuse and where students lived on or near campus.
Chapter III

Methodology

Research Design

Participants

The number and age range of subjects is inclusive of all currently enrolled students at the university at least 18 years of age with email addresses in the university database. Subjects must have been current students with at least one hour of coursework currently in progress. Those who were under the age of 18 were not able to complete the 2007 or 2010 phases of the online survey, due to parental consent requirements. The specific population for the 2007 phase of the study was 5700 students randomly selected via the institution’s email database who were currently enrolled and with a university email address. The specific population for the second phase of the survey was students enrolled in fall 2010 classes for at least one hour of coursework willing to complete the online survey.

Instrumentation

The survey instrument used for this study was the existing CORE Alcohol and Drug Survey, Short Form (Appendix A). Permission to include a copy of the survey instrument in this study was provided by the CORE Alcohol and Drug Institute (Appendix B). The survey was “developed in 1989 to assess the nature, scope, and consequences of alcohol and other drug use on college campuses” (Core Institute, 2010, p. 1).

Amendments to the 1986 Drug-Free Schools and Communities Act, included allocations for prevention efforts at colleges and universities. The Fund for the Improvement of Postsecondary Education (FIPSE) was designated to disperse the funds.
Soon after being made responsible for the allocation of the funds, FIPSE discovered that there were no consistent methods available to assess substance abuse on college campuses. Most surveys at the time were specific to particular campuses and had not been repeated on other campuses. In response to this need, FIPSE formed an instrument selection committee. Because there were no instruments that could meet the vast needs all institutions of higher education, the committee set out to develop such a survey. The committee wanted an instrument that would be “statistically reliable and valid, easily administered, of high quality, inexpensive, quickly scoreable and capable producing data that could be directly compared with data obtained from other major survey instruments” (Presley & Meilman, 1994, p. 248).

The Core Alcohol and Drug Survey is commonly used to assess alcohol and drug use on college campuses and the negative consequences. The survey is designed to assess the nature, scope, and consequences of college drinking as well as the students’ awareness of institutional policy surrounding alcohol and drugs. The survey has also been used to assess the prevalence of college alcohol use and the negative effects associated with that use (Martens, Brown, Donovan, & Dude, 2005).

Validity of the Core Alcohol and Drug Survey was established by a panel who reviewed the literature and existing instruments to ensure that the major aspects of alcohol and drug use were adequately covered by the survey. “The inter-rater agreement for agreement for item inclusion was .90. Professional judgment identified and rated the universe of content, selected the content sample, and specified the item format and scoring system” (CORE Institute, 2010, p. 1). Researchers used the Pearson product-moment correlation coefficient to test the reliability of the instrument. The data indicate
that scores from the survey are stable across time, and thus the instrument has sufficient
reliability (CORE Institute, 2010).

According to Garson (2010), Cronbach’s Alpha is the most common estimate of
internal consistency or reliability.

The widely-accepted social science cut-off is that the alpha should be at .70 or
higher for a set of items to be considered a scale, but some use .75 or .80 while
others are as lenient as .60. That .70 is as low as one may wish to go is reflected
in the fact that when alpha is .70, the standard error of measurement will be over
half (0.55) a standard deviation. (Garson, 2010, p. 1)

The overall alpha for items of the CORE Alcohol and Drug Survey meet the .70 standard.
Cronbach alpha and item-to-total-test correlations have been conducted on questions 16,
17, 18, 19, and 21 of the CORE survey short form. The overall alphas for those questions
are as follows: question 16 = 0.740, question 17 = 0.696, question 18 = 0.650, question
19 = 0.939, and question 21 = 0.894 (CORE Institute, 2010).

Henryson (1971) notes that an "item-to-total-test correlation should fall between
.3 to .7 for inclusion in a survey test. The Cronbach alpha scores for Core Alcohol
and Drug Survey meet those criteria in almost all cases with the exception of
Question 19 that had six out of its 12 variables that had item total correlations
greater than .80. (CORE Institute, 2010, p. 2)

Procedures

For the first phase of the study, 5,700 currently enrolled students were selected to
receive an email invitation to complete the CORE Alcohol and Drug Survey. Permission
to administer and proceed with the study was received from the Human Subjects Review
Board (Appendix C). The students were randomly selected and the instrument was distributed electronically via campus email with an electronic letter attached to each (Appendix D). The university’s Registrar’s Office provided a list 5,700 emails that were randomly selected by the system using system technology. Eligible students (n=14,592) must have been currently enrolled at the Hattiesburg campus. Students below the age of 18 were asked not to complete the survey due to parental consent issues. The survey was open for completion by students for two weeks. During the two-week period, two reminder emails were sent to students who had yet to complete the survey. Goals, protocol, benefits, risks, and informed consent for the 2007 study were also approved by the Institutional Review Board (Appendix E).

The second phase of the survey was administered in the fall semester of 2010 to determine if students changed their drinking behaviors between the first and second phases of the study. Permission to administer and proceed with the study was received from the Human Subjects Review Board (Appendix F). The students were randomly selected and the instrument was distributed electronically via campus email with an electronic letter attached to each (Appendix G). Randomly selected students enrolled in fall 2010 semester (N = 5,700) were solicited via email to complete the second phase of the survey regarding campus drinking behaviors. This researcher worked with college’s Registrar’s Office, as in the 2007 first phase of the study, to obtain 5700 randomly selected student emails for the 2010 phase of the survey. Students below the age of 18 were asked not to complete the second phase of the survey due to parental consent issues. The survey was open for completion by students for two weeks. During the two week period, two reminder emails were sent to students who had yet to complete the survey.
During both phases of the survey, students who completed the survey were entered into drawings for four $100 textbook scholarships. Goals, protocol, benefits, risks, and informed consent for the 2010 phase of the study were also approved by the Institutional Review Board (Appendix H).

Answers to the 2007 and 2010 phases of the survey were confidential and were not identifiable to any one student. Each student who completed the surveys was assigned a nine-digit user ID. This user ID was the only information that was kept on the CORE server. Neither the student’s name nor their answers to the survey were stored on the server. The nine-digit ID is not associated with the student’s name or answers. When the data from the survey was downloaded to the server, the ID was not downloaded. The data is then anonymous. All variables were collected at one time during the on-line surveys. Each participant in the study was given the opportunity to voluntarily complete the survey or discontinue the survey at any time without penalty, prejudice, or loss of benefits. The same procedures were used for both phases of the survey.

For the second phase survey, each student answered the short form of the CORE Alcohol and Drug Survey. After the surveys were completed, the data were collected without information that would be identifiable to any one student and sent to the CORE Institute for scoring.

Hypotheses and Data Analysis

Hypothesis 1: Is there a significant difference in the number of times vandalism acts were reported based on gender?

Data Analysis for Hypothesis 1: One Way ANOVA

Independent Variable: gender
Dependent Variable: number of times acts of vandalism were reported

Hypothesis 2: Is there a significant difference in the number of times acts of
aggression were reported based on gender?

Data Analysis for Hypothesis 2: One Way ANOVA

Independent Variable: gender

Dependent Variable: number of times acts of aggression were reported

Hypothesis 3: Is there a significant difference in the student’s age based on the
work hard/play hard groups (i.e. High GPA/Heavy Drinker, Low GPA/Heavy Drinker,
Low GPA/Light Drinker, High GPA/Light Drinker) and the phase of the study (i.e. 2007
or 2010)?

Data Analysis for Hypothesis 3: Factorial ANOVA

Independent Variable One: work hard/play hard groups

Independent Variable Two: phase of study (i.e. 2007 or 2010)

Dependent Variable: age of student

Hypothesis 4: Is there a significant difference in the average number of drinks per
week based on where and with whom the students live?

Data Analysis for Hypothesis 4: Factorial ANOVA

Independent Variable One: where the student lives

Independent Variable Two: with whom the student lives

Dependent Variable: average number of drinks consumed per week

Reported drinking behaviors and academic performance for the research questions
will be coded into levels:

a. Light drinker – consumes an average of zero to four drinks a week.
b. *Moderate/Heavy drinker* – consumes an average of five or more drinks a week.

c. *High GPA* – reports a cumulative GPA of B- or higher.

d. *Low GPA* – reports a cumulative GPA of C+ or lower.

e. *High GPA/Light drinker* – reports B- or higher and consumes an average of zero to four drinks per week.

f. *Low GPA/Moderate/Heavy drinker* – reports C+ or lower and consumes an average of five or more drinks per week.

g. *High GPA/Moderate/Heavy drinker* – reports B- or higher and consumes an average of five or more drinks per week.

h. *Low GPA/Light Drinker* – reports C+ or lower and consumes an average of zero to four drinks per week.
CHAPTER IV

RESULTS

Introduction

Participants in this survey included undergraduate and graduate students who were currently enrolled at a public southeastern university during the two phases of the survey--2007 and 2010. Possible participants were randomly selected from the institution’s student email database to receive the CORE Alcohol and Drug Survey via email from the CORE Alcohol and Drug Institute. The 2007 phase of the survey administered 5700 email surveys, with 607 students completing the survey. The 2010 phase of the survey administered 5700 email surveys, with 473 students completing the survey. The final number of surveys completed was 1080 which yielded a rate of return of 10.5% for this study.

The survey instrument consisted of 23 multiple selection questions with a nearly 100% response rate. The 2007 phase of the survey had individual question response rates ranging from 92.9% to 99.8%. Though 607 students completed the survey, no question in the 2007 phase of the survey actually had 607 respondents. Six hundred six was the highest total respondents recorded for any question in the 2007 phase of the survey, which may suggest that one student submitted a completed survey without any answers to the 23 questions. The 2010 phase of the survey had individual question response rates ranging from 94.1% to 100%.

Descriptive Statistics

Several types of demographics were collected with both phases of the survey. This information was useful in determining the extent to which the student population
was represented. The 2007 and 2010 phases of the survey were completed by freshmen (16.8% and 22.8%, respectively), sophomores (12.7% and 15.9%, respectively), juniors (23.3% and 23%, respectively), non-degree seeking (0.2% and 0.6%, respectively), and other (0.7% and 0.4%, respectively). Demographic information related to classification determined that the majority of students, 57.6% in 2007 and 63% in 2010, were in the typical college age range of 18-22.

The majority of the respondents were White in both phases of the survey, 73.3% in 2007 and 61.7% in 2010. Blacks represented the second largest population of respondents with 17.5% in 2007 and 26.4% in 2010. Small numbers of American Indian/Alaskan Native, Hispanic, Asian/Pacific Islander, and other ethnicity were also represented in both phases of the survey. The majority of respondents were also single (75.7% in 2007 and 82.6% in 2010). Married students represented 19.7% of respondents in 2007 and 14.6% of respondents in 2010.

Females represented the majority of respondents in both phases of the survey with 73.9% in 2007 and 72% in 2010. Off-campus residents represented the majority of respondents in 2007 and 2010, with 66.7% and 60.3%, respectively. In 2007, the majority of students responding to the survey (41%) were employed part-time, while the majority of students responding to the survey in 2010 (44%) were not working.

The majority of the respondents reported living off-campus in both phases of the survey, 67.3% in 2007 and 60% in 2010, with campus residents representing the second largest group in both phases of the survey with 28.4% in 2007 and 35.7% in 2010. The majority of respondents (49.4% in 2007 and 60.9% in 2010) also reported living with roommates.
Participants in both phases of the survey reported cumulative grade point averages where most ranged from a B- to an A+, with 83.7% in 2007 and 82.5% in 2010 falling into the high GPA category. Students reported cumulative grades of C+ or worse in 2007 at a rate of 16% and in 2010 at a rate of 17.5%.

For the purposes of this study, students who responded to the surveys were placed in two categories based on the reported average number of drinks consumed per week. Students who consumed an average of zero to four drinks per week were classified as light drinkers, while students who consumed an average of five or more drinks per week were classified as moderate/heavy drinkers. Respondents in both phases of this survey overwhelmingly identified themselves as light drinkers with 85% and 86.5% in 2007 and 2010 respectively falling into this category.

Almost all students who responded to the surveys reported that they had never been involved in an act of vandalism while under the influence of alcohol or drugs. Only 2.3% of 2007 participants and 2.1% of 2010 participants reported being involved in one or more acts of vandalism while under the influence. Though reported numbers for committing acts of vandalism were relatively low for both phases of the survey, more students reported having been involved in an act of aggression while under the influence. In 2007, 21% of the respondents reported having gotten into one or more fights while drinking. In 2010, 17.9% of the respondents reported the same.

Statistical Results

Hypotheses 1 was as follows: Is there a significant difference in the number of times acts of vandalism were reported based on gender?
A one way ANOVA was conducted to determine the effects of the independent variable, gender, on the dependent variable number of times vandalism acts were reported. A level of statistical significance of 0.05 was used throughout this study. The one way ANOVA indicated no significant difference between the number of times acts of vandalism were reported by men and women ($F(1, 470) = .26, p = .61$). The means (with standard deviations in parenthesis) for dependent variable number of times vandalism acts were reported were 1.05 (.451) for males N=132 and 1.04 (.285) for females N=340, with 1.04 (.339) total and N=472.

Hypotheses 2 was as follows: Is there a significant difference in the number of times acts of aggression were reported based on gender?

A one way ANOVA was conducted to determine the effects of the independent variable, gender, on the dependent variable number of times acts of aggression were reported. The one way ANOVA indicated no significant difference between the number of times acts of aggression were reported by men and women ($F(1, 468) = .12, p = .74$). The means (with standard deviations in parenthesis) for dependent variable number of times acts of aggression were 1.31 (.917) for males N=132 and 1.34 (.826) for females N=338, with 1.33 (.852) total and N=470.

Hypothses 3 was as follows: Is there a significant difference in the student’s age based on the work hard play hard groups (i.e., High GPA/Moderate/Heavy Drinker, Low GPA/Moderate/Heavy Drinker, Low GPA/Light Drinker, High GPA/Light Drinker and the phase of the study (i.e., 2007 or 2010)?

The data for hypotheses 3 were recoded to create the work hard/play hard groups. For the purposes of analysis, high GPA/moderate/heavy drinker was assigned a “1.” Low
GPA/moderate/heavy drinker was assigned a “2.” Low GPA/light drinker was assigned a “3.” High GPA/light drinker was assigned a “4.”

A factorial ANOVA was also conducted to evaluate the effects of independent variable, work hard/play groups and independent variable, phase of study on the dependent variable, age of student. The factorial ANOVA indicated no significant interaction between independent variable one of work hard/play hard groups and independent variable two of phase of study $F (3, 1066) = .33, p = .8$ nor were there any significant main effects for work hard/play hard, $F (3, 1066) = .45, p = .721$ or for phase of study, $F (1, 1066) = .07, p = .79$. The means and standard deviations for independent variable one and independent variable two as a function of the dependent variable are presented in Table 1.

Table 1

*Dependent Variable: Age*

<table>
<thead>
<tr>
<th>Work Hard/Play Hard Groups</th>
<th>Year</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>High GPA/Moderate/Heavy Drinker</td>
<td>2010</td>
<td>24.7</td>
<td>7.793</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>24.9</td>
<td>7.666</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>24.8</td>
<td>7.689</td>
<td>131</td>
</tr>
<tr>
<td>Low GPA/Moderate/Heavy Drinker</td>
<td>2010</td>
<td>22.9</td>
<td>5.555</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>22.6</td>
<td>5.777</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>22.7</td>
<td>5.516</td>
<td>19</td>
</tr>
</tbody>
</table>
Table 1 (continued).

<table>
<thead>
<tr>
<th>Work Hard/Play Hard Groups</th>
<th>Year</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low GPA/Light Drinker</td>
<td>2010</td>
<td>24.5</td>
<td>8.152</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>24.5</td>
<td>7.077</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>24.5</td>
<td>7.572</td>
<td>152</td>
</tr>
<tr>
<td>High GPA/Light Drinker</td>
<td>2010</td>
<td>23.6</td>
<td>7.762</td>
<td>338</td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>24.8</td>
<td>8.552</td>
<td>434</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>24.3</td>
<td>8.230</td>
<td>772</td>
</tr>
<tr>
<td>Total</td>
<td>2010</td>
<td>23.9</td>
<td>7.780</td>
<td>471</td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>24.7</td>
<td>8.207</td>
<td>603</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>24.4</td>
<td>8.031</td>
<td>1074</td>
</tr>
</tbody>
</table>

Figure 1 for hypothesis 3 below indicates that there was an interaction, just not a significant one. Sometimes year 2007 was higher and other times year 2010 was higher. This also suggests a probable type 2 error because graphs show interaction by intersecting lines.
Hypotheses 4 was as follows: Is there a significant difference in the average number of drinks consumed per week based on where and with whom the students live?

A factorial ANOVA was conducted to evaluate the effects of independent variable one, where the student lives and independent variable two, with who the student lives on the dependent variable of average number of drinks consumed per week. The factorial ANOVA indicated no significant interaction between independent variable one of where the student lives and independent variable two of with whom the student lives $F(4, 20) = 1.285, p = .30$ nor were there any significant main effects for where the student lives, $F(3, 20) = 1.077, p = .381$ or for with whom the student lives, $F(2, 20) = 1.345, p = \ldots$
.4. The means and standard deviations for independent variable one and independent variable two as a function of the dependent variable are presented in Table 2.

Table 2

*Dependent Variable: Average Number of Drinks Consumed Per Week*

<table>
<thead>
<tr>
<th>Where Student Lives</th>
<th>With Whom</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>House - Apartment</td>
<td>Roommate</td>
<td>2.8</td>
<td>3.703</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>Alone</td>
<td>3.1</td>
<td>5.881</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td>1.3</td>
<td>2.023</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Spouse</td>
<td>2.6</td>
<td>3.714</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Children</td>
<td>1.2</td>
<td>1.498</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Spouse and Children</td>
<td>2.1</td>
<td>5.319</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>1.8</td>
<td>3.632</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2.4</td>
<td>4.037</td>
<td>282</td>
</tr>
<tr>
<td>Residence Hall</td>
<td>Roommate</td>
<td>1.1</td>
<td>3.290</td>
<td>156</td>
</tr>
<tr>
<td></td>
<td>Alone</td>
<td>.2</td>
<td>.832</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.1</td>
<td>3.177</td>
<td>169</td>
</tr>
</tbody>
</table>
Table 2 (continued).

<table>
<thead>
<tr>
<th>Where Student Lives</th>
<th>With Whom</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved Housing</td>
<td>Roommate</td>
<td>5.0</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alone</td>
<td>4.0</td>
<td>2.828</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.3</td>
<td>2.082</td>
<td>3</td>
</tr>
<tr>
<td>Fraternity - Sorority</td>
<td>Roommate</td>
<td>3.1</td>
<td>4.045</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Alone</td>
<td>2.5</td>
<td>3.536</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3.0</td>
<td>3.795</td>
<td>11</td>
</tr>
<tr>
<td>Other</td>
<td>Roommate</td>
<td>.0</td>
<td>.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td>.0</td>
<td>.000</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Spouse and Children</td>
<td>.0</td>
<td>.000</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>.5</td>
<td>.707</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>.1</td>
<td>.408</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>Roommate</td>
<td>1.9</td>
<td>3.563</td>
<td>276</td>
</tr>
<tr>
<td></td>
<td>Alone</td>
<td>2.4</td>
<td>5.137</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
<td>1.2</td>
<td>1.986</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Spouse</td>
<td>2.6</td>
<td>3.714</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Children</td>
<td>1.1</td>
<td>1.498</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Spouse and Children</td>
<td>2.0</td>
<td>5.210</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>1.7</td>
<td>3.505</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1.9</td>
<td>3.767</td>
<td>471</td>
</tr>
</tbody>
</table>
This two-phase study of 1080 undergraduate and graduate students conducted in 2007 and 2010 yielded results with no significant interactions for the hypotheses as they related to gender and aggression and gender and vandalism. Likewise, the study did not present significant interactions in the hypothesis related to alcohol abuse and residency. In the work hard/play hard hypothesis, there was not a significant interaction within the work hard/play hard groups and the phase of study, based on age.
CHAPTER V

DISCUSSION

This study was conducted among undergraduate and graduate students attending a mid-sized university in the southeastern United States. The survey was conducted in two phases during 2007 and 2010. During both phases of the survey, 5,700 emails were randomly selected from the student database to receive the short form of the CORE Alcohol and Drug Survey. During the first phase of the survey, 607 students completed the survey. During the second phase of the survey, 473 students completed the survey. Response rates of 10.65% for the 2007 phrase and 8.30% for the 2010 phase were obtained, and the following results were yielded.

Of the average number of drinks per week reported by respondents, males reported a mean higher than females for both phases of the study. Males during the 2010 phase of the survey reported a mean for average number of drinks per week that was approximately two drinks lower than the 2007 phase.

In both phases of the survey, respondents reported using alcohol at lower rates than students from similar institutions who also completed the survey. However, when asked how often they thought the average student on the campus used alcohol, the greatest number of respondents reported that their peers were drinking three times a week. The contingent consistency peer influence model of personal drug use may be at work in this area as it suggests that students’ perceptions of peer drinking actually can create, true or false, the imaginary peer (Piane & Safer, 2008, p. 70).

The majority of the respondents, 67.3% in phase one and 60% in phase two, reported living off campus. A small number of participants for each phase reported
living in fraternity or sorority housing, while campus housing was the second most reported living arrangement reported by respondents.

Conclusions and Discussion

Hypotheses one and two analyzed the number of times acts of aggression were reported and the number of times acts of violence were reported to determine if there was a significant difference in reporting by gender. Alcohol myopia theory suggests that as an individual consumes alcohol, he/she is less likely to be able to discriminate between stimuli and cues, making them more likely to participate in activities that are uncharacteristic or extreme, such as aggression and vandalism (Griffin et al., 2010). The first two hypotheses were designed to determine if one gender is more or less likely than the other to become myopic when alcohol is consumed. Though there was no significant interaction for either hypothesis, women did report a slightly higher percentage of acts of aggression than men in the categories of one and two reported aggressive incidents. This information confirms earlier research that suggests acts of aggression and vandalism increase as the level of intoxication increase. These data may also confirm the drinking patterns of women in other studies that show an increase in the number of women being sanctioned for alcohol violations and the higher blood alcohol levels for women being treated at hospitals (Morse et al., 2002).

Hypothesis three was developed with the possibility that there may be a growing number of students in college who have developed a work hard/play hard way of life that allows them to participate regularly in heavy drinking behaviors, but also allows them to focus enough on academics to maintain above average grades. These students may report “having it all,” but is this really possible? This researcher organized students into four
subgroups who completed the survey based on their self reported grades and average number of drinks consumed each week. The subgroups were analyzed to determine if there was a significant difference among them based on age. Though there was interaction, there was no significant interaction found between the students’ age based on the work hard/play hard groups and the phase of the study. The lack of significant interaction here supports existing research that indicates drinking reduces the number of study hours and is generally associated with lower grades, regardless of the myths that may exist surrounding heavy partying and good grades.

Hypothesis four was developed to determine if residency conditions have a significant effect on a student’s drinking behavior. In both phases of the survey, students were asked to identify where they lived (apartment, campus housing, fraternity/sorority house, residence hall, approved housing, and other). They were also asked to identify with whom they lived (with roommate, alone, with parents, with spouse, with children, other). There was no significant interaction recorded for this hypothesis. These findings contradict earlier research that suggests students who live with their parents, for example, are less likely to drink than students who live off and on campus with roommates or alone (Office of Applied Studies, 2006). It also does not support the findings of increased likelihood for binge drinking for students living in Greek Housing presented by Presley et al. (2002) and Theall et al. (2009).

The reported drinking patterns of students who participated in this study suggested contradictions to previous conclusions from earlier research. Wechsler and Kuo (2000) estimated that 35% of all college students were binge drinkers through their analysis of the College Alcohol Study. In the 2007 phase of this study, 28.3% of students
reported binge drinking in the previous two weeks, and 29% of students reported binge
drinking behaviors in the 2010 phase of the study.

Similar to a 2005 Rutgers survey where 92% of students did not classify
themselves as binge drinkers while 35% of them reported activities that would classify
the as binge drinkers, 87% of those in the first phase of this study did not classify
themselves as binge drinkers while 28.3% of them reported activities that would classify
them as binge drinkers. Results were similar in the second phase of this study for this
particular topic. These findings further support research suggesting that students not only
have different definitions for binge drinking that exceed the standard five or more drinks,
but that on average students believe that a binge drinker is someone who drinks a great
deal more than they do, regardless of the amount that the student drinks (Lederman &
Stewart, 2005).

Students from the surveyed university did not report the estimated 20% of men
and 10% of women participating in “extreme drinking,” a term used by White, Kraus,
and Swartzwelder (2006, p. 1007). Extreme drinking has been defined as 10 or more
drinks in one day for men and eight or more drinks in one day for women. In the 2010
phase of this study only 13% of men and 4% of women who completed the survey
reported drinking behavior that might be labeled extreme.

With regards to perceptions of alcohol use findings from this study support prior
research suggesting that students believe alcohol consumption as common behavior on
campus (Felder, 2005). In 2007, 93.2% of students who completed the first phase of the
survey believed that the average student consumed alcohol at least once a week or more.
That number dropped slightly to 85% in the 2010 phase of the study. In 2007, 47.3% of
respondents actually reported being non-drinkers, while 52.9% of respondents in 2010 reported being non-drinkers. These findings further support research indicating that students have accepted norms about their communities that do not necessarily mirror actual student behaviors.

Between 2007 and 2010, there was a decrease in the number of alcohol-related negative consequences reported by respondents. In 2007, 24.5% of the respondents reported suffering a negative public consequence (trouble with the police, violence, DUI, vandalism) of alcohol use, while in 2010 20.5% reported the same. In 2007, 16.1% of the respondents reported suffering a serious personal problem (being hurt or injured, suicidality, sexual assault) as a consequence of alcohol use, while in 2010 12.3% reported the same consequences. Both phases of the survey yielded reported sexual assaults at a lower rate than previous studies, which have reported rates indicating that 30% of women may have experienced an alcohol-or drug-related sexual assault (Lawyer et al., 2010).

Students participating in this study also reported fewer instances of missed classes and poor test performance related to alcohol than in previous studies. Perkins (2002) reported that 26% of student drinkers had performed poorly on a test and 33% had missed a class due to alcohol or other drug use. Respondents to this survey reported extraordinarily high numbers contradicting these findings, with 85% of the 2007 and 84% of the 2010 respondents reporting to never have done poorly on a test or important project as a result of alcohol or drug use. Similarly, 81% of the 2007 and 82% of the 2010 respondents reported never having missed a class due to alcohol or drug use.
Limitations

There are some limitations that may have affected this study. The participants for this study were randomly selected from the entire student body without regards to any criteria other than their enrollment as students at the time of the surveys. This may have provided a cross section of the population that was too broad and lacked focus on documented populations of concern such as freshman, Greek members, and athletes.

Because both phases of this survey were emailed and there was no paper version of the survey, completion of the survey required that the student check his/her campus email in order to know that they had received an invitation to participate in the survey. The surveyed institution does not currently have a program in place that mandates all students use and regularly check their campus emails. Many students who received an invitation to complete the survey may never have known that they received the invitation. Because the survey was administered in two phases, 2007 and 2010, it is possible that some students may have taken the survey twice.

As an incentive to complete the survey, textbook scholarship drawings were held during both phases of the survey. These drawings included all students who successfully completed the survey. As an incentive, the textbook scholarships may have been more appealing to students who were more interested in the financing of their educations than those who were not.

The timing of both phases of the survey may also have been a limitation in that both phases of the study were conducted in the latter part of the fall semesters of 2007 and 2010. The literature indicates that drinking behaviors are often heavier at the beginning of semesters and often taper off as the semester moves forward into mid-terms
and finals, as the academic demands increase (Tremblay et al., 2010). The data were collected during these times of the year with the intention of presenting students with a survey during a time when they were not being inundated with information, such as the beginning of a semester.

In addition to the above limitations, it should be noted that the identification of students who drank five or more drinks during a week as moderate/heavy drinkers may not have identified those students who were truly members of the work hard/play hard groups created for this study.

Recommendations for Policy and Practice

This study produced information that can be used by college administrators and programmers in their daily work of shaping young people on college campuses. Educational programming specific to women and alcohol should become standard. Because the literature review found that women are more likely to be sexually victimized in situations involving alcohol, college women should also be informed on how alcohol abuse can affect them physically and emotionally. Women should also know that alcohol abuse can have a faster rate of deterioration for their bodies than their male counterparts. Though young women may not often see themselves as aggressive or as vandals, results from this study suggest that, while drinking, women reported just as many episodes of aggression and vandalism as men.

A new batch of freshmen students arrive on college campuses across the nation each fall. For many of them, college will bring their first experience with alcohol. Many of those freshmen will be told by upperclassmen that they can have all of the fun they want and still make good grades. However, if that fun involves heavy drinking, this
study suggests that grades will likely suffer as a result. The student who parties hard three to four times a week and makes all As is a rarity and certainly is not supported by the results of this study. The work hard/play hard groups of this study were established to examine the possibility that today’s students were beginning to create ways to have the media-created “college life” and do well in school. Administrators and programmers should send the message to students that drinking in excess leads to missed classes, fewer study hours, and lower grades. As the cost of tuition continues to rise, students can no longer waste time and money drinking their way through college, without bearing ill effects.

This study suggests that gender did not have a significant effect on individuals who reported acts of vandalism or aggression. This finding may be important because, although prior research indicates that alcohol use affects men and women in different ways, it does not appear to suggest one gender is more or less aggressive the more myopic behavior becomes due to alcohol use.

As for residency, although this study found no interactions regarding where students lived, the literature review on residency suggests that college administrators might be wise to further explore the notion of providing housing options that reflect what students are saying about their use of alcohol and substances. Substance-free residence halls can be designated for students who self-identify as substance-free and wish to live in an environment with other students who have chosen the same lifestyle (“Is Substance-Free,” 2001). Administrators can also support alcohol-free fraternities and sororities as a way to provide an aspect of campus life to students without the legacy of alcohol that has followed so many of our Greek organizations.
Recommendations for Future Research

The future research in this area should focus on more specialized populations within the student body. Research tells us that Greeks, athletes, and first-year students are at higher risk for dangerous drinking behaviors (Presley et al., 2002).

A longitudinal study of first-time freshman at a given institution would allow a researcher to establish a benchmark for new students regarding alcohol cultural, and then coordinate class-specific education and programs during the first year for that class. The researcher could post-test the class at the end of the freshman year to gauge effectiveness of the educational programs. The results could be used in social norms campaigns for first-year students but could also be used in the recruitment of potential students. For this institution, alcohol would no longer be the taboo subject that is only talked about in the freshman halls on Thursday night before the weekly party ritual begins.

College athletes are significantly more likely to be exposed to alcohol education programs than non-athletes, but athletes are more likely to drink great quantities of alcohol and drink more frequently than non-athletes (Brenner & Swanik, 2007). Research should be done in conjunction with smaller athletic programs and SEC schools, for example, to determine the impact of team schedules and practices on the decisions to drink. This research may also suggest that there are different motivators for excessive drinking in larger programs than smaller programs. Do college athletes have the expectation to win at everything--including drinking?

Ethnographic studies should be conducted in parties, bars, and other social settings to provide real-time information related to student drinking behaviors, as opposed to self-reported drinking behaviors reported in quantitative research. This type
of research may provide better understandings of students’ motivations for drinking and the behaviors exhibited while under the influence.

Lastly, more individual Greek chapter alcohol profiles for fraternities and sororities need to be completed. Greeks organizations are often a captive audience with long histories of problems with alcohol. Results from these types of studies may suggest that some groups are creating a more dangerous culture than others through traditions and rituals. Greek organizations could use the data obtained from studies like this one to change the paradigm for Greek life in this country. Once the paradigm shifts for Greek life, it may then be possible for all Greek organization to step outside of the shadow of the “Animal House” mentality.

Summary

This study suggested that the “work hard/play hard” groups developed for this study support existing research suggesting heavy drinking reduces the number of study hours and is generally associated with lower grades regardless of age. This is important to university administrators and educators in the planning of alcohol education programs for college students, dispelling the myth that the work hard/play hard concept is not effective for students interested in positive academic performance.

The respondents in this study reported lower levels of drinking than respondents from similar colleges who also participated in the survey. However, the respondents to this survey reported believing that their peers were drinking at much higher levels. This finding makes a case for strong social norms campaigns that tell more students the real facts about who is drinking on college campuses and how much they are actually drinking. Administrators need to recognize the power of the “imaginary peer” and begin
to combat false beliefs and ideas with the factual information given by students. In order to give students the right information, all colleges should have a current alcohol and drug use profile for their student populations.

Lastly, the study found that residence status and living situation (roommate, alone, with parents, etc.) does not have a significant impact on the drinking behaviors of students. This is important for university officials as they speak with parents who would have their college students stay at home as way of protecting them from the perceived alcohol implications of living on campus. This further supports the need for education and intervention on college campuses as a way to reduce alcohol related issues.
# APPENDIX A

## CORE ALCOHOL AND DRUG SURVEY

### Core Alcohol and Drug Survey

**For use by two- and four-year institutions**

**Please use a number 2 Pencil.**

1. **Classification:**
   - Freshman
   - Sophomore
   - Junior
   - Senior
   - Graduate/professional
   - Not seeking a degree
   - Other

2. **Age:**
   - 5
   - 6
   - 7
   - 8
   - 9

3. **Ethnic origin:**
   - American Indian
   - Asian
   - Black (non-Hispanic)
   - White (non-Hispanic)
   - Hispanic
   - Other

4. **Marital status:**
   - Single
   - Married
   - Separated
   - Divorced
   - Widowed

5. **Gender:**
   - Male
   - Female

6. **Is your current residence as a student:**
   - On-campus
   - Off-campus

7. **Approximate cumulative grade point average:**
   - A+  A  A-  B+  B  B-  C+  C  C-  D+  D  D-  F

8. **Some students have indicated that alcohol or drug use at parties they attend in and around campus reduces their enjoyment, often leads to negative situations, and therefore, they would rather not have alcohol and drugs available and used. Other students have indicated that alcohol and drug use at parties increases their enjoyment, often leads to positive situations, and therefore, they would rather have alcohol and drugs available and used. Which of these is closest to your own view?**
   - Have available
   - Not have available

9. **With regard to drugs?**
   - Yes
   - No

10. **With regard to alcohol?**
    - Yes
    - No

11. **Student status:**
    - Full-time (12+ credits)
    - Part-time (1-11 credits)

12. **Campus situation on alcohol and drugs:**
    - Does your campus have alcohol and drug policies?
    - Yes
    - No
    - Don't know

13. **Place of permanent residence:**
    - In-state
    - USA, but out of state
    - Country other than USA

14. **Think back over the last two weeks. How many times have you had five or more drinks at a sitting?**
    - None
    - Once
    - Twice
    - Three to five times
    - Six to nine times
    - Ten or more times

15. **Average # of drinks* you consume a week:**
    - 0
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10 or more

16. **At what age did you first use:**
    - (mark one for each line)
    - Tobacco (smoke, chew, snuff)
    - Alcohol (beer, wine, liquor)
    - Marijuana (pot, hash, hash oil)
    - Cocaine (crack, rock, freebase)
    - Amphetamines (diet pills, speed)
    - Sedatives (downers, ludes)
    - Hallucinogens (LSD, PCP)
    - Opiates (heroin, smack, horse)
    - Inhalants (glue, solvents, gas)
    - Designer drugs (ecstasy, MDMA)
    - Steroids
    - Other illegal drugs

---

*Other than a few sips

### 17. Within the last year about how often have you used...
(mark one for each line)

<table>
<thead>
<tr>
<th>a. Tobacco (smoke, chew, sniff)</th>
<th>b. Alcohol (beer, wine, liquor)</th>
<th>c. Marijuana (pot, hash, hash oil)</th>
<th>d. Cocaine (crack, rock, freebase)</th>
<th>e. Amphetamines (diet pills, speed)</th>
<th>f. Sedatives (downers, ludes)</th>
<th>g. Hallucinogens (LSD, PCP)</th>
<th>h. Opiates (heroin, smack, horse)</th>
<th>i. Inhalants (glue, solvents, gas)</th>
<th>j. Designer drugs (ecstasy, MDMA)</th>
<th>k. Steroids</th>
<th>l. Other illegal drugs</th>
</tr>
</thead>
</table>

### 18. During the past 30 days on how many days did you have:
(mark one for each line)

<table>
<thead>
<tr>
<th>a. Tobacco (smoke, chew, sniff)</th>
<th>b. Alcohol (beer, wine, liquor)</th>
<th>c. Marijuana (pot, hash, hash oil)</th>
<th>d. Cocaine (crack, rock, freebase)</th>
<th>e. Amphetamines (diet pills, speed)</th>
<th>f. Sedatives (downers, ludes)</th>
<th>g. Hallucinogens (LSD, PCP)</th>
<th>h. Opiates (heroin, smack, horse)</th>
<th>i. Inhalants (glue, solvents, gas)</th>
<th>j. Designer drugs (ecstasy, MDMA)</th>
<th>k. Steroids</th>
<th>l. Other illegal drugs</th>
</tr>
</thead>
</table>

### 19. How often do you think the average student on your campus uses...
(mark one for each line)

<table>
<thead>
<tr>
<th>a. Tobacco (smoke, chew, sniff)</th>
<th>b. Alcohol (beer, wine, liquor)</th>
<th>c. Marijuana (pot, hash, hash oil)</th>
<th>d. Cocaine (crack, rock, freebase)</th>
<th>e. Amphetamines (diet pills, speed)</th>
<th>f. Sedatives (downers, ludes)</th>
<th>g. Hallucinogens (LSD, PCP)</th>
<th>h. Opiates (heroin, smack, horse)</th>
<th>i. Inhalants (glue, solvents, gas)</th>
<th>j. Designer drugs (ecstasy, MDMA)</th>
<th>k. Steroids</th>
<th>l. Other illegal drugs</th>
</tr>
</thead>
</table>

### 20. Where have you used...
(mark all that apply)

<table>
<thead>
<tr>
<th>a. Tobacco (smoke, chew, sniff)</th>
<th>b. Alcohol (beer, wine, liquor)</th>
<th>c. Marijuana (pot, hash, hash oil)</th>
<th>d. Cocaine (crack, rock, freebase)</th>
<th>e. Amphetamines (diet pills, speed)</th>
<th>f. Sedatives (downers, ludes)</th>
<th>g. Hallucinogens (LSD, PCP)</th>
<th>h. Opiates (heroin, smack, horse)</th>
<th>i. Inhalants (glue, solvents, gas)</th>
<th>j. Designer drugs (ecstasy, MDMA)</th>
<th>k. Steroids</th>
<th>l. Other illegal drugs</th>
</tr>
</thead>
</table>

### 21. Please indicate how often you have experienced the following due to your drinking or drug use during the last year...
(mark one for each line)

| a. Had a hangover | b. Performed poorly on a test or important project | c. Been in trouble with police, residence hall, or other college authorities | d. Damaged property, pulled fire alarm, etc. | e. Got into an argument or fight | f. Got nauseated or vomited | g. Driven a car while under the influence | h. Missed a class | i. Been criticized by someone I know | j. Thought I might have a drinking or other drug problem | k. Had a memory loss | l. Done something I later regretted | m. Been arrested for DWI/DUI | n. Have been taken advantage of sexually | o. Have taken advantage of another sexually | p. Tried unsuccessfully to stop using | q. Seriously thought about suicide | r. Seriously tried to commit suicide | s. Been hurt or injured |
|-------------------|-----------------------------------------------|------------------------------------------|---------------------------------------|-----------------------------------|-----------------------------------|---------------------------------|-----------------------------------|---------------------------------|-----------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------------|

### 22. Have any of your family had alcohol or other drug problems: (mark all that apply)

<table>
<thead>
<tr>
<th>Mother</th>
<th>Father</th>
<th>Stepfather</th>
<th>Father's parents</th>
<th>Brother's/sisters</th>
<th>Stepbrothers/sisters</th>
<th>Sister</th>
<th>Step sister</th>
<th>Brothers</th>
<th>Stepsisters</th>
<th>Mother's parents</th>
<th>Father's mother</th>
<th>Stepfather's mother</th>
<th>Stepbrother's mother</th>
<th>Stepfather's father</th>
<th>Stepbrother's father</th>
<th>Stepfather's stepmother</th>
</tr>
</thead>
</table>

### 23. If you volunteer any of your time on or off campus to help others, please indicate the approximate number of hours per month and principal activity:

<table>
<thead>
<tr>
<th>Activity:</th>
<th>Don't volunteer, or</th>
<th>less than 1 hour</th>
<th>1–4 hours</th>
<th>5–9 hours</th>
<th>10–15 hours</th>
<th>16 or more hours</th>
</tr>
</thead>
</table>

Mark Referral by NCS MM236019-1 65431 E06 Printed in U.S.A.
APPENDIX B

COPYRIGHT PERMISSION

CORE Institute
measuring change, delivering results

April 7, 2011

To Whom It May Concern:

Provided by the laws of the United States (title 17, U.S. Code) to the authors of original works of authorship and the exclusive rights under Section 106 of the 1976 Copyright Act, the Core Institute authorizes Michael Mitchell of the University of Southern Mississippi to do the following:

- To use the survey to collect data for his dissertation titled “Alcohol Abuse at a Mid-sized University in The Southeastern United States”.
- To prepare derivative works based upon the copyrighted work.
- To display the copyrighted work within his dissertation.

Permission applies to the:
- Core Alcohol and Other Drug Survey Community College Short Form

Limitations of the permission are:
- Permission applies only to scholarly work.
- Permission to use the survey is for his dissertation project only and should not be used for any other future project or shared with others to use without permission.

If you have any questions or need additional information please do not hesitate to call. I can be reached at 618.453.4390 or lrowald@siu.edu.

Sincerely,

Laura A. Rowald
Laura A. Rowald, Ph.D.
Researcher III
Core Institute, SIUC

It is illegal for anyone to violate any of the rights provided by the copyright law to the owner of copyright. These rights, however, are not unlimited in scope. Sections 107 through 121 of the 1976 Copyright Act establish limitations on these rights. In some cases, these limitations are specified exemptions from copyright liability. One major limitation is the doctrine of "fair use," which is given a statutory basis in section 107 of the 1976 Copyright Act. In other instances, the limitation takes the form of a "compulsory license" under which certain limited uses of copyrighted works are permitted upon payment of specified royalties and compliance with statutory conditions. For further information about the limitations of any of these rights, consult the copyright law or write to the Copyright Office.
APPENDIX C

HUMAN SUBJECTS REVIEW COMMITTEE APPROVAL 2007

The University of Southern Mississippi
118 College Drive #5147
Hattiesburg, MS 39406-0001
Tel: 601.266.6820
Fax: 601.266.5529
www.usm.edu/irb

HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 27062102
PROJECT TITLE: CORE Alcohol and Drug Survey
PROPOSED PROJECT DATES: 07/23/07 to 08/03/07
PROJECT TYPE: New Project
PRINCIPAL INVESTIGATORS: Michael A. Mitchell
COLLEGE/DIVISION: Student Affairs
DEPARTMENT: Dean of Students
FUNDING AGENCY: University Police Department
HSPRC COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 07/16/07 to 07/15/08

[Signature]
Lawrence A. Hosman, Ph.D.
HSPRC Chair

[Signature]
07-17-07
Date
Dear Student,

You have been selected to complete a survey that will give a better understanding to the climate and culture of alcohol and other drugs at the University of Southern Mississippi. Your response is important and will help us to better understand the frequency and extent of alcohol and drug use on campus, perceptions about use on campus, and the problems related to use.

This survey will only take about 20 minutes to complete. It is confidential and anonymous. The results are compiled by an off-campus organization and there are no risks associated with completing the survey. If you are under the age of 18, do not complete this survey.

The survey is available from now until October 5, 2007.

After you complete the online survey, you will be eligible to win one of four (4) $250 textbook scholarships. The drawings will be held the week of October 8, 2007.

If you have questions about the survey, please feel free to contact me at michael.a.mitchell@usm.edu

TO ACCESS THE SURVEY: Go to http:www and use the 5-digit login code.

Thanks for your participation,

Mike Mitchell, Associate Dean of Students
University of Southern Mississippi
Human Subjects Review
Michael A. Mitchell

Statement of Project Goals

The goal of the administration of the CORE Drug and Alcohol survey on the campus of the University of Southern Mississippi is to develop a profile of drug and alcohol usage for the Southern Miss student body. The development of such a profile will create a reference point for university administrators as they program and plan to create educational opportunities for students surrounding drug and alcohol issues.

Protocol

A link to the CORE Drug and Alcohol Survey will be sent to the email addresses of all Hattiesburg campus Southern Miss students. Once the survey has been completed, the data will be compiled by the CORE Institute.

The number and age range of subjects is inclusive of all currently enrolled students at Southern Miss with email addresses in the university database. Subjects must be current Southern Miss students with at least one hour of coursework currently in progress. Those who are under the age of 18 will not be able to complete the online survey, due to parental consent requirements.

The online survey takes approximately 20 minutes to complete and may be completed from any computer which has access to the internet.

Benefits

Participants who successfully complete the survey will be entered into a drawing for four (4) textbook scholarships in the amount of $250 each. Students will be assigned a unique 9-digit number once they decide to complete the survey. The drawings will be done by the CORE Institute. This is the only time that identifying information gathered in the process will be used.
Risks

There are no perceived risks of participation in the completion of this study. All completed surveys are maintained by the CORE Institute. Only compiled data is provided to the university.

Informed Consent

I understand that my participation in this survey is completely voluntary and may be discontinued at any time without penalty, prejudice, or loss of benefits. I will be completing a brief survey about my use of drugs and alcohol that will take approximately 20 minutes to complete. I understand that all of the information I provide is confidential and protected by a 9-digit number that will be provided only to me and may only be used by me to access my survey should I not complete it in a single sitting. Once the survey is completed, even the 9-digit number will not access the survey information. I understand that once I complete the survey, I will be entered into a drawing for four (4) $250 textbook scholarships.

This project has been reviewed by the Human Subjects Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Research Board at 601.266.6820. Any questions about the research should be directed to Michael Mitchell at 601.266.6028.
APPENDIX F

HUMAN SUBJECTS REVIEW COMMITTEE APPROVAL 2010

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board

HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE
NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the “Adverse Effect Report Form”.
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: R27062102
PROJECT TITLE: CORE Alcohol and Drug Survey
PROPOSED PROJECT DATES: 09/13/2010 to 09/27/2010
PROJECT TYPE: Previously Approved Project
PRINCIPAL INVESTIGATORS: Michael A. Mitchell
COLLEGE/DIVISION: College of Education & Psychology
DEPARTMENT: Educational Studies and Research
FUNDING AGENCY: USM Dean of Students Office
HSPRC COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 09/20/2010 to 09/19/2011

Lawrence A. Hosman, Ph.D.
HSPRC Chair

4-22-2010
Date
Dear Student,

You have been selected to complete a survey that will give a better understanding to the climate and culture of alcohol and other drugs at the University of Southern Mississippi. Your response is important and will help us to better understand the frequency and extent of alcohol and drug use on campus, perceptions about use on campus, and the problems related to use.

This survey will only take about 20 minutes to complete. It is confidential and anonymous. The results are compiled by an off-campus organization and there are no risks associated with completing the survey. If you are under the age of 18, do not complete this survey.

**The survey is available from now until October 29, 2010.**

After you complete the online survey, you will be eligible to win one of four (4) $100 textbook scholarships. The drawings will be held the week of November 1, 2010.

If you have questions about the survey, please feel free to contact me at mmitchell@usouthal.edu

**TO ACCESS THE SURVEY:** Go to http:www and use the 5-digit login code.

Thanks for your participation,

Mike Mitchell, Doctoral Student
University of Southern Mississippi
Human Subjects Review
Michael A. Mitchell

**Statement of Project Goals**

The goal of the administration of the CORE Drug and Alcohol survey on the campus of the University of Southern Mississippi is to develop a profile of drug and alcohol usage for the Southern Miss student body. The development of such a profile will create a reference point for university administrators as they program and plan to create educational opportunities for students surrounding drug and alcohol issues.

**Protocol**

A link to the CORE Drug and Alcohol Survey will be sent to the email addresses of all Hattiesburg campus Southern Miss students. Once the survey has been completed, the data will be compiled by the CORE Institute.

The number and age range of subjects is inclusive of all currently enrolled students at Southern Miss with email addresses in the university database. Subjects must be current Southern Miss students with at least one hour of coursework currently in progress. Those who are under the age of 18 will not be able to complete the online survey, due to parental consent requirements.

The online survey takes approximately 20 minutes to complete and may be completed from any computer which has access to the internet. The 23 question survey gathers self reported demographics, academic performance, drug and alcohol usage, and perceptions of drug and alcohol usage on campus.

**Benefits**

Participants who successfully complete the survey will be entered into a drawing for four (4) textbook scholarships in the amount of $100 each. Students will be assigned a unique 9-digit number once they decide to complete the survey. The drawings will be done by the CORE Institute. This is the only time that identifying information gathered in the process will be used.
Risks

There are no perceived risks of participation in the completion of this study. All completed surveys are maintained by the CORE Institute. Only compiled data is provided to the university.

Because the university will not use a tracking system to administer the survey, anonymity is assured. The CORE Institute’s dedicated server maintains a single identifier for the date which is assigned to the student’s survey at the time of login. This identifier is known only to the student by using Thawte encryption. The CORE Institute does not know or have access to the identifiers. The identifier is linked only to the data and not the student. The identifier allows the student to go back and complete the survey should they not be able to complete it in one sitting. Once the survey is completed it is locked and the identifier will no longer open the survey. Firewalls are used to protect the server. The server is protected from the public and the CORE Institute’s network.

Informed Consent

You have been selected to complete a survey that will give a better understanding to the climate and culture of alcohol and other drugs at the University of Southern Mississippi. Your response is important and will help us to better understand the frequency and extent of alcohol and drug use on campus, perceptions about use on campus, and the problems related to use. There are no risks associated with completing this survey.

I understand that my participation in this survey is completely voluntary and may be discontinued at any time without penalty, prejudice, or loss of benefits. Completion and submission of this survey implies my consent to participate. I understand that if I am under the age of 18, I need consent to complete this survey. If I am under the age of 18, I should not complete this survey.

I will be completing a brief survey about my use of drugs and alcohol that will take approximately 20 minutes to complete. I understand that all of the information I provide is confidential and protected by a 9-digit number that will be provided only to me and may only be used by me to access my survey should I not complete it in a single sitting. Once the survey is completed, even the 9-digit number will not access the survey information. I understand that once I complete the survey, I will be entered into a drawing for four (4) $100 textbook scholarships.

This project has been reviewed by the Human Subjects Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Research Board at 601.266.6820. Any questions about the research should be directed to Michael Mitchell at 251.680.7551.
REFERENCES


Retrieved from http://www.addictiontheoryapplication.com


CORE Institute (2010). *Validity and reliability core alcohol and drug long form*. 


