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**A COMPARISON OF FREQUENCY OF ALCOHOL USE AND NEGATIVE
CONSEQUENCES OF USE AMONG AUSTIN PEAY STATE UNIVERSITY
STUDENT ATHLETES AND NONATHLETES DURING 1995**

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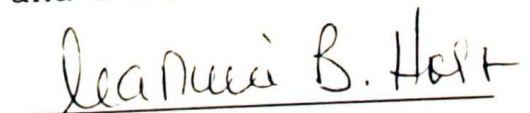

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A COMPARISON OF FREQUENCY OF ALCOHOL USE AND NEGATIVE
CONSEQUENCES OF USE AMONG AUSTIN PEAY STATE UNIVERSITY
STUDENT ATHLETES AND NONATHLETES DURING 1995

A Field Study
Presented to the
Graduate and Research Council of
Austin Peay State University

In Partial Fulfillment
of the Requirements for the Degree of
Education Specialist

by
Diane G. Berty
August, 1996

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ABSTRACT

This causal-comparative, or ex post facto, study was conducted to test if Austin Peay State University intercollegiate student athletes used alcohol and experienced negative consequences of use more frequently than their nonathlete peers. The results were obtained from the CORE Alcohol and Drug Surveys conducted during the Spring of 1995 and Fall of 1995 by the Office of LifeChoices at Austin Peay State University. One hundred and eighty-six intercollegiate student athlete respondents and 374 nonathlete respondents composed the working data base for this study. The data were analyzed using the chi square method and each hypothesis tested at the .05 level of significance. The results of this study indicate there is a difference in self-reported frequency of alcohol consumption and negative consequences of use between populations. Therefore, recommendations are made concerning the continuation of the institution's efforts to assist this high-risk population of intercollegiate student athletes.

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CHAPTER 1

Introduction

Alcohol use and abuse permeate our society and pose grave consequences to students in a university setting. Many within the university are concerned about alcohol use among intercollegiate student athletes. Student athletes have been identified as a collegiate population at risk for substance abuse, particularly alcohol abuse.

Austin Peay State University (APSU) competes at the National Collegiate Athletic Association (NCAA) Division I level in the Ohio Valley Conference (OVC), and sponsors men's teams in football (I-AA), basketball, baseball, golf, tennis, and cross country. Women's athletic programs include volleyball, basketball, tennis, cross country, softball, and indoor and outdoor track. The APSU athletic department currently serves approximately 200 student athletes.

Student athletes at APSU show drinking behaviors that indicate they are at risk. The Environmental Assessment Instrument (Szaley, 1990) administered during the Fall of 1995 by the Office of LifeChoices found that of all students surveyed, 39% reported they participated in sports a lot and

also reported binge drinking. This compares with 26% of students who self-reported never participating in sports or binge drinking.

Student athletes often feel more pressure to perform, both inside and outside the classroom, than the general student population. This pressure may lead some student athletes to alcohol and other drugs to cope.

Statement of the Problem

The problem investigated in this field study was the frequency of self-reported alcohol use among APSU intercollegiate student athletes versus traditional-age student nonathletes as well as the consequences of said use. This investigation attempted to determine the self-reported frequency of alcohol use of intercollegiate student athletes at APSU compared to students of traditional age who were not intercollegiate athletes. In addition, frequency of self-reported negative consequences of use experienced by these intercollegiate student athletes was compared with their nonathlete peers.

Hypotheses

The following null hypotheses were tested at the .05 significance level:

1. There will be no significant difference in self-reported frequency of alcohol consumption between APSU intercollegiate student athletes and traditional-age student nonathletes;

2. There will be no significant difference in the self-reported frequency with which APSU intercollegiate student athletes and traditional-age student nonathletes experienced the following negative consequences of use: (a) have had a hangover, (b) have performed poorly on a test or project, (c) have been in trouble with campus authorities, (d) have damaged property, (e) have gotten into an argument or fight, (f) have been nauseated or vomited, (g) have driven a car while under the influence, (h) have missed a class, (i) have been criticized, (j) have thought [I] might have a drinking/drugging problem, (k) have had a memory loss, (l) have done something [I] later regretted, (m) have been arrested for DWI/DUI, (n) have been taken advantage of sexually, (o) have taken advantage of another sexually, (p) have tried unsuccessfully to stop using, (q) have seriously thought about suicide, (r) have seriously tried to commit suicide, and (s) have been hurt or injured.

Definition of Terms

Alcohol -- Alcohol is a substance which affects physical and cognitive functioning and includes beer, wine, and hard liquors.

Alcohol abuse -- Alcohol abuse is a maladaptive pattern of use manifested by recurrent and significant adverse consequences related to the repeated use of alcohol (American Psychiatric Association, 1994).

Alcohol user -- An alcohol user is a person who intentionally takes beverage alcohol for the expressed purpose of altering some aspect of their experience.

Binge drinking -- Binge drinking is consumption of five or more drinks in one sitting over the past two weeks (CORE survey).

Drink -- A drink is a bottle of beer, a glass of wine, a wine cooler, a shot of liquor, or a mixed drink (CORE survey).

Frequency -- The percentage of students in a category who have a like characteristic (compared to the group as a whole).

Intercollegiate student athlete -- An intercollegiate student athlete is a student who meets the criteria established by the NCAA for eligibility.

Traditional-age -- A student between the ages of 17 and 24.

Importance of the Study

This field study was important for several reasons. While various studies have investigated the frequency of alcohol use among college and university students (Prendergast, 1994), few have examined the frequency of alcohol consumption and the consequences of use among intercollegiate student athletes. Such a study could be utilized by colleges and universities to identify ways to develop appropriate educational, prevention strategies for this population. In addition, results of this study may be used to implement safety-net strategies to facilitate continued academic and social success of student athletes. This study was important because it allowed the administration of APSU to compare self-reported frequency of alcohol consumption and negative consequences of use among intercollegiate student athletes and nonathletes to determine if there is a difference.

Limitations of the Study

The review of literature for this study was limited in that all information was obtained from the holdings in the APSU Woodward Library and the Student Development Center.

The study was limited by the fact that frequency of alcohol use and negative consequences of use were collected from self-report surveys for both the student athlete and nonathlete populations. Reliance upon self-report may have resulted in inconsistencies and inaccuracies in the data. These reports, although confidential, may represent conservative estimates by the students (Haberman, 1994).

CHAPTER 2

Review of the Literature

Scope of the Problem

"In high school, we drank to get high, to defy our parents and to pretend we were grown-up. In college, the purpose of drinking was to get drunk and so I got drunk" (Rabow, 1995). This statement reflects the way in which many college and university students view the campus alcohol culture.

The college experience is intended to impact its members. It serves the function of bringing together students of divergent backgrounds and beliefs in order to assure common interests and goals within a common campus community. While students may choose different fields of study and are introduced to a variety of campus groups to which they may belong, they are still tied to a common campus life. Students are socialized into a common college culture. As a part of this socialization process, students on campus confront the issue of alcohol consumption (Rabow, 1995).

Alcohol consumption and its impact on college students has been a topic of concern within the academic community

for many years. Straus and Bacon's 1953 study (as cited in Gehring and Geraci, 1989) was among the first to examine the nationwide impact of drinking in the college setting. Many academicians have studied the issue of collegiate alcohol use since 1953. Studies have examined frequency of use, quantity of use, patterns of use, characteristics of students who use, reasons cited for use, consequences of use, and many other related topics. Studies have examined single institutions, states, regions, and the nation. In addition, various demographic characteristics have shaped studies. These characteristics have included, but are not limited, to gender, race/ethnicity, age, residential status, religious affiliation, Greek affiliation, and athletic participation. Increasingly, studies have examined college drinking as a complex function of both person (e.g., attitudes, expectancies) and social/environmental (e.g., peer influence, drinking culture) variables (Scott and Ambrosion, 1994).

Although rates of illicit drug use in college populations have decreased since 1980, alcohol use has remained widespread (Eigen, 1991). Approximately 75% to 95% of the nation's college students consume alcohol (Williams

and Knox, 1987). Ninety percent of both college men and women consistently state they have used alcohol during the previous year (Gleason, 1994). Presley, Meilman, and Lysterla (1994) found that students surveyed nationwide consumed an average of five drinks per week. Since 1981, binge drinking has decreased among high school seniors and among noncollege young adults ages 19 to 22, but has remained constant for traditional-age college students (U.S. Department of Health & Human Services, 1991). The use of alcohol has become an established part of the college experience (Scott and Ambrose, 1994).

Alcohol affects every college student directly or indirectly (Wechsler, 1992). Student attitudes toward drinking shape the atmosphere on campus and alcohol often has a powerful influence on social events. Ideas, beliefs, and patterns of alcohol consumption are socially defined and enforced on college campuses. Alcohol is the major social *prop*, supported by the various social functions of college life (Rabow, 1995).

Historic Perspective

Alcohol consumption has been a part of the collegiate experience for many years as is evidenced by this

description of a student celebration commemorating George Washington's birthday at Harvard in 1800, "And each one to evince his spunk, vied with his neighbor to get drunk" (as cited in Gehring and Geraci, 1989). Alcohol has been a part of humankind's history since the Stone Age and a part of America's history since alcohol crossed the Atlantic as a staple on the Mayflower (Matthews, 1995).

Although alcohol use and abuse by students has been a part of the college and university culture since these institutions opened their doors, 1953 marked the first nationwide study of use. The landmark 1953 study by Straus and Bacon (as cited in Gehring and Geraci, 1989) of 15,000 college students nationwide found 79% of the men and 65% of the women drank alcoholic beverages. Since 1953, many studies have been conducted to determine the pervasiveness of alcohol consumption on America's college and university campuses.

Fisher (Sherwood, Ed., 1987, chap. 1) wrote that prior to the 1960s colleges and universities, although aware of the incidence of alcohol use, did little to address student alcohol abuse. During the 1960s and early 1970s concern grew regarding student use and abuse of alcohol. As an

outgrowth of these concerns, the National Institute on Alcohol Abuse and Alcoholism conducted the *University 50 + 12* project during the 1974-75 academic year. This study examined 50 higher education institutions, one from each state, and twelve minority and private institutions. The goals of this project were to gather information about student drinking as well as colleges' and universities' responses to drinking; to disseminate information regarding alcohol, its use, and its abuse; and to focus attention on the problem of student alcohol abuse. The findings of the *University 50 + 12* project, as summarized by Hewitt in 1977 (cited in Sherwood, Ed., chap. 1), included the fact that only 15% of the institutions in the study had any type of organized alcohol education program. Most of the institutions, according to the findings, recognized student alcohol abuse to be a serious problem which resulted in social and physical injury and property damage. Moderate to heavy drinking was reported to be common among college students as was the attitude or belief that getting drunk was acceptable and extremely common.

Since the *University 50 + 12* project, many within the academic community have sought to understand the dynamic

relationship between alcohol and the traditional-age college student. In 1984, a study was conducted to evaluate the attitudes of college administrators, campus leaders, and heavy student drinkers toward alcohol consumption (Miller Brewing Co.). This study revealed that students perceived drinking as a very positive social facilitator which was a natural part of growing up and of campus behavior while administrators were concerned about the visible and dangerous aspects of alcohol-related vandalism and accidents and realized little real support to affect change within their institutions. The authors concluded:

Drinking is an extremely important part of the college experience. It is the facilitator that accompanies every meaningful social event and is the sign of a person's well adjusted sociability. It is normal to drink. Those who don't drink are the weird ones. It is a way of establishing yourself socially, creating a niche for yourself in meeting people, which is the primary adjustment in coming from high school to college. It is a social learning experience in which teenagers learn how to handle alcohol, test their limits, and prepare for later roles. It is deeply tied

to their emerging masculinity in which they use alcohol to release tension, lose their inhibitions, and express pent-up sexual frustration in aggressiveness. Most drinking on campus is viewed as natural or healthy rebellion. Many students like "getting away with it" and drinking without parent control. They see drinking as exaggerated in the freshman and sophomore years and tapering off as they become more responsible and get older. For example, "When I declare a major," or "At some point you have to get it together." They expect their drinking to be even more responsible and reduced as they leave the university. This perception has little effect on their current behavior, which they extremely enjoy. Irresponsible drinking is seen primarily as drunkenness, not alcoholism. It is not a concern to students unless it directly affects them (p. 3).

Context of Use

Prendergast found (1994), in his review of substance use and abuse research literature since 1980, that alcohol is the drug of choice for college students and that heavy alcohol use and alcohol-related problems remain at

disturbingly high levels on campuses. In addition, evidence was found that many students continued to ignore the dangers of frequent, heavy alcohol use, and even more students considered abusive drinking patterns normative.

There are many unspoken rules guiding alcohol consumption on college and university campuses. Since drinking seems to be an integral part of student life on most campuses and parties are likely to be planned around the availability of alcohol, most students not only accept its presence but also believe it to be an essential part of their college experience (Gleason, 1994). Two-thirds of college students, when asked, prefer alcohol to be available at social events in and around campus (Presley, Meilman, Lysterla, 1995).

Rabow (1995) found most students reported feeling out of place if they refused to drink. There were tremendous pressures to *fit-in* with the established social patterns on campus in which alcohol played a large role. Failure to *fit-in* most often resulted in students being put down and resulted in feelings of isolation and inadequacy. Students also reported feeling an intense need to succeed socially as well as academically and drinking often determined their

acceptance into the social arena.

Alcohol is a social lubricant giving students an easy, traditional way of initiating conversation, bonding, and experiencing other forms of socialization. The social lives of students very frequently are centered around alcohol-related events. Burda and Vaux (1988) found that most bonding for college males with their male peers took place with alcoholic beverages, thus serving as the main purpose for drinking. Gleason (1994) reported females often drink to facilitate contact with others, to relax in social situations, and to support and be a part of the peer culture.

Consequences of Use

Alcohol use and abuse by college and university students is not without consequences. Alcohol abuse has been recognized as a leading threat to the academic, social, and physical well-being of college students (Gonzalez, 1991). Alcohol-related problems on campuses include a wide range of negative consequences. These consequences can include economic, health, social, and academic difficulties (Eigen, 1991).

Alcohol consumption, abuse, and its consequences have

been estimated to cost the United States \$86 billion annually (Eigen, 1991). Eigen cites the U.S. Department of Commerce finding that this figure is only slightly less money per year than is received by all American institutions of higher education from all sources.

The typical college student spends more money for alcoholic beverages than for textbooks. On a representative campus, the student body expenditure for alcohol is approximately \$446.00 per student annually (Eigen, 1991). The cost of alcohol-related vandalism and theft is difficult to measure. Presley, et al. (1995) found 15% of male college students self-reported having damaged property, pulled a fire alarm, etc. while under the influence. Anderson and Gadaletto (1991) estimated over two-thirds of campus vandalism nation-wide is alcohol-related.

The most serious health consequence of alcohol use is death. The most immediate death threat to the college student is an alcohol-related automobile crash (Eigen, 1991). According to the CORE Alcohol and Drug Survey (CORE survey) results (Presley, et al., 1994) approximately 36% of college students self-reported driving a car while under the influence while only 2% reported an arrest for driving while

intoxicated or driving under the influence.

Another cause of immediate death is the rapid ingestion of alcohol or alcohol poisoning (Eigen, 1991). In the last five years, the number of emergency room admissions for alcohol poisoning in campus communities has risen 15% (Matthews, 1995).

Approximately 35% of suicide victims have been drinking and two-thirds of those are legally intoxicated at the time of death reported Abel and Zeidenberg (1985). According to CORE survey results, approximately six percent of students have thought about or attempted to commit suicide under the influence. In addition, a recent national report concluded alcohol was involved in two-thirds of college student suicides (CASA, 1994).

Immediate alcohol-related death is substantially lower than eventual alcohol-related death for America's college and university students. Eigen, (1991) using figures from the U.S. Department of Health and Human Services, estimated between 240,000 and 360,000 of the approximately 12 million college students will eventually die as a result of alcohol abuse.

College students also are at risk for health

consequences other than death. Twenty-six percent of college students reported having experienced memory losses during the past year. Sixty percent of students reported they had experienced hangovers and 53% reported nausea and vomiting secondary to use in the last year. Fifteen percent indicated being hurt or injured. In addition, eight percent reported being taken advantage of sexually (Presley, et al., 1995).

Student alcohol consumption results in social consequences affecting the campus. A 1990 Carnegie Foundation study observed a close connection between alcohol abuse and campus crime. Petroff and Broek (as cited by Eigen, 1991) reported on the relationship between alcohol and campus crime at the University of Iowa in 1990 and found seven percent of the undergraduates had stolen something in the last year after drinking. The Campus Violence Prevention Center, a research institute at Towson State College, reported alcohol as a factor in up to 90% of violent campus crimes (as cited in Matthews, 1995).

Alcohol has been implicated in more than 40% of all academic problems and 28% of all dropouts (Matthews, 1995). Research indicates a correlation between alcohol consumption

and academic failure. This finding has been true for both males and females, but is especially significant for males. Students who consumed an average of three drinks per week had an overall A average; students who consumed four drinks per week, a B; students who consumed six drinks per week, a C; and, students who consumed 10+ drinks per week, a D or F. Twenty-seven percent of students self-reported missing a class as a result of use and 20% reported performing poorly on a test or project (Presley, et al, 1995).

Over seven percent of freshman classes each year become dropouts for alcohol-related reasons. This dropout has accounted for over 120,000 students each year, three times as many as are in Tennessee colleges and universities. An estimated \$33 billion in lifetime earnings have been lost for those alcohol-related dropouts and they have paid \$3.1 billion less in taxes over their lifetimes (Eigen, 1991).

Students under the age of 21, according to the CORE survey (Presley, et al, 1995) data, experienced the negative consequences of alcohol use more often than students over the age of 21. Younger students reported rates of vandalism, arguments and fights, criticism for substance use, and physical injury that were approximately

double those of the older students.

In a national survey of 140 campuses, Wechsler, Davenport, Dowdall, Moeykens, and Castillo (1994) found students responding to the survey who were binge drinkers (44%) experienced more negative consequences of use than their nonbinging peers. Among the more serious alcohol-related consequences, frequent binge drinkers were seven to 10 times more likely than the nonbinging drinkers to *not* use protection when having sex, to engage in unplanned sexual activity, to get into trouble with campus police, to damage property, to drive under the influence, or to get hurt or injured. Almost half of these frequent bingers had experienced five or more alcohol-related problems since the beginning of the school year in which the study took place.

At Risk Populations

All campus special-interest organizations or groups experience some degree of difficulty regarding alcohol, some more than others (Matthews, 1995). Populations at particular risk for alcohol abuse have been identified as traditional-age students, adult children of alcoholics, drug-addicted students, women, sexually active students, and student athletes (Rivinus, 1988). Collectively, the

population at risk for alcohol abuse is probably well over 50% of the student population according to Coughlin (1994).

Of particular concern for this author were traditional-age students and student athletes. Traditional-age students are at greater risk of alcohol abuse. Students 17 to 24 years of age are at greater risk of substance abuse, particularly alcohol, partly due to the matriculation process (Coughlin, 1994). Students entering college view the use of alcohol as a social rite of passage, despite its effects on cognitive and emotional development (Rivinus, 1988).

Leibsohn (1994), in reviewing studies of alcohol use in the transition from high school to college or work, found an increase in alcohol use as the high school student enters college as compared with students entering the work force. She found a variety of reasons for this difference, the most profound being significant changes in the social environment. College students are living on their own, usually for the first time, and a new sense of freedom from parental control may be experienced. There also are changes in peer groups who may influence alcohol use.

Expectations concerning alcohol consumption also have

been noted by Berkowitz and Perkins (1986) as contributing to traditional-age student abuse of alcohol. The researchers have shown perceptions of alcohol use on campus are greater than the actual usage levels, leading students to believe they should drink to the level of the perception in order to fit in.

Haberman (1994) also considered traditional-age college students as a high-risk population. He stated these students can be viewed as high-risk since they often neglect their own health needs and participate in risky behaviors.

Student athletes also have been identified as a collegiate population at risk for alcohol abuse. In 1984, the College of Human Medicine at Michigan State University was contracted by the NCAA to conduct a study of substance abuse by college athletes. The study found alcohol use among student athletes was rising (as cited in Overman and Terry, 1991).

According to researchers, student athletes often feel more pressure to perform both inside and outside the classroom than the general student population (Grossman and Gieck, 1993). In addition to striving to excel athletically, academically, and socially, athletes may

experience stress due to isolated living conditions and long hours spent practicing, training, and traveling (Pinkerton, Hinz, and Barrow, 1989). Athletes may use alcohol to cope with these stressors. Insecurity about identity and self-image, an intense fear of failure, fear of aggression, and peer pressure are other factors researchers have found which may contribute to an athlete's abuse of alcohol (Martin & Thrasher, 1989).

Student athletes have been found to have a more negative view of alcohol than nonathletes, but such an attitude was not found to produce drinking behaviors distinct from nonathletes (Overman & Terry, 1991). In addition, the uniqueness of the athletic experience subjects student athletes to a certain type of socialization. As Overman and Terry (1991) point out, these experiences are both negative and positive, with attitudes and behaviors related to alcohol use of particular concern.

The 1992-93 National Study of Substance Use and Abuse Habits of College Student-Athletes reported binge drinking had increased from 35% in 1985 to 47% in 1993 (NCAA, 1993). Wechsler, Dowdall, Davenport, and Castillo (1995) found those students who strongly valued athletics were more

likely to binge drink. The Towson State University Campus Violence Prevention Center, reported in 1994, found only one percent of nonathlete students who were heavy drinkers self-reported committing acquaintance rape, but five times as many student athletes admitted to this crime (as cited by Epstein, 1996).

Conclusion

Alcohol is the drug of choice on college campuses. Alcohol use and abuse permeates the college and university setting and poses serious consequences to students, especially student athletes. Forty-one percent of college students drink to get drunk versus 34% of their noncollege counterparts. Students spend more money on alcohol than the collective cost of operating campus libraries, scholarships, and fellowships in the United States -- \$4.2 billion annually. It is projected that an equal number of college students will die as a result of alcohol abuse as will obtain masters and doctoral degrees (Eigen, 1991).

CHAPTER 3

Methodology

As reported in the literature review, traditional-age students as well as intercollegiate student athletes have been identified as at risk for alcohol abuse. This research investigated the self-reported frequency rates of alcohol use among APSU intercollegiate student athletes versus traditional-age student nonathletes during the fall semester of the 1995-96 academic year and spring semester of 1994-95, respectively, using the CORE survey instrument.

Consequences of use were examined for both populations through data collection and analysis. A causal-comparative study using the chi square method of data analysis was conducted. The major questions investigated in this study were:

Is there a difference between the frequency in self-reported alcohol consumption by APSU intercollegiate student athletes and traditional-age student nonathletes? Is there a difference between the frequency in self-reported consequences of use reported by APSU intercollegiate student athletes and traditional-age student nonathletes?

The procedures and methods are described in this

chapter under the following topics: (1) null hypotheses; (2) description of subjects; and (3) research design and procedures.

Null Hypotheses

1. There will be no significant difference in self-reported frequency of alcohol consumption between APSU intercollegiate student athletes and traditional-age student nonathletes;
2. There will be no significant difference in the self-reported frequency with which APSU intercollegiate student athletes and traditional-age student nonathletes experienced the following negative consequences of use: (a) have had a hangover, (b) have performed poorly on a test or project, (c) have been in trouble with campus authorities, (d) have damaged property, (e) have gotten into an argument or fight, (f) have been nauseated or vomited, (g) have driven a car while under the influence, (h) have missed a class, (I) have been criticized, (j) have thought [I] might have a drinking/drugging problem, (k) have had a memory loss, (l) have done something [I] later regretted, (m) have been arrested for DWI/DUI, (n) have been taken advantage of

sexually, (o) have taken advantage of another sexually, (p) have tried unsuccessfully to stop using, (q) have seriously thought about suicide, (r) have seriously tried to commit suicide, and (s) have been hurt or injured.

Description of the Subjects

The study involved traditional-age students from the general campus population and intercollegiate student athletes enrolled at APSU, a state supported, liberal arts university located in Clarksville, Tennessee. The traditional-age students from the general campus population (Sample 1, N=374) were composed of 36.1% males and 63.9% females. The mean age was 20.64 years. For purposes of this study, students from the general campus population who were not within age ranges of 17 to 24 were excluded. Exclusion of these students provided comparable samples since most intercollegiate student athletes can be described as traditional-age. There was similar distribution of freshmen, sophomores, juniors, and seniors in the sample. Most students lived off campus (66.1%).

Sample 2, APSU intercollegiate student athletes (N=186), was composed of 72.8% males and 27.2% females. The mean age was 19.75 years. There was similar distribution of

freshmen, sophomores, juniors, and seniors in the sample. Most students lived on campus (63.1%).

Research Design and Procedures

Design

This study utilized a causal-comparative, or ex post facto, design. Students were divided into two groups -- intercollegiate student athlete and nonathlete. The data were analyzed using the chi square method, with a significance level of .05.

Procedures

Archival data obtained from the CORE survey (Appendix A) conducted by the Office of LifeChoices at APSU in the Spring semester (1994-95) and Fall semester (1995-96) were used in this study. This CORE survey instrument was made available by the Fund for the Improvement of Post-Secondary Education (FIPSE) funded grant program. The CORE survey instrument was specifically designed for use with a higher education population. Information concerning validity and reliability is found in Appendix B.

Administration of the surveys by the Office of LifeChoices to the general campus population took place in the Spring of 1995 (Sample 1). A stratified random sample

of APSU students was selected from Tuesday, Thursday classes meeting at 9:30 a.m. With the exception of one class, in which surveys were administered by LifeChoices staff, surveys were administered by the academic faculty. Faculty were provided with an informed consent and instructions for survey administration. Completed surveys were placed by the student in an envelope located some distance from the faculty member. The faculty member sealed the envelope before leaving the classroom and was responsible for contacting the LifeChoices Office for pick-up.

Participation was voluntary but students choosing not to complete the survey instrument were asked to remain in the classroom. This method of data collection allowed a high return rate.

Administration of the surveys by the Office of LifeChoices to APSU intercollegiate student athletes took place in the Fall of 1995 (Sample 2). Austin Peay State University was awarded a NCAA CHOICES grant during the 1995-96 academic year. As a part of this research and prevention grant, the Office of LifeChoices surveyed APSU intercollegiate athletes. Each student athlete was asked to complete the survey following their required annual

physical. Athletes completed the survey in an area removed from athletic training and coaching staffs. Completed surveys were returned to LifeChoices staff. Participation in the study was voluntary. This method of data collection allowed a high return rate.

Survey instruments were sent to the University of Minnesota for machine scoring with request for processing of the institution's raw data into a computerized statistical report. From data, the author obtained self-reported frequency of alcohol consumption of intercollegiate student athletes versus traditional-age student nonathletes. In addition, negative consequences of use were obtained for both populations. Data were requested in summarized statistical format with no identifying information, thereby assuring confidentiality of the respondents in Samples 1 and 2.

CORE survey topical areas analyzed to extract candidates for this study are identified as follows. For Sample 1, question two (respondent's age) was used in selecting data on traditional-age students. This question served in building the data base for Sample 1 and Sample 2. Question 17b asked respondents to indicate within the last

year how often they had used alcohol. The respondent data were used to determine frequency of alcohol consumption for the two samples. Question 14, which addressed binge drinking, also was examined. Question 21a-s, which asked respondents to indicate within the last year how often they had experienced various negative consequences due to their drinking or drug use, was used to determine frequency of negative consequences for the two samples.

A chi square test for independent groups was used to test the null hypotheses. This decision was based upon the fact that two groups were included and data were self-reported in what is considered to be categorical variables (Appendix A).

CHAPTER 4

Results

This chapter contains a summary of the data and provides a presentation of the methods used to examine the hypotheses. The data analysis consisted of statistical testing of the two null hypotheses. Appropriate data were collected and are provided in tables which show the results of each analysis.

Summary and Analysis of the Data

The data reflect the analysis of the frequency of alcohol consumption and negative consequences of use for intercollegiate student athletes as well as their nonathlete peers during the 1995-96 and 1994-95 academic years, respectively. Raw data were obtained through administration of the CORE survey for both populations.

As previously described, the analysis of data was conducted using the chi square method for each hypothesis. The findings of this study regarding the effect of APSU intercollegiate athletic participation on self-reported frequency of alcohol consumption report chi square = 32.65 (df = 8, $p < .00007$).

Eighty-seven percent of APSU intercollegiate student

athletes reported using alcohol within the last year as compared with 62.5% of nonathletes. Of athletes who reported consuming alcohol, 18.9% did so three times a week. This compared with only 7.1% of nonathletes. The findings of percentage alcohol use within the last year are reported in Table 4.1.

Prevalence of binge drinking for APSU intercollegiate student athletes and nonathletes also showed higher rates for athletes (41.4%) than nonathletes (25.3%). Of equal significance was the percentage of athletes who reported heavy bingeing (more than three bingeing episodes in the past two weeks). Athletes who reported heavy bingeing were 22% as compared with 8.1% of nonathletes. The findings of the percentage of binge drinking are reported in Table 4.2.

The findings for this study regarding the effect of APSU intercollegiate athletic participation on self-reported negative consequences of use are reported in Table 4.3. Question 21a-s, which addressed negative consequences, asked the respondents to relate how often they had experienced various consequences following their drinking *and/or* drug use.

Intercollegiate student athletes at APSU reported more

negative consequences of alcohol and other drug use than their nonathlete peers. Although not all consequences between groups were statistically significant, the percentage of all negative consequences reported by student athletes was higher than that reported by nonathletes. The percentage of students experiencing any negative consequences of use within the last year is reported in Table 4.4. Table 4.5 reports the percentage of students experiencing various consequences six or more times in the last year.

Approximately 68% of athletes surveyed reported having had a hangover as compared with 44% of nonathletes. Fourteen percent of surveyed athletes reported being in trouble with college authorities while only 4% of nonathletes reported the same. Approximately 13% more of surveyed student athletes than nonathletes reported getting into a fight or argument as a result of their use (68.5% vs. 81.9%). Fifty-two percent of surveyed athletes reported getting nauseated or vomiting during the last year as compared with 36% of nonathletes. Seventy-seven percent of surveyed nonathletes reported they had not driven a car under the influence; this compared with 63% of athletes.

Surveyed student athletes also reported having done something they later regretted more often than nonathletes (64.5% vs. 76.7%). Approximately 23% of surveyed athletes missed a class as compared with 19% of nonathletes. In addition, surveyed athletes reported having been taken advantage of sexually and taking advantage of another sexually more often than nonathletes (88.7% vs. 92.9%; 89.7% vs. 97.5%).

Summary of Results

Null Hypotheses

The first null hypothesis stated there will be no significant difference in self-reported frequency of alcohol consumption between APSU intercollegiate student athletes and traditional-age student nonathletes. The statistical analysis comparing the frequency of consumption yielded data that rejected this hypothesis. The second null hypothesis stated there will be no significant difference in the self-reported frequency with which APSU intercollegiate student athletes and traditional-age student nonathletes experienced specified negative consequences of use. This null hypothesis, although not rejected, was not supported by analysis of the data. As reported in Table 4.3, nine

consequences yielded data that rejected the hypothesis; two consequences yielded data which approached significance; and seven consequences yielded data which supported the hypothesis. The data supported the assumption of this author that self-reported frequency of alcohol use and negative consequences for the intercollegiate student athlete are greater than self-reported by traditional-age student nonathletes.

TABLE 4.1

Prevalence, In Percentages, of Alcohol Use
During the Previous 12 Months

Number of episodes	Athletes	Nonathletes
Never	13.0	28.5
Once a year	14.6	11.7
Six times a year	11.9	14.9
Once a month	7.6	8.4
Twice a month	14.1	11.1
Once a week	16.8	16.0
Three times a week	18.9	7.1
Five times a week	2.2	1.9
Every day	1.1	0.3

Table 4.2

Prevalence, In Percentages, of Binge Drinking
During the Previous 12 Months

Number of episodes	Athletes	Nonathletes
Never	58.6	74.7
Once a year	10.8	12.7
Twice	8.6	4.6
Three to five times	14.5	6.2
Six to nine times	3.2	1.6
Ten or more times	4.3	0.3

Table 4.3

Chi Square Analysis Results for
Negative Consequences of Use

Consequences of Use	Chi Square	Degrees of Freedom	Significance Level
<i>Had a hangover</i>	42.18	5	0.00000
Performed poorly on test	9.36	5	0.09554
<i>Been in trouble w/campus authorities</i>	31.04	5	0.00001
Damaged property	3.11	4	0.53908
<i>Got into argument or fight</i>	26.72	5	0.00006
<i>Got nauseated or vomited</i>	24.24	5	0.00030
<i>Driven a car under the influence</i>	15.89	5	0.00704
<i>Missed a class</i>	22.23	5	0.00045
Been criticized	4.68	5	0.45592
Thought had a drinking/drug problem	7.44	5	0.19018,
Had a memory loss	6.61	5	0.25146
<i>Done something later regretted</i>	14.52	5	0.01236
Been arrested for DWI/DUI	4.46	4	0.34724
<i>Taken advantage of sexually</i>	12.15	5	0.03273
<i>Taken advantage of another sexually</i>	19.21	4	0.00071
Tried unsuccessfully to stop using	3.46	4	0.62991
Seriously thought about suicide	9.13	5	0.10393
Seriously tried to commit suicide	7.93	4	0.09424
Been hurt or injured	2.45	5	0.78382

Note. Consequences in italics represent findings at the .05 level of confidence.

TABLE 4.4

Percentage of Students Experiencing Various Consequences
of Using Alcohol and Other Drugs in the Last Year

Consequence	Athlete	Nonathlete
Hangover	67.7	43.5
Performed poorly on test	22.0	13.4
Trouble with authorities	14.1	3.8
Damaged property	6.5	4.1
Argument or fight	21.5	9.1
Nauseated or vomited	51.9	25.9
Driven under influence	27.5	23.4
Missed a class	22.6	19.2
Been criticized	26.9	20.2
Thought I had a problem	5.4	4.5
Had memory loss	19.9	16.1
Did something I later regretted	35.5	23.3
Arrested for DWI, DUI	1.6	0.8
Taken advantage of sexually	11.3	7.1
Taken advantage of another sexually	10.3	2.5
Tried unsuccessfully to stop using	3.2	2.5
Thought about suicide	4.3	1.1
Tried suicide	2.6	0.5
Been hurt or injured	9.1	6.3

TABLE 4.5

Percentage of Students Experiencing
Various Consequences of
Using Alcohol and Other Drugs
Six or More Times in the Last Year

Consequence	Athlete	Nonathlete
Hangover	25.2	10.6
Performed poorly on test	4.3	1.6
Trouble with authorities	1.0	0.3
Damaged property	0.0	0.3
Argument or fight	2.7	1.6
Nauseated or vomited	10.4	3.0
Driven under influence	11.4	4.9
Missed a class	8.7	1.9
Been crudest	5.3	3.2
Thought I had a problem	0.5	.05
Had memory loss	4.4	1.4
Did something I later regretted	5.9	1.6
Arrested for DWI, DUI	0.0	0.3
Taken advantage of sexually	2.7	0.5
Advantage of another sexually	1.6	0.5
Tried unsuccessfully to stop using	0.0	0.6
Thought about suicide	0.5	0.6
Tried suicide	1.1	0.5
Been hurt or injured	1.6	0.6

CHAPTER 5

Discussion

Alcohol is the drug of choice for college and university students in America as cited by many authors in the literature review. Studies and surveys available provide ample evidence to support that approximately 75% to 95% of the nation's college and university students will consume alcohol. National trends show a high use and abuse rate of alcohol by college and university students. With little information available on consumption of alcohol and resulting negative consequences for intercollegiate student athletes, the author chose to analysis data comparing this population to their traditional-age peers.

This study was designed to determine if there was a difference in the self-reported frequency of alcohol consumed and negative consequences experienced by APSU intercollegiate student athletes versus traditional-age APSU student nonathletes. Since chi square was significant for the frequency of alcohol consumed this study does not support the null hypothesis. Furthermore, 87% of surveyed intercollegiate student athletes reported consuming alcohol within the last year as compared with only 62.5% of student

nonathletes. Regarding negative consequences of use experienced by both surveyed populations, the majority of chi squares were significant. Therefore this study does not support the null hypothesis.

As expected, based on the literature review and the author's experience at APSU, the results of this study indicated APSU does have college students -- both intercollegiate athletes and traditional-age nonathletes -- who consume alcohol. In addition, the results of this study showed binge drinking rates of 41.4% for intercollegiate student athletes and 25.3% for traditional-age student nonathletes. This study showed significant differences in frequency of alcohol use and binge drinking by APSU intercollegiate student athletes as compared with traditional-age student nonathletes. Based on the literature review and this author's experience APSU intercollegiate student athletes experience negative consequences of use more often and with greater frequency than traditional-age student nonathletes.

It should be noted that demographic differences in the samples of athletes and nonathletes may have affected the outcome of this study. Sample 1 was comprised of 72% males

as compared to 36% males in Sample 2. Many studies have reported that male consume alcohol more frequently and tend to suffer more resulting negative consequences (Prendergast, 1994). In addition, more athletes (Sample 1) lived on campus (63%) than did nonathletes (34%). A study conducted by Dickson in 1994 revealed that living on campus at APSU corresponded to increased levels of alcohol consumption.

The results of this study should be given consideration by this institution in its efforts to assist collegiate student athletes and traditional-age student nonathletes in the pursuit of their college education. It is this author's opinion that this study will be beneficial, when combined with other studies, to support the continuation of the comprehensive alcohol and other drug prevention education program at APSU.

In addition, this study provides support for the continuation of alcohol education prevention efforts for APSU intercollegiate student athletes begun in the 1995-96 academic year through the NCAA CHOICES grant. Furthermore, it is suggested the information in this study immediately be incorporated into the decision-making process for current programming offered by the institution, specifically the

Student Development Center and Athletic Department.

Additional studies yielding comparisons of frequency of alcohol consumption of male versus female student athletes and their traditional-age peers should be explored. Residential status of these populations also should be analyzed to determine significance. Of interest to this author would be the analysis of data of alcohol consumption alone and resulting negative consequences. The findings outlined in this study represent patterns of alcohol consumption for both populations which should be of concern to the APSU community as well as other colleges and universities. Alcohol abuse results in a disruption of the educational process and negatively impacts the health status of APSU students. Of particular concern is the impact frequency of alcohol consumption has on the intercollegiate student athlete's ability to succeed at APSU and beyond.

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APPENDICES

APPENDIX A

The CORE Alcohol and Drug Survey

Core Alcohol and Drug Survey

FIPSE Drug Prevention Grantee Instrument

Form 191

For use by two- and four-year institutions

Processed by UCS, Office of Measurement Services
University of Minnesota
2520 Broadway Drive - Room 130
St. Paul, MN 55113

Please use a number 2 pencil.

For additional use:

A	0	1	2	3	4	5	6	7	8	9
B	0	1	2	3	4	5	6	7	8	9
C	0	1	2	3	4	5	6	7	8	9
D	0	1	2	3	4	5	6	7	8	9
E	0	1	2	3	4	5	6	7	8	9

1. Classification:

- Freshman ☐
Sophomore ☐
Junior ☐
Senior ☐
Grad/professional ☐
Not seeking a degree ☐
Other ☐

2. Age:

0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

3. Ethnic origin:

- American Indian ☐
Alaskan Native ☐
Hispanic ☐
Asian/Pacific Islander ☐
White (non-Hispanic) ☐
Black (non-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. Are you working?

- Yes full-time ☐
Yes part-time ☐
No ☐

9. Approximate cumulative grade average: (choose one)

- A+ ☐ A ☐ A- ☐ B+ ☐ B ☐ B- ☐ C+ ☐ C ☐ C- ☐ D+ ☐ D ☐ D- ☐ F ☐

10. 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 ☐

- With regard to drugs? ☐
With regard to alcohol? ☐

8. Living arrangements

A. Where: (mark best answer)

- House/apartment/etc ☐
Residence hall ☐
Approved housing ☐
Fraternity or sorority ☐
Other ☐

B. With whom:

(mark all that apply)

- With roommate(s) ☐
Alone ☐
With parent(s) ☐
With spouse ☐
With children ☐
Other ☐

11. Student status:

- Full-time (12+ credits) ☐
Part-time (1-11 credits) ☐

13. Place of permanent residence:

- In-state ☐
USA, but out of state ☐
Country other than USA ☐

12. Campus situation on alcohol and drugs:

- a. Does your campus have drug and alcohol policies? ☐ yes ☐ no ☐ don't know
b. If so, are they enforced? ☐
c. Does your campus have a drug and alcohol prevention program? ☐
d. Do you believe your campus is concerned about the prevention of drug and alcohol use? ☐
e. Are you actively involved in efforts to prevent drug and alcohol use problems on your campus? ☐

14. Think back over the last two weeks. How many times have you had five or more drinks* at a sitting?

- None ☐
Once ☐
Twice ☐
3 to 5 times ☐
6 to 9 times ☐
10 or more times ☐

15. Average # of drinks* you consume a week

0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

(If less than 10, code answer as 01, 02, etc.)

16. At what age did you first use... (mark one for each line)

- | | Under 10 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26+ |
|-------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| a. Tobacco (smoke, chew, snuff) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| b. Alcohol (beer, wine, liquor)* | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| c. Marijuana (pot, hash, hash oil) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| d. Cocaine (crack, rock, freebase) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| e. Amphetamines (diet pills, speed) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| f. Sedatives (downers, ludes) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| g. Hallucinogens (LSD, PCP) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| h. Opiates (heroin, smack, horse) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| i. Inhalants (glue, solvents, gas) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| j. Designer drugs (ecstasy, MDMA) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| k. Steroids | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| l. Other illegal drugs | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

*Other than a few sips

*A drink is a bottle of beer, a glass of wine, a wine cooler, a shot glass of liquor, or a mixed drink.

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

Never used
Once/year
6 times/year
Twice/month
Once/month
3 times/week
5 times/week
Every day

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

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

Never used
Once/year
6 times/year
Twice/month
Once/month
3 times/week
5 times/week
Every day

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

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

Never used
On campus events
Residence hall
Bar/restaurant
Frat/sorority
Where you live
Private parties
In a car
Other

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

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

- ☐ Mother
- ☐ Brothers/sisters
- ☐ Spouse
- ☐ Father
- ☐ Mother's parents
- ☐ Children
- ☐ Stepmother
- ☐ Father's parents
- ☐ None
- ☐ Stepfather
- ☐ Aunts/uncles

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

0 days
1-2 days
3-5 days
6-9 days
10-19 days
20-29 days
All 30 days

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

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)

Never
Once
Twice
3-5 times
6-9 times
10 or more times

- 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 a 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

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:

- ☐ Don't volunteer, or less than 1 hour
 - ☐ 10-15 hours
 - ☐ 1-4 hours
 - ☐ 16 or more hours
 - ☐ 5-9 hours
- Principal volunteer activity is:

APPENDIX B

The CORE Alcohol and Drug Survey:

Validity and Reliability

Developers of the CORE Alcohol and Drug Survey have stated the following:

The CORE Alcohol and Drug Survey was developed using APA standards for test development in order to insure that it is a valid and reliable instrument. The CORE Institute continuously examines the psychometric properties of the CORE Alcohol and Drug Survey for the sake of obtaining the most accurate data possible and in order to provide users with the best possible survey instruments (p. 119).

Content-Related Validity

To establish content-related validity for the instrument, existing instruments and literature were reviewed to ensure that major aspects, consequences, and types of alcohol and drug use were adequately covered by items on the survey. A panel then reviewed each item to ensure construction of an instrument that sampled the domains of interest. The inter-rater agreement threshold

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.

Test-Retest Reliability

The measures employed in looking at the CORE survey include the Spearman rank correlation coefficient and the phi correlation coefficient. The data indicate that, overall, the CORE survey is a stable, reliable instrument.

Item Reliability

The CORE survey was designed to describe, by self-report, behaviors and perceptions of alcohol and drug use on campuses. Due to the scope and varied intended purposes of these questions, analysis of reliability was performed for the items themselves. Cronbach alpha and item-to-total-test correlations were performed on questions 16, 17, 18, and 20 of the survey. The corrected item-to-total-test correlations and Cronbach alpha scores for each question analyzed meet the criteria established by Henryson of reliability (.3 - .7) for inclusion in a survey.