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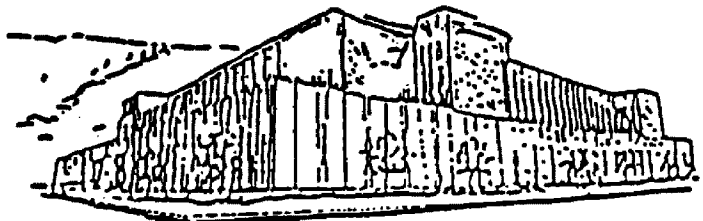
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HEALTH RISK BEHAVIORS
ON THE UNIVERSITY OF MONTANA CAMPUS
SPRING SEMESTER 1996

by

Laurie Sorber

B.A. University of Montana, 1992

Presented in partial fulfillment of the requirements

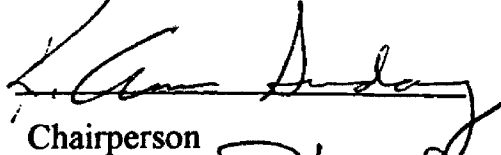
for the degree of

Master of Arts

The University of Montana

1999

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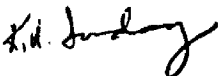
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Health Risk Behaviors Among Undergraduates on the University of Montana Campus.

Committee Chair: K. Ann Sondag 

The purpose of this project was to determine the prevalence of health risk behaviors existing among undergraduates on the University of Montana campus during the Spring semester 1996. Six behaviors were highlighted, and frequencies were segmented by gender, class level and place of residence. The UM sample population was then compared to national data gathered by the Centers for Disease Control for those six behaviors. The six behaviors were binge drinking, cigarette use, condom use, marijuana use, forced sexual intercourse and the use of laxatives or vomiting to lose or keep from gaining weight. Subjects were selected by a stratified random sample and telephoned and asked to participate in the study. Those agreeing to participate came to the Student Health Service to fill out a survey. Two hundred seventy-two surveys were completed. The average student participating in the study was a white non-Hispanic student approximately 20.6 years old. Female participants outnumbered male participants by only 14. Most participants were single, and 13.2 reported membership in a Greek organization.

According to survey results, UM students put themselves at risk for developing and maintaining negative lifestyle behaviors at a rate consistent with students nationwide, with the exception of marijuana use, where UM students reported higher rates of usage. Students most likely to engage in binge drinking tended to be male, Freshmen and Juniors, living in dorms and Greek houses. Those most likely to use tobacco were of both genders, Freshmen, living in dorms. Inconsistent condom use was reported by both genders, all class levels and all places of residence. Those experiencing forced sexual intercourse were mostly female, Juniors and Seniors, living off campus. The use of vomiting or taking laxatives to lose or keep from gaining weight was practiced by females, mostly Sophomores and Seniors, living in dorms. Marijuana users were mostly male, all class levels, living in dorms and off campus.

To track trends in health behaviors among students on the University of Montana campus, this study suggests repetition of the survey every two years. Increasing sample size may also contribute to a more accurate overview of health risk behaviors.

ACKNOWLEDGEMENTS

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CHAPTER I

INTRODUCTION

The college years mark a period of exploration, adjustment, and change as the student makes the transition from youth to adulthood within the academic arena. These years provide an opportunity for young students to assume adult roles and responsibilities, while simultaneously expanding educational, social and vocational interests (Prendergast, 1994). Students typically experience a sense of increased autonomy as they distance themselves from parental supervision (Jones, Harel & Levinson, 1992), and take on the responsibility of making decisions for themselves.

These years also mark a time when behaviors developed by the young adult may become permanent habits. Behavioral patterns regarding alcohol and drug use, safety practices, dietary choices, sexual behavior and physical activity all may continue into adulthood (Healthy People 2000).

According to the U.S. Department of Health and Human Services (1992), the two major health problems of young adults are injuries and violence that lead to death and disability before age 25, and the development of lifestyle habits that contribute to poor health later in life.

College students are at a crossroads in terms of lifestyle development. While the college environment lends itself to an increased sense of freedom for young adults, it also is a somewhat controlled environment where learning about health can be facilitated. Colleges and universities are key environments for this learning to take place.

PURPOSE OF STUDY

The purpose of this study was to determine the prevalence of health risk behaviors that exist among traditionally aged undergraduates on the University of Montana campus.

RESEARCH QUESTIONS

The following questions were investigated:

1) What were the frequencies of the following behaviors among the four class levels on the University of Montana campus:

- a) binge drinking
- b) tobacco use
- c) condom use
- d) unwanted sexual activity
- e) use of purging methods to control weight
- f) use of marijuana

2) What were the frequencies of the following behaviors for both genders on the University of Montana campus in the following areas:

- a) binge drinking
- b) tobacco use
- c) condom use
- d) unwanted sexual activity

e) use of purging methods to control weight

f) use of marijuana

3) What were the frequencies of the following behaviors by place of residence among this population:

a) binge drinking

b) tobacco use

c) condom use

d) unwanted sexual activity

e) use of purging methods to control weight

f) use of marijuana

4) How did the UM sample population compare to the NCHRBS sample population on the following behaviors?

a) binge drinking

b) tobacco use

c) condom use

d) unwanted sexual activity

e) use of purging methods to control weight

f) use of marijuana

SIGNIFICANCE OF STUDY

At the time of this study, no available information specific to the University of Montana regarding the prevalence of health risk behavior was available. Use of the National College Health Risk Behavior Survey (NCHRBS) provided this information which could be used as a needs assessment to help modify existing health education programming and develop new programming to meet the needs of the UM undergraduate population. Differences among class levels, between genders and place of residence in regard to specific behaviors were investigated, in order to provide information that could be used to direct health education programming to appropriate sub-populations.

LIMITATIONS

It was assumed that subjects involved in this study would understand and interpret the survey instrument correctly, as well as answer survey questions honestly. It was also assumed that the sample population was representative of the University campus.

DELIMITATIONS

For the purposes of this study, the population under investigation consisted of undergraduate students ages 18 - 25, enrolled on the main campus of the University of Montana during the Spring 1996 semester.

DEFINITION OF TERMS

AIDS: Acquired Immunodeficiency Syndrome

Alcohol use: Consumption of alcohol (beer, wine, wine coolers or liquor) other than drinking a few sips for religious purposes (Centers for Disease Control, 1995).

Binge drinking: For males, consuming five or more drinks in one sitting, and for females, consuming four or more in one sitting (Harvard School of Public Health, 1993)

Drug use: Ingestion of any illegal drug, including non-prescribed steroid shots or pills (Centers for Disease Control, 1995)

Health risk behavior: Any behavior that contributes to the leading causes of morbidity and mortality in the U.S. (Centers for Disease Control, 1995)

HIV: Human immunodeficiency disease

Physical activity: Exercise or sport activities lasting at least 20 minutes that make one sweat and breathe hard (Centers for Disease Control, 1995)

Suicide: Any action taken to end one's life (Centers for Disease Control, 1995)

Sexual intercourse: Vaginal or anal intercourse, as well as oral/genital sex (Centers for Disease Control, 1995)

Tobacco use: Ingesting any form of tobacco, whether through smoking cigarettes or chewing snuff (Centers for Disease Control, 1995)

CHAPTER II

REVIEW OF LITERATURE

The Centers for Disease Control has determined six areas of behavior that contribute to the leading causes of morbidity and mortality in the U.S., including: alcohol and other drug use, sexual behaviors that lead to unintended pregnancy, sexually transmitted diseases, and AIDS, tobacco use, behaviors leading to unintentional and intentional injury, eating behaviors and physical inactivity. Following is a review of literature related to these areas as they pertain to college students.

ALCOHOL

Alcohol use on the college campus is a long standing tradition. Perhaps in no other segment of American society is alcohol use and abuse more accepted as normal behavior. Alcoholic beverages are present in many facets of student life; they can be found at Greek parties, athletic events, in the residence halls and a variety of other places and situations where college students spend their leisure time. For some students, drinking alcohol is a rite of passage. For others, alcohol use in college marks the beginning of long term alcohol dependence resulting in acute problems later in life (Prendergast, 1994).

Many college administrators cite alcohol abuse as one of the top health issues on their campuses, and believe that alcohol related problems are on the rise (Hanson & Engs, 1992). In an unpublished report depicting results of the 1991 College Alcohol Survey, Anderson and Gadaletto found that rates of alcohol related problems such as violations of campus policy, violent behaviors, physical injury, emotional difficulty, lack of academic success and student attrition all

increased in frequency from 1981 to 1985 (Hanson & Engs, 1995). Hanson and Engs (1992) also report increases in alcohol related problems such as hangovers, drunk driving, academic difficulty, legal problems, and regretted actions.

Most researchers estimate that the percentage of college students using alcohol falls between 85% and 90% (Johnston et al, 1992, Wiggins & Wiggins, 1987, Meilman, Stone, Gaylor & Turco, 1990), while another quotes a lower rate of 74.7% (Reis & Chamberlain, 1994). Regardless of the exact figure, there are specific areas that warrant further investigation: episodes of binge drinking, the narrowing gender gap in terms of alcohol consumption and resulting consequences, and class differences in drinking patterns.

Perhaps the most accurate glimpse into the problem of binge drinking patterns among college students is presented by Weschler, Dowdall, Davenport and DeJong (1993) in the Harvard Alcohol Study. This national study gathered data on the binge drinking habits of 79,600 students from 140 colleges and universities. Binge drinking is defined as consuming five or more drinks in one sitting (males) and four or more drinks in one sitting (females). Primary results of the study are as follows:

- 44% of all U.S. students surveyed participated in binge drinking in the two weeks prior to the survey.
- Among male students, 50% were binge drinkers. Among female students, 39% were binge drinkers.

- Binge drinking practices varied from 1% of students at one institution to 70% at another.
- Binge drinkers experienced more alcohol related problems since the start of the school year than their non-binge drinking counterparts.
- Among frequent binge drinkers (those that had engaged in binge drinking behaviors three or more times in the past two weeks), 70% of the men and 55% of the women had been intoxicated in the previous month.
- Students that engaged in binge drinking in high school were three times more likely to be binge drinkers in college.
- Fraternity and sorority residents were four times more likely to be binge drinkers than their non-Greek counterparts.

Further evidence shows that female drinkers are closing the gender gap on heavy drinking (Engs & Hanson, 1990, Weschler & Issac, 1992, Berkowitz & Perkins, 1985, Saltz & Eland, 1986). While male students drink more frequently, consume more per occasion, and experience more negative consequences, female students experience additional negative consequences that perhaps reinforce the cycle of alcohol consumption (Berkowitz & Perkins, 1987, Stewart, 1986, Gleason, 1994). These consequences include depression, damaged interpersonal relationships, and increased risk of sexual victimization, which contributes to the use of alcohol as a coping mechanism following the abuse (Stewart, 1986).

Studies focusing on differences in consumption among class levels have produced varying

results. Friend and Koushki (1984) report that among freshmen in four upstate New York colleges, first semester students exhibited lower substance use rates than students in other class levels, but by the following spring semester, no differences existed. This led them to believe that a rapid increase in substance abuse takes place following entrance into college. In 1990, Maney found that among 2795 college students, juniors and seniors drank the greatest amounts of alcohol, with the heaviest drinkers being senior males. Contrary to these studies, Baer, Kivlahan and Marlatt (1995) found a substantial increase in rates of drinking occurred during the transition from highschool to the first year in college, but then declined steadily, perhaps because students begin to assume more responsibility and take on more traditionally adult roles.

Regardless of gender and class differences in drinking patterns, alcohol remains a heavily abused drug on college campuses. The problems associated with high levels of alcohol consumption pose serious consequences to college students, and deserve further investigation.

SEXUAL BEHAVIORS LEADING TO UNINTENDED PREGNANCY, SEXUALLY TRANSMITTED DISEASES AND AIDS

High risk sexual behavior on college campuses is well documented. Studies show that a significant proportion of the college population engages in unprotected sex with multiple partners (Jaccard, Levinson & Beamer, 1995, Baldwin & Baldwin, 1988, Rindskopf, 1981, Butcher, Manning, & O'Neal, 1991.) For many students, these years mark a period of sexual exploration, sexual permissiveness and a false sense of immunity to sexually transmitted diseases (STD's) and HIV infection (Sawyer & Moss, 1993, Jaccard et al, 1995, Simon, 1993, Wright, Watts &

Garrison, 1993). According to Carroll (1988), approximately three quarters of the college population is sexually active. These students will average two partners a year, and almost half will have six or more partners before marriage (Delmater & MacCorquodale, 1979, Baldwin & Baldwin, 1988, Carroll, 1988). As a result of this high risk behavior, rates of STD's are high. Estimated cases of chlamydia among college students range from 5% to 20%, clinic visits regarding genital warts have increased from 50,000 to 300,000 over the course of thirty years, and visits regarding genital herpes have increased from 15,000 to 125,000 in the same time span (Estrin, 1988, McCormack, Rosner, McComb, Becker, Stone & Cates, 1986). It is estimated that HIV infection affects one in five hundred college students (Jaccard et al, 1995, Butcher et al, 1991).

These statistics are troubling to college personnel. Because college students represent a well-educated population with ready access to health information, it is easily assumed that preventive behaviors would prevail in relation to sexual behavior. However, this assumption is questionable. Many researchers are finding that a high level of knowledge concerning the consequences of high risk sexual behavior including STD and HIV transmission and unintended pregnancy does not guarantee preventive behavior, such as abstinence and regular condom use (Baldwin & Baldwin, 1988, CDC, 1990, Stunin & Hingson, 1987, Freimuth, Edgar & Hammond, 1987). Consider this conversation between a college couple and Simon (1993):

I recall talking to a couple who were using oral contraceptives for pregnancy prevention but were not using condoms for disease protection. I asked them where they

saw themselves in terms of risk for HIV transmission: low, medium or high. They both answered that they were at low risk. I asked them how many partners they had had. The male student answered "A dozen or so", and the female student answered "Seventeen".

In his study of heterosexual college students on a northeast campus, Carroll (1988) found that concern about HIV infection facilitated sexual behavior change in 40% of his sample. The reported change, however, was not the desired result of increased condom use, but increased partner selectivity. Baffi, Schroeder, Redican and McCluskey (1989) found that most males listed their primary reason for using condoms to prevent pregnancy, but gave little thought to STD and HIV prevention.

Perhaps the most influential factor involved in high risk sexual behavior is the use of alcohol and other drugs. Frequently used to facilitate sexual encounters, alcohol and drug use is related to a failure to use condoms (Robertson & Plant, 1988, Hingson, Strunin, Berlin & Heeren, 1990, Stall, McKusick, Wiley, Coates & Ostrow, 1986), which in turn contributes to unintended pregnancies, the spread of STD's and HIV infection (Meilman, 1993, Simon, 1993, Wright et al, 1993, Johnston, O'Malley & Bachman, 1988). Seigel (1986) states that alcohol and other drugs "may be co-factors in the acquisition, development, worsening and transmission of HIV infection".

This picture is confirmed by the results of two studies. At the College of William and Mary, a sample of two hundred fifty nine students reported that approximately 35% had engaged in alcohol induced sexual activity since coming to school, and that most had abandoned safe sex

techniques at least once while under the influence (Meilman, 1993). At Tulane, 47% of the men and 57% of the women reported having sex from one to five times due to intoxication. Only 17% of the males and 21% of the females reported condom use (Butcher et al, 1991).

Sexual experimentation has been and will continue to be a part of the college experience for many students. As previously noted, behaviors contributing to high rates of sexually transmitted diseases, risk for HIV contraction and pregnancy occur regularly on the college campus. Any or all of the conditions resulting from high risk sexual behavior may lead to negative and life long consequences for the affected individual.

OTHER DRUG USE

While a limited amount of literature exists concerning illicit drug use among college students, it has been determined by many researchers that overall rates of use have been in decline since 1980 (Prendergast, Johnston, O'Malley & Bachman, 1992). Johnston et al currently provide the clearest picture of collegiate drug use in their ongoing study Monitoring the Future: A Continuing Study of the Lifestyles and Values of Youth. Among the college student population, combined usage rates of any illicit drug fell from 33% to 29% from 1990 to 1991. Rates of usage in 1991 among individual drugs are as follows:

- Crack cocaine - Usage rate is .5% of the college population, down from the 1987 rate of 2%.
- Cocaine - Steady decline is reported. Rates dropped from 5.6% to 3.6%.
- Marijuana - Rates declined 3% from 1990, with the 1991 rate being 27%

- **Stimulants** - Since 1982, stimulant use fell from 21% to 4%.
- **Over-the-counter "stay awake pills"** - Prevalence is up from 1982 among the 19 -22 age group, with 1991 levels at 21%.
- **LSD** - An increase from 1989 (3.4%) to 1991 (5.1%) is reported.
- **PCP** - Use of this drug declined dramatically in the 19 - 22 age group, with rates at .2%.
- **Heroin** - Rates among college students have remained low, from 1% to .2%.
- **Tranquilizers** - 1991 rate for college students is 2.4%
- **Barbiturates** - 1991 rate among college students is 1.2%.
- **MDMA (ecstasy)** - 1991 rate of use among college students is .9%.
- **Ice** - Small percentages were reported. According to Johnston et al, ice is primarily used in the non-college population of 19 - 22 year olds.

Gender differences in usage exist within the college population. Johnston et al (1992) report that males are more likely to use most illicit drugs, with main differences appearing in frequency of use.

Drug use by college students poses serious consequences. Besides putting themselves at risk for legal action, students that use illegal drugs risk impaired academic performance, as well as impaired personal relationships.

TOBACCO USE

Use of tobacco has been demonstrated to be a major risk factor in relation to certain forms of cancer, heart disease and lung disease (U.S. Department of Health and Human Services, 1987).

Although tobacco has received an inordinate amount of negative publicity over the years, tobacco use among teens and women is on the rise (Charney, 1993). Of particular interest to college administrators is the association of smoking to impaired academic performance, and the use of alcohol and other illegal drugs (Johnston et al, 1992). Smokeless tobacco is associated with the use of other drugs as well (Ary, Lichtenstein, & Severson, 1987, Gray, 1993), and is known to contribute to ill health, including oral cancer, dental caries, tooth abrasion, periodontis, and leukoplakia (Glover, Laflin, Flannery, & Albritton, 1989). In addition, the nicotine in smokeless tobacco is similar to the nicotine found in cigarettes, and has similar adverse potential.

Among college students, rates of smoking have remained relatively constant since 1991 at 23% (Johnston et al, 1992). In terms of gender differences, college females are more likely to smoke than their male counterparts at lighter levels of use (Johnston et al, 1992).

Despite extensive warnings and educational efforts to reduce rates of smoking, tobacco use remains a problem within the U.S. population. College students are no exception.

BEHAVIORS LEADING TO INTENTIONAL AND UNINTENTIONAL INJURY

EFFECTS OF VIOLENCE ON INTENTIONAL INJURY

In 1985, the U.S. Public Health Service designated violence as one of the biggest public health problems contributing to death and disability in the U.S. (Healthy People 2000, 1992).

College campuses are not immune to this phenomena. The Task Force on Campus Violence and Human Dignity reported that "campuses everywhere are experiencing dramatic increases in visible manifestations of bigotry and prejudice, violence in relationships, and intolerance to difference" (1991). Additionally, a female student's chance of experiencing sexual assault is 25% (Bohmer & Parrot, 1993).

Alcohol and drug use contributes to these rates of violence. Many researchers have concluded that substance use significantly increases the prevalence of fighting, suicide, homicide, accidental death, as well as disability, robbery, rape and assault among adolescents (Valois, 1986, Johnston et al, Kandel, 1982).

BEHAVIORS LEADING TO UNINTENTIONAL INJURY

Typical behaviors leading to unintentional injury among college students include inconsistent usage of seat belts and bicycle helmets. Driving under the influence of alcohol or riding with an individual who has been drinking alcohol pose potential injury as well.

Seat Belt Usage

Despite the link of seat belt usage to reduced rates of automobile related fatalities, usage remains inconsistent (Clark, 1993). According to Clark (1993), factors influencing both attitudes and actual use of seat belts involve socioeconomic and educational levels, as well as age - various studies have found that those that are older, more educated and in a higher socioeconomic bracket are more likely to use seat belts consistently. In her study on a private university campus, Clark (1993) found that seat belt usage among the campus population was significantly lower than that

of the general population. Although this population belonged to a higher socioeconomic and educational bracket than the general public, Clark suggests that perhaps age played a role in the lower levels of usage.

Usage of Bicycle Helmets

Riding a bicycle is a popular mode of transportation among college students. However, studies conducted on different college campuses show that bicycle helmets are not widely used by these students (Fullerton & Becker, 1991). At the University of Vermont, less than 20% of bicyclists interviewed trailside owned a helmet, and at the University of Arizona, only 10% of bicyclists used helmets (Wasserman, Waller, Monty, Emery & Robinson, 1988). The importance of helmet use is demonstrated by Wasserman et al (1988), who found that head trauma is responsible for about three quarters of all bicycle deaths.

Fullerton and Becker (1991) found that owning a helmet was strongly associated with previous bicycle related injuries among the population in their study. They also suggest that "if an awareness of personal risk is a factor in helmet use, increased education concerning the hazards of bicycling and the potential life-saving qualities of safety helmets may increase helmet use among college students" (Fullerton & Becker, 1991).

Alcohol Related Automobile Accidents

According to Healthy People 2000 (1992), motor vehicle crashes are the fifth leading cause of death in the U.S., and half of these crashes involve alcohol. Concerning the college population, Wechsler et al (1993) found a positive relationship between student binge drinking

and driving after drinking alcohol in their College Alcohol Study. Of the students participating in the study, 62% of males and 49% of females admitted to driving after drinking, and about half of this population reported riding in a car with someone else who was under the influence of drugs or alcohol.

The consequences stemming from alcohol related automobile crashes are potentially severe. College students, with higher than average levels of alcohol consumption, can be considered a high risk population in terms of alcohol related automobile crashes.

EATING BEHAVIORS

Lifelong eating patterns developed in adolescence are typically carried over into adulthood, and may have lasting effects on the individual. Research shows that diseases such as coronary heart disease, stroke, hypertension, obesity, and certain types of cancer may all be either prevented by or brought on by dietary practices (Harris, Casperson, DeFries & Estes, 1989, Powell, Casperson, Koplan & Ford, 1989).

According to Brevard and Ricketts (1996), college students, similar to other American adult populations, may not consume a nutritionally sound and healthful diet. In a study conducted at the University of Arizona, Smiley, Johannessen, Marsh and Collins (1992) reported that while about 95% of students understood the importance of eating healthfully, only 65% actually practiced healthy eating habits. Additionally, 50% of the students reported eating fast food, which is typically high in fat and sodium, at least once a week, and 13% reported eating fast food on a daily basis.

Of other concern among college administrators and health service personnel is the presence eating disorders on college campuses. Primarily affecting female students, disordered eating behaviors such as bulimia, anorexia and compulsive overeating have been determined to be common on college campuses (Mintz & Betz, 1988). Some researchers believe that the college environment itself helps to promote eating disorders among students; pressure to achieve academically, and an air of competitiveness may lead to the onset of an eating disorder (Brouwers, 1988, Striegel-Moore, 1986). To meet the needs of students suffering from eating disorders, university counseling centers have begun to offer educational workshops, as well as support and therapy groups (Kashubeck, Walsh & Crowl, 1994).

PHYSICAL INACTIVITY

Similar to eating behaviors, patterns of physical activity are typically formed during adolescence and carried into adulthood, and may possibly have significant long term effects on the individual. Obesity, heart disease, certain forms of cancer, hypertension and other diseases may be brought on by lack of regular physical activity (Powell, Casperson, Koplan & Ford, 1989). According to the CDC (1990), as much as 60% of the US population is sedentary, thereby placing themselves at risk for future disease.

The US Department of Health and Human Services (1990) reports that of the adult population between the ages of eighteen to thirty five, only 46% of this population maintains an active lifestyle after their years in school. Additionally, other estimations show that only one fifth of the adult population exercises at a level sufficient for cardiorespiratory benefit (Stephens, Jacobs

& White, 1985). This estimation is similar to the results of a study done by Brevard and Ricketts (1996), who found that 29% of students living on campus and 28% of students living off campus reported being sedentary or only minimally active.

The concept that regular physical activity plays an important role in achieving optimal health is gaining attention from the medical community (Harris, Casperson, DeFries & Estes). Because college students are at a pivotal point in terms of lifestyle development, the years spent on campus can be influential in developing and maintaining interest in physical activity.

CHAPTER III

METHODOLOGY

RESEARCH SETTING

This study took place on the main campus of the University of Montana. Survey administration took place in the Student Health Services building.

SAMPLE SELECTION

Subjects for this study were drawn from a roster of all undergraduate students between the ages of 18 and 25, currently enrolled for the Spring 1996 semester on the main campus at the University of Montana. After receiving approval from the Institutional Review Board, the Registrar's office produced a list of currently enrolled students and their phone numbers, segmented by class and gender. Once this list was obtained, a stratified random sample by class was drawn. Sample selection continued in this manner until the beginning of finals week. Two hundred and seventy two surveys were completed.

DATA COLLECTION PROCEDURE

Prospective subjects were telephoned, given a brief description of the NCHRBS and it's purpose, and asked to participate in the study. To encourage participation, prospective subjects were informed that if they completed a survey, their name would be entered in a drawing to receive one of ten \$30 gift certificates redeemable at downtown restaurants. The drawing took place after all data were collected. If the individual agreed to participate, an appointment was set up for that person to fill out the NCHRBS in a private room of the Student Health Service during a designated time. Subjects were allowed to select a day and time that best fit their schedule.

As subjects arrived to fill out the survey, their names were crossed off the daily appointment list. Subjects then read and signed a letter of informed consent (Appendix A). These signed letters served as entry forms for incentive drawings. In order to promote accuracy and honesty in responses, subjects were told the following:

- 1) All information will be confidential.
- 2) Individual answers will not be investigated.
- 3) Do not write your name on the survey.
- 4) All surveys and the list of subjects and phone numbers will be shredded at the conclusion of the study.

Once any questions were answered by the survey administrator, testing began. The NCHRBS took approximately twenty minutes to complete. Once subjects were finished, the survey and informed consent were detached from one another by the subject, and dropped into separate boxes, so that signatures would not be attached to survey answers.

INSTRUMENTATION

Developed by the CDC, the NCHRBS (Appendix B) has been administered to approximately 9,400 students across 148 college campuses in the U.S. during the Spring of 1995. According to the CDC,

the main purpose of the NCHRBS is to yield baseline data for the twenty nine health risk objectives related to the health risk behaviors of college students. It is

also used to produce baseline data for two other national health objectives corresponding to the availability of health education programming for students, faculty and staff (1995).

The NCHRBS measures frequencies of the health risk behaviors listed below:

- 1) Behaviors that result in intentional and unintentional injury
- 2) Tobacco use
- 3) Alcohol and other drug use
- 4) Sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including HIV infection
- 5) Dietary behaviors
- 6) Physical activity

DATA ANALYSIS

Data analysis included the use of descriptive statistics to determine frequencies of health risk behaviors. Cross tabulations were run to determine differences among gender, class level and place of residence in regard to the following behaviors: binge drinking, tobacco use, condom use, unwanted sexual activity, use of purging methods to control weight and marijuana use.

Descriptive statistics were used to compare the University of Montana population to the NCHRBS population in the same six areas.

CHAPTER IV

RESULTS

The purpose of this study was to determine the prevalence of health risk behaviors that exist among traditionally aged undergraduates of the University of Montana campus. Frequencies of behaviors among all students were determined, as well as frequencies between gender, place of residence and class level.

DEMOGRAPHIC DATA

The average participant involved in this study was a full time, white non-Hispanic student approximately 20.6 years old. The number of male and female students differed only slightly, with 14 more female students in the study. Participants were mostly all single, and 13.2 percent reported membership in a Greek organization. A demographic overview appears below. For more specific demographic data, see Appendix C.

Demographic Overview of Students Participating in the NCHRBS:

- White non-Hispanic
- 20.6 years old
- 129 Male students
- 143 Female Students

- 73 Freshmen
- 64 Sophomores
- 64 Juniors
- 70 Seniors

- 109 Dorm residents
- 10 Greek house residents
- 131 off campus residents
- 21 Residing with parent/guardian

ALCOHOL USE AND BINGE DRINKING

This section asked questions about alcohol use and the prevalence of binge drinking. Most students reported having their first drink of alcohol between the ages of thirteen and sixteen, and approximately 70 percent of students reported at least one episode of binge drinking during the past 30 days. An overview of binge drinking 6 or more days preceding the survey appears below. For more specific data concerning alcohol use, see Appendix D.

Reported binge drinking 6 or more days in the 30 days preceding the survey:

- 36% of male students (n=44) (missing cases=7)
- 9% of female students (n=12) (missing cases=7)

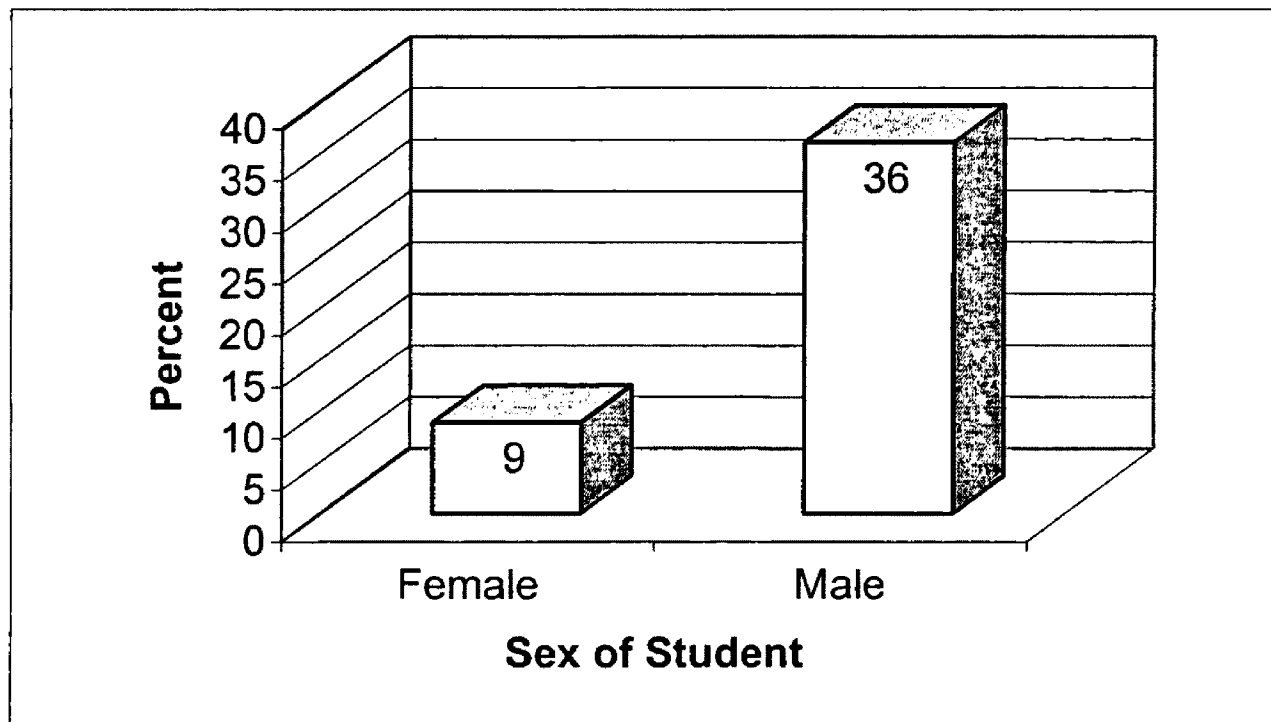
- 31% of Freshmen (n=21) (missing cases=5)
- 17% of Sophomores (n=10) (missing cases=6)
- 27% of Juniors (n=17) (missing cases=2)
- 12% of Seniors (n=8) (missing cases=1)

- 27% of Dorm residents (n=27) (missing cases=8)
- 30% of Greek house residents (n=3) (missing cases=0)
- 19% of Off campus residents (n=24) (missing cases=3)
- 11% residing with parent/guardian (n=2) (missing cases=3)

BINGE DRINKING BY GENDER

Thirty-six percent of male students (n=44) and 9 percent of female students (n=12) reported binge drinking six or more days during the past 30 days. Forty-one percent of males (n=50) and 51.4 percent of females (n=70) reported binge drinking one to five days during the past 30 days, and 23 percent of male students (n=28) and 40 percent of female students (n=54) reported no episodes of binge drinking during the past 30 days. See figure 1 below:

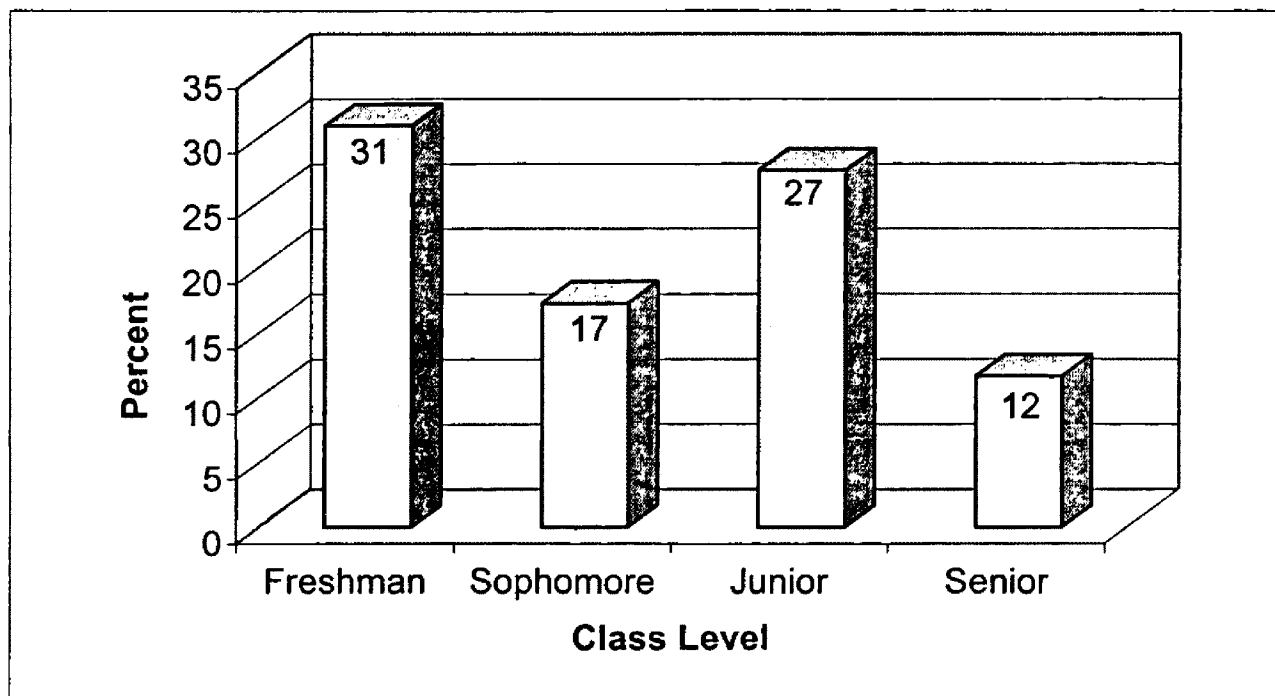
Figure 1: Percent of Students by Gender that Report Binge Drinking 6 or More Days During the Past Thirty Days



BINGE DRINKING BY CLASS LEVEL

Thirty-one percent of freshmen (n=21) and 27 percent of juniors (n=17) reported approximately twice as many binge drinking episodes during the past 30 days as sophomores (n=10) and seniors (n=8). Fifty percent of freshmen (n=34), 66 percent of sophomores (n=47), 58 percent of juniors (n=36) and 68 percent of seniors (n=47) reported binge drinking two days or less during the past 30 days. See Figure 2 below:

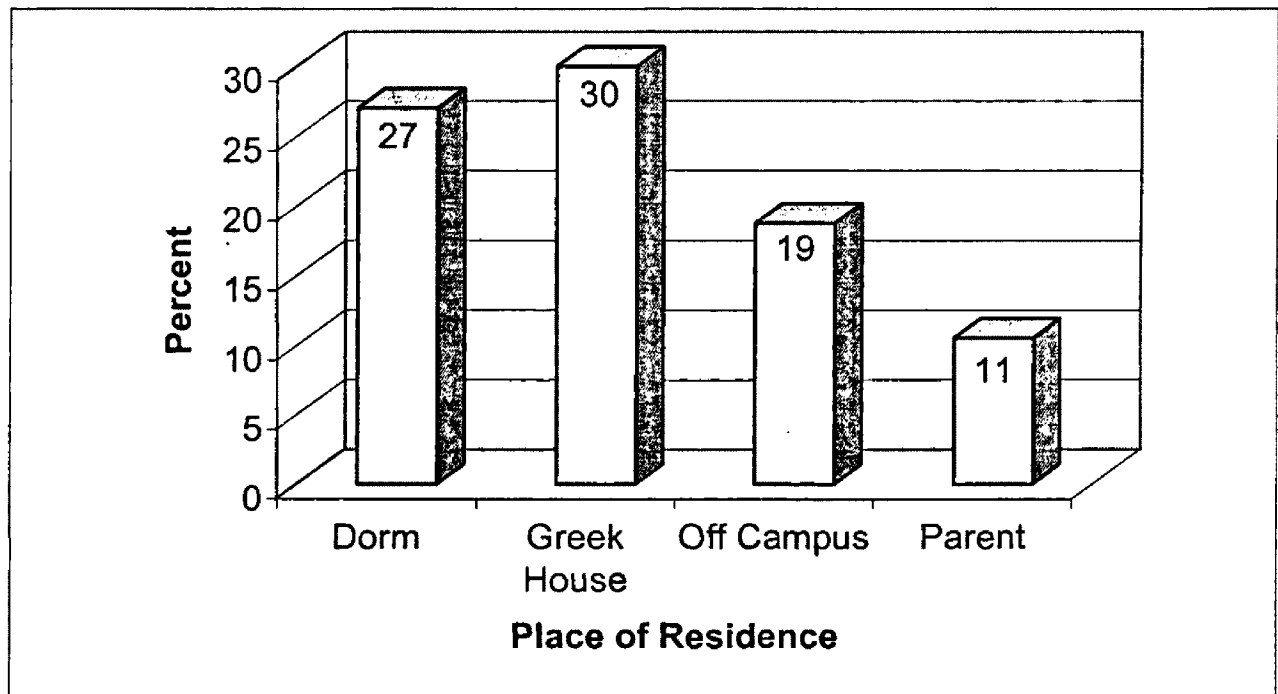
Figure 2: Percent of Students by Class Level that Report Binge Drinking 6 or More Days During Past Thirty Days



BINGE DRINKING BY PLACE OF RESIDENCE

Twenty-seven percent of dorm residents (n=27), 30 percent of Greek house residents (n=3), 19 percent of students residing in off campus housing (n=24) and 11 percent of students residing in a parent's home (n=2) reported six or more binge drinking episodes during the past 30 days. Twenty-eight percent of dorm residents (n=29), 30 percent of Greek house residents (n=3), 31 percent of students residing in off campus housing (n=40) and 52 percent of students residing in a parent's home (n=10) reported no episodes of binge drinking in the past 30 days. See Figure 3 below:

Figure 3: Percent of Students by Place of Residence that Report Binge Drinking 6 or More Days During Past Thirty Days



TOBACCO USE

This section asked questions regarding use of cigarettes, chewing tobacco and snuff.

Approximately three quarters of participants have tried cigarettes at some time in their life, most having their first puff between the ages of fifteen and sixteen. One third of students reported smoking regularly, and approximately one third reported an attempt to quit at some time in their life. An overview of students smoking eleven or more cigarettes a day in the 30 days preceding the survey appears below. For more specific data regarding the use of tobacco, see Appendix E.

Reported smoking eleven or more cigarettes a day in the 30 days preceding the survey:

- 8% of male students (n=8) (missing cases=22)
- 3% of female students (n=3) (missing cases=42)

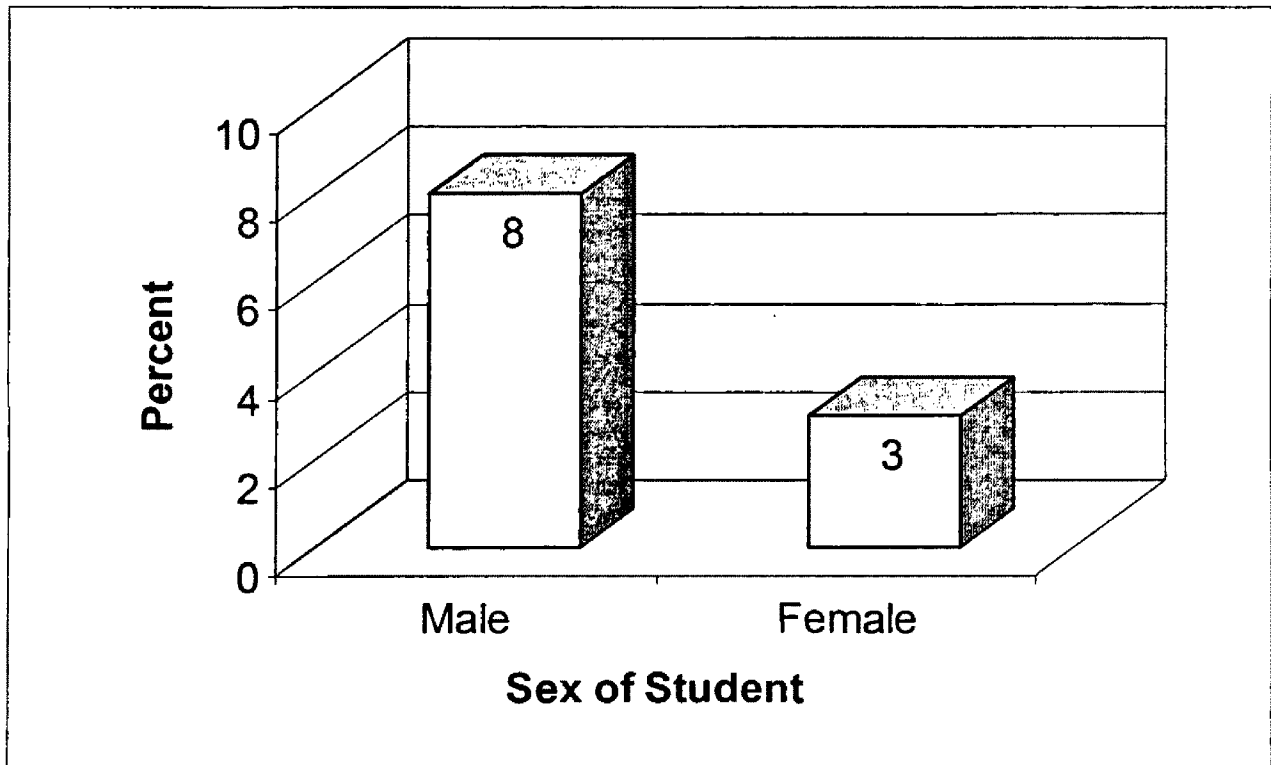
- 5% of Freshmen (n=3) (missing cases=18)
- 4% of Sophomores (n=2) (missing cases=16)
- 8% of Juniors (n=4) (missing cases=11)
- 2% of Seniors (n=1) (missing cases=19)

- 6% of Dorm residents (n=5) (missing cases=25)
- 11% of Greek House residents (n=1) (missing cases=1)
- 5% Of Off campus residents (n=5) (missing cases=28)
- 0% residing with parent/guardian (n=0) (missing cases=9)

CIGARETTE USE BY GENDER

Eight percent of male students (n=8) and 3 percent of female students (n=3) reported smoking eleven or more cigarettes a day during the past 30 days, on the days they smoked. Forty-three percent of male students (n=46) and 48 percent of female students (n=48) reported not smoking in the past 30 days. See Figure 4 below:

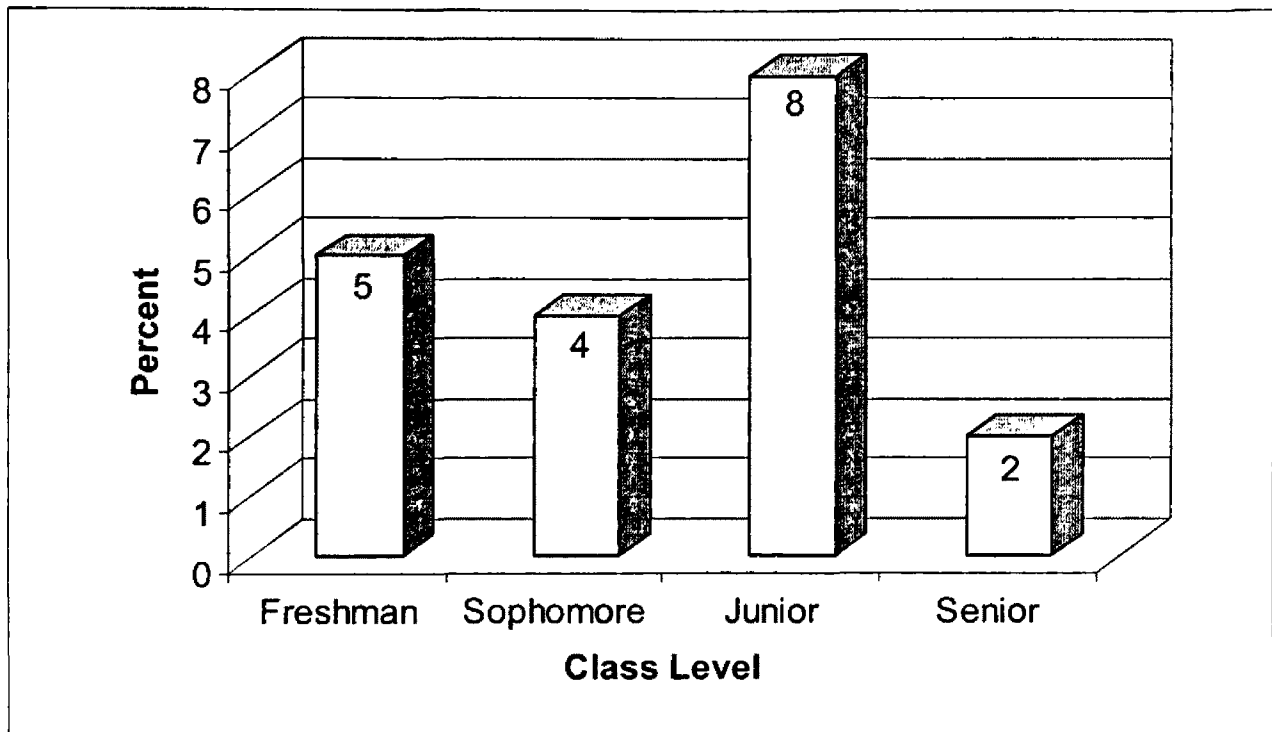
Figure 4: Percent of Students by Gender that Report Smoking Eleven or More Cigarettes a Day During the Past Thirty Days, on the Days They Smoked



CIGARETTE USE BY CLASS LEVEL

Juniors reported the highest incidence of smoking (8 percent, n= 4). Seniors reported the highest incidence of non-smoking (70 percent, n= 36). See Figure 5 below:

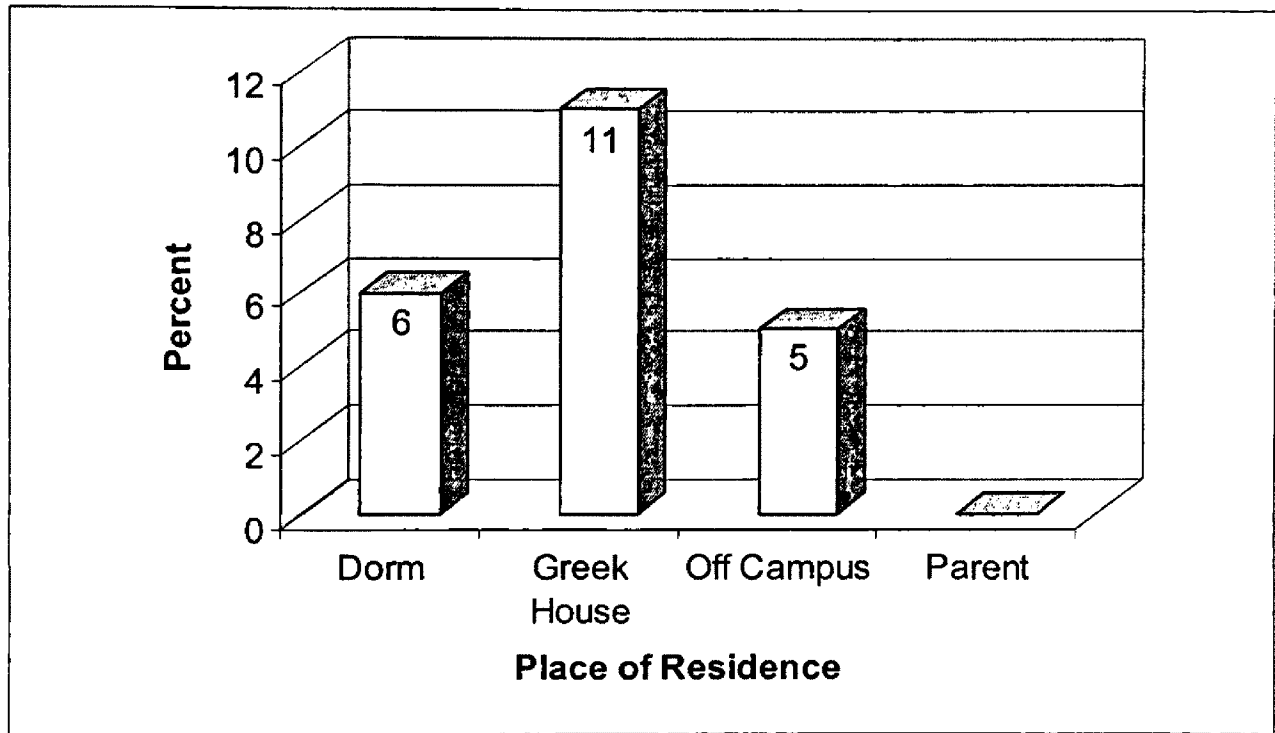
Figure 5: Percent of Students by Class Level that Report Smoking Eleven or More Cigarettes a Day During Past Thirty Days, on the Days They Smoked



CIGARETTE USE BY PLACE OF RESIDENCE

Dorm residents and students residing off campus reported the highest levels of smoking, on the days they smoked. See Figure 6 below:

Figure 6: Percent of Students by Place of Residence that Report Smoking Eleven or More Cigarettes a Day During Past Thirty Days, on the Days They Smoked



Page 33 omitted in numbering.

SEXUAL BEHAVIORS, UNINTENDED PREGNANCY AND DISEASE

This section asked questions concerning age of first sexual contact, choice and use of birth control, prevalence of forced sexual contact, and if participants had ever had their blood tested for AIDS. Of those students reported having sexual intercourse, approximately 45 percent used a condom during their last experience. Nine percent of students reported having been forced to have sex against their will at some time in their life. About one quarter of students reported having their blood tested for AIDS. Overviews concerning condom use and forced sexual intercourse appear below. For more specific results concerning sexual behaviors, unintended pregnancy and disease, see Appendix F.

Reported using a condom “most of the time” and “always” 30 days preceding the survey:

- 28% of male students (n=32) (missing cases=15)
- 29% of female students (n=33) (missing cases=29)

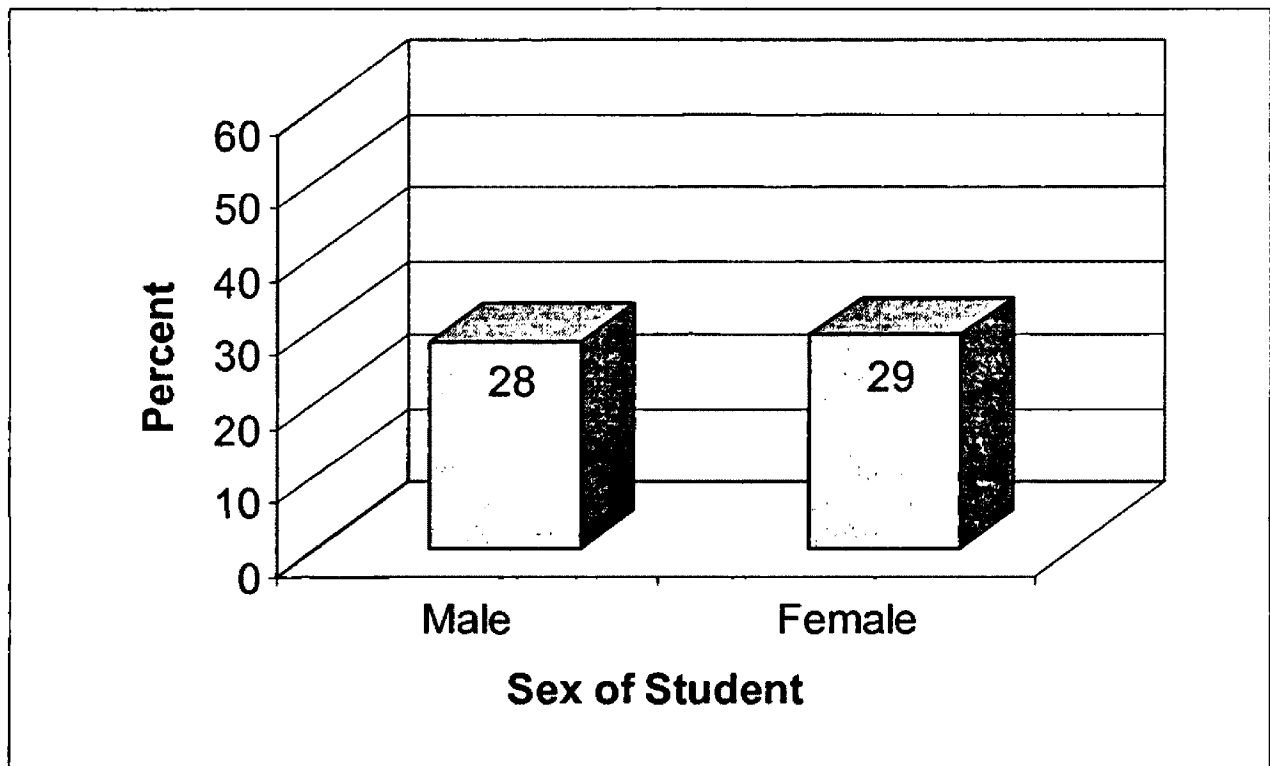
- 30% of Freshmen (n=16) (missing cases=20)
- 16% of Sophomores (n=9) (missing cases=7)
- 35% of Juniors (n=19) (missing cases=9)
- 34 % of Seniors (n=21) (missing cases=8)

- 31% of Dorm residents (n=26) (missing cases=25)
- 33% of Greek house residents (n=3) (missing cases=1)
- 27% of Off campus residents (n=32) (missing cases=10)
- 23% residing with parent/guardian (n=4) (missing cases=7)

CONDOM USE BY GENDER

Twenty-eight percent of male students (n=32) and 29 percent of female students (n=33) reported using a condom “most of the time” and “always” during the past 30 days. Thirty-seven percent of male students (n=42) and 40 percent of female students (n=46) reported using a condom “sometimes”, “rarely”, and “never” during the past 30 days. See figure 7 below:

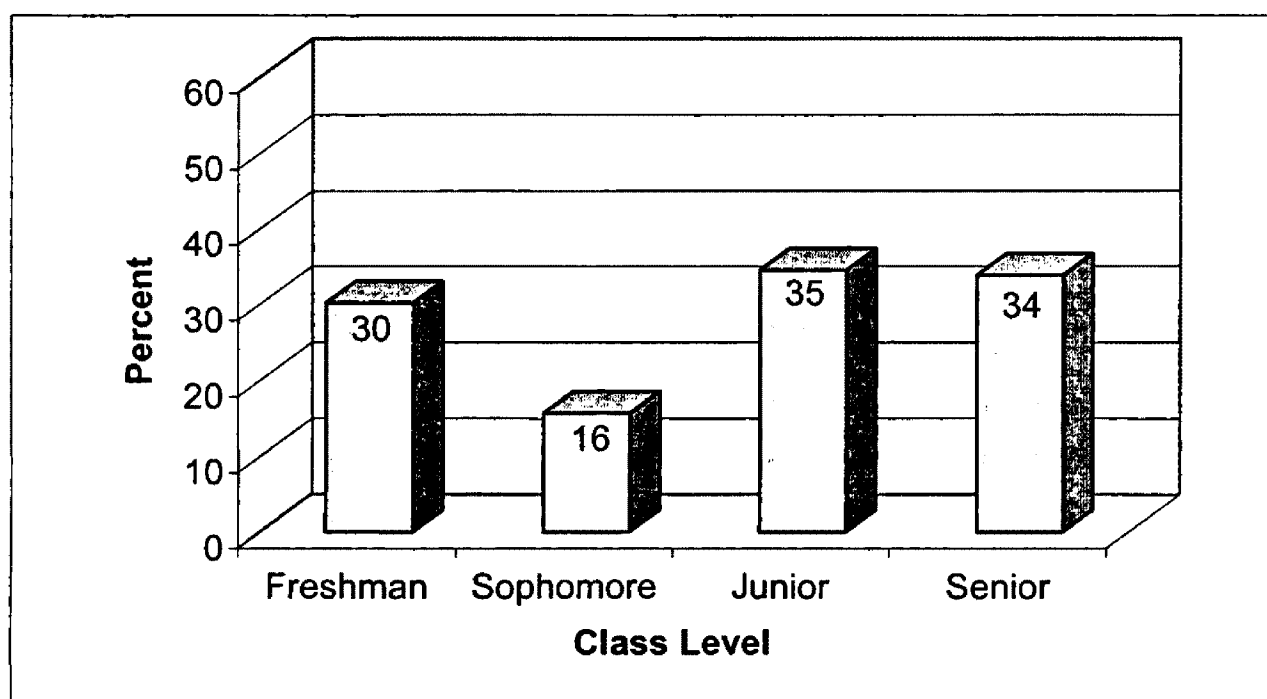
Figure 7: Percent of Students by Gender that Report Using a Condom “Most of the Time” and “Always” During Past Thirty Days



CONDOM USE BY CLASS LEVEL

Thirty percent of freshmen (n=16), 16 percent of sophomores (n=9), 35 percent of Juniors (n=19) and 34 percent of Seniors (n=21) reported using a condom “most of the time” and “always” during the past 30 days. Thirty-eight percent of freshmen (n=20), 39 percent of sophomores (n=22), 33 percent of Juniors (n=18) and 43 percent of Seniors (n=27) reported using a condom “sometimes”, “rarely” and “never” during the past 30 days. See figure 8 below:

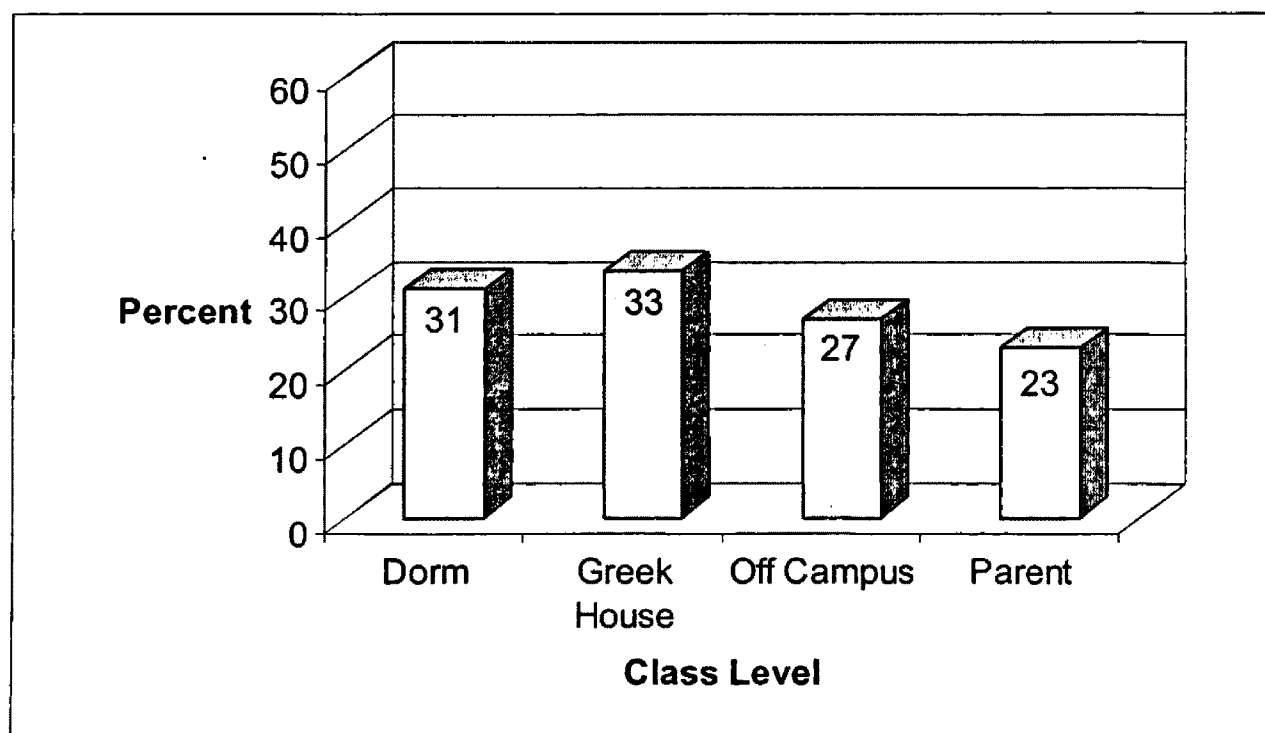
Figure 8: Percent of Students by Class Level that Report Using a Condom “Most of the Time” and “Always” During Past Thirty Days



CONDOM USE BY PLACE OF RESIDENCE

Thirty-one percent of dorm residents (n=26), 33 percent of Greek house residents (n=3), 27 percent of students residing off campus (n=32) and 23 percent of students residing in a parent's home (n=4) reported using a condom "most of the time" and "always" during the past 30 days. Thirty-five percent of dorm residents (n=29), 44 percent of Greek house residents (n=4), 42 percent of students residing in off campus housing (n=51) and 28 percent of students residing in a parent's home (n=4) reported using a condom "sometimes", "rarely" and "never" during the past 30 days. See Figure 9 below:

Figure 9: Percent of Students by Place of Residence that Report Using a Condom "Most of the Time" and "Always" During Past Thirty Days



Reported having been forced to have sex against their will during their life:

- **3% of male students** (n=4) (missing cases=0)
- **15% of female students** (n=21) (missing cases=0)

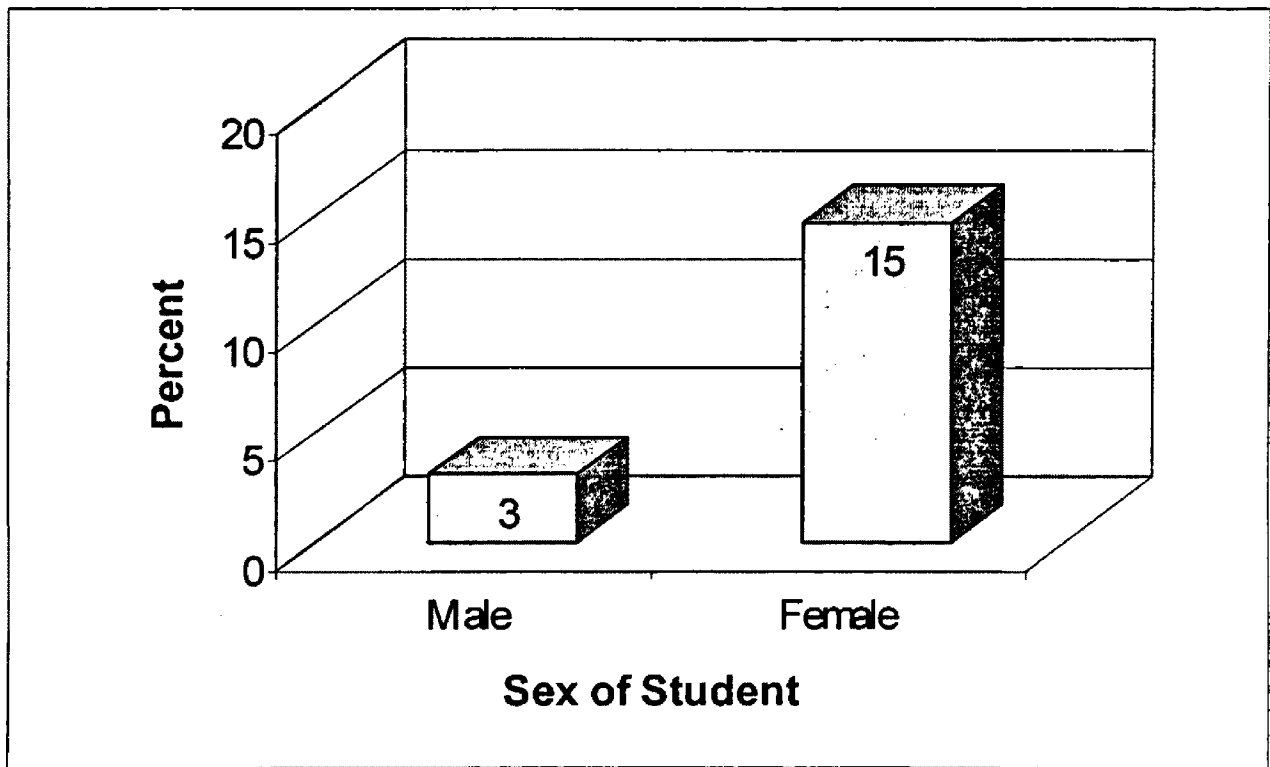
- **6% of Freshmen** (n=4) (missing cases=0)
- **6% of Sophomores** (n=4) (missing cases=0)
- **13% of Juniors** (n=8) (missing cases=0)
- **13% of Seniors** (n=9) (missing cases=0)

- **8% of Dorm residents** (n=9) (missing cases=0)
- **10% of Greek house residents** (n=1) (missing cases=0)
- **11% of Off campus residents** (n=14) (missing cases=0)
- **5% residing with parent/guardian** (n=1) (missing cases=0)

FORCED SEX BY GENDER

Female students reported approximately five times as many incidents of having been forced to have sex against her will during her life than male students. Fifteen percent of female students (n=21) and 3 percent of male students (n=4) report having been forced to have sex against their will during their life. See Figure 10 below:

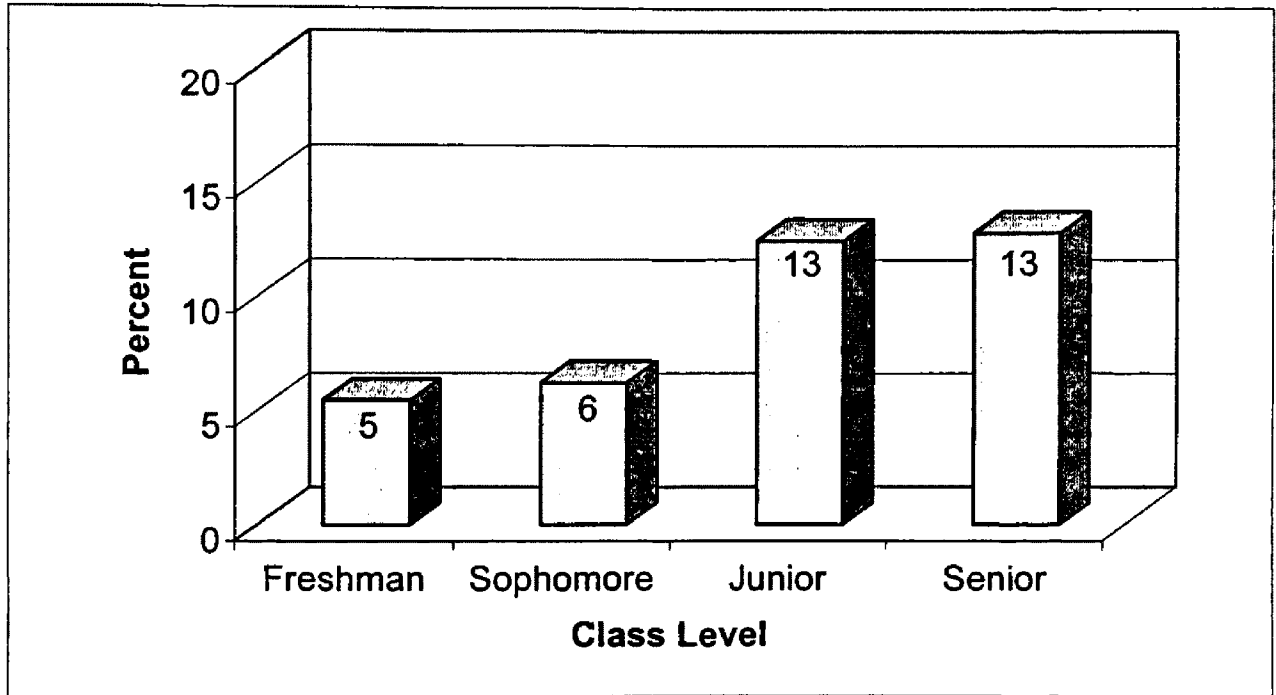
Figure 10: Percent of Students by Gender that Report Having Been Forced to Have Sex Against Their Will During Their Life



FORCED SEX BY CLASS LEVEL

Juniors and Seniors reported approximately twice as many incidents of having been forced to have sex against their will during their life than Freshmen and Sophomores. See Figure 11 below:

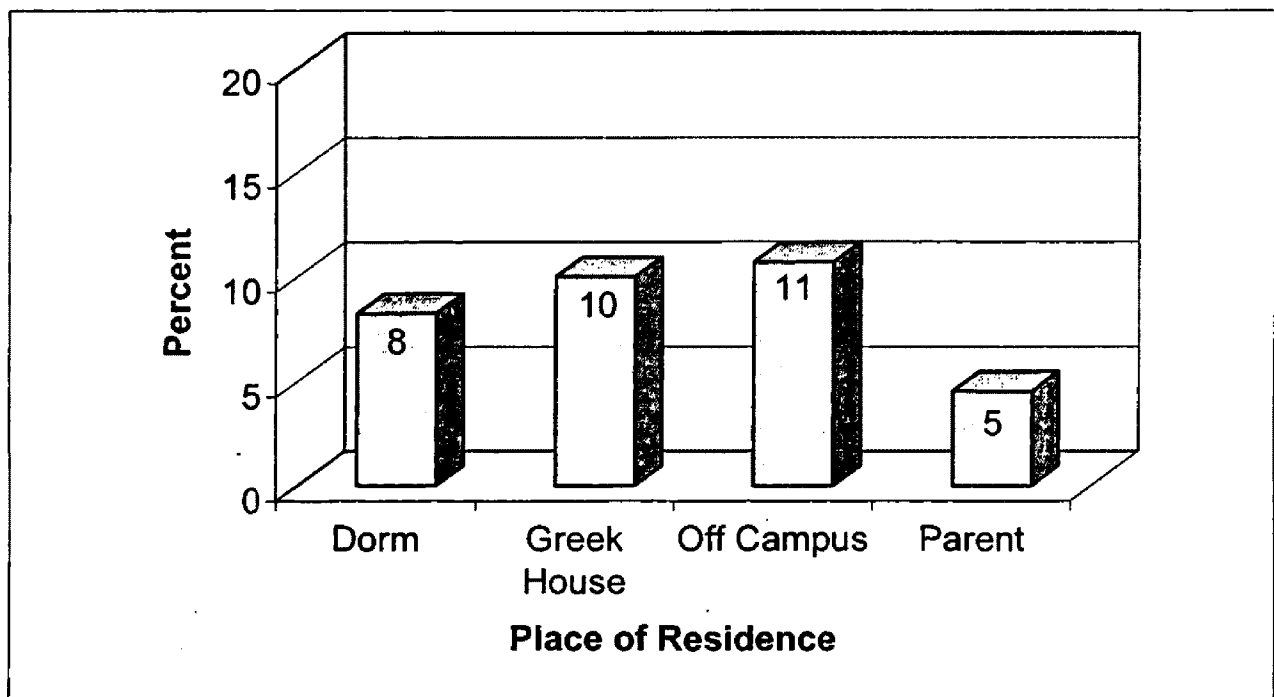
Figure 11: Percent of Students by Class Level that Report Having Been Forced to Have Sex Against Their Will During Their Life



FORCED SEX BY PLACE OF RESIDENCE

Eight percent of dorm residents (n=9), 10 percent of Greek house residents (n=1), 11 percent of students residing off campus (n=14) and 5 percent of students residing in a parent's home (n=1) reported having been forced to have sex against their will during their life. See Figure 12 below:

Figure 12: Percent of Students by Place of Residence that Report Having Been Forced to Have Sex Against Their Will During Their Life



MARIJUANA AND OTHER DRUG USE

This section asked questions about frequency of marijuana use, as well as use of cocaine, LSD, inhalants, steroids and other hallucinogenic drugs. Marijuana was used more often than any other drug, with approximately 64 percent of students reporting trying marijuana at least once in their life. Approximately 55 percent of students reported using marijuana at least once in the 30 days preceding the survey. An overview of students reporting using marijuana at least once in the 30 days preceding the survey appears below. More detailed information concerning marijuana and other drug use can be found in Appendix G.

Report using marijuana at least once in the 30 days preceding the survey:

- 65% of male students (n=61) (missing cases=63)
- 44% of female students (n=35) (missing cases=35)

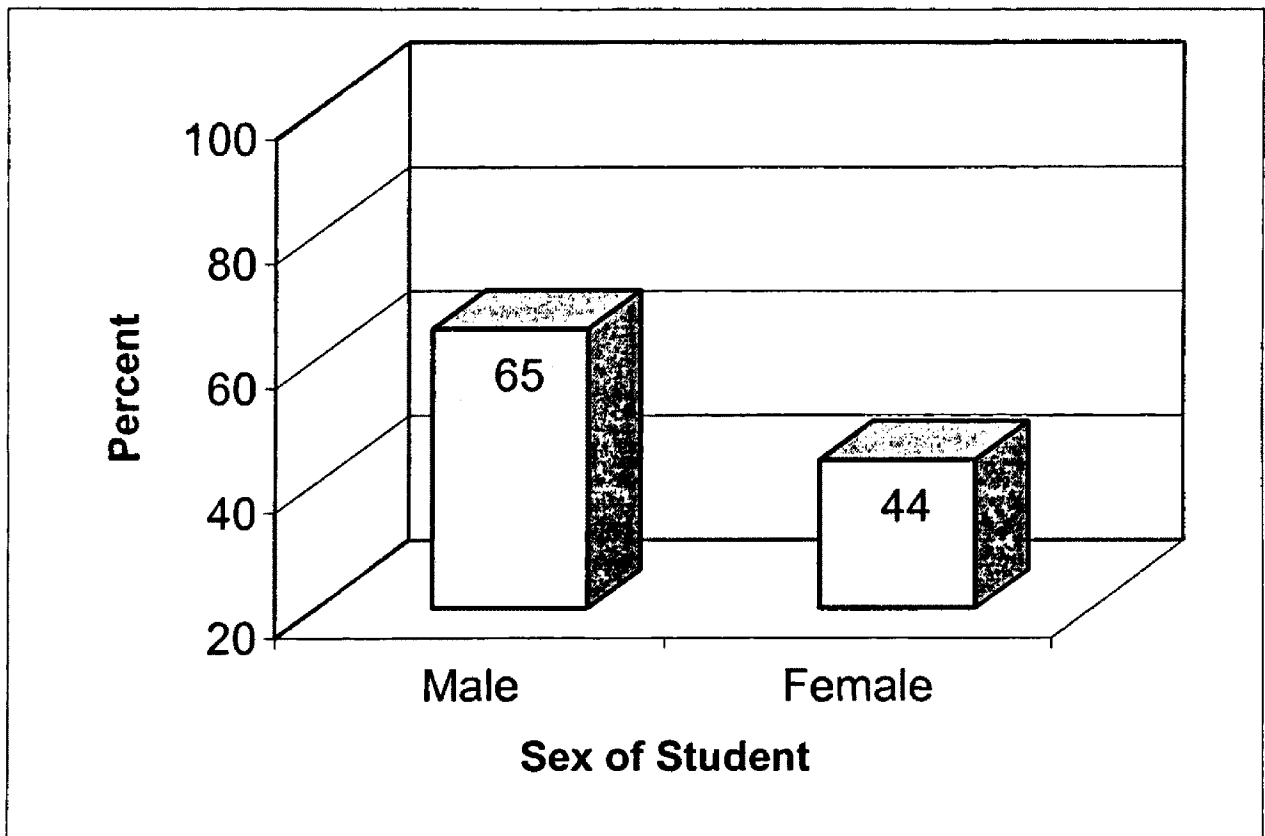
- 56% of Freshmen (n=28) (missing cases=23)
- 59% of Sophomores (n=24) (missing cases=23)
- 56% of Juniors (n=24) (missing cases=40)
- 51% of Seniors (n=20) (missing cases=12)

- 58% of Dorm residents (n=40) (missing cases=40)
- 50% of Greek house residents (n=3) (missing cases=4)
- 55% of Off campus residents (n= 48) (missing cases=43)
- 45% residing with parent/guardian (n=5) (missing cases=11)

MARIJUANA USE BY GENDER

Sixty-five percent of male students (n=61) and 44 percent of female students (n=35) that have used marijuana before report used marijuana at least once during the past 30 days. Thirty-five percent of male students (n=33) and 56 percent of female students (n=45) that have used marijuana before reported no use of marijuana during the past 30 days. See Figure 13 below:

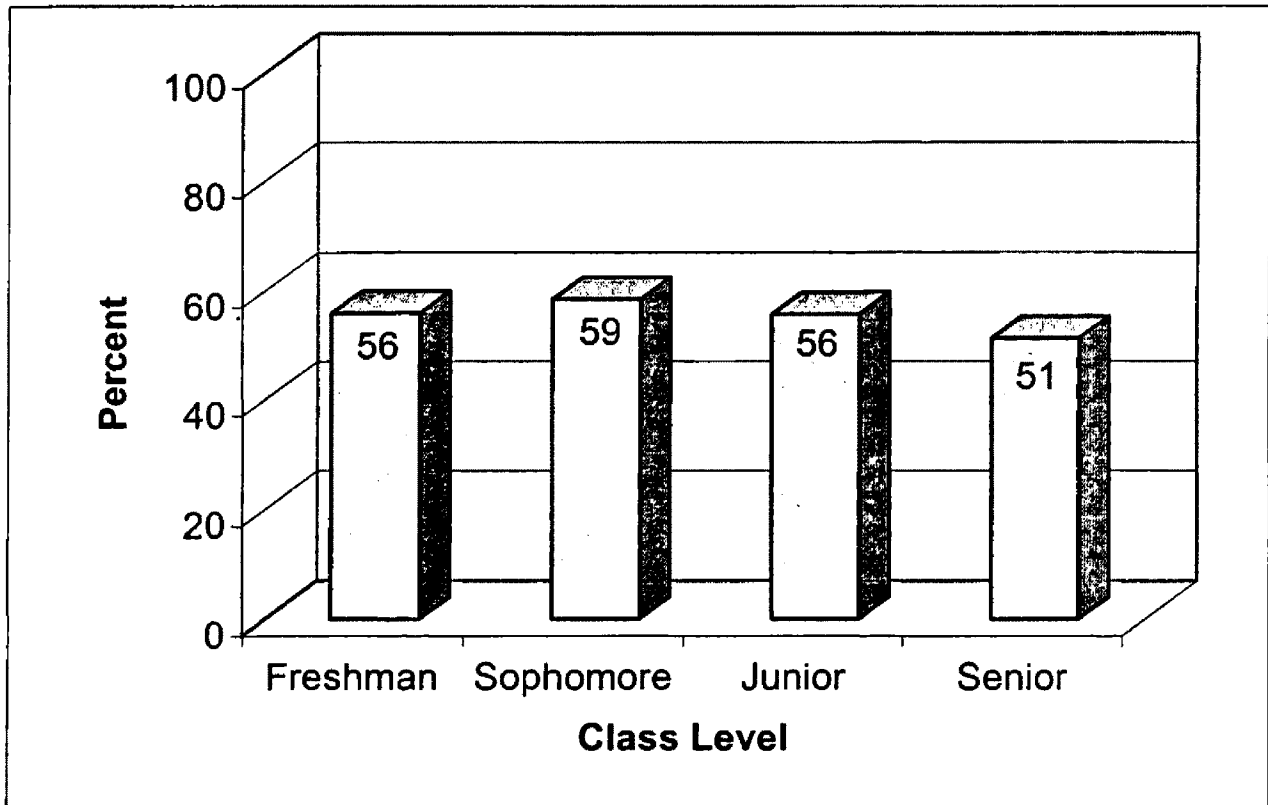
Figure 13: Percent of Students by Gender that Report Using Marijuana at Least Once During Past Thirty Days



MARIJUANA USE BY CLASS LEVEL

Fifty-six percent of Freshmen (n=28), 59 percent of Sophomores (n=24), 56 percent of Juniors (n=24) and 51 percent of Seniors (n=20) that have used marijuana before report using marijuana at least once during the past 30 days. Forty-four percent of Freshmen (n=22), 42 percent of Sophomores (n=17), 44 percent of Juniors (n=19) and 49 percent of Seniors (n=19) that have used marijuana before report no use of marijuana during the past 30 days. See Figure 14 below:

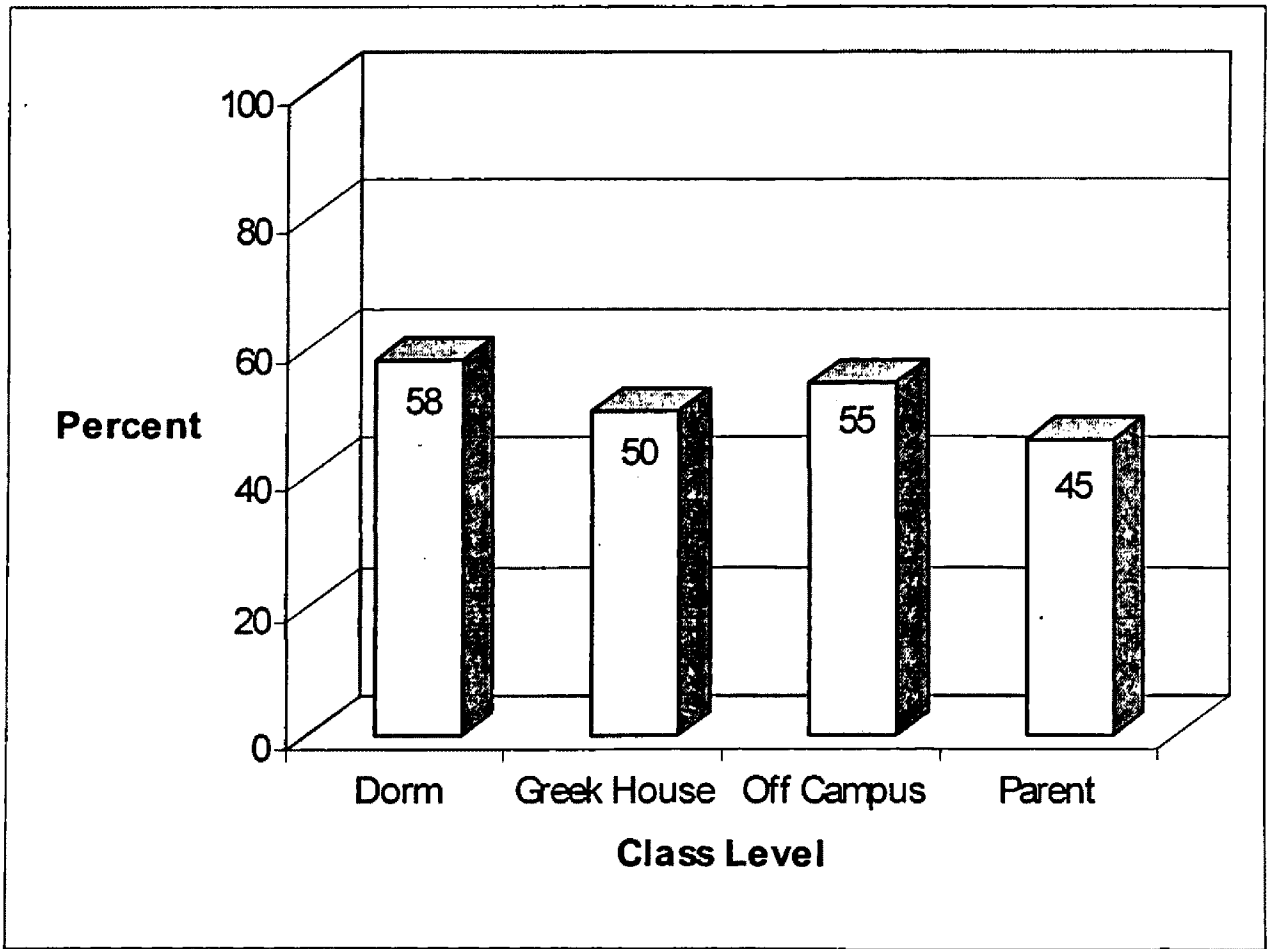
Figure 14: Percent of Students by Class Level that Report Using Marijuana at Least Once During Past Thirty Days



MARIJUANA USE BY PLACE OF RESIDENCE

Fifty-eight percent of dorm residents (n=40), 50 percent of Greek house residents (n=3), 55 percent of students residing off campus (n=48) and 45 percent of students residing in a parent's home (n=5) that have used marijuana before report using marijuana at least once during the past 30 days. Forty-two percent of dorm residents (n=29), 50 percent of Greek house residents (n=3), 45 percent of students residing off campus (n=40) and 55 percent of students residing at a parent's home (n=6) that have used marijuana before report no use of marijuana during the past 30 days. See Figure 15 below:

Figure 15: Percent of Students by Place of Residence that Report Using Marijuana at Least Once During Past Thirty Days



EATING BEHAVIORS

This section asked questions about weight and weight loss methods, as well as type of foods consumed daily. A little more than half the participants felt they were “about the right weight”, and a little less than half were trying to lose weight. An overview of students that reported using vomiting or taking laxatives to lose or keep from gaining weight in the 30 days preceeding the survey appears below. For more specific information of eating behaviors, see Appendix H.

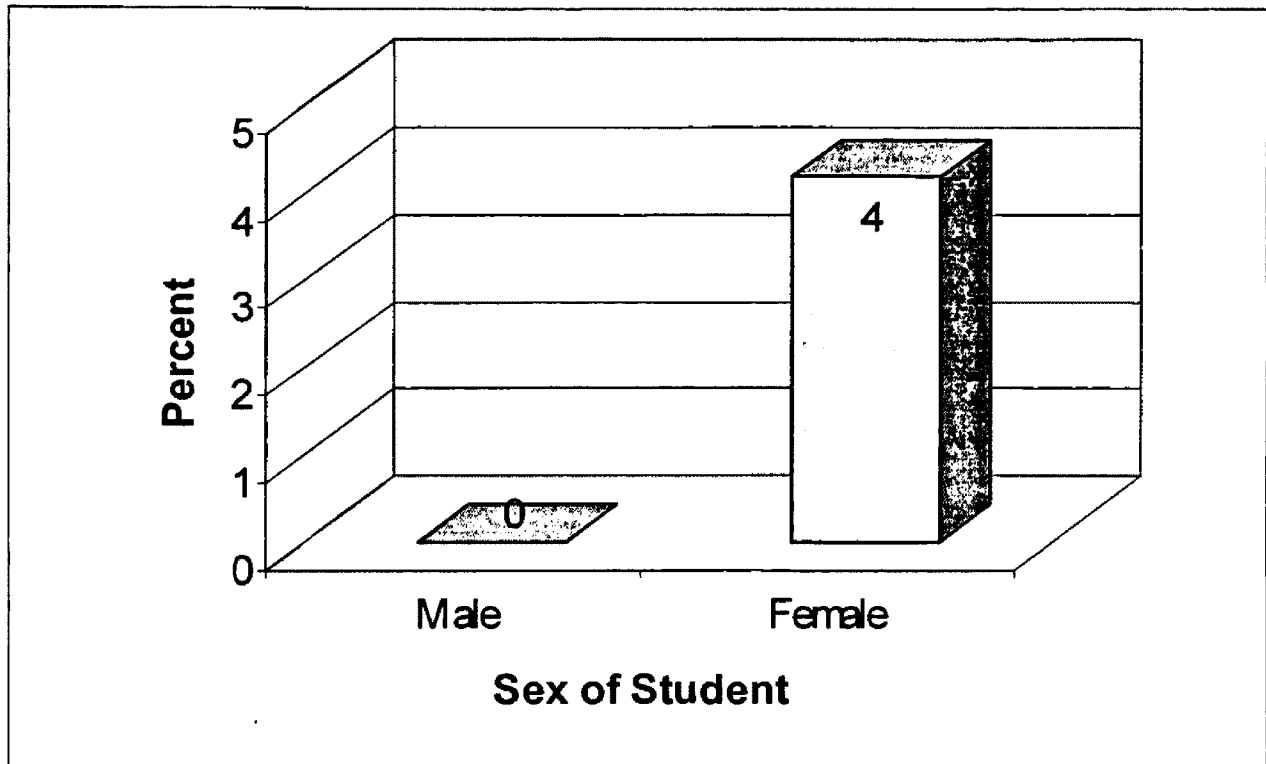
Reported vomiting or taking laxatives to lose or keep from gaining weight in the 30 days preceeding the survey:

- No male students
- 4% of Female students (n=6) (missing cases=0)
- 1% of Freshmen (n=1) (missing cases=0)
- 3% of Sophomores (n=2) (missing cases=0)
- 2% of Juniors (n=1) (missing cases=0)
- 3% of Seniors (n=2) (missing cases=0)
- 4% of Dorm residents (n=4) (missing cases=0)
- No Greek house residents
- 2% of Off campus residents (n=2) (missing cases=0)
- No students residing with parent/guardian

VOMITING OR TAKING LAXATIVES TO LOSE OR KEEP FROM GAINING WEIGHT BY GENDER

Four percent of students (n=6) report vomiting or taking laxatives to lose or keep from gaining weight during the past 30 days. See Figure 16 below:

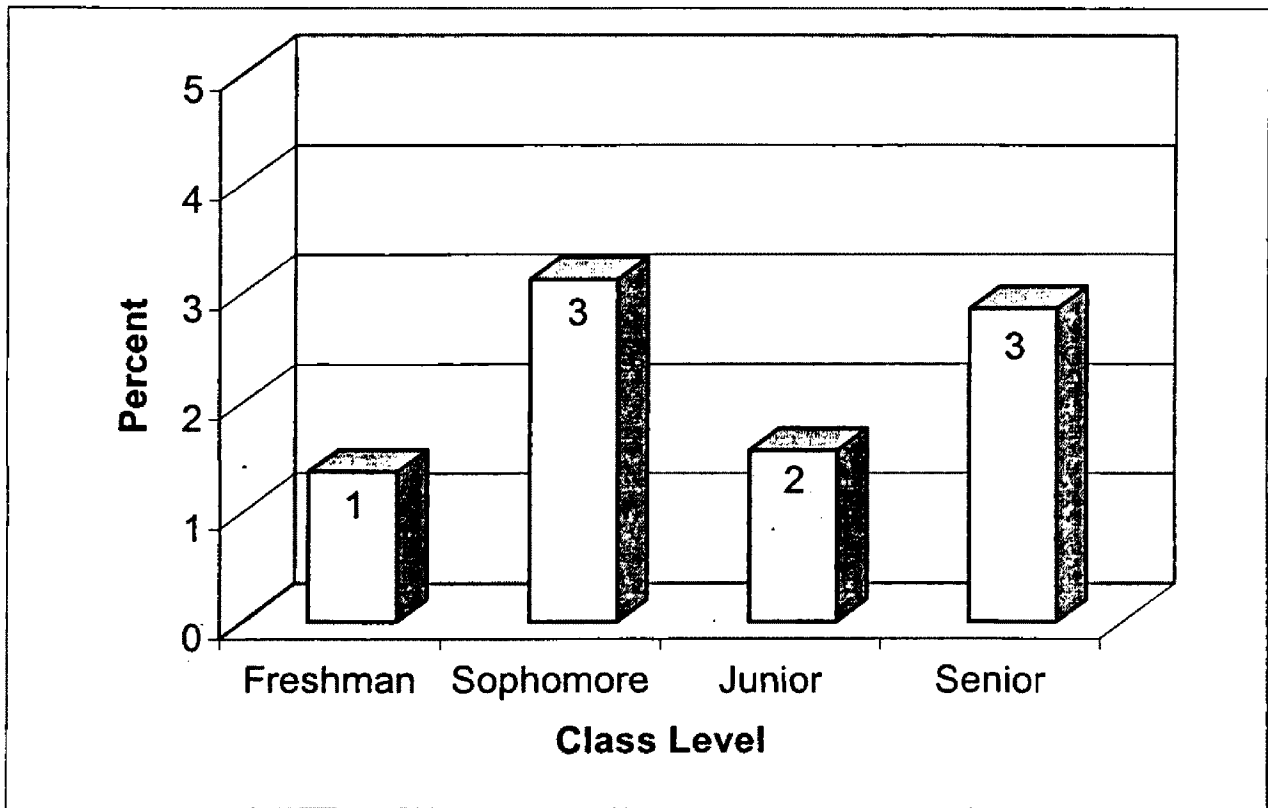
Figure 16: Percent of Students by Gender that Report Vomiting or Taking Laxatives to Lose Weight or to Keep From Gaining Weight During Past Thirty Days



VOMITING OR TAKING LAXATIVES TO LOSE OR KEEP FROM GAINING WEIGHT BY CLASS LEVEL

One percent of Freshmen (n=1), 3 percent of Sophomores (n=2), 2 percent of Juniors (n=1) and 3 percent of Seniors (n=2) reported vomiting or taking laxatives to lose weight or keep from gaining weight during the past 30 days. See Figure 17 below:

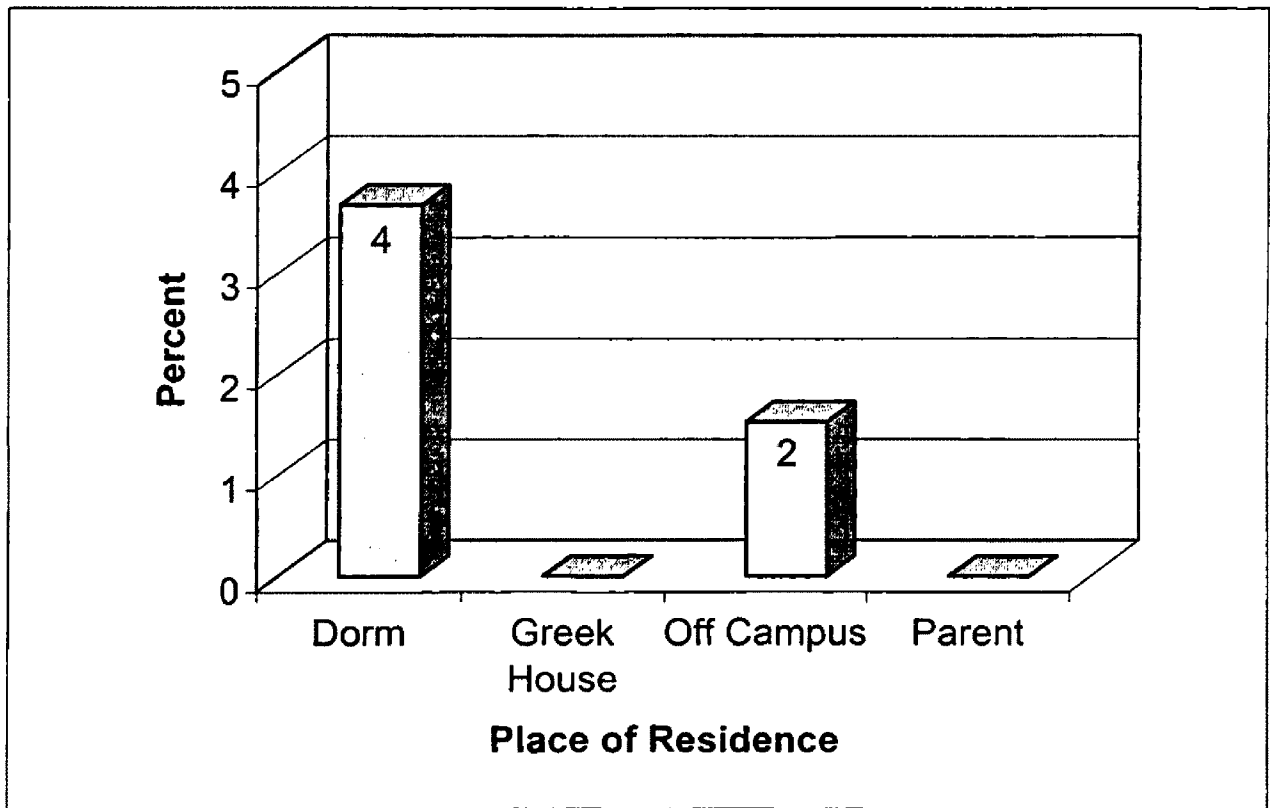
Figure 17: Percent of Students by Class Level that Report Vomiting or Taking Laxatives to Lose Weight or to Keep From Gaining Weight During Past Thirty Days



VOMITING OR TAKING LAXATIVES TO LOSE OR KEEP FROM GAINING WEIGHT BY PLACE OF RESIDENCE

Four percent of dorm residents (n=4) and 2 percent of students residing off campus (n=2) report vomiting or using laxatives to lose or keep from gaining weight during the past 30 days. See Figure 18 below:

Figure 18: Percent of Students by Place of Residence that Report Vomiting or Taking Laxatives to Lose Weight or to Keep From Gaining Weight During Past Thirty Days



NCHRBS VS UM POPULATION

This section compared the 1995 NCHRBS population with the UM sample population on the six behaviors of alcohol use, cigarette use, condom use, forced sexual intercourse, vomiting or taking laxatives to lose or keep from gaining weight and marijuana use. Specific results are as follows:

ALCOHOL

Reported drinking alcohol 20 or more days in the 30 days preceding the survey:

NCHRBS	4.2%
UM	4.4%

CIGARETTE USE

Reported smoking cigarettes 20 or more days in the 30 days preceding the survey:

NCHRBS	16.5%
UM	16.6%

CONDOM USE

Reported using a condom “most of the time” and “always” during the 30 days preceding the survey:

NCHRBS	27.9%
UM	16.6%

FORCED SEX

Reported having been forced to have sex against their will during their life:

NCHRBS	13.1%
UM	9.2%

VOMITING OR TAKING LAXATIVES TO LOSE OR KEEP FROM GAINING**WEIGHT**

Report vomiting or taking laxatives to lose or keep from gaining weight in the 30 days preceding the survey:

NCHRBS 2.6%

UM 2.2%

MARIJUANA USE

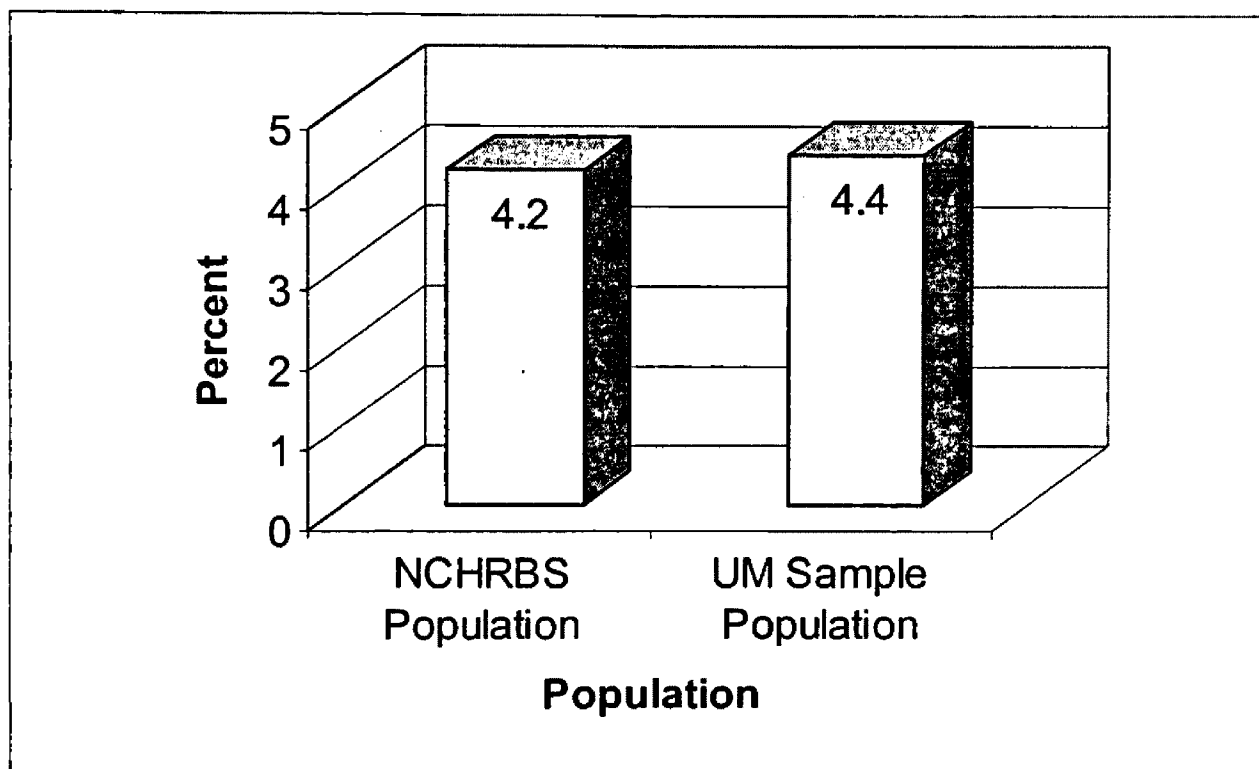
Report using marijuana at least once during the 30 days preceding the survey:

NCHRBS 14%

UM 54.4%

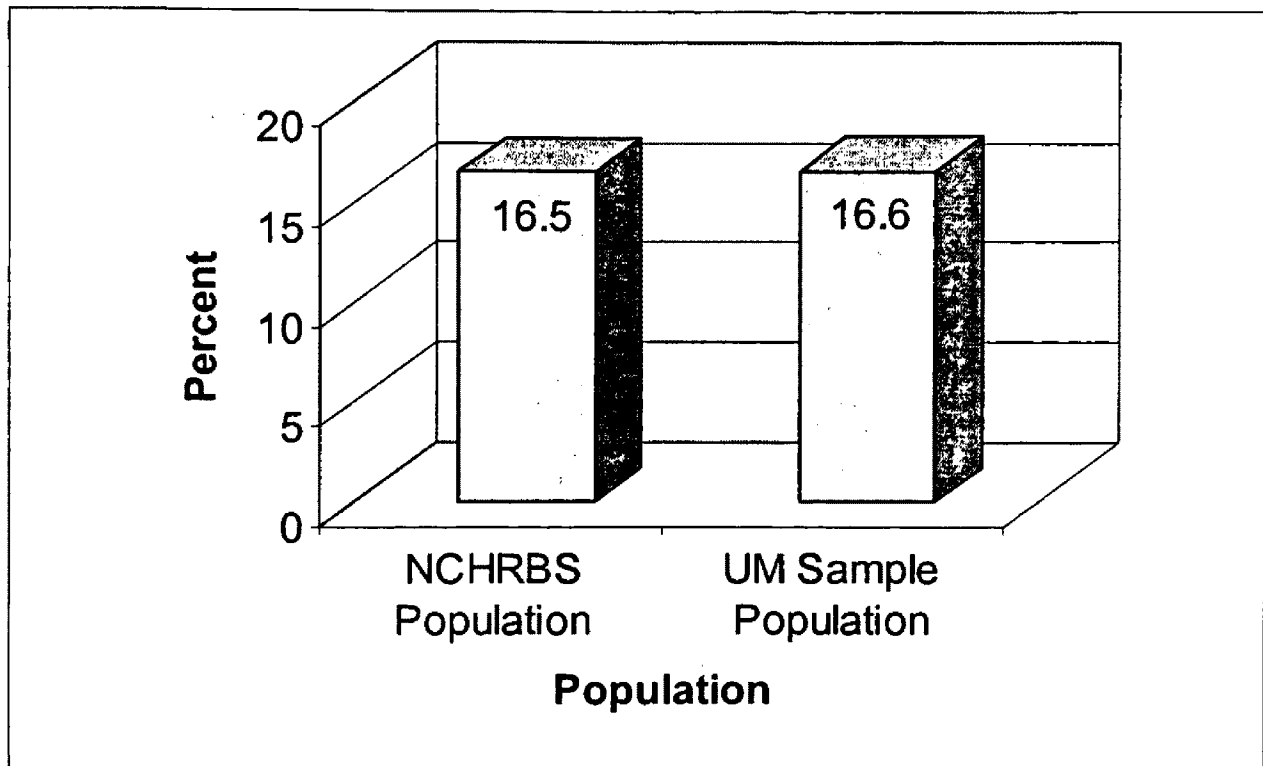
BINGE DRINKING BY SAMPLE POPULATION

Figure 19: Percent of Students that Drank Alcohol on ≥ 20 of the 30 Days Preceding the Survey (UM Sample Population versus NCRBS Population)



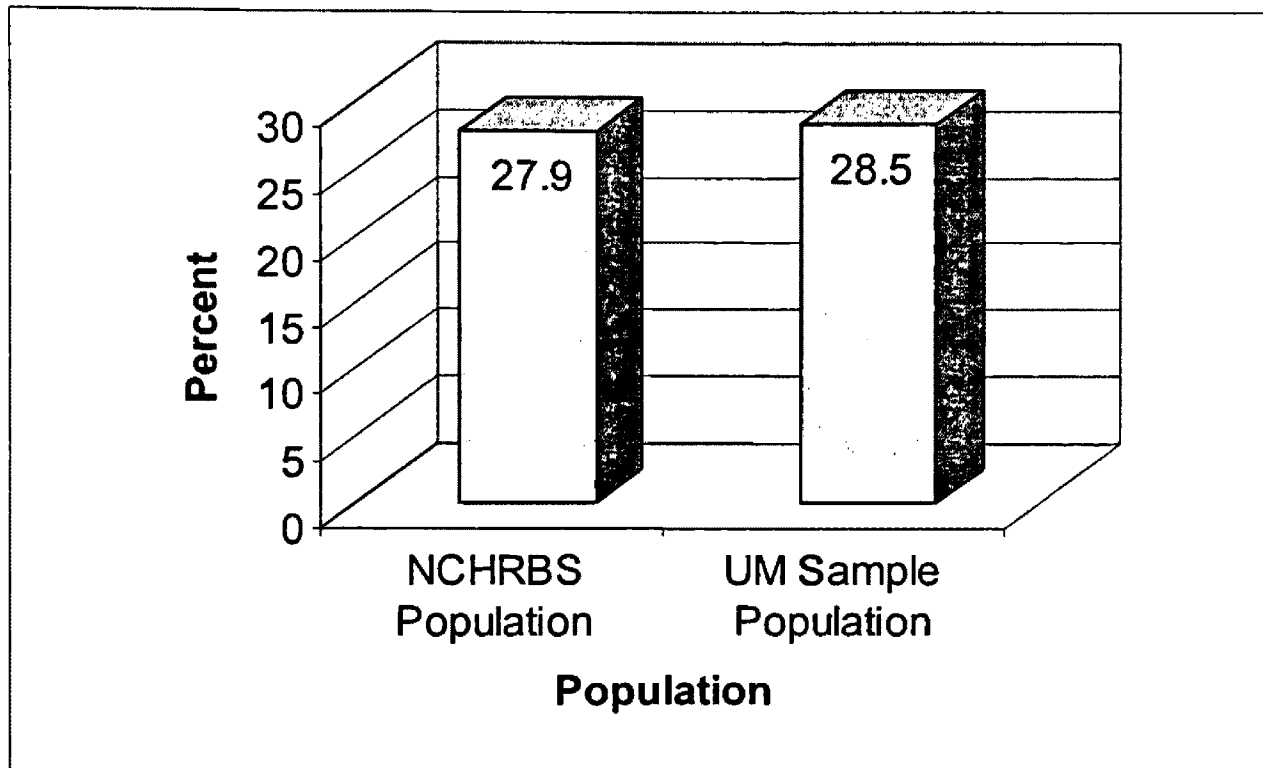
CIGARETTE USE BY SAMPLE POPULATION

Figure 20: Percent of Students that Report Smoking ≥ 20 of 30 Days Preceding Survey (UM Population Versus NCHRBS Population)



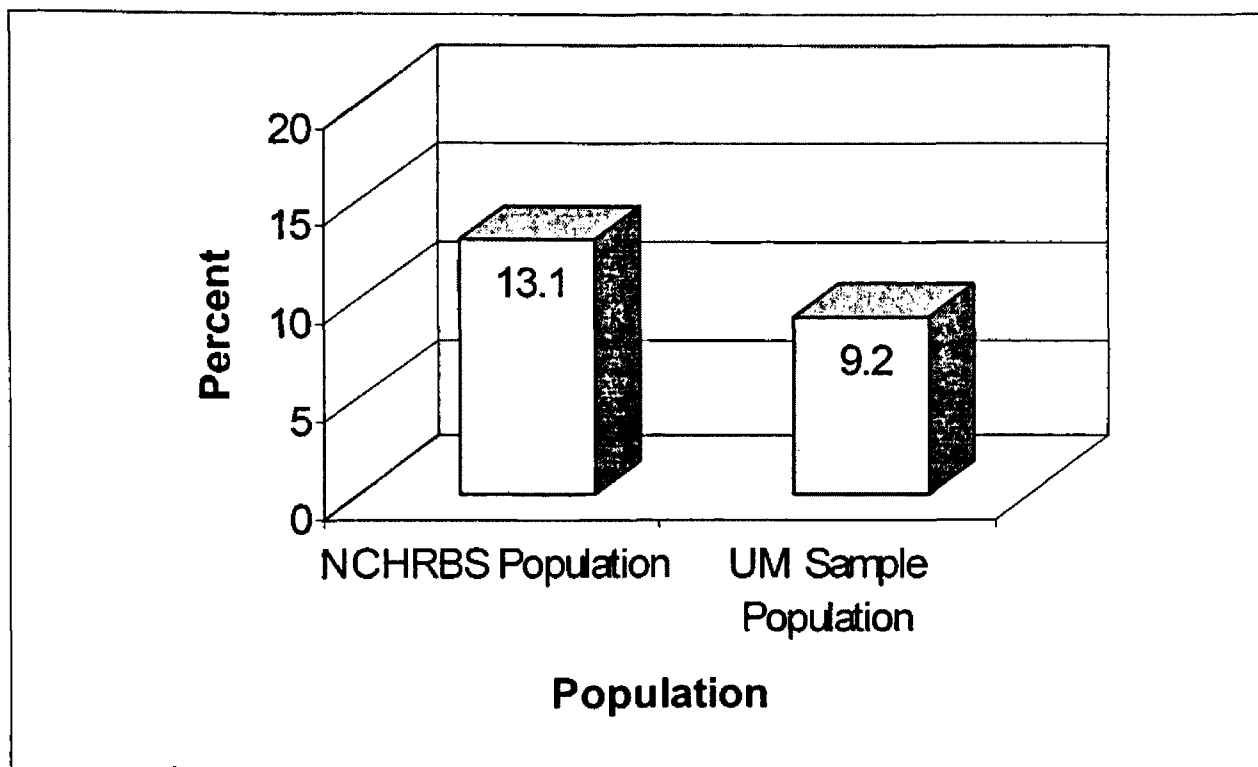
CONDOM USE BY SAMPLE POPULATION

Figure 21: Percent of Students that Report Using a Condom “Most of the Time” and “Always” During Past Thirty Days



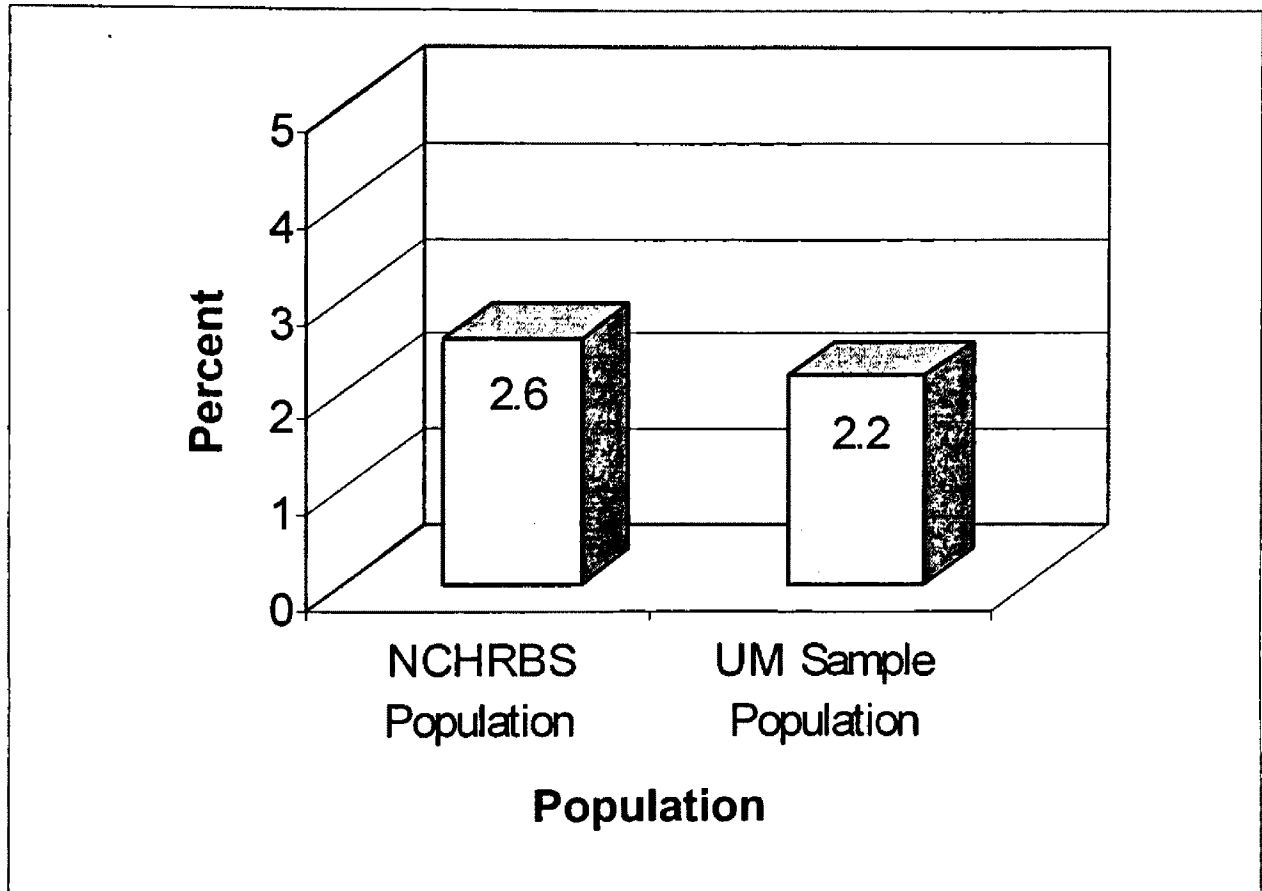
FORCED SEX BY SAMPLE POPULATION

Figure 22: Percent of Students that Report Having Been Forced to Have Sex Against Their Will During Their Life



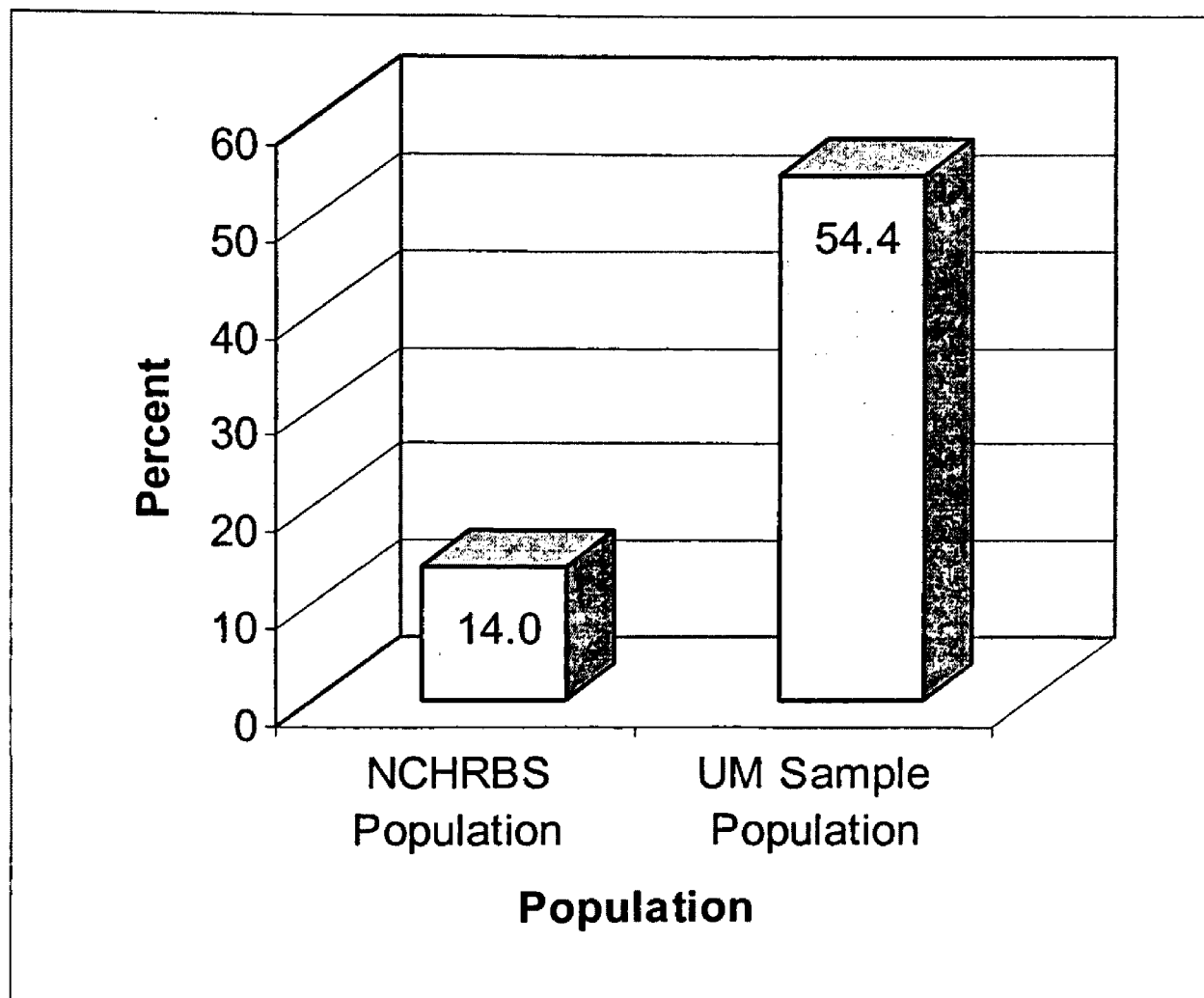
VOMITING OR TAKING LAXATIVES TO LOSE OR KEEP FROM GAINING WEIGHT BY SAMPLE POPULATION

Figure 23: Percent of Students that Report Vomiting or Taking Laxatives to Lose Weight or to Keep From Gaining Weight During Past Thirty Days



MARIJUANA BY SAMPLE POPULATION

Figure 24: Percent of Students that Report Using Marijuana at Least Once During Past Thirty Days



CHAPTER V

INTRODUCTION

The purpose of this study was to identify the prevalence of certain health risk behaviors among undergraduate students, as described in the 1995 National Health Risk Behavior Survey. Frequencies of six specific behaviors were broken down by gender, class level and place of residence and then compared to national results as well.

SUMMARY OF FINDINGS

The six areas highlighted in the study included the following behaviors: binge drinking, use of tobacco, use of marijuana, forced sexual intercourse, condom use, and the use of laxatives or vomiting to lose or control weight. Findings from each category are discussed below.

Binge Drinking

Binge drinking continues to be a problem on college campuses, with UM being no exception. When this problem is investigated according to gender, male students reported more episodes of binge drinking than females. Although it may appear that females binge drink less than their male counterparts, it is important to note that about half of the females participation in this study reported binge drinking five days or less in the 30 days preceding the survey.

Differences among class levels in regard to binge drinking show that Freshmen and Juniors seem to be more frequent binge drinkers than Sophomores and Seniors. Students in these two class levels reported binge drinking six or more days during the past 30 days at a rate approximately twice that of Sophomores and Seniors.

When comparisons are made according to place of residence, it appears that students living off campus are less likely to binge drink than those living on campus. Twenty-seven percent (n=26) of students living in dorms reported binge drinking six or more days during the past 30 days compared to 19 percent (n=24) of those living off campus. Due to the relatively low number of students living in Greek houses or with a parent, it is difficult to make comparisons including these groups. It should also be noted that Freshmen are required to live in the Dorms for the first year.

Cigarette Use

On the days they smoked, forty-four percent (n=44) of both male and female students reported smoking at least one cigarette a day for the past 30 days. Eight percent of males (n=8) and 3% of females (n=3) reported smoking eleven or more cigarettes a day, on the days they smoked, in the 30 days preceding the survey.

Of those smoking eleven or more cigarettes a day, on the days they smoked in the 30 days preceding the survey, Juniors reported the highest rate (8%, n=4) while Seniors reported the lowest rate (2%, n=1). Five percent (n=3) of Freshmen and 4% of Sophomores (n=2) reported this same behavior.

Place of residence provided differing results. Six percent of Dorm residents (n=5) 11% of Greek House residents (n=1), and 5% of students residing off campus (n=5) smoked eleven or more cigarettes a day during the past 30 days, on the days they smoked. There were no reports of smoking eleven or more cigarettes a day by students residing with a parent/guardian. Conclusions concerning survey participants are difficult to draw due to the low numbers in each category.

Condom Use and Forced Sex

Although consistent condom use reduces potential problems associated with high risk sexual behavior, only 28 percent (n=32) of male students and 29 percent (n=33) of female students reported condom use “most of the time” and “always” during the past 30 days. Perhaps in a more disturbing light, 37 percent (n=42) of males and 40 percent (n=46) of females reported using a condom “sometimes”, “rarely” or “never”.

Sophomores (n=9) report the lowest level of condom use in the categories of “most of the time” and “always”, with only 16 percent responding to these categories. Other class levels reported similar rates of use. Regardless of class level, however, it appears that most students do not use condoms regularly. Thirty-eight percent (n=20) of Freshmen, 39 percent (n=22) of Sophomores, 33 percent (n=18) of Juniors and 43 percent (n= 27) of Seniors reported using a condom “sometimes”, “rarely” and “never” during the past 30 days.

Consistent results were obtained in relation to place of residence and condom use. Approximately one third of each category reported using a condom “most of the time” and “always”. Similarly, reports of using a condom “sometimes”, “rarely”, or “never” were relatively consistent. Thirty-five percent (n=29) of dorm residents, 44 percent (n=4) of Greek house residents, 42 percent (n=51) of students living off campus and 28 percent (n=4) of student residing in a parent’s home reported these rates.

Episodes of forced sexual intercourse affect female students at a rate five times that of male students. Fifteen percent (n=21) of female students reported forced sexual intercourse at some time in their life, while only 3 percent (n=4) males reported the same.

Juniors and Seniors report two times as many incidents of forced sexual intercourse than their Freshman and Sophomore counterparts, with 13 percent (n=8) of Juniors and 13 percent (n=9) of Seniors answering affirmatively.

In regard to place of residence, students residing in dorms and those residing off campus report the highest rate of forced sexual intercourse, with 8 percent (n=9) of dorm residents and 11 percent (n=14) of off campus students reporting this occurrence. Only one student in the categories of Greek house resident and those residing with a parent reported an episode of forced sexual intercourse, therefore making it difficult to draw conclusions concerning these populations.

Vomiting or Taking Laxatives to Lose or Keep From Gaining Weight

Mostly affecting females, behaviors associated with eating disorders are becoming more visible on college campuses. On the UM campus, 4 percent (n=6) of students, all female, reported vomiting or taking laxatives to lose or keep from gaining weight in the past 30 days.

Of the six female students, 3 percent (n=2) of Sophomores, 3 percent (n=2) of Seniors, one percent (n=1) of Freshmen and two percent (n=1) of Juniors reported these behaviors.

When investigated by place of residence, four of the six females reporting these behaviors resided in a dorm, while the remaining two students lived off campus.

Due to a small number of affirmative responses, it is difficult to draw conclusions concerning these behaviors. It is important to note, however, that all respondents were female.

Marijuana Use

Illegal drug use on the UM campus predominately consists of marijuana. Sixty five percent (n=61) of male students and 44 percent (n= 35) of female students reported marijuana use at least once during the past 30 days.

Usage among class levels appeared to be similar. Over 50 percent of students in each class level reported using marijuana at least once during the past 30 days, with Sophomores reporting the highest level, at almost 60 percent.

Patterns according to place of residence resemble those of class levels. An average of 52 percent of students used marijuana at least once during the past 30 days, with 58 percent (n=40) of dorm residents at the high end of usage and 45 percent (n=6) of those residing with a parent reporting the lowest level of usage. Rates in each category may appear high, as only 64% of the total sample answered this question.

University of Montana Campus Compared to the National Sample

According to the results of the survey, it appears that frequency of most behaviors reported by UM students and students in the national sample are similar. Comparison of the two groups in regard to the behaviors of binge drinking, cigarette use, condom use and vomiting or using laxatives to lose or control weight revealed similar results, with a difference of less than one percentage point between each group. Risk behaviors that demonstrated differences greater than one percentage point were marijuana use and forced sex. In a less dramatic difference, the national sample reported 13.1 percent of students having experienced forced sex, while 9.2 percent of UM students reported this behavior. Of more concern is the difference reported in rates of marijuana use. Fifty-four percent of UM students reported using marijuana at least once in the past 30 days, as

opposed to 14 percent of students in the national sample. Two thirds of the um sample answered tyhis question

DISCUSSION

According to the results of this survey, it appears that UM students, similar to students across the country, frequently put themselves at risk for developing and maintaining negative lifestyle habits. General conclusions drawn in accordance with the gathered data are discussed below.

In terms of gender, male students tend to binge drink and use marijuana at a higher rate than their female counterparts. Females, however, tend to have experienced episodes of forced sex and the use of vomiting or taking laxitives to lose or keep from gaining weight at a rate at least four times that of male students. Cigarette and condom use were reported relatively equally by both groups.

When class level is investigated, it appears that Freshmen and Juniors binge drink and use cigarettes at higher rates than those in the other class levels, with rates of binge drinking almost twice as high as other class levels. Juniors and Seniors are more likely to use condoms than lower class levels but also reported higher rates of forced sexual intercourse. Similar rates of the behaviors of vomiting or taking laxatives to lose or control weight and use of marijuana were reported by each class level.

Place of residence provided notable differences and similarities as well. Dorm residents appear to be at highest risk for binge drinking, and vomiting or using laxatives to lose or keep from gaining weight. Greek house residents reported high levels of binge drinking as well. Students residing with a parent reported the lowest levels of forced sexual intercourse. Rates of marijuana use were reported in relatively equal rates among

the four categories, with dorm residents at the high end and those residing with a parent at the low end.

These negative lifestyle behaviors which are practiced and often perfected during a student's career can easily carry on into life beyond the college years. Because college campuses are a somewhat contained environment, they can be ideal realms in which to educate students about the consequences of these negative lifestyle behaviors. The problem with this notion, however, is twofold. First, many college students arrive on campus with previously well established negative health behaviors. Secondly, education about lifestyle behaviors and their consequences do not necessarily lead to the application and practice of healthy behaviors. It is logical to presume that most college students are well aware of the dangerous consequences associated with behaviors such as overconsumption of alcohol and poor sexual decision making, for example. It is not logical, though, to presume that knowledge translates into action or behavior change.

PROFILE OF STUDIED PARTICIPANTS MOST LIKELY TO ENGAGE IN RISKY BEHAVIORS

Health professionals who develop programs designed to reduce risk behaviors in college students need a clear description of their target population in order to make these programs effective. Following are profiles of the type of student most likely to engage in each high risk behavior:

Binge Drinking: Male, Freshmen and Juniors, Living in Dorms and Greek Houses

Cigarette Use: Male and Female, Freshmen and Greek House Residents, Dorm residents

Inconsistent Condom Use: Male and Female, All Class Levels, All Places of Residence

Forced Sexual Intercourse: Female, Juniors and Seniors, Living off Campus

Vomiting or Taking Laxatives to Lose or Keep From Gaining Weight: Female, Sophomores and Seniors, Living in Dorms

Marijuana Use: Male, All Class Levels, Living in Dorms and Off Campus

RECOMMENDATIONS FOR FURTHER RESEARCH

In order to accurately track progress, trends and behavioral patterns among students on the University of Montana campus, it may be reasonable to repeat the NCHRBS at a rate of perhaps every two to three years. Another possibility might be to vary sampling procedures in order to achieve a larger sample size. The 1996 survey employed a stratified random sample where subjects were called and asked to participate. This method may have intimidated or attracted certain students, thus skewing results. In order to gather more data and increase the number of survey respondents, which would in turn generate more accurate information, it may be wise to employ a different method of subject recruitment. Randomly selecting classes with approval from the professor may achieve this purpose. The survey could be completed in a twenty minute time period during the class. Another option may be to mail surveys to randomly selected students, supplying return postage to insure a higher rate of return. If the sampling technique used for this project was repeated, it would be best to administer the survey at a different time of the year, as opposed to the end of the spring semester when students are preparing for exams. Also, employing more personnel to call selected students may help to increase the sample size.

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APPENDIX A
INFORMED CONSENT

Student Informed Consent Statement

The Student Health Services at the University of Montana supports the practice of protection for human subjects participating in research. The following information is provided so you can decide whether or not you wish to participate in this study.

In order to determine the health risk behaviors in which UM students engage, we are administering the National College Health Risk Behavior Survey on The University of Montana Campus. You will be asked to complete a survey. This will take approximately 30 minutes. Information from this study will be used by the Student Wellness office to modify existing health education programming and develop new programming for UM students.

Because the survey contains some questions that could be legally damaging to some subjects, the following steps will be taken to minimize potential risks:

- 1) All reported information will remain anonymous
- 2) Your name will not be associated with research findings in any way
- 3) Individual answers will not be investigated
- 4) At the conclusion of the study, the list of subject names, phone numbers and completed surveys will be shredded.

Some of the material on the survey may be upsetting to some subjects. On the third page of this consent letter is a list of services both on campus and in the community that are available for subjects to contact if survey questions cause emotional distress.

Although there is minimal risk to the subjects participating in this study, The University of Montana requires that the following paragraph be included:

In the event that you are injured as a result of this research you should individually seek appropriate medical treatment. If the injury is caused by the negligence of the University or any of its employees, you may be entitled to reimbursement or compensation pursuant to the Comprehensive State Insurance Plan established by the Department of Administration under the authority of M.C.A., Title 2, Chapter 9. In the event of a claim for such injury, further information may be obtained from the University's Claims Representative or University Legal Counsel.

Please feel free to ask any question you may have regarding this study. We appreciate your participation and thank you for your help.

Sincerely,

Linda Green, Health Educator
Principal Investigator

Laurie Lamont
Co-investigator

Student Health Services
634 Eddy
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243-2801

Student Health Services
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By signing this form, I confirm that I am at least 18 years of age.

NAME _____

DATE _____

APPENDIX B**INSTRUMENT****National College Health Risk Behavior Survey**

1996

University of Montana Health Risk Behavior Survey

This survey is about health behavior. The information you provide will help to identify the kind of health programs and services college students need.

Developed by the Centers for Disease Control, this survey has previously been administered to 9,400 college students across the country to determine national trends in college student health risk behavior.

The purpose of this study is to look at health behaviors on the University of Montana campus. Information from this study will NOT be reported to the CDC or any other national organization.

Completing this survey is voluntary and the answers you give will be safeguarded to the fullest extent possible in accordance with applicable statutes. No individual responses will be reported, so please answer every question as honestly as you can. Mark only one answer to every question unless otherwise indicated.

Do NOT write your name on the survey.

THANK YOU VERY MUCH FOR YOUR HELP

IMPORTANT

- Read each question carefully.
- Use a #2 pencil only.
- Make dark marks.
- Example: ○ ○ ● ○
- Erase completely to change your answer.

1. How old are you?

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

2. What is your sex?

- Female
- Male

3. What is your class standing?

- Freshman
- Sophomore
- Junior
- Senior
- Graduate student
- Other

4. What is your current year in college?

- 1st year
- 2nd year
- 3rd year
- 4th year
- 5th year
- 6th year
- 7th year
- 8th year or beyond

5. Are you a full-time student?

- Yes
- No

6. How do you describe yourself?

- White - not Hispanic
- Black - not Hispanic
- Hispanic or Latino
- Asian or Pacific Islander
- American Indian or Alaskan Native
- Other (specify): _____

7. What is your marital status?

- Never been married
- Married
- Separated
- Divorced
- Widowed

8. With whom do you currently live?
(Select all that apply.)

- Alone
- Spouse/domestic partner
- Roommate(s)/friend(s)
- Parent(s)/guardian(s)
- Other relatives
- Your children
- Other

9. Where do you currently live?

- College dormitory or residence hall
- Fraternity or sorority house
- Other university/college housing
- Off-campus house or apartment
- Parent/guardian's home
- Other

10. Are you a member of a social fraternity or sorority?

- Yes
- No

11. How many hours a week do you work for pay?

- 0 hours
- 1-9 hours
- 10-19 hours
- 20-29 hours
- 30-39 hours
- 40 hours
- More than 40 hours

12. Do you have any kind of health care coverage, including health insurance or prepaid plans such as HMOs (health maintenance organizations)?

- Yes
- No
- Not sure

13. How much education does your mother have?

- She did not finish high school
- She graduated from high school or attained a GED
- She had some education after high school
- She graduated from college
- Not sure

14. How much education does your father have?

- He did not finish high school
- He graduated from high school or attained a GED
- He had some education after high school
- He graduated from college
- Not sure

The next 15 questions ask about safety and violence.

15. How often do you wear a seat belt when riding in a car driven by someone else?

- Never
- Rarely
- Sometimes
- Most of the time
- Always

16. How often do you wear a seat belt when driving a car?

- I do not drive a car
- Never wear a seat belt
- Rarely wear a seat belt
- Sometimes wear a seat belt
- Most of the time wear a seat belt
- Always wear a seat belt

17. During the past 12 months, how many times did you ride a motorcycle?

- 0 times
- 1 to 10 times
- 11 to 20 times
- 21 to 39 times
- 40 or more times

18. When you rode a motorcycle during the past 12 months, how often did you wear a helmet?

- I did not ride a motorcycle during the past 12 months
- Never wore a helmet
- Rarely wore a helmet
- Sometimes wore a helmet
- Most of the time wore a helmet
- Always wore a helmet

19. During the past 12 months, how many times did you ride a bicycle?

- 0 times
- 1 to 10 times
- 11 to 20 times
- 21 to 39 times
- 40 or more times

20. When you rode a bicycle during the past 12 months, how often did you wear a helmet?

- I did not ride a bicycle during the past 12 months
- Never wore a helmet
- Rarely wore a helmet
- Sometimes wore a helmet
- Most of the time wore a helmet
- Always wore a helmet

21. During the past 12 months, how many times did you go boating or swimming?

- 0 times
- 1 to 10 times
- 11 to 20 times
- 21 to 39 times
- 40 or more times

22. When you went boating or swimming during the past 12 months, how often did you drink alcohol?

- I did not go boating or swimming during the past 12 months
- Never drank alcohol
- Rarely drank alcohol
- Sometimes drank alcohol
- Most of the time drank alcohol
- Always drank alcohol

23. During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been drinking alcohol?

- 0 times
- 1 time
- 2 or 3 times
- 4 or 5 times
- 6 or more times

24. During the past 30 days, how many times did you drive a car or other vehicle when you had been drinking alcohol?

- 0 times
- 1 time
- 2 or 3 times
- 4 or 5 times
- 6 or more times

25. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club? Do not count carrying a weapon as part of your job.

- 0 days
- 1 day
- 2 or 3 days
- 4 or 5 days
- 6 or more days

26. During the past 30 days, on how many days did you carry a gun? Do not count carrying a gun as part of your job.

- 0 days
- 1 day
- 2 or 3 days
- 4 or 5 days
- 6 or more days

27. During the past 12 months, how many times were you in a physical fight?
- 0 times - SKIP TO QUESTION 30
 - 1 time
 - 2 or 3 times
 - 4 or 5 times
 - 6 or 7 times
 - 8 or 9 times
 - 10 or 11 times
 - 12 or more times

28. During the past 12 months, with whom did you fight? (Select all that apply.)

- A total stranger
- A friend or someone I know
- A boyfriend, girlfriend, or date
- My spouse or domestic partner
- A parent, brother, sister, or other family member
- Other

29. During the past 12 months, how many times were you in a physical fight in which you were injured and had to be treated by a doctor or nurse?

- 0 times
- 1 time
- 2 or 3 times
- 4 or 5 times
- 6 or more times

Sometimes people feel so depressed and hopeless about the future that they may consider attempting suicide, that is, taking some action to end their own life. The next four questions ask about suicide.

30. During the past 12 months, did you ever seriously consider attempting suicide?

- Yes
- No

31. During the past 12 months, did you make a plan about how you would attempt suicide?

- Yes
- No

32. During the past 12 months, how many times did you actually attempt suicide?

- 0 times
- 1 time
- 2 or 3 times
- 4 or 5 times
- 6 or more times

33. If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?

- I did not attempt suicide during the past 12 months
- Yes
- No

The next eight questions ask about tobacco use.

34. Have you ever tried cigarette smoking, even one or two puffs?

- Yes
- No - SKIP TO QUESTION 41

35. How old were you when you smoked a whole cigarette for the first time?

- I have never smoked a whole cigarette
- 12 years old or younger
- 13 or 14 years old
- 15 or 16 years old
- 17 or 18 years old
- 19 or 20 years old
- 21 to 24 years old
- 25 years old or older

36. During the past 30 days, on how many days did you smoke cigarettes?

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

37. During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?

- I did not smoke cigarettes during the past 30 days
- Less than 1 cigarette per day
- 1 cigarette per day
- 2 to 5 cigarettes per day
- 6 to 10 cigarettes per day
- 11 to 20 cigarettes per day
- More than 20 cigarettes per day

38. Have you ever smoked cigarettes regularly, that is, at least one cigarette every day for 30 days?

- Yes
- No

39. How old were you when you first started smoking cigarettes regularly (at least one cigarette every day for 30 days)?

- I have never smoked cigarettes regularly.
- 12 years old or younger
- 13 or 14 years old
- 15 or 16 years old
- 17 or 18 years old
- 19 or 20 years old
- 21 to 24 years old
- 25 years old or older

40. Have you ever tried to quit smoking cigarettes?

- Yes
- No

41. During the past 30 days, on how many days did you use chewing tobacco or snuff, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?

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

The next three questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

42. How old were you when you had your first drink of alcohol other than a few sips?

- I have never had a drink of alcohol other than a few sips - SKIP TO QUESTION 45
- 12 years old or younger
- 13 or 14 years old
- 15 or 16 years old
- 17 or 18 years old
- 19 or 20 years old
- 21 to 24 years old
- 25 years old or older

43. During the past 30 days, on how many days did you have at least one drink of alcohol?

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

44. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?

- 0 days
- 1 day
- 2 days
- 3 to 5 days
- 6 to 9 days
- 10 to 19 days
- 20 or more days

The next three questions ask about marijuana use.

45. During your life, how many times have you used marijuana?

- 0 times - SKIP TO QUESTION 48
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 to 99 times
- 100 or more times

46. How old were you when you tried marijuana for the first time?

- 12 years old or younger
- 13 or 14 years old
- 15 or 16 years old
- 17 or 18 years old
- 19 or 20 years old
- 21 to 24 years old
- 25 years old or older

47. During the past 30 days, how many times did you use marijuana?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

The next 10 questions ask about cocaine and other drug use.

48. During your life, how many times have you used any form of cocaine including powder, crack, or freebase?

- 0 times - SKIP TO QUESTION 52
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 to 99 times
- 100 or more times

49. How old were you when you tried any form of cocaine, including powder, crack, or freebase, for the first time?

- 12 years old or younger
- 13 or 14 years old
- 15 or 16 years old
- 17 or 18 years old
- 19 or 20 years old
- 21 to 24 years old
- 25 years old or older

50. During the past 30 days, how many times did you use any form of cocaine, including powder, crack, or freebase?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

51. During your life, how many times have you used the crack or freebase forms of cocaine?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 to 99 times
- 100 or more times

52. During your life, how many times have you sniffed glue, or breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 to 99 times
- 100 or more times

53. During your life, how many times have you taken steroid pills or shots without a doctor's prescription?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 to 99 times
- 100 or more times

54. During your life, how many times have you used any other type of illegal drug, such as LSD, PCP, ecstasy, mushrooms, speed, ice, or heroin?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 to 99 times
- 100 or more times

55. During the past 30 days, how many times have you used any other type of illegal drug, such as LSD, PCP, ecstasy, mushrooms, speed, ice, or heroin?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

56. During the past 30 days, how many times have you used any illegal drug in combination with drinking alcohol?

- 0 times
- 1 to 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

57. During your life, how many times have you used a needle to inject any illegal drug into your body?

- 0 times
- 1 time
- 2 or more times

The next 15 questions ask about sexual behavior. For the purpose of this survey, sexual intercourse is defined as vaginal intercourse, anal intercourse, or oral/genital sex.

58. How old were you when you had sexual intercourse for the first time?

- I have never had sexual intercourse -
SKIP TO QUESTION 69
- 12 years old or younger
- 13 or 14 years old
- 15 or 16 years old
- 17 or 18 years old
- 19 or 20 years old
- 21 to 24 years old
- 25 years old or older

59. During your life, with how many females have you had sexual intercourse?

- I have never had sexual intercourse with a female
- 1 female
- 2 females
- 3 females
- 4 females
- 5 females
- 6 or more females

60. During the past 3 months, with how many females have you had sexual intercourse?

- I have never had sexual intercourse with a female
- I have had sexual intercourse with a female, but not during the past 3 months
- 1 female
- 2 females
- 3 females
- 4 females
- 5 females
- 6 or more females

61. During your life, with how many males have you had sexual intercourse?

- I have never had sexual intercourse with a male
- 1 male
- 2 males
- 3 males
- 4 males
- 5 males
- 6 or more males

62. During the past 3 months, with how many males have you had sexual intercourse?

- I have never had sexual intercourse with a male
- I have had sexual intercourse with a male, but not during the past 3 months
- 1 male
- 2 males
- 3 males
- 4 males
- 5 males
- 6 or more males

63. During the past 30 days, how many times did you have sexual intercourse?

- 0 times
- 1 time
- 2 or 3 times
- 4 to 9 times
- 10 to 19 times
- 20 or more times

64. During the past 30 days, how often did you or your partner use a condom?

- I have not had sexual intercourse during the past 30 days
- Never used a condom
- Rarely used a condom
- Sometimes used a condom
- Most of the time used a condom
- Always used a condom

65. The last time you had sexual intercourse, did you or your partner use a condom?

- Yes
- No

66. Did you drink alcohol or use drugs before you had sexual intercourse the last time?

- Yes
- No

67. The last time you had sexual intercourse, what method did you or your partner use to prevent pregnancy? (Select all that apply.)

- No method was used to prevent pregnancy
- Birth control pills
- Condoms
- Withdrawal
- Some other method
- Not sure

68. How many times have you been pregnant or gotten someone pregnant?

- 0 times
- 1 time
- 2 or more times
- Not sure

69. During your life, have you ever been forced to have sexual intercourse against your will?

- Yes
- No - SKIP TO QUESTION 72

70. How old were you the first time you were forced to have sexual intercourse against your will?

- 4 years old or younger
- 5 to 12 years old
- 13 or 14 years old
- 15 or 16 years old
- 17 or 18 years old
- 19 or 20 years old
- 21 to 24 years old
- 25 years old or older

71. How old were you the last time you were forced to have sexual intercourse against your will?

- 4 years old or younger
- 5 to 12 years old
- 13 or 14 years old
- 15 or 16 years old
- 17 or 18 years old
- 19 or 20 years old
- 21 to 24 years old
- 25 years old or older

72. Have you ever had your blood tested for the AIDS virus/HIV infection?

- Yes
- No
- Not sure

The next eight questions ask about body weight.

73. How do you describe your weight?

- Very underweight
- Slightly underweight
- About the right weight
- Slightly overweight
- Very overweight

74. Which of the following are you trying to do about your weight?

- Lose weight
- Gain weight
- Stay the same weight
- I am not trying to do anything about my weight

75. During the past 30 days, did you diet to lose weight or to keep from gaining weight?

- Yes
- No

76. During the past 30 days, did you exercise to lose weight or to keep from gaining weight?

- Yes
- No

77. During the past 30 days, did you vomit or take laxatives to lose weight or to keep from gaining weight?

- Yes
- No

78. During the past 30 days, did you take diet pills to lose weight or to keep from gaining weight?

- Yes
- No

79. What is your height?

HEIGHT		
FT.	IN.	
3	0	0
4	1	1
5	2	2
6	3	3
7	4	4
8	5	5
9	6	6
	7	7
	8	8
	9	9

80. What is your weight?

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

The next seven questions ask about food you ate yesterday. Think about all meals and snacks you ate yesterday from the time you got up until you went to bed. Be sure to include food you ate at home, on campus, at restaurants, or anywhere else.

81. Yesterday, how many times did you eat fruit?

- 0 times
- 1 time
- 2 times
- 3 or more times

82. Yesterday, how many times did you drink fruit juice?

- 0 times
- 1 time
- 2 times
- 3 or more times

83. Yesterday, how many times did you eat green salad?

- 0 times
- 1 time
- 2 times
- 3 or more times

84. Yesterday, how many times did you eat cooked vegetables?

- 0 times
- 1 time
- 2 times
- 3 or more times

85. Yesterday, how many times did you eat hamburger, hot dogs, or sausage?

- 0 times
- 1 time
- 2 times
- 3 or more times

86. Yesterday, how many times did you eat french fries or potato chips?

- 0 times
- 1 time
- 2 times
- 3 or more times

87. Yesterday, how many times did you eat cookies, doughnuts, pie, or cake?

- 0 times
- 1 time
- 2 times
- 3 or more times

The next six questions ask about physical activity.

88. On how many of the past 7 days did you exercise or participate in sports activities for at least 20 minutes that made you sweat and breathe hard, such as basketball, jogging, swimming laps, tennis, fast bicycling, or similar aerobic activities?

- 0 days
- 1 day
- 2 days
- 3 days
- 4 days
- 5 days
- 6 days
- 7 days

89. On how many of the past 7 days did you do stretching exercises, such as toe touching, knee bending, or leg stretching?

- 0 days
- 1 day
- 2 days
- 3 days
- 4 days
- 5 days
- 6 days
- 7 days

90. On how many of the past 7 days did you do exercises to strengthen or tone your muscles, such as push-ups, sit-ups, or weight lifting?

- 0 days
- 1 day
- 2 days
- 3 days
- 4 days
- 5 days
- 6 days
- 7 days

91. On how many of the past 7 days did you walk or bicycle for at least 30 minutes at a time? (Include walking or bicycling to or from class or work.)

- 0 days
- 1 day
- 2 days
- 3 days
- 4 days
- 5 days
- 6 days
- 7 days

92. During this school year, have you been enrolled in a physical education class?

- Yes
- No

93. During this school year, on how many college sports teams (intramural or extramural) did you participate?

- 0 teams
- 1 team
- 2 teams
- 3 or more teams

The next three questions ask about AIDS education and health information.

94. Have you ever been taught about AIDS or HIV infection in your college classes?

- Yes
- No
- Not sure

95. During this school year, where on your college campus did you receive information about avoiding AIDS or HIV infection? (Select all that apply.)

- College classes
- Residence hall or other campus housing
- Student clubs or organizations
- Student health center
- Health fair
- Pamphlets, brochures, or newsletters
- College newspapers
- Informal discussion with friends
- Other
- I was not provided with any information

96. On which of the following health topics have you ever received information from your college or university? (Select all that apply.)

- Tobacco use prevention
- Alcohol and other drug use prevention
- Violence prevention
- Injury prevention and safety
- Suicide prevention
- Pregnancy prevention
- Sexually transmitted disease (STD) prevention
- AIDS or HIV infection prevention
- Dietary behaviors and nutrition
- Physical activity and fitness

THANK YOU!

APPENDIX C
DEMOGRAPHIC DATA

1. How old are you?	<u>Number</u>	<u>Percent</u>
a. 18	28	10.3
b. 19	56	20.7
c. 20	53	19.6
d. 21	49	18.1
e. 22	34	12.6
f. 23	33	12.1
g. 24	17	6.3
		n = 270
Missing value	2	.7

2. What is your sex?	<u>Number</u>	<u>Percent</u>
a. Male	129	47.4
b. Female	143	52.6
		n = 272

3. What is your class standing?

	<u>Number</u>	<u>Percent</u>
a. Freshman	73	26.8
b. Sophomore	64	23.5
c. Junior	64	23.5
d. Senior	70	25.7
	n = 271	
Missing value	1	.4

4. What is your current year in college?

	<u>Number</u>	<u>Percent</u>
a. 1st year	72	26.5
b. 2nd year	60	22.1
c. 3rd year	52	19.1
d. 4th year	46	16.9
e. 5th year	31	11.4
f. 6th year	10	3.7
g. 7th year	1	.4
	n = 272	

5. Are you a full time student?

	<u>Number</u>	<u>Percent</u>
a. Yes	261	96.0
b. No	11	4.0
	n = 272	

6. How do you describe yourself?

	<u>Number</u>	<u>Percent</u>
a. White Non-Hispanic	259	95.2
b. Hispanic or Latino	2	.7
c. Asian or Pacific Islander	3	1.1
d. American Indian or Alaskan Native	2	.7
e. Other	5	1.8
f. a & c	1	.4

n = 272

7. What is your marital status?

	<u>Number</u>	<u>Percent</u>
a. Never been married	263	96.7
b. Married	7	2.6
c. Separated	1	.4
d. Divorced	0	0
e. Widowed	1	.4

n = 272

8. With whom do you currently live?

	<u>Number</u>	<u>Percent</u>
a. Alone	48	17.6
b. Spouse/Partner	21	7.7
c. Roommates	166	61.0
d. Parent/Guardian	24	8.8
e. Other relatives	6	2.2
f. Your children	1	.4
g. Other	6	2.2

n = 272

9. Where do you currently live?

	<u>Number</u>	<u>Percent</u>
a. Dormitory	109	40.1
b. Greek house	10	3.7
c. Other university housing	0	0
d. Off-campus housing	131	48.2
e. Parent/Guardian's home	21	7.7
f. Other	1	.4

n = 272

10. Are you a member of a social fraternity or sorority?

	<u>Number</u>	<u>Percent</u>
a. Yes	36	13.2
b. No	236	86.6

n = 272

11. How many hours a week do you work for pay?

	<u>Number</u>	<u>Percent</u>
a. 0 hours	128	47.1
b. 1-9 hours	33	12.1
c. 10-19 hours	68	25.0
d. 20-29 hours	30	11.0
e. 30-39 hours	9	3.3
f. 40 hours	2	.7
g. 40 hours or more	2	.7

n = 272

12. Do you have any kind of health care coverage, including health insurance or pre-paid plans, such as HMO's (health maintenance organizations)?

	<u>Number</u>	<u>Percent</u>
a. Yes	245	90.1
b. No	13	4.8
c. Not sure	13	4.8
	n = 271	
Missing value	1	.4

13. How much education does your mother have?

	<u>Number</u>	<u>Percent</u>
a. Did not finish H.S.	6	2.2
b. Graduated from H.S./GED	53	19.5
c. Some education after H.S.	76	27.9
d. Graduated from college	135	49.6
e. Not sure	2	.7
	n = 272	

14. How much education does your father have?

	<u>Number</u>	<u>Percent</u>
a. Did not finish H.S.	10	3.7
b. Graduated from H.S./GED	40	14.7
c. Some education after H.S.	67	24.6
d. Graduated from college	149	54.8
e. Not sure	6	2.2

n = 272

APPENDIX D
ALCOHOL USE AND BINGE DRINKING

1. How old were you when you had your first drink of alcohol other than a few sips?

	<u>Number</u>	<u>Percent</u>
a. Never had a drink of alcohol	14	5.1
b. 12 or younger	40	14.7
c. 13 or 14	75	27.6
d. 15 or 16	75	27.6
e. 17 or 18	55	20.2
f. 19 or 20	8	2.9
g. 21 to 24	5	1.8

n = 272

2. During the past 30 days, on how many days did you have at least one drink of alcohol?

	<u>Number</u>	<u>Percent</u>
a. 0 days	20	7.8
b. 1 or 2 days	53	20.5
c. 3 to 5 days	56	21.7
d. 6 to 9 days	59	22.9
e. 10 to 19 days	58	22.5
f. 20 to 29 days	12	4.6
g. All 30 days	0	0
		n = 258
Missing value	14	5.1

3. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?

	<u>Number</u>	<u>Percent</u>
a. 0 days	82	31.8
b. 1 day	37	14.3
c. 2 days	36	14.7
d. 3 to 5 days	47	18.2
e. 6 to 9 days	34	13.2
f. 10 to 19 days	22	8.5
g. 20 or more days	0	0
	n = 258	
Missing value	14	5.1

APPENDIX E
TOBACCO USE

1. Have you ever tried cigarette smoking, even one or two puffs?

	<u>Number</u>	<u>Percent</u>
a. Yes	209	77.4
b. No	61	22.6
	n = 270	
Missing value	2	.7

2. How old were you when you first smoked a whole cigarette for the first time?

	<u>Number</u>	<u>Percent</u>
a. Never smoked a whole cigarette	24	11.5
b. 12 or younger	32	15.4
c. 13 or 14	32	15.4
d. 15 or 16	52	25.0
e. 17 or 18	46	22.1
f. 19 or 20	17	8.2
g. 21 to 24	5	2.4
	n = 208	
Missing value	64	23.5

3. During the past 30 days, on how many days did you smoke cigarettes?

	<u>Number</u>	<u>Percent</u>
a. 0 days	93	45.2
b. 1 or 2 days	23	11.0
c. 3 to 5 days	23	11.0
d. 6 to 9 days	13	6.3
e. 10 to 19 days	11	5.3
f. 20 to 29 days	17	8.1
g. All 30 days	28	13.5
		n = 208
Missing value	64	23.5

4. During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?

	<u>Number</u>	<u>Percent</u>
a. Did not smoke cigarettes/30 days	94	45.2
b. Less than 1 per day	23	11.0
c. 1 per day	23	11.0
d. 2 to 5 per day	37	17.8
e. 6 to 10 per day	20	9.6
f. 11 to 20 per day	7	3.3
g. More than 20 per day	4	1.9
	n = 208	
Missing value	64	23.5

5. Have you ever smoked cigarettes regularly, that is, at least one cigarette every day for 30 days?

	<u>Number</u>	<u>Percent</u>
a. Yes	88	42.3
b. No	120	57.6
	n = 208	
Missing value	64	23.5

6. How old were you when you first started smoking regularly (at least 1 cigarette every day for 30 days)?

	<u>Number</u>	<u>Percent</u>
a. Never smoked regularly	115	55.3
b. 12 or younger	3	1.4
c. 13 or 14	10	4.8
d. 15 or 16	16	7.7
e. 17 or 18	40	19.2
f. 19 or 20	20	9.6
g. 21 to 24	4	1.9
	n = 208	
Missing value	64	23.5

7. Have you ever tried to quit smoking cigarettes?

	<u>Number</u>	<u>Percent</u>
a. Yes	88	43.3
b. No	115	56.7
	n = 203	
Missing value	69	25.4

8. During the past 30 days, on how many days did you use chewing tobacco or snuff, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits or Copenhagen?

	<u>Number</u>	<u>Percent</u>
a. 0 days	233	86.2
b. 1 or 2 days	14	5.1
c. 3 to 5 days	7	2.6
d. 6 to 9 days	0	0
e. 10 to 19 days	6	2.2
f. 20 to 29 days	5	1.8
g. All 30 days	5	1.8
		n = 270
Missing value	2	.7

APPENDIX F
SEXUAL BEHAVIORS, UNINTENDED PREGNANCY AND DISEASE

1. How old were you when you had sexual intercourse for the first time?

	<u>Number</u>	<u>Percent</u>
a. Never had sexual intercourse	44	16.2
b. 12 or younger	6	2.2
c. 13 or 14	16	5.9
d. 15 or 16	86	31.6
e. 17 or 18	90	33.1
f. 19 or 20	17	6.3
g. 21 to 24	11	4.0
		n = 270
Missing value	2	.7

2. During your life, with how many females have you had sexual intercourse?

	<u>Number</u>	<u>Percent</u>
a. Never had sexual intercourse w/female	117	51.3
b. 1 female	21	9.2
c. 2 females	16	7.0
c. 3 females	11	4.8
d. 4 females	8	3.5
e. 5 females	14	6.1
f. 6 or more females	41	17.9
	n = 228	
Missing value	44	16.2

3. During the past 3 months, with how many females have you had sexual intercourse?

	<u>Number</u>	<u>Percent</u>
a. Never had sexual intercourse w/female	117	51.3
b. No sexual intercourse w/fem. in past 3 mo.	28	12.3
c. 1 female	56	24.6
d. 2 females	14	6.1
e. 3 females	9	3.9
f. 4 females	3	1.3
g. 5 females	0	0
h. 6 or more females	1	.4
	n = 228	
Missing value	44	16.2

4. During your life, with how many males have you had sexual intercourse?

	<u>Number</u>	<u>Percent</u>
a. Never had sexual intercourse w/male	102	45.3
b. 1 male	35	15.6
c. 2 males	10	4.4
d. 3 males	17	7.6
e. 4 males	13	5.7
f. 5 males	17	7.5
g. 6 or more males	31	13.7
	n = 225	
Missing value	47	17.3

5. During the past three months, with how many males have you had sexual intercourse?

	<u>Number</u>	<u>Percent</u>
a. Never had sexual intercourse w/ male	103	45.3
b. No sexual intercourse w/male in past 3 mo.	28	12.3
c. 1 male	80	35.2
d. 2 males	13	5.7
e. 3 males	2	.7
f. 4 males	1	.4
g. 5 males	0	0
h. 6 or more males	0	0

n = 227

Missing value	45	16.5
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6. During the past 30 days, how many times did you have sexual intercourse?

	<u>Number</u>	<u>Percent</u>
a. 0 times	77	33.7
b. 1 time	15	6.5
c. 2 or 3 times	31	13.5
d. 4 to 9 times	42	18.4
e. 10 to 19 times	51	22.3
f. 20 or more times	12	5.2

n = 228

Missing value	44	16.2
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7. During the past 30 days, how often did you or your partner use a condom?

	<u>Number</u>	<u>Percent</u>
a. No sexual intercourse in past 30 days	75	33.0
b. Never	63	27.3
c. Rarely	45	6.6
d. Sometimes	10	4.4
e. Most of the time	27	11.9
f. Always	38	16.7
	n = 227	
Missing value	44	16.2

8. The last time you had sexual intercourse, did you or your partner use a condom?

	<u>Number</u>	<u>Percent</u>
a. Yes	101	44.9
b. No	124	55.1
	n = 225	
Missing value	47	17.3

9. Did you drink alcohol or use drugs before you had sexual intercourse the last time?

	<u>Number</u>	<u>Percent</u>
a. Yes	60	26.5
b. No	166	73.7
	n = 226	
Missing value	46	16.9

10. The last time you had sexual intercourse, what method did you or your partner use to prevent pregnancy?

	<u>Number</u>	<u>Percent</u>
a. No method was used	15	6.6
b. Birth control pills	61	26.9
c. Condoms	67	29.6
d. Withdrawal	19	8.4
e. Some other method	20	8.8
f. Not sure	2	.7
g. Birth control pills and condoms	24	10.6
h. Contraception and withdrawal	12	5.3
i. Condoms and some other method	4	1.7
j. Birth control pills/other method/withdrawal	2	.7
	n = 226	
Missing value	46	16.9

11. How many times have you been pregnant or gotten someone pregnant?

	<u>Number</u>	<u>Percent</u>
a. 0 times	199	87.6
b. 1 time	23	10.1
c. 2 or more times	4	1.7
d. Not sure	1	.4
	n = 227	
Missing value	45	16.5

12. During your life, have you ever been forced to have sex against your will?

	<u>Number</u>	<u>Percent</u>
a. Yes	25	9.2
b. No	247	90.8
	n = 272	

13. How old were you the first time you were forced to have sex against your will?

	<u>Number</u>	<u>Percent</u>
a. 4 or younger	0	0
b. 5 to 12	3	13.0
c. 13 or 14	0	0
d. 15 or 16	9	39.1
e. 17 or 18	4	17.4
f. 19 or 20	4	17.4
g. 21 to 24	3	13
	n = 23	
Missing value	249	91.5

14. How old were you the last time you were forced to have sex against your will?

	<u>Number</u>	<u>Percent</u>
a. 4 or younger	0	0
b. 5 to 12	2	8.6
c. 13 or 14	0	0
d. 15 or 16	8	34.8
e. 17 or 18	4	17.4
f. 19 or 20	5	21.7
g. 21 to 24	4	17.4
	n = 23	
Missing value	249	91.5

15. Have you ever had your blood tested for AIDS?

	<u>Number</u>	<u>Percent</u>
a. Yes	73	27.3
b. No	181	67.8
c. Not sure	13	4.8
		n = 267
Missing value	5	1.8

APPENDIX G
MARIJUANA AND OTHER DRUG USE

1. During your life, how many times have you tried marijuana?

	<u>Number</u>	<u>Percent</u>
a. 0 times	97	35.7
b. 1 or 2 times	23	8.5
c. 3 to 9 times	35	12.9
d. 10 to 19 times	14	5.1
e. 20 to 39 times	25	9.2
f. 40 to 99 times	24	8.8
g. 100 or more times	53	19.6
		n = 271
Missing value	1	.4

2. How old were you when you tried marijuana for the first time?

	<u>Number</u>	<u>Percent</u>
a. 12 or younger	20	12.2
b. 13 or 14	47	28.6
c. 15 or 16	62	37.8
d. 17 or 18	30	18.3
e. 19 or 20	4	2.4
f. 21 to 24	1	.6
	n = 164	
Missing value	108	39.6

3. During the past 30 days, how many times did you use marijuana?

	<u>Number</u>	<u>Percent</u>
a. 0 times	78	44.8
b. 1 or 2 times	34	19.5
c. 3 to 9 times	17	9.8
d. 10 to 19 times	21	12.1
e. 20 to 39 times	17	9.8
f. 40 or more times	7	4
	n = 174	
Missing value	98	36.0

4. During your life, how many times have you used any form of cocaine including powder, crack or freebase?

	<u>Number</u>	<u>Percent</u>
a. 0 times	235	87.0
b. 1 or 2 times	19	7.0
c. 3 to 9 times	6	2.2
d. 10 to 19 times	4	1.5
e. 20 to 39 times	2	.7
f. 40 to 99 times	4	1.5
g. 100 or more times	0	0
	n = 270	
Missing value	2	.7

5. How old were you when you tried any form of cocaine, including powder, crack or freebase, for the first time?

	<u>Number</u>	<u>Percent</u>
a. 12 or younger	2	6.0
b. 13 or 14	2	6.0
c. 15 or 16	9	27.3
d. 17 or 18	13	39.4
e. 19 or 20	7	21.2
f. 21 to 24	0	0
	n = 33	
Missing value	239	87.8

6. During the past 30 days, how many times did you use any form of cocaine, including powder, crack or freebase?

	<u>Number</u>	<u>Percent</u>
a. 0 times	29	85.3
b. 1 or 2 times	5	14.7
c. 3 to 9 times	0	0
d. 10 to 19 times	0	0
e. 20 to 39 times	0	0
f. 40 or more times	0	0
	n = 34	
Missing value	238	87.5

7. During your life, how many times have you used the crack or freebase forms of cocaine?

	<u>Number</u>	<u>Percent</u>
a. 0 times	25	71.4
b. 1 or 2 times	8	22.8
c. 3 to 9 times	1	2.8
d. 10 to 19 times	0	0
e. 20 to 39 times	1	2.8
f. 40 to 99 times	0	0
g. 100 or more times	0	0
	n = 35	
Missing value	237	87.1

- 8. During your life, how many times have you sniffed glue, or breathed the contents of aerosol cans, or inhaled any paints or sprays to get high?**

	<u>Number</u>	<u>Percent</u>
a. 0 times	235	86.4
b. 1 or 2 times	23	8.5
c. 3 to 9 times	8	2.9
d. 10 to 19 times	3	1.1
e. 20 to 39 times	2	.7
f. 40 to 99 times	0	0
g. 100 times or more	0	0
	n = 271	
Missing value	1	.4

- 9. During your life, how many times have you taken steroid pills or shots without a doctor's prescription?**

	<u>Number</u>	<u>Percent</u>
a. 0 times	271	99.6
b. 1 or 2 times	1	.4
c. 3 to 9 times	0	0
d. 10 to 19 times	0	0
e. 20 to 39 times	0	0
f. 40 to 99 times	0	0
g. 100 or more times	0	0

n = 272

- 10. During your life, how many times have you used any other type of illegal drug, such as LSD, PCP, ecstasy, mushrooms, speed, ice, or heroin?**

	<u>Number</u>	<u>Percent</u>
a. 0 times	178	65.4
b. 1 or 2 times	25	9.2
c. 3 to 9 times	31	11.4
d. 10 to 19 times	15	5.5
e. 20 to 39 times	8	2.9
f. 40 to 99 times	10	3.7
g. 100 or more times	5	1.8

n = 272

- 11. During the past 30 days, how many times have you used any other type of illegal drug, such as LSD, PCP, ecstasy, mushrooms, speed, ice, or heroin?**

	<u>Number</u>	<u>Percent</u>
a. 0 times	248	91.9
b. 1 or 2 times	13	4.8
c. 3 to 9 times	9	3.3
d. 10 to 19 times	0	0
e. 20 to 39 times	0	0
f. 40 to 99 times	0	0
g. 100 or more times	0	0

n = 272

APPENDIX H
EATING BEHAVIORS

1. How do you describe your weight?

	<u>Number</u>	<u>Percent</u>
a. Very underweight	0	0
b. Slightly underweight	26	9.6
c. About the right weight	152	55.9
d. Slightly overweight	85	31.3
e. Very overweight	8	2.9

n = 271

Missing value	1	.4
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2. Which of the following are you trying to do about your weight?

	<u>Number</u>	<u>Percent</u>
a. Lose weight	130	47.8
b. Gain weight	17	6.3
c. Stay the same weight	55	20.2
d. I am not trying to do anything about my wt.	69	25.4
e. a & c	1	.4

n = 272

3. During the past 30 days, did you diet to lose weight or keep from gaining weight?

	<u>Number</u>	<u>Percent</u>
a. Yes	68	25.0
b. No	204	75.0

n = 272

4. During the past 30 days, did you exercise to lose weight or keep from gaining weight?

	<u>Number</u>	<u>Percent</u>
a. Yes	174	64.0
b. No	98	36.0

n = 272

5. During the past 30 days, did you vomit or take laxatives to lose weight or to keep from gaining weight?

	<u>Number</u>	<u>Percent</u>
a. Yes	6	2.2
b. No	266	97.8

n = 272

6. During the past 30 days, did you take diet pills to lose weight or to keep from gaining weight?

	<u>Number</u>	<u>Percent</u>
a. Yes	6	2.2
b. No	265	97.8

n = 271

7. What is your height?

	<u>Number</u>	<u>Percent</u>
a. 4'10" to 5'02"	16	6.0
b. 5'03" to 5'07"	104	38.4
c. 5'08" to 6'00"	113	41.6
d. 6'01" to 6'05"	39	14.3

n=272

8. What is your weight?

	<u>Number</u>	<u>Percent</u>
a. 100 to 120	36	12.7
b. 121 to 140	65	23.8
c. 141 to 160	64	23.7
d. 161 to 180	55	20.3
e. 181 to 200	26	9.5
f. 201 to 220	15	5.5
g. 221 to 240	9	3.4
h. 241 to 260	0	0
i. 261 to 280	0	0
j. 281 to 300	0	0
k. 301 to 320	1	.4
l. 321 to 325	1	.4

n = 272

9. Yesterday, how many times did you eat fruit?

	<u>Number</u>	<u>Percent</u>
a. 0 times	81	29.8
b. 1 time	92	33.8
c. 2 times	64	23.5
d. 3 or more times	35	12.9

n = 272

10. Yesterday, how times did you drink fruit juice?

	<u>Number</u>	<u>Percent</u>
a. 0 times	100	36.8
b. 1 time	85	31.3
c. 2 times	57	21.0
d. 3 or more times	30	11.0

n = 272

11. Yesterday, how many times did you eat green salad?

	<u>Number</u>	<u>Percent</u>
a. 0 times	171	62.9
b. 1 time	89	32.7
c. 2 times	11	4.0
d. 3 or more times	1	.4

n = 272

12. Yesterday, how many times did you eat cooked vegetables?

	<u>Number</u>	<u>Percent</u>
a. 0 times	139	51.1
b. 1 time	100	36.8
c. 2 times	30	11.0
d. 3 or more times	2	.7

n = 271

Missing value	1	.4
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13. Yesterday, how many times did you eat hamburgers, hotdogs or sausage?

	<u>Number</u>	<u>Percent</u>
a. 0 times	195	71.7
b. 1 time	67	24.6
c. 2 times	10	3.7
d. 3 or more times	0	0

n = 272

14. Yesterday, how many times did you eat french fries or potato chips?

	<u>Number</u>	<u>Percent</u>
a. 0 times	172	63.2
b. 1 time	90	33.1
c. 2 times	10	3.7
d. 3 or more times	0	0

n = 272

15. Yesterday, how many times did you eat cookies, doughnuts, pie or cake?

	<u>Number</u>	<u>Percent</u>
a. 0 times	143	52.6
b. 1 time	97	35.7
c. 2 times	28	10.3
d. 3 or more times	4	1.5

n = 272