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A COMPARISON OF STUDENT AND STUDENT-ATHLETE DRUG USE AND
ATTITUDES TOWARD DRUG TESTING OF ATHLETES

THESIS

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In response to a NCAA ruling, North Texas State University (NTSU) launched a comprehensive drug testing, drug education and counseling program for its athletes effective August 1, 1986. This study assessed and compared NTSU student-athlete and student alcohol and drug use. In addition, attitudes toward a variety of sports-related drug topics, including mandatory athletic drug testing, were assessed and compared. The study revealed significant differences between student-athletes and students in drug use of the following: steroids, marijuana, cocaine, psychedelics, and amphetamines. Both groups favored mandatory drug testing of athletes.

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CHAPTER I

INTRODUCTION

Behind the blood, sweat, and tears of the players, behind the roar of the crowd, looms an "avalanche of drugs that threatens to overwhelm the integrity of both professional and amateur athletes" (7). This has been the recent battle cry of sports administrators and the sports media (1,3,7,8,9).

A great deal of attention is currently being focused on the abuse of drugs by athletes. According to the National Household Survey on Drug Abuse (5), the use of marijuana, hallucinogens, alcohol and cigarettes as well as nonmedical use of prescription drugs for young adults increased steadily during the 1970's and peaked in 1979. Only cocaine use has increased in popularity through 1985. Although drug use may have peaked, any recent decreases in use have been small. The problem is still apparently significant in the college-age group. Two studies (11, 12) have found no significant difference in the drug usage rates for athletes and other college students. Thus there appears to be adequate documentation that drug abuse among college students is substantial and that it prevails among intercollegiate athletes as well.

Athletes' consumption of drugs is not a recent phenomenon. What is new is the types of drugs the press and administrators are focusing upon. As long as the drugs involved in sports were only amphetamines, steroids, painkillers and alcohol, the commissioners of professional leagues and administrators of universities felt little discomfort. Alcohol is part of the image of the athlete; "if you are a jock then you drink booze," said Philip Wilson, associate director of the drug treatment program for the National Football League (7). The other drugs mentioned above are performance enhancers, and in the "anything goes" world of athletic competition, few care about how players excel, as long as they excel.

Stories of cocaine abuse moved the drug issue to another level. They outraged the public, made television advertisers nervous, caught the interest of the sports press, and worried the sporting world's power structure. For specific reasons to be discussed later, the sports drug testing crusade shifted into high gear in 1986.

The athletic department at North Texas State University (NTSU) is no exception to this trend. It initiated a random drug testing program which became effective in August, 1986, to be implemented on all NTSU intercollegiate student-athletes. A document (see Appendix A) explaining the drug education, testing, and counseling program is sent to all student-athletes and their parents. This document details

the nature and objectives of the drug testing program and explains the testing procedure and corrective measures that will be taken should prohibited substances be found in urine samples. The student-athlete must sign a student waiver form (see Appendix B) that provides consent for participation in the program. Any student-athlete who refuses to sign the consent form is not permitted to participate in the athletic program.

The drug testing program calls for NTSU student-athletes to be randomly tested during the academic year for depressants, including barbiturates, nonbarbiturates; opiates; tranquilizers; stimulants, including amphetamines and cocaine; hallucinogens, including LSD; marijuana and mesquiline; and other controlled substances such as PCP ("Angel Dust") (see Appendix C). Legal drugs such as alcohol are not tested. The laboratory work is done at Texas College of Osteopathic Medicine in Fort Worth. The testing is left to the discretion of the North Texas State University head athletic trainer, George Young, who oversees specimen collection and processing.

Drs. Hay and Hipple from the North Texas State University counseling and testing center were responsible for the educational and counseling segments of the program.

In general, the concerns, attitudes, and perceptions of the administrators are highly publicized; e.g., they want to "protect the athlete and the integrity of the

game" (1,3,7,8,9). But what are the attitudes and actual experiences of NTSU students and student-athletes toward drugs and the drug testing program?

The stimulus for this paper is the recently implemented drug testing program in the NTSU athletic department. An assessment of the attitudes and actual experiences of the NTSU student body (students and student-athletes) toward drugs and the drugs testing program is needed.

Statement of the Problem

Although widespread use of drugs has become a problem of national magnitude, documented research regarding the actual drug use experiences of college athletes and their attitudes toward mandatory drug testing is minimal. This present lack of research is not conducive to effective and optimal education and prevention measures; therefore, this study investigated drug use and attitudes toward drug testing on the NTSU campus.

Purposes of the Study

This study was designed to investigate the drug experiences of college students and student-athletes, and also to assess their attitudes toward athletic drug testing. Specifically, the purposes of this study were as follows:

1. Identify drug consumption rates and patterns among NTSU students.

2. Identify drug consumption rates and patterns among NTSU student-athletes.
3. Assess the attitudes of NTSU students toward drug testing in athletics.
4. Assess the attitudes of NTSU student-athletes toward drug testing in athletics.
5. Determine the NTSU student-athlete's knowledge and perception of the NTSU alcohol/drug abuse services.

Research Questions

The following research questions were investigated:

1. Types of drugs currently being used by NTSU students and student-athletes.
2. The current and past frequency and amount of drug use by NTSU students and student-athletes.
3. NTSU students and student-athletes opinions and attitudes toward alcohol, drugs, and drug testing.
4. The knowledge and perception of the NTSU student-athlete toward the NTSU alcohol/drug abuse services.
5. The reasons that students and student-athletes give for abstaining from a drug.

Significance of the Study

Athletic drug testing programs are in vogue and are being implemented, in many cases, rather whimsically. For a drug testing program to be effective, it is imperative that

the population to be tested have its attitudes, needs, and perceptions assessed. This information and knowledge is needed to ensure that the program is tailored in the most effective and beneficial way. Presently, very little, if any, information exists.

Dr. Bob Hay of the NTSU counseling and testing center, who is overseeing the counseling aspect of the drug testing program, said, "This information would be very insightful and help ensure that the program is on target." A noted sports sociologist recommended that researchers should "try to steer clear of moral judgements and provide us with a tally of the extent and patterns of drug use" (10).

This study was significant in that it

1. Determined the drug consumption rates and patterns of NTSU students and student-athletes;
2. Provided first year feedback on the efficacy of the drug testing program;
3. Could influence the course and evolution of drug testing programs; and
4. Will assist in clarifying the attitudes and perceptions of the NTSU student body in regards to the NTSU drug testing program and the campus alcohol/drug abuse services.

The procedure of drug testing in athletics is new and consequently very little information exists. Because of

this, studies such as the one proposed are desperately needed to ensure and enhance their efficacy.

Limitations

1. Since there is not a similar study available for reference, comparison of findings was not possible.
2. This study was subject to all the limitations of collecting data using the questionnaire form.
3. Drug use is both personal and controversial; consequently, subjects may not be completely candid in their responses.
4. Statistical tests are limited to nonparametric techniques because the samples were selected using nonprobability techniques.
5. The student-athlete sample was limited to male football players.
6. The reliability and validity of the questionnaire is not yet available from the National Collegiate Athletic Association (NCAA). Its reliability and validity is assumed.
7. Due to the student-athlete sample selection bias, generalizations to other college student-athletes may be misleading.
8. When comparisons are made between students and student-athletes, the student sample will consist of

males and females whereas the student-athlete sample will be entirely males.

Definition of Terms

The following terms have restricted meanings and are thus defined for this study:

1. Student-athlete is defined as any undergraduate student participating on a National Collegiate Athletic Association (NCAA) intercollegiate sports team.
2. Students referred to in this study will be undergraduates at a four year university.
3. Nonathlete will be defined as any undergraduate student at a four year university who is not on a NCAA intercollegiate sports team.
4. The NTSU student body consists of all students enrolled at North Texas State University (NTSU).
5. Drug use or abuse is defined as the recreational use of nonmedical drugs.

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CHAPTER II

REVIEW OF LITERATURE

This paper centers around two broad concepts: consumption of drugs for nonmedicinal purposes and drug testing of individuals for detection of these drugs. Drug usage patterns and rates from international and U.S. perspectives will be reviewed, then the scope will be narrowed to the two populations under study, college students and athletes.

In the heated debate over controlling drug abuse, participants sometimes try to make their cases with carefully selected, self-serving statistics that cloud the central issue. This "numbers war," as one congressman refers to it, indicates how "fluid and unreliable many of the estimates and projections on substance abuse are" (22). Semantic differences aside, most experts agree that substance abuse remains a serious problem.

Drugs on an International Level

The "social and economic fabric of most countries is being threatened by illegal drugs to an unprecedented extent," according to the annual report of the International Narcotics Control Board (INCB) for 1984 (27). The report

paints a picture of drug abuse spreading rapidly on an international basis. The world-wide spread of drug abuse has generated an unprecedented response from governments in efforts to counter the drug trade. Increased bilateral, regional and interregional cooperation has led to record drug seizures, confiscation of traffickers' immense financial assets and destruction of many clandestine laboratories. Illegal drug production and trafficking financed by organized crime is so pervasive that the economies of entire countries "are disrupted, legal institutions menaced and the very security of some states threatened" (29).

Whenever illicit cultivation, production and trafficking occur, the INCB report observes, "drug abuse among local populations nearly always ensues. This accounts for the spread of drug abuse geographically beyond the few countries which were once the main centers of such abuse. The fact is that very few countries now remain unaffected" (28).

The 1985 report of the INCB revealed a particularly "ominous development that there is an increasingly clear link between drug trafficking, illegal arms trade, and international terrorism" (26). The United Nations is clear on its stance. Resolution 41/124 unequivocally condemned drug trafficking in all its illicit forms - production, processing, marketing and consumption - as a criminal activity and asked states to "pledge their political will in

a concerted and universal struggle to achieve its complete and final elimination" (27).

William B. Buffom, Undersecretary General for Political and General Assembly affairs, who is responsible for overall coordination of United Nations anti-drug activities, told the assembly on October 31, 1986 that "countries in all regions of the world had reported continuing increases in illicit drug traffic and an expansion in problems related to drug abuse, with a marked increase in the use of so-called 'designer drugs' and lethal forms of cocaine paste known as 'crack'" (27). The general consensus among international leaders seems to be that the many problems associated with illegal drugs are not only increasing but spreading to practically every nation.

Drugs in America

Drug use has become endemic in the United States during the last twenty years, and there is little reason to expect that much will change in the overall drug use patterns in the foreseeable future (11). The experimental and recreational use of some substances, e.g., marijuana and cocaine, has become as much a rite of adolescent maturation as earlier generations' experiments with alcohol and tobacco.

Americans now consume 60 percent of the world's production of illegal drugs. An estimated 20 million are regular users of marijuana 4 to 8 million more are cocaine abusers and 500,000 are heroin addicts (14).

In 1986, more than 12 tons of heroin, 65 tons of marijuana and 150 tons of cocaine spread across the country (17). Destinations ranged from big metropolitan cities to small farm towns. Sales of illegal narcotics total \$100 billion annually, more than the total net sales of General Motors, more than American farmers take in from all crops (17).

This business is effecting people in record numbers. Between 1981 and 1985, cocaine-related deaths in 25 major metropolitan centers more than doubled and cocaine-related emergency room visits tripled (20). However, it should be noted that the death toll from cocaine (570) is minute compared with the number of fatalities attributed to alcohol (98,186) and tobacco (some 300,000 annually) (2). While the health cost of drug abuse was estimated by one National Center of Health Statistics study at \$59.7 billion in 1983, the medical bill for alcohol abuse was \$116.7 billion (2). "There is no question that alcoholism in terms of social cost remains our number one problem. We can not lose sight of that because of our emphasis on drugs," says National Institute on Drug Abuse officer Herbert Schuster (22).

The latest National Household Survey of Drug Use (see table I), the most comprehensive sampling of drug use characteristics of the general population in the United States, shows that cocaine use continues to rise; and that within the cocaine using population, smoking of free-base cocaine is at very high levels (7). While the figures

TABLE I

PERCENT OF U. S. POPULATION USING
NONPRESCRIBED SUBSTANCES IN 1985 BY AGE-GROUP

	12-17 yr.		18-25 yr.		26 yr.	
	In Past 30 Days	Ever Used	In Past 30 Days	Ever Used	In Past 30 Days	Ever Used
Alcohol	32	57	72	93	60	89
Marijuana	12	24	22	68	6	27
Cigarettes	16	45	37	76	32	81
Cocaine	2	7	8	25	2	10
Stimulants	3	6	4	17	1	8
Tranquilizers	1	5	2	12	1	7
Sedatives	1	5	2	11	1	5
Analgesics	1	6	2	11	1	6
Hallucinogens	1	3	2	12	—*	6
Heroin	—*	—*	—*	1	—*	1

* less than .5%

differ from survey to survey, officials at every level agree: cocaine use appears to be increasing throughout the population (16). While cocaine use has increased since the 1982 Household Survey, most other drugs have stabilized or even decreased in the 1985 survey. However, in addition to cocaine, the 1985 survey showed an increase in the current use of cigarettes (14.7 to 15.6 percent), alcohol (26.9 to 31.4 percent) and marijuana (11.5 to 12.5 percent) among young people age 12-17 (11).

The "war on drugs" is a regular feature on the nightly news and front pages. Politicians and the media have all jumped on the anti-drug crusade bandwagon. However, this is a drug society we live in. We have prescription drugs, over-the-counter drugs, and drugs you can buy in the grocery store. Illegal drugs and legal drugs (e.g. alcohol and tobacco) all have the ability to hurt and kill. Although the press and politicians may be guilty of hyping the drug crisis, the costs to users and society are nonetheless tremendous and appalling.

Drug Usage Among College Students

Drug abuse among U.S. youth has become an increasing concern over the past 20 years. In many people's opinions, there is a serious problem regarding the abuse of alcohol and the use of drugs on university campuses. The most recent and comprehensive statistics come from the National Institute on Drug Abuse entitled Drug Use Among American

High School Students, College Students, and Other Young Adults: National Trends Through 1985 (11). A number of important findings emerge from these three national subpopulations - high school seniors (see table II), young adults through age 27 (see table II), and college students (see table II). Below is an overview of key findings (11).

- Probably the most important finding in 1985 is that the rather steady decline of the past four years in overall illicit drug use among high school seniors, the nation's college students, and young adults appears to have halted.
- Concurrent with this halt in the decline in overall involvement with illicit drugs came the equally significant finding that cocaine use increased among all subpopulations.
- The steady decline since 1979 in marijuana use among all subpopulations halted in 1985.
- In general, the trends since 1980 in illicit substances use among American college students are found to parallel those for their age group as a whole.
- Regarding sex differences, in all three population males are more likely to use most illicit drugs. The study states, "insofar as there have been differential trends for the two sexes among any of

TABLE II
 PREVALENCE OF USE OF SEVEN TYPES OF DRUGS, 1985

	Percent who used in last twelve months		
	High School Class of 1985	Respondents 1-8 years beyond High School	College Students 1-4 years beyond High School
Marijuana	40.6	40.0	41.7
Hallucinogens	6.3	3.1	3.7
Cocaine	13.1	19.9	17.3
Stimulants	15.8	13.5	11.9
Sedatives	5.8	3.8	2.5
Tranquilizers	6.1	5.5	3.5
Alcohol	85.6	89.9	92.0

these populations, they have been in the direction of a diminution of differences between the sexes" (11).

- To summarize, over the past five years there has been an appreciable decline in the use of a number of the illicit drugs among high school seniors, and even larger declines in their use among American college students and young adults more generally. However, in 1985 there occurred a halt in these trends in all three populations, as well as an increase in active cocaine use.

The study concludes that "while the overall picture has improved in the past five years, the amount of illicit as well as licit drug use among America's younger age group is still of great concern" (11). Dr. Lloyd D. Johnston, of the Institute for Social Research states, "clearly this nation's young adults still show a level of involvement with illicit drugs which is greater than can be found in any other industrialized nation in the world. Even by historical standards in this country these rates still remain extremely high" (1). There appears to be adequate documentation that drug abuse among college students is substantial. Total usage may have decreased somewhat in the past five years, but it still remains a problem.

Drugs and Athletes

Studies of drug use by athletes are relatively few. According to many observers, drug abuse by athletes has

reached alarming levels (3). Every sport has recently had a highly publicized drug scandal of its own. And the problem is global in scope. In January 1985, two world record setting Soviet weight lifters were stripped of all awards and the Soviet ministry withdrew their master of sport titles and permanently disqualified them from competition (12). The sports world is rocked almost daily with new drug abuse revelations.

The attention and concern is such that a hearing before the Committee on Labor and Human Resources, in the U.S. Senate was held to examine "the impact of illegal drugs on sports" (5). Senator Paula Hawkins, chairman of the Subcommittee on Alcoholism and Drug Abuse, in her opening statement to the committee said, "while there is no reliable scientific data available detailing the amount of drug use by athletes, all indications are that a larger proportion of athletes than nonathletes, both amateur and professional, are abusing drugs and/or alcohol" (5).

In professional sports especially, it is often claimed that illegal drug use is "epidemic." Estimates are that 10 to 20 percent of the players use illegal narcotics regularly (15). And as one former Miami Dolphin said, "the membership of professional sports is being eaten alive by a cancer" (5). It is recognized as such a problem in professional sports that all four major sports leagues in the United States now employ trained personnel who deal with

drug and alcohol abuse. And it is recognized as such a problem in amateur athletics that a major drug abuse prevention program initiated by the Drug Enforcement Administration in conjunction with the National Collegiate Athletic Association (NCAA) and the National High School Athletic Coaches Association, has been established.

Several studies (8,24,25) have found no significant difference in the drug usage rates for college athletes and other college students. Two of the studies were within conferences, the PAC 10 and the Big 10, and the third involved five nonconference and geographically distant universities. Each study concluded that with the exception of anabolic steroids, college athletes and nonathletes use drugs at similar rates. In addition, there was no significant difference in drug use between male and female athletes, except that male athletes were more likely to use anabolic steroids. Toohey (24) concluded, "Athletes do not represent a special subpopulation within our society with respect to drug use and the athlete is as much a part of the culturization that has taken place with respect to drug use as any other individual in the university population." Therefore, as discussed in the previous section, drug abuse among college students is substantial and it prevails among intercollegiate athletes at very similar rates.

Although much attention is given to athlete's use of drugs, both amateur and professional, by the mass media, the

illicit use of drugs is prevalent in all of society. As Philip Wilson, associate director of drug treatment center for the National Football League puts it "drug abuse in sports - which involves an estimated 20 percent of all athletes - is simply a mirror of the burgeoning drug culture in society at large" (15).

Drug Testing

In addition to drug usage rates and patterns, the second component of this study is that of drug testing of individuals, specifically athletes. Before literature on athletic drug testing is reviewed, an overview of drug testing in general will be given.

Drug testing programs are gaining acceptance in the work place (4,6,9,21,30). Although the reliability and legality of drug testing have been questioned, companies and federal agencies are instituting such programs in increasing numbers.

In the past two years, at least two major accidents have brought the problem of drug use on the job into the news headlines. An investigation following a fatal accident aboard the USS Nimitz revealed widespread drug abuse by the sailors on the ship. Then, in 1985, major league baseball was shaken by confessions from many players, that they had used illegal drugs and been under the influence of drugs while on the playing field. To try and control such

problems, the Navy has instituted a mandatory drug testing program. Baseball commissioner, Peter Ueberroth, has proposed a mandatory drug testing program for baseball. The drug abuse problem has received a lot of attention from business and government as well.

Numerous studies have shown that illegal drug use in the work place is increasing, and with it come increases in employee health problems, accidents, and absenteeism (6,21,30). As a result, a number of companies, as well as many federal agencies have instituted drug testing programs.

Data on the cost of drug abuse to industry and government points to a problem. According to J. Michael Walsh (6), Chief of the clinical behavior and pharmacology branch of the National Institute on Drug Abuse, in certain occupations 25 percent to 45 percent of applicants tested showed recent illegal drug use. Various estimates of the cost to industry range from 50 to 100 billion dollars annually because of increased health care costs and lost productivity (9).

Two big questions arise when discussing a drug testing program: Is the testing reliable? Is it legal? A thorough review of these questions is beyond the scope of this paper but will be considered briefly.

Three methods are most frequently used to screen urine for illegal drugs - thin layer chromatography and two immunoassays. Each has different qualities. Chromatography

separates the chemical constituents of a sample of their differential movements through a two-phase system. Comparing the peaks that correspond to emergence of the compounds to a known standard allows presumptive identification of a compound. Immunoassay techniques involve the reaction of anti-serum to a particular compound that is tested against a sample. If the compound in question is in the sample, then the amount of free anti-serum will be diminished in proportion to the quantity of the compound present. The reliability of these tests, chromatography and immunoassay, is often called into question. Critics say that the tests are wrong as often as 67 percent of the time (21). Being falsely accused of being a drug user could ruin a person's career or life.

Critics and confusion also surround the constitutionality of drug testing, but the main question hinges on the employee's right to protection against unreasonable searches under the fourth amendment of the U.S. Constitution. Other concerns center on a person's right to privacy and the relationship between test results and work performance. The bottom line at this time is that "there are no federal or state institutional provisions that directly prohibit the use of drug-detection programs" (4).

The growth of drug-detection programs in public and private employment has been phenomenal and is moving ahead still faster. Survey's finding that more than 25 percent of

the Fortune 500 companies do drug testing are probably well out of date, that number will be closer to 50 percent by the end of 1986 (9).

Drug Testing for Athletes

Little information exists about drug testing programs for athletes. However, there seems to be a high level of awareness of the problem of drug abuse among athletes. There is also increasing interest in implementing drug testing programs for both amateur and professional athletes.

There are three main reasons why drug use is a threat to amateur and professional sports and why drug testing programs are being considered or implemented. The first is simply public reaction. Drug use taints the credibility of a sport. If a team is losing, the fans might say, "no wonder, they're losing, half the team is on drugs." And if a team develops that image, attendance will decline, the franchise will lose money, and ultimately the whole sport or league will go under. Also, the public is concerned that drug use by athletes may corrupt the youngsters who idolize them. Senator Orrin G. Hatch, chairman of the committee on Labor and Human Resources, speaks for many when he says, "Americans freely give loyalty, love, and money, and in return expect athletes to be above reproach, above bribery, above manipulation, and above drug abuse. They should fulfill this requirement and provide a positive role model" (5).

The second reason relates to performance. Drug use can hinder an athlete's physical performance. The player's diet, concentration, motivation and overall health can all be negatively affected and result in a subpar contribution or performance.

Third, there is the criminal connection. In order to get drugs, the athlete has to interact with those who sell them. This opens up some rather unsavory possibilities. Blackmail, physical violence, and an athletes' fixing a game in lieu of paying off debts for drugs are a few examples. The potential link between drugs and gambling can be devastating to a team and league. Drugs and gambling, if not controlled, "threaten the very existence of college sports," said an officer for the NCAA (31). The two issues are closely related, said Wilfred S. Baily, secretary-treasurer of the NCAA. The NCAA's new drug testing program which began in the fall of 1986, is designed not only to deter drug use among players, but also to prevent "as much as possible the related problem of game-fixing as it is influenced by drug abuse" (31). Professional Baseball commissioner, Peter Ueberroth, echoes the sentiments of all professional sports commissioners, "the integrity of the game is everything. We have to eliminate illegal substances from the game, substances that can be used to control people" (15).

Organizations involved with amateur and professional sports have initiated a variety of anti-drug use programs. One approach is that of drug testing.

Drug testing in certain sports and in international competition has occurred only in the last 20 years (19). It began with amphetamines and gradually expanded to include other stimulants or narcotics, depressants, and most recently anabolic steroids.

The United States Olympic Committee (USOC) prohibits the use by athletes of certain classes of drugs, including psychomotor and CNS stimulants, sympathomimetic amines, diuretics, beta-adrenergic blockers, narcotic analgesics, and anabolic steroids (3). The committee is "spot-testing" athletes to ensure that they are drug-free while training and competing for places on the 1988 U.S. Olympic team.

All the professional leagues management's and player's associations have drug prevention programs. This includes lectures on illegal drugs by representatives of the federal drug enforcement administration, treatment facilities for players with drug problems, and education programs for players and other team personnel on the detection, treatment, and care of chemically dependent persons. However, with the exception of professional tennis, no professional league has a mandatory drug testing program (18).

The NCAA has developed guidelines for instituting drug screening programs, they include scheduling a course on

drugs and developing a plan to assist athletes with drug related problems. It is the NCAA's position (3) that athletic departments should provide training for coaches, trainers, and team physicians in recognizing persons with drug problems, and that coaches and other staff members should help athletes who have such problems.

In 1986, the NCAA adopted a drug testing program for NCAA championship competitions and certified post season football games. The NCAA prohibits the use by athletes of diuretics, anabolic steroids, cocaine, marijuana, heroin, and CNS stimulants such as amphetamines and caffeine. The NCAA also prohibits blood doping and restricts the use of local anesthetics, drugs for bronchospasm, corticosteroids, and certain other substances (23).

The cost of providing comprehensive drug detection and testing programs has increased enormously because of constant development of new drugs, their gradual inclusion in testing protocols, and the need for more accurate and elaborate detection devices and systems. It is estimated by George Young, head athletic trainer at NTSU, that the NTSU drug testing program for the 86-87 school year will cost approximately \$10,000 dollars.

These costs which sometimes are grossly disproportionate to the sums available for training and preparation, have become a concern for sports administrators as well as the public that directly or indirectly provides the funds.

The increase in drug testing, even when combined with efforts to educate athletes about drug use and abuse, has not had a substantial effect in decreasing either (8). Some evidence indicates that drug use and abuse have actually been increasing (8). The verdict is still out on the effectiveness of drug testing for athletes.

The NTSU Drug Testing Program

The NTSU athletic department instituted a random drug testing program, effective August 1, 1986, to be implemented on all NTSU student-athletes. The program, which also involves drug counseling and education, was developed partially in response to the National Collegiate Athletic Association's drug testing policy for championship events.

A document (see Appendix A) explains the drug education, testing and counseling program. The administration of NTSU believes that "the use and/or abuse of drugs can:

1. Seriously affect the performance of individuals as students and as athletes;
2. Be detrimental to the physical and mental well being of its student-athletes, no matter when such usage should occur during the year;
3. Be dangerous to the athlete and his/her teammates in athletic competition and practice; and
4. Be detrimental to the spirit of fair competition."

(see Appendix A).

The specific goals of the program, as stated in the aforementioned document, are to:

1. Provide educational counseling concerning the effect of substance abuse on athletic activities;
2. Deter substance abuse by student athletes;
3. Identify in a confidential way any participant in the program who may be abusing a specific drug;
4. Counsel any participant in this program so identified regarding such involvement as it may affect him/her and his/her teammates;
5. Encourage the proper treatment of any chronic chemical dependency;
6. Provide reasonable safeguards that every participant in the program is medically fit to engage in intercollegiate athletic competition; and
7. Encourage discussion at all appropriate levels about usage of controlled substances.

NTSU athletes are randomly tested throughout the academic year for most of the drugs banned at NCAA championship events (see Appendix C). Under the program, the specimen of an athlete showing a positive laboratory test will be immediately retested to assure accuracy. If the positive result is confirmed, the athletic director, the head coach, the athletic trainer and the athlete will be notified that a positive result has been verified.

Following a confirmed first positive test, the athlete must participate in drug counseling and evaluation sessions as specified by the athletic director. Failure to participate in the sessions would be treated as a second positive test.

If a second positive test is confirmed, the athlete will be directed by the athletic director to participate in a drug abuse program. He/she will also be suspended from the next intercollegiate contest for which he/she would otherwise have been eligible. The athlete will be reinstated after the athletic director receives confirmation of participation in a drug abuse program. The athlete will again be tested at the discretion of the trainer for the next 12 weeks.

An athlete who has a confirmed positive test for the third time will be dismissed from his or her team with immediate loss of any remaining scholarship funds. At the end of one calendar year, the athlete may apply to the athletic director for reinstatement.

NT athletes may refuse to consent to the drug testing plan, but such refusal would place the individual ineligible for an athletic scholarship or to participate in intercollegiate athletics at NTSU.

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CHAPTER III

PROCEDURES USED IN THE DEVELOPMENT OF THE STUDY

The goals of this study were twofold: 1) to determine the drug usage rates of NTSU students and student-athletes and 2) to assess the attitudes and impact of the NTSU drug testing program. Permission to conduct the study was obtained from the NTSU athletic director and the executive assistant to the chancellor.

The Population

The source of subjects for this study was the NTSU student body. In the fall semester of 1986, the student body consisted of approximately 21,000 people, 15,000 undergraduates and 6,000 graduate students (3). There are approximately 10,000 men (47 percent) and 11,000 women (53 percent). The age median is 23. Foreign students account for 9.8 percent of the student body population. The racial classification of the student body is composed of 16,000 (76 percent) whites, 1300 (7 percent) blacks, 65 native americans, 120 Asians, 700 Hispanics, and 2,000 (9.8 percent) nonresident aliens.

A subpopulation under study was the NTSU student-athletes. There are 397 student-athletes, 279 males and 118 females, in the NTSU athletic department. They compete on

nine mens teams and eight womens teams. NTSU teams participate in Division I, NCAA intercollegiate athletics. The athletes are full-time students presently (spring semester 1987) enrolled in at least 12 credit hours at North Texas State University.

Selection of the Samples

Two samples were gathered from the NTSU student body population, a student-athlete sample and a student sample. The student-athlete sample was the entire NTSU intercollegiate football team, which consisted of 82 players. Permission was obtained from head coach Corky Nelson to administer the instrument at their final spring drills meeting.

The student sample was determined using a cluster sampling technique. Permission was obtained from the computer science department to administer the questionnaire to four Introduction to Computer Science, CS1101, classes. These classes (118 students) represented a cross-section of the student body since all students are required to take this class in order to graduate with an arts or sciences degree. In addition, one Human Sexuality class, (34 students) was administered the questionnaire. This was a general elective class which attracts a wide range of students. A total of 152 students will be in the student sample.

Description of the Instruments

The test instrument (see Appendix D) was adapted from the NCAA student-athlete drug questionnaire (4). NTSU drug testing counselors, Dr. Hay and Dr. Hipple, edited the original NCAA questionnaire specifically for NTSU student-athletes. This questionnaire was administered to the student-athlete sample. A modified version (see Appendix E) of this instrument with questions pertaining only to student-athletes deleted, was given to the student sample. The two questionnaires were identical except for the irrelevant athlete questions that were deleted. Because many questions are needed to cover all of the topic areas in this study, the questionnaire was divided into five sections.

Section one questions respondents for their opinions and attitudes toward different sports-related topics including drug testing. The questions are designed using a Likert attitudinal scale for responses.

Sections two and five are designed to elicit information on the respondent's athletic and academic careers. In addition, demographic and drug use variables are collected in these sections.

Section three gathers data on respondent's use of six different classes of drugs. In addition to rates and

patterns of drug use, this section also explores the effect, if any, the drug testing program is having on the athlete's choice of drugs.

Section four focuses on the alcohol/drug abuse services available at NTSU. The awareness level and effectiveness of these services was determined from this section.

Data Gathering

The appropriate questionnaire for each of the two samples, students and student-athletes, was administered during the week prior to spring semester finals (May 4-8, 1987). The student-athlete sample (the football team) was administered the questionnaire during its final "spring drills" meeting. The student sample was administered the questionnaire in classrooms during a normal class period.

Statistical Treatment of the Data

After the questionnaires were administered, the data was transferred to computer recording forms and then key punched on to IBM computer diskettes. These diskettes were then "input" into the NTSU computer center's IBM hardware for data processing and analysis. The computer software was Statistical Analysis System (SAS). Data analysis included: 1) descriptive statistics such as frequency counts and percentages, 2) phi coefficient and contingency coefficient for determining the strength of correlations, and 3) when

comparing groups, chi-square was the statistical test used to treat the data.

After all computations had been made, the data was entered into tables and charts for ease of reporting and interpretation. For the convenience of the reader, pertinent research questions are stated, then followed by appropriate tables, charts and explanations which provide data relating to each question.

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CHAPTER IV

PRESENTATION OF DATA

This chapter is composed of the socio-demographic characteristics, analysis of data, and the results of the present study. This study assessed and compared NTSU student-athlete and student drug use, and also determined attitudes toward a variety of sports-related topics including drug testing for athletes. The Analysis of Data section explains the statistical procedures utilized in the study. In the Results section, information derived from the data is presented as responses to the pertinent research questions set forth in Chapter I. Data for the responses were based on the information collected from the 234 subjects who participated in completing the appropriate research questionnaire. An overview of the research population from which the data was accumulated precedes the Analysis of Data and Results sections.

Socio-Demographic Characteristics

Detailed in this section are the selected characteristics of the subjects. This data is presented to identify the representation of the subjects. Within the research population, i.e., the NTSU student body, were two

sub-populations - NTSU students (N=152) and NTSU student-athletes (N=82) which are detailed separately and collectively.

The subjects in the student sample were comprised of 57.3 percent (N=82) females and 42.7 percent (N=61) males. The student-athlete sample was comprised of 100 percent (N=82) males. The age of the subjects is shown in Table III; 55.8 percent (N=126) of total subjects were categorized in the 18-20 year age range; 26.9 percent (N=61) were in the 21-22 age range; 10.7 percent (N=24) were between 23-25; while the remaining 6.6 percent (N=15) were 26 years or older.

TABLE III
AGE CHARACTERISTICS OF RESPONDENTS

AGE	Student Sample				Student-Athlete Sample		All Subjects	
	N	Male %	N	Female %	N	%	N	%
18-20	23	37.70	45	54.88	57	69.5	126	55.8
21-22	17	27.87	23	28.04	21	25.6	61	26.9
23-25	12	19.68	8	9.76	4	4.9	24	10.7
26	9	14.76	6	7.32	-	-	15	6.6
Total	61	100.00	82	100.00	82	100.00	234	100.00

Table IV identifies the race characteristics of the respondents in this study. The student sample was comprised of 80.4 percent (N=115) whites, 13.3 percent (N=19) black, and the remaining 6.3 percent (N=9) were listed as Mexican-American, Oriental, or American Indian. The student sample appears to be very representative of the student body (e.g. 76.8 percent of student body is white). The student-athlete sample was composed of 51.2 percent (N=42) blacks, 43.9 percent (N=36) whites, and the remaining 4.9 percent (N=4) Mexican-American. As stated in chapter one under limitations of the study, the student-athlete sample is not representative of the student-athlete population.

TABLE IV
RACE CHARACTERISTICS OF RESPONDENTS

RACE	Student Sample		Student-Athlete Sample		All Subjects	
	N	%	N	%	N	%
American Indian	2	1.4	1	1.2	3	1.3
Black	19	13.3	42	51.2	61	27.1
Mexican American	3	2.1	3	3.7	6	2.7
Latin American	-	-	-	-	-	-
Oriental	4	2.8	-	-	4	1.8
White	115	80.4	36	43.9	151	67.1
Total	143	100.00	82	100.00	234	100.00

The current academic standing of the subjects is stated in Table V. Combining the percentages of freshman and sophomores, and those of juniors and seniors, the student sample was composed of 47.3 percent (N=71) underclass members; and 52.7 percent upperclass members. The student-athlete sample was comprised of 63.4 (N=52) underclass members and 36.6 percent (N=30) upperclass members.

TABLE V
CLASS RANK CHARACTERISTICS OF RESPONDENTS

CLASS RANK	Student Sample		Student-Athlete Sample		All Subjects	
	N	%	N	%	N	%
Freshman	35	23.3	30	36.6	65	28.0
Sophomore	36	24.0	22	26.8	58	25.0
Junior	47	31.3	25	30.5	72	31.1
Senior	32	21.4	5	6.1	37	15.9
Total	150	100.00	82	100.00	234	100.00

The grade point averages (GPAs) of the two samples are listed in Table VI. The GPA mean for the student sample was 3.01 and the GPA mean for the student-athlete sample was 2.51. A t-test was utilized to determine the significance of the differences between these two sample means. The t-test revealed a significant difference with a p value of $<.0001$.

TABLE VI
GRADE POINT AVERAGES OF STUDENTS

	N	Mean	SD	t-value
Student sample	135	3.01	.562	6.237
Student-Athlete sample	73	2.51	.547	6.285
df = 206			p $<.0001$	

To summarize the socio-demographic data, of the 82 respondents in the student-athlete sample, all were males. Ninety-one point five percent were between 18-21 years of age and the remaining 8.5 percent were 22 or 23 years old. The sample was composed of 51.2 percent blacks and 43.9 percent whites. The student sample (N=152) consisted of 57.3 percent females and 42.7 percent males. Eighty-two point seven percent of the student population were between

the ages of 18-22 years of age. Eighty-one point four percent of the student sample was white while 13.3 percent were black.

The greatest differences between students and student-athletes existed in the ages, racial classifications, and grade point averages of the subjects. Blacks were disproportionately represented in the student-athlete sample, 51.2 percent were black while only 13.3 percent of the student sample were black. The age characteristics of the student-athlete indicated a younger sample than that of the student sample. This could impact incidence of alcohol consumption. The student sample appeared to be more academically inclined. Student grade point averages were significantly higher than student-athletes (3.01 and 2.51, respectively).

Analysis of Data

The data was analyzed utilizing three nonparametric statistical techniques:

- 1) descriptive statistics for nominal/categorical data e.g. percentages and frequency distributions.
- 2) when comparing nominal/categorical samples, chi-square was the statistical test used to treat the data. Whenever a frequency was less than five, Yates' correction was applied.

A significance level at $p < .05$ was chosen. This level has been deemed acceptable by statisticians for nonexperimental studies, especially investigations which involve a large number of subjects, as does this study (1).

Results

Presented in this section are the results as determined by the data accumulated in this research project. The results are arranged in response to the pertinent research questions of this study. For the convenience of the reader, pertinent questions are enumerated below and are followed by the corresponding tables and table summary statements.

1. What is the frequency of alcohol and drug use at NTSU?

The student sample used alcohol and drugs at rates very similar to national averages. The student-athlete sample used drugs at a rate significantly lower than the national average. After all respondents had completed the appropriate questionnaire, the data was tabulated and a frequency distribution calculated. The data in table VII depicts the results pertaining to research question number one.

TABLE VII

FREQUENCY IN ANNUAL PREVALENCE OF SEVEN TYPES
OF DRUGS AMONG NTSU STUDENTS AND STUDENT-ATHLETES

	PERCENT WHO USED IN PAST 12 MONTHS					
	Male Students N=61	Female Students N=82	Male Student- Athletes N=82	All Subjects N=234	*U.S. College Students	NCAA** Survey Male Athletes
Steroids	3.28%	0.00%	10.98%	5.2%	NA	6.0%
Alcohol	80.33%	90.12%	90.24%	88.0%	92.0%	88.0%
Marijuana	28.33%	39.02%	17.07%	28.8%	41.7%	36.0%
Cocaine	11.67%	15.85%	2.44%	10.4%	17.3%	17.0%
Psychedelics	10.00%	4.88%	0.00%	4.3%	4.2%	4.0%
Barbiturates	5.08%	10.98%	2.47%	6.1%	3.5%	2.0%
Amphetamines	10.17%	20.73%	4.94%	12.2%	11.9%	8.0%

* Annual prevalence of drugs among college students 1-4 years beyond high school.
Source: National Institute on Drug Abuse, 1985.

** NCAA national study of college student-athletes during the fall of 1984.

2. Is there a significant difference in frequency of alcohol and drug use between:

- A) Males and females?
- B) Students and student-athletes?

There were no significant differences between males and females within the student sample. When comparing male students with male student-athletes, five classes (seven total) of drugs produced significant differences between the samples. Following the testing of the entire student body sample (N=234), the data was divided into two further samples, students (N=152) and student-athletes (N=82). In addition, the student sample was further divided into males (N=61) and females (N=84). The frequencies within and between these samples were subjected to a chi-square test to determine if significant differences existed. The results are displayed in tables VIII and IX respectively.

TABLE VIII
ALCOHOL AND DRUG USE: FEMALE VERSUS MALE WITHIN STUDENT SAMPLE

	<u>Female</u>		<u>Male</u>		D.F.	(value) χ^2	(prob) p value
	N	Percent who have used in last 12 months	N	Percent who have used in last 12 months			
Steroids	82	0.0	61	3.28	1	2.727	0.256
Alcohol	81	90.12	61	80.33	1	2.759	0.097
Marijuana	82	39.02	60	28.33	1	1.752	0.186
Cocaine	82	15.85	60	11.67	1	0.502	0.479
Psychedelics	82	4.88	60	10.00	1	1.389	0.239
Barbiturates	82	10.98	59	5.08	1	1.529	0.216
Amphetamines	82	20.73	59	10.17	1	2.804	0.094

TABLE IX
ALCOHOL AND DRUG USE: STUDENT VERSUS STUDENT-ATHLETE

	Student Sample (males only)		Student-Athlete Sample		D.F.	χ^2	p value
	N	Percent who have used in last 12 months	N	Percent who have used in last 12 months			
Steroids	62	3.28	82	10.98	1	8.872	$p < 0.05^*$
Alcohol	62	80.33	82	90.24	1	0.639	$p > 0.05$
Marijuana	62	28.33	82	17.07	1	8.607	$p < 0.05^*$
Cocaine	62	11.67	82	2.44	1	8.631	$p < 0.05^*$
Psychedelics	62	10.00	81	0.00	1	5.683	$p < 0.05^*$
Barbiturates	62	5.08	81	2.47	1	2.863	$p > 0.05$
Amphetamines	62	10.17	81	4.94	1	6.204	$p < 0.05^*$

* Significant at the .05 level of confidence.

The data presented in table VIII indicated that the alcohol and drug use of male and female subjects were not significantly different at the .05 level of confidence. However, significant differences were found in drug use between male students and male student-athletes. The survey found that student-athletes used significantly more steroids than nonathletes. Conversely, students used significantly more marijuana, cocaine, psychedelics, and amphetamines than athletes. Alcohol and barbiturates were the only two classes of drugs in which a significant difference did not exist between students and student-athletes.

3. What is the awareness level and perception of the NTSU alcohol/drug abuse services among NTSU student-athletes?

Table X depicts the results pertaining to research question number three.

TABLE X
AWARENESS LEVEL AND PERCEPTION OF
THE NTSU ALCOHOL/DRUG ABUSE SERVICES

	Student-Athletes
Does your school offer alcohol/drug abuse education or prevention classes?	N=82 Yes: 71.95 No: 3.66 Don't know: 24.39
Have you ever attended alcohol/drug abuse services offered at NTSU?	N=82 Yes: 7.32 No: 92.68
How would you rate the effectiveness of NTSU's alcohol/drug abuse education and prevention services?	N=82 Excellent: 3.66 Good: 18.29 Fair: 8.54 Poor: 4.88 Can't Say: 64.63
Does NTSU have alcohol/drug abuse counseling or treatment services?	N=82 Yes: 58.54 No: 2.44 Don't know: 39.02
Have you ever participated in alcohol/drug abuse counseling or treatment services offered at NTSU?	N=82 Yes: 3.66 No: 96.34
How would you rate the effectiveness of NTSU's counseling and treatment services?	N=82 Excellent: 1.22 Good: 17.07 Fair: 4.88 Poor: 3.66 Can't Say: 73.17

Table X reveals that the student-athlete sample is largely aware of the services available (71.95 percent). The athletes also perceived the services to be effective, only 4.88 percent rated the effectiveness "poor."

4. What is the main reason an individual cites for abstaining from using a drug?

The number one reason for abstention was "no desire to experience the effects" (38.65 percent). For each of the seven classes of drugs surveyed, subjects who had not used a particular class of drug in the previous 12 months, were asked to identify the one main reason for abstaining. Tables XI through XVII display the reasons that were selected.

TABLE XI

ONE MAIN REASON FOR ABSTAINING FROM STEROIDS

	Male Students N=65	Female Students N=87	Male Student- Athletes N=82	All Subjects N=234
A. I recovered from my injury or illness.	3.70%	0.00%	7.1%	3.6%
B. Concerned about what they might do to my health.	31.48%	8.06%	40.0%	25.8%
C. It's against my beliefs.	11.11%	8.06%	11.4%	11.9%
D. Others would disapprove.	-	0.00%	1.4%	0.5%
E. They're hard to get.	-	0.00%	1.4%	0.5%
F. I had a bad experience with them.	-	-	-	-
G. I didn't get the desired effects.	-	1.61%	1.4%	1.0%
H. Was afraid of being caught.	-	-	1.4%	0.5%
I. Coach's rules.	-	-	-	-
J. No desire to experience the effects.	53.70%	82.26%	35.7%	56.2%

TABLE XII

ONE MAIN REASON FOR ABSTAINING FROM ALCOHOL

	Male Students N=65	Female Students N=87	Male Student- Athletes N=82	All Subjects N=234
A. Concerned about what it might do to my health.	25.0%	33.33%	21.7%	25.0%
B. It's against my beliefs.	8.33%	11.11%	30.4%	20.5%
C. Others would disapprove.	—	11.11%	—	2.3%
D. It's hard to get.	8.33%	—	—	2.3%
E. I had a bad experience with it.	8.33%	22.22%	4.3%	9.1%
F. I didn't get the desired effects.	—	—	4.3%	2.3%
G. Was afraid of being caught.	—	—	—	—
H. I don't like it.	8.33%	—	4.3%	4.5%
I. Coach's rules.	—	—	—	—
J. No desire to experience the effects.	41.67%	22.22%	34.7%	44.0%

TABLE XIII
ONE MAIN REASON FOR ABSTAINING FROM MARIJUANA

	Male Students N=65	Female Students N=87	Male Student- Athletes N=82	All Subjects N=234
A. Concerned about what it might do to my health.	35.71%	26.42%	15.3%	24.6%
B. It's against my beliefs.	16.67%	9.43%	29.2%	19.9%
C. Others would disapprove.	2.38%	-	1.4%	1.2%
D. It's hard to get.	-	-	1.4%	0.6%
E. I had a bad experience with it.	2.38%	1.89%	-	1.2%
F. I didn't get the desired effects.	-	3.77%	6.9%	4.1%
G. Was afraid of being caught.	-	3.77%	6.9%	4.1%
H. I don't like it.	7.14%	11.32%	8.3%	8.8%
I. Coach's rules.	-	-	-	-
J. No desire to experience the effects.	30.95%	43.40%	29.2%	33.9%
K. Because it is illegal.	4.76%	-	1.4%	1.8%

TABLE XIV

ONE MAIN REASON FOR ABSTAINING FROM COCAINE

	Male Students N=65	Female Students N=87	Male Student- Athletes N=82	All Subjects N=234
A. Concerned about what it might do to my health.	36.36%	29.23%	28.6%	30.9%
B. It's against my beliefs.	20.45%	18.46%	23.4%	20.9%
C. Others would disapprove.	-	-	-	-
D. It's hard to get.	4.55%	3.08%	-	2.1%
E. I had a bad experience with it.	-	1.54%	-	0.5%
F. I didn't get the desired effects.	-	-	1.3%	1.0%
G. Was afraid of being caught.	-	3.08%	-	1.0%
H. I don't like it.	6.82%	3.08%	3.9%	4.2%
I. Coach's rules.	-	-	-	-
J. No desire to experience the effects.	31.82%	41.54%	40.3%	38.2%
K. Because it is illegal.	-	-	1.3%	0.5%

TABLE XV

ONE MAIN REASON FOR ABSTAINING FROM PSYCHEDELICS

	Male Students N=65	Female Students N=87	Male Student- Athletes N=82	All Subjects N=234
A. Concerned about what they might do to my health.	44.90%	31.34%	25.7%	32.8%
B. It's against my beliefs.	20.41%	20.90%	31.1%	24.2%
C. Others would disapprove.	2.04%	-	-	0.5%
D. They're hard to get.	-	-	-	-
E. I had a bad experience with them.	-	1.49%	-	0.5%
F. I didn't get the desired effects.	-	-	-	0.5%
G. Was afraid of being caught.	-	-	-	-
H. I don't like them.	8.16%	7.46%	2.7%	6.1%
I. Coach's rules.	-	-	-	-
J. No desire to experience the effects.	24.49%	38.81%	39.2%	34.8%
K. Because it is illegal.	-	-	1.4%	0.5%

TABLE XVI
ONE MAIN REASON FOR ABSTAINING FROM BARBITURATES

	Male Students N=65	Female Students N=87	Male Student- Athletes N=82	All Subjects N=234
A. No need to use them	30.00%	41.54%	34.7%	35.6%
B. I recovered from my injury or illness.	4.00%	3.08%	2.8%	3.1%
C. Concerned about what they might do to my health.	18.00%	9.23%	8.3%	11.9%
D. It's against my beliefs.	12.00%	10.77%	16.7%	13.4%
E. Others would disapprove.	2.00%	—	—	0.5%
F. They're hard to get.	—	3.08%	—	1.0%
G. I had a bad experience with them.	—	—	—	—
H. Was afraid of being caught.	2.00%	—	—	0.5%
I. I don't like them.	—	3.08%	4.2%	2.6%
J. Coach's rules.	—	—	2.8%	1.0%
K. No desire to experience the effects.	32.00%	29.23%	29.2%	30.4%

TABLE XVII

ONE MAIN REASON FOR ABSTAINING FROM AMPHETAMINES

	Male Students N=65	Female Students N=87	Male Student- Athletes N=82	All Subjects N=234
A. No need to use them	21.28%	36.21%	35.2%	31.5%
B. I recovered from my injury or illness.	-	-	-	-
C. Concerned about what they might do to my health.	27.66%	12.07%	8.5%	15.5%
D. It's against my beliefs.	17.02%	10.34%	11.3%	12.7%
E. Others would disapprove.	-	-	-	-
F. They're hard to get.	-	-	-	-
G. I had a bad experience with them.	-	3.45%	-	1.1%
H. I didn't get the desired effects.	-	1.72%	-	0.6%
I. Was afraid of being caught.	-	-	-	-
J. I don't like them.	2.13%	3.45%	5.6%	3.9%
K. Coach's rules.	-	-	4.2%	1.7%
L. No desire to experience the effects.	31.91%	32.76%	35.2%	33.1%

When the seven classes of drugs were combined, the number one reason (38.65 percent) for abstaining was "no desire to experience the effects." The second most common reason (25.00 percent) was "concerned about what they might do to my health." The third most common reason (17.5 percent) was "it's against my beliefs."

Except for steroids, the three samples male students, female students, and male student-athletes all responded very similarly. Reasons for abstaining from steroids yielded the largest differences between males and females. Females (82.26 percent) had "no desire to experience the effects" while males (students 31.48 percent and athletes 40.00 percent) were more "concerned about what they might do to my health."

5. What are the NTSU's students' and student - athletes' opinions and attitudes toward a variety of sports related topics, including athletic drug testing? Are there significant differences between NTSU students and student-athletes?

Questionnaire items 1-19 address these issues and five of these items revealed significant differences between students and student-athletes. The four possible responses for each item that pertain to research question number five (strongly disagree, disagree, agree, strongly agree) were

collapsed into disagree and agree. This was to allow for a 2x2 contingency table to be set up. The chi-square test was used to analyze the data.

The questionnaire contained several items about the significance of drug abuse as a problem. They are listed in table XVII, showing the percent of agreement for all respondents as well as for the two subgroups of the NTSU student body (students and student-athletes).

TABLE XVIII
ATTITUDES TOWARD DRUG ABUSE AS A PROBLEM

Item		NTSU Students (N=152)	NTSU Student- Athletes (N=82)	Total (N=234)	p value
There is a problem of illegal drug use by professional athletes.	Agree: N:*	91.3% 137	89.02% 73	90.52% 210	p > 0.05
There is a problem of illegal drug use by college athletes.	Agree: N:	82.19% 120	75.61% 62	79.82% 182	p > 0.05
Over the last four years, the use of illegal drugs by professional athletes has increased.	Agree: N:	81.38% 118	90% 72	190 84.44	p > 0.05
The image of professional athletes has been hurt by the drug convictions of some professional athletes.	Agree: N:	84.56% 126	80.25% 65	83.04% 191	p > 0.05
The newspapers and television have unfairly reported the use of illegal drugs by professional athletes.	Agree: N:	33.57% 48	51.25% 41	39.91% 89	p < 0.05

* Number of respondents who strongly agreed or agreed with the preceding statement.

Generally, the NTSU student-athletes agreed with NTSU students. The one exception was that student-athletes believed that newspapers and television had been unfairly reporting the use of drugs by professional athletes (51.25 percent and 33.57 percent, respectively.)

Table XIX summarizes the answers to six items concerning attitudes toward intercollegiate athletics

specifically. Included are the total percent of agreement for the items and percent of agreement for the two subgroups, NTSU student-athletes and students.

TABLE XIX
ATTITUDES TOWARD INTERCOLLEGIATE ATHLETICS

Item		NTSU Students (N=152)	NTSU Student- Athletes (N=82)	Total (N=234)	p value
College athletes are generally under more stress than other college students.	Agree: N:*	38.26% 57	95.12% 78	58.44 135	$p < 0.05$
College athletes should be tested for illegal drug use as part of routine physical exams.	Agree: N:	77.03% 114	67.07% 55	73.48% 169	$p > 0.05$
Certain college athletes must take drugs (like steroids) to keep up with their competitors.	Agree: N:	16.89% 25	31.71% 26	22.17% 51	$p < 0.05$
Colleges should provide drug and alcohol education programs for athletes.	Agree: N:	87.92% 131	88.89% 72	88.26% 203	$p > 0.05$
Too many athletes use drugs to improve their athletic performance.	Agree: N:	75.86% 110	56.79% 46	69.03% 156	$p < 0.05$
Colleges should provide a mandatory drug counseling program for athletes with drug and alcohol problems.	Agree: N:	85.14% 126	85.37% 70	85.22% 196	$p > 0.05$
College athletes use drugs more than other college students because they sustain more sports-related injuries.	Agree: N:	23.24 33	21.25 17	22.52 50	$p > 0.05$

* Number of respondents who strongly agreed or agreed with the preceding statement.

These two subgroups expressed significantly different opinions on one-half (3) of the items. NTSU student - athletes generally agreed with NTSU students that college athletes should be tested for illegal drug use as part of routine physical exams (67.07 percent and 77.03 percent respectively), and that colleges should provide drug and alcohol education programs for athletes (85.37 percent and 85.14 percent, respectively.) NTSU student-athletes disagreed strongly with NTSU students as to whether college athletes are under more stress than other college students ($p < .0001$.) and whether too many athletes use drugs to improve their athletic performance ($p < .003$). NTSU student-athletes also disagreed strongly with NTSU students as to whether college athletes must take drugs (like steroids) to keep up with their competitors ($p < .01$).

Table XX summarizes the answers to seven items concerning attitudes toward drug testing for athletes.

TABLE XX
ATTITUDES TOWARD DRUG TESTING FOR ATHLETES

Item		NTSU Students (N=152)	NTSU Student- Athletes (N=82)	Total (N=234)	p value
All professional athletes should be tested.	Agree: N:*	77.85% 116	71.95% 59	75.76% 175	$p > 0.05$
Professional athletes should be randomly tested.	Agree: N:	56.76% 84	67.07% 55	60.43% 139	$p > 0.05$
All olympic athletes should be tested.	Agree: N:	85.14% 126	84.15% 69	84.78% 126	$p > 0.05$
All olympic medal winners should be tested.	Agree: N:	68.92% 102	71.95% 59	70.00 161	$p > 0.05$
Olympic athletes should be randomly tested.	Agree: N:	53.42% 78	65.85% 54	57.89% 132	$p > 0.05$
All college athletes should be tested.	Agree: N:	75.51% 111	72.84% 59	74.56% 170	$p > 0.05$
College athletes should be randomly tested.	Agree: N:	51.70% 76	65.85% 54	56.77% 130	$p < 0.05$

* Number of respondents who strongly agreed or agreed with the preceding statement.

Generally, the NTSU student-athletes agreed with NTSU students. The one exception was whether college athletes should be randomly tested. ($p < .03$.)

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CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Research findings based upon questionnaires which assessed NTSU student and student-athlete drug use and attitudes toward pertinent drug topics are discussed in this chapter. Implications of the findings and recommendations are also included.

Summary

This study was designed to investigate consumption of drugs for nonmedicinal purposes and attitudes toward drug testing and other drug-related topics. A questionnaire from the National Collegiate Athletic Association was adapted and administered to 234 students at NTSU. The students surveyed included 82 male athletes and 152 nonathletes (65 males and 87 females).

Through the collected data, frequency of alcohol and drug use among NTSU students and student-athletes was determined. A comparison utilizing a chi-square test to identify significant differences between male and female students and also between male students and male student-athletes was conducted. Through computing a frequency

distribution table, reasons that students and student-athletes cited for abstaining from a particular class of drug were tabulated. Descriptive statistics were employed to determine the awareness level and perception of the NTSU alcohol/drug abuse services among student-athletes. Lastly, attitudes toward athletic drug testing and other drug-related topics were compared utilizing a chi-square test to identify significant differences between students and student-athletes.

Conclusions

Based upon the results found in this study, the following conclusions have been drawn:

1. Frequency of alcohol and drug use on the NTSU campus is similar to national averages.
2. Within the student sample, there were no significant differences (at the .05 level of confidence) in alcohol and drug use between male and female students.
3. The chi-square analysis of the data with respect to alcohol use indicated that there was no significant difference (at the 0.05 level of confidence) in alcohol use between students and student-athletes.
4. The survey revealed that intercollegiate athletes used significantly more steroids than nonathletes.
5. The chi-square analysis of the data with respect to marijuana, cocaine, psychedelics, and amphetamines

use indicated that the male student population is more likely to use these drugs than the male student-athlete population. There were significant differences beyond the 0.05 level of confidence.

6. Except for barbiturates and alcohol, in which cases rates were very similar, NTSU student-athletes' frequency of drug usage was lower than a 1984 NCAA nationwide student-athlete survey (4).
7. Except for steroids, the reasons cited for abstaining from a particular drug were similar regardless of gender.
8. The three main reasons for abstention were "no desire to experience effects" (38.65 percent), "concerned about what they might do to my health" (25.0 percent), and "it's against my beliefs" (17.5 percent).
9. Student-athletes appeared to be quite aware of the alcohol/drug abuse services offered at NTSU. They also generally perceived the services in a favorable fashion.
10. Chi-square analysis of the 19 questionnaire items which measured attitudes toward a variety of drug related topics, revealed five items in which significant differences between NTSU students and student-athletes existed. The following items of difference are presented:

- A higher percent of student-athletes than students believed that newspapers and television had been unfairly reporting the use of drugs by professional athletes (p value $< .01$).
- Student-athletes disagreed strongly with students as to whether college athletes are under more stress than other college students (p value $< .0001$). They also disagreed as to whether too many athletes use drugs to improve their athletic performance (p $< .003$). Student-athletes also disagreed strongly with students as to whether college athletes must take drugs (like steroids) to keep up with their competitors (p $< .01$).
- Student-athletes believed more so than students that college athletes should be randomly drug tested (p $< .03$).

Implications

An assessment of NTSU student and student-athlete drug use and attitudes toward a variety of drug-related topics was studied. The findings indicate that with respect to drug use among the college student population, males and females present frequency levels which are not statistically significant. Although no significant differences at the 0.05 level of confidence were noted between male and female students, practical differences did exist. With the exceptions of steroids and psychedelics, female students in

this study used drugs at higher rates than males (table VII). In addition, the data in this study seems to indicate that students abstain from using a particular class of drug for similar reasons, regardless of gender. These assertions imply that neither gender represents a special sub-population within the college student body with respect to drug use behavior and reasons for abstention.

The findings of this study indicated that the three main reasons for abstaining, "no desire to experience the effects, concerned about what they might do to my health and it's against my beliefs," are all intrinsically motivated reasons. Extrinsic reasons (e.g., "afraid of being caught, others would disapprove") were seldom selected. DeCharms (1) has proposed that whenever individuals see themselves as the cause of their behavior, they will consider themselves intrinsically motivated. Conversely, when individuals perceive the cause of their behavior to be external (e.g., coach's rules), they will consider themselves extrinsically motivated. Weinberg (2) contends that intrinsic motivators have a stronger and more lasting effect on behavior than external motivators.

These assertions bring into consideration the psychological construct, locus of control. A thorough review of locus of control is beyond the scope of this paper, however, implications for health educators will be addressed. Wallston (4) reviewed several studies and found

that internals (those who believe that reinforcement is contingent upon the individual's behavior) are more likely to engage in behavior that facilitate physical well-being than externals (those who believe reinforcement is controlled by outside forces). Other studies have shown that the type of treatment interacts with an individual's locus of control in determining treatment outcome. Since internals appear more likely to engage in positive health, educators may want to focus on training internality. However, educators may also tailor programs to individual's generalized expectancies regarding locus of control and achieve positive results.

The data in this study seems to indicate that the great majority (72 percent) of student-athletes are aware of the alcohol/drug services offered at NTSU. This suggests that the coaching staff and those who relate to the athlete have done a commendable job in making them cognizant of these services.

Another finding, that student-athletes used significantly more steroids than nonathletes was not really surprising. Robert Veatch (3) identified the use of steroids by athletes as an implementation of "the therapeutic drug ethic" or better athletic performance through modern chemistry in a 1976 study.

This survey found that with the exception of alcohol and barbiturates, male student-athletes consumed

significantly less drugs than male students. In addition, of the seven classes of drugs surveyed, NTSU student-athletes used four classes of drugs at lower rates than a NCAA nationwide survey (table VII). The exceptions were amphetamines and steroids, in which cases NTSU student-athlete rates were slightly higher than the NCAA results. The seventh class of drugs, alcohol, reveals that NTSU student-athletes and the nationwide NCAA results are quite similar (90.24 percent and 88.00 percent respectively). One plausible explanation for the lower NTSU student-athlete drug usage would be the NTSU athletic drug testing program. Although no attempt was made at causality in this study, the drug testing program could have deterred drug use among student-athletes.

Recommendations

The following recommendations are based upon the findings and conclusions of this study.

1. Educators should focus on intrinsic motivators vis-a-vis extrinsic motivators, when teaching drug education and prevention classes.
2. A follow-up study should be conducted in which a more representative student-athlete sample is gathered.
3. A pre-post test should be designed to identify the possible impact of the drug testing program on

student-athlete drug use behavior and it should be administered on a regular basis.

4. Based on the results of this study, continuation of the NTSU athletic drug testing program is recommended.

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APPENDICES

APPENDIX A

NORTH TEXAS STATE UNIVERSITY INTERCOLLEGIATE ATHLETICS
DRUG EDUCATION, TESTING AND COUNSELING PROGRAM

Effective August 1, 1986

Introductory Statement

The Administration of North Texas State University (NTSU), as well as its health service professionals, substance abuse counselors and coaches, strongly believe that the use and/or abuse of the drugs listed later in this policy (excluding those drugs prescribed by a physician to treat a specific medical condition) can:

1. Seriously affect the performance of individuals as students and as athletes;
2. Be detrimental to the physical and mental well being of its student athletes, no matter when such usage should occur during the year;
3. Be dangerous to the athlete and his/her teammates in athletic competition to practice; and
4. Be detrimental to the spirit of fair competition.

Consequently, the use and/or abuse by a student athlete of the drugs listed later in this policy (excluding those drugs prescribed by a physician to treat a specific medical condition when taken in accordance with the prescription), or the failure of a student athlete to participate in alcohol and drug abuse counseling as required under this policy, is deemed a violation of the student athlete's intercollegiate athletic team rules and shall subject the student athlete involved to the sanctions provided later in this policy.

Therefore, NTSU is implementing a program of drug education, testing and counseling efforts for its student athletes using many of the resources already available to all University students.

ATHLETES ARE FREE TO REFUSE TO CONSENT TO DRUG TESTING UNDER THIS PROGRAM. HOWEVER, ATHLETES WHO DECLINE PARTICIPATION IN THE PROGRAM, WHICH IS DESIGNED TO PROTECT THE HEALTH AND REPUTATION OF THE STUDENT ATHLETE, WILL NOT BE ELIGIBLE FOR, NOR SHALL BE PERMITTED TO RECEIVE A SCHOLARSHIP OR TO PARTICIPATE IN, INTERCOLLEGIATE ATHLETICS FOR NTSU. AN ATHLETE WHO FAILS TO TEST FOR DRUGS AS PROVIDED IN THIS POLICY, AFTER INITIALLY CONSENTING TO DRUG TESTING, SHALL BE CONSIDERED TO HAVE MADE A DECISION NOT TO PARTICIPATE IN THE NTSU PROGRAM AND TO AGREE TO FORFEIT HIS/HER SCHOLARSHIP IMMEDIATELY.

An athlete who is already in NTSU's intercollegiate athletics program and who refuses to participate in this drug education, testing and counseling program will be notified of his/her impending prohibition from the University's intercollegiate athletics program before such prohibition takes effect. He/she will be given the opportunity to meet

with the Athletic Director and the student athlete's Head Coach to be heard on the matter of the impending prohibition from participation in the intercollegiate athletics program.

It is standard University procedure for coaches and trainers to send student athletes with an apparent medical problem to the team physician or to personnel at the Student Health Center who may have subsequently required a urine sample from the student athlete to test for the presence of drugs or chemicals. This procedure is independent of the program herein described.

Purpose of the Program

The purpose of the University's Drug-testing and Counseling Program is not to interfere unduly with the private lives of student athletes. Its primary purpose is to aid the student athletes directly. Such assistance is consistent with the specific goals of the program which are to:

1. Provide educational counseling concerning the effect of substance abuse on athletic activities;
2. Deter substance abuse by student athletes;
3. Identify in a confidential way any participant in the Program who may be abusing a specific drug;
4. Counsel any participant in this Program so identified regarding such involvement as it may affect him/her and his/her teammates;
5. Encourage the proper treatment of any chronic chemical dependency;
6. Provide reasonable safeguards that every participant in the Program is medically fit to engage in intercollegiate athletic competition; and
7. Encourage discussion at all appropriate levels about usage of controlled substances.

Implementation of the Program

When an athlete is recruited to engage in an intercollegiate athletic sport, the Program will be discussed with the recruit, who will be given a copy of the Program. A second copy of the Program will be provided for the athlete's parents, legal guardian or spouse. All new and returning athletes will be required annually to sign a form acknowledging receipt and understanding of the Program and shall be requested to give their consent to participate in the Program on a consent form to be provided.

Drug Testing

All participants will be randomly tested during the academic year for any of the following substances:

CNS Depressants -- barbituates, nonbarbituates, opiates, tranquilizers, etc.

CNS Stimulants -- amphetamines, cocaine, etc.

Hallucinogens -- LSD, marijuana, mescaline, etc.

Other -- PCP (Angel Dust), etc.

Specimen collection and processing will be carried out by and at the discretion of the Athletic Trainer. The tests themselves will be done by qualified laboratory personnel.

Every practical effort will be made to assure the accuracy and confidentiality of the test results. The records will be secured by the Athletic Director (AD).

Each specimen from the athlete will be assigned a number. All testing and the results will be based on this number.

Positive Test Results

A. First Positive Situation

1. The specimen of an athlete showing a positive laboratory test will be retested immediately to assure no error has occurred. If the positive result is verified and confirmed the AD, the athlete's Head Coach and Athletic Trainer will be notified that a positive result was obtained for the participant.
2. The athlete will be notified of test results and proposed action and will have an opportunity to discuss the matter fully with the AD and to present evidence of any rebuttal or mitigating circumstances which he/she feels important and/or constraining.
3. After notifying the athlete, one or more of the athlete's parents, legal guardian or spouse will be notified by the AD. The choice of person (s) notified will be at the discretion of the AD.
4. The athlete must positively participate in counseling and evaluation sessions as specified by the AD. Failure to participate in these sessions will be constructively treated as a second positive test and treated accordingly.

5. The athlete will be individually tested at the discretion of the Athletic Trainer for twelve (12) weeks.
6. In addition to the above, the AD or the athlete's Head Coach may access other appropriate sanctions.

B. Second Positive Situation

1. The specimen of an athlete showing a second positive test will be retested immediately to assure no error has occurred. The AD, the athlete's Head Coach and Athletic Trainer will be notified if the athlete is actually or constructively found to have a second positive situation during his or her NTSU athletic career. He or she will then be directed by the AD to participate positively in a drug abuse program which may be at the athlete's own expense. The athlete shall be suspended from the next intercollegiate contest for which he or she would have otherwise been eligible. In addition to the above, the AD or Head Coach may access other appropriate sanctions.
2. Prior to implementation of the suspension period, the athlete will be notified of the proposed suspension and the reasons for the proposed action and will have an opportunity to discuss the matter fully with the AD and to present evidence of any rebuttal or mitigating circumstances which he/she feels important and/or constraining. Reinstatement of the athlete to intercollegiate athletic competition at the completion of the suspension period shall occur only after the AD receives a statement from a counselor of the athlete's positive participation in a drug abuse program as specified by the AD. An athlete's refusal to participate in a drug abuse program, as set forth in this paragraph, will be constructively treated as a third positive result.
3. After notifying the athlete, one or more of the athlete's parents, legal guardian or spouse will be notified by the AD. The choice of the person (s) notified will be at the discretion of the AD.
4. The athlete will be individually tested at the discretion of the Athletic Trainer for twelve (12) weeks.

C. Third Positive Situation

1. The specimen of an athlete found to have a third positive result by reason of a positive laboratory test subsequent to a finding of a second positive situation will be retested immediately to assure no error has occurred.
2. If the athlete is actually or constructively found to have a third positive situation, the AD, Head Coach, Athletic

Trainer and President will be notified that a positive result was obtained for the participant. The athlete's parents, legal guardian or spouse will be informed as deemed appropriate by the AD of the positive result.

3. An athlete who is actually or constructively found to be in a third positive situation will be dismissed from his or her team with immediate loss of any remaining scholarship funds. At the end of one calendar year, the dismissed student may apply to the AD for reinstatement. The AD shall have the discretion to determine reinstatement. Prior to dismissal, the athlete will be notified of the proposed dismissal and the reasons for this proposed action and will have an opportunity to discuss the matter fully with the AD and to present evidence of any rebuttal or mitigating circumstances which he/she feels important and/or constraining.

Amendments or Modifications to the Program

This Program may be modified or amended, with the approval of the President of NTSU. Such amendments or modifications shall apply to, and be effective for, all athletes in NTSU's intercollegiate athletics program upon notice and acknowledgment by such athletes of the University's Drug Testing and Counseling Program as so amended or modified.

ACKNOWLEDGMENT OF RECEIPT OF DRUG TESTING PROGRAM AT NTSU
AND AGREEMENT TO ABIDE BY THE TERMS AND CONDITIONS CONTAINED THEREIN

TO: Athletic Director, NTSU
North Texas State University
Denton, Texas 76203

I hereby acknowledge that I have received a copy of the NTSU Intercollegiate Athletics Drug Education, Testing, and Counseling Program. I further acknowledge that I have read said program, that it has been outlined to me, and that I fully understand the provisions of this program and agree to abide by the terms and conditions contained therein as a condition for participating in intercollegiate athletics at NTSU.

Print Name (Student Athlete)

Signature (Student Athlete) Date

Signature of parent, legal guardian Date
or spouse (if applicable).

APPENDIX B

At the beginning of each academic year and before the athlete is allowed to train or compete, he/she will be expected to sign the following document:

CONSENT TO TESTING OF URINE SAMPLE AND
AUTHORIZATION FOR RELEASE OF INFORMATION

TO: Athletic Director, NTSU
North Texas State University
Denton, Texas 76203

I hereby consent to have samples of my urine collected and tested for the presence of certain drugs or substances in accordance with the provisions of the NTSU Intercollegiate Athletics Drug Education, Testing, and Counseling Program, at all times urinalysis testing is required under the program during the academic year.

I further authorize you to make a confidential release to the Athletic Director, Head Coach, Athletic Trainer and any other individuals authorized by this policy or the AD of test results you may have relating to the screening or testing of my urine sample(s) in accordance with the provisions of the NTSU Intercollegiate Athletics Drug Education, Testing, and Counseling Program. I further authorize this information to be released under the Family Educational Rights and Privacy Act.

North Texas State University, its Board of Regents, its officers, employees and agents are hereby released from legal responsibility or liability for the release of such information and records as authorized by this form.

Print Name (Student Athlete)

Signature (Student Athlete) Date

Signature of parent, legal guardian Date
or spouse (if applicable).

APPENDIX C

INSTITUTE OF FORENSIC MEDICINE
Department of Pathology
Toxicology Laboratory Service
Camp Bowie at Montgomery
Fort Worth, Texas 76107
phone: 817/735-2610

NORTH TEXAS STATE UNIVERSITY
ATHLETIC DEPARTMENT

Medications: _____

On _____ at _____
date time

I witnessed _____
give a urine sample and immediately took
custody of and sealed the specimen.

Other Remarks: _____

signature

released by: _____ date

received by: _____ date

DRUG SCREEN

___ NONE DETECTED

___ AMPHETAMINES

___ METHAQUALONE

___ BARBITURATES

___ OPIATES

___ BENZODIAZEPINES

___ PHENCYCLIDINE

___ COCAINE

___ PROPOXYPHENE

___ CANNABINOIDS

Date Received: _____

Date Completed: _____

Toxicology number: _____

Gary H. Wimbish Ph.D. DABFT
Director
Institute of Forensic Medicine

Te College of
Osteopathic Medicine

Under the direction of the North
Texas State University Board of
Regents

APPENDIX D

This questionnaire is part of an NTSU study of student-athletes. The questions ask about your opinions and experiences with alcohol and different drugs. There is a lot of publicity these days about athletes and drugs, but very little accurate information. We are attempting to learn the actual opinions and experiences of college student-athletes.

If this study is to be helpful, it is important that you answer each question thoughtfully and honestly. If you find a question which you feel you cannot answer honestly, we would prefer that you leave it blank. All of your answers will be kept strictly confidential and anonymous. Only the researchers will see the completed questionnaires. It will be impossible for anyone to identify your answers.

Your participation in this study is voluntary. You can omit answers to any question or discontinue your participation in the study at any time without penalty. Your voluntary completion of this questionnaire constitutes your informed consent to participate in the study.

Other student-athletes have said that the questionnaire was interesting and that they enjoyed answering the questions. We hope you will too. Be sure to read the instructions carefully before you begin. If you have any questions, ask one of the researchers. Thank you for your help in this important national study.

John Hipple

Bob Hay

INSTRUCTIONS

1. This questionnaire is divided into several sections. Read the information at the beginning of each section carefully.
2. Read the questions carefully. Most questions ask you to "mark one," but some ask you to "mark all that apply" or to write a short answer. Please print as clearly as possible for the short answer questions.
3. Darken completely the circle(s) that indicate your answer(s).
4. Do not write your name on the questionnaire.
5. When finished, return your questionnaire to the researchers.
6. If you have any questions, please ask one of the researchers.

SECTION 1

The following questions ask for your opinion about different sports-related topics. (Mark one for each line)

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. There is a problem of illegal drug use by professional athletes.	1	2	3	4
2. There is a problem of illegal drug use by college athletes.	1	2	3	4
3. College athletes are generally under more stress than other college students.	1	2	3	4
4. College athletes should be tested for illegal drug use as part of routine physical exams	1	2	3	4
5. Certain college athletes must take drugs (like steroids) to keep up with their competitors	1	2	3	4
6. Colleges should provide drug and alcohol education programs for athletes.	1	2	3	4
7. In my sport, too many athletes use drugs to improve their athletic performance.	1	2	3	4
8. Over the last four years, the use of illegal drugs by professional athletes has increased	1	2	3	4
9. Colleges should provide a mandatory drug counseling program for athletes with drug and alcohol problems.	1	2	3	4
10. The image of professional athletics has been hurt by the drug convictions of some professional athletes.	1	2	3	4
11. The newspapers and television have unfairly reported the use of illegal drugs by professional athletes	1	2	3	4
12. College athletes use drugs more than other college students because they sustain more sports-related injuries	1	2	3	4

There has been a lot of discussion about whether or not athletes should be physically tested for illegal drug use. Do you agree or disagree with the following? (Mark one for each line)

13. All professional athletes should be tested	1	2	3	4
14. Professional athletes should be randomly tested.	1	2	3	4
15. All Olympic athletes should be tested.	1	2	3	4
16. All Olympic medal winners should be tested	1	2	3	4
17. Olympic athletes should be randomly tested	1	2	3	4
18. All college athletes should be tested.	1	2	3	4
19. College athletes should be randomly tested	1	2	3	4

The following questions are about ANABOLIC STEROIDS. These medications must be prescribed by a doctor.

20. Have you ever used anabolic steroids regularly? (Mark one)

- a. No
- b. Yes, but not in the last 12 months.
- c. Yes, in the last 12 months.

21. Have you used any anabolic steroids since the drug testing program started in August? (Mark one)

- a. No
- b. Yes, but I've stopped now
- c. Yes

Go to Question #25

22. Why do you use anabolic steroids? (Mark one)

- a. For a sports related injury.
- b. For a non-sports related injury or illness.
- c. To improve athletic performance.
- d. To prevent injury.

23. Where do you usually get your steroids? (Mark one)

- a. Coach
- b. Trainer
- c. Team physician
- d. Other physician
- e. Teammate or other athlete
- f. Friend or relative
- g. Pro scout or agent
- h. Other source

24. During the competitive season of your sport, do you use anabolic steroids more or less than during the off-season? (Mark one)

- a. A lot more
- b. A little more
- c. No difference
- d. A little less
- e. A lot less
- f. I don't use anabolic steroids during the competitive season.

Go to Question #26

25. If you DO NOT USE or have STOPPED USING ANABOLIC STEROIDS, mark the ONE MAIN REASON why.

- a. I recovered from my injury or illness
- b. Concerned about what they might do to my health
- c. It's against my beliefs
- d. Others would disapprove
- e. They're hard to get
- f. I had a bad experience with them
- g. I didn't get the desired effects
- h. Was afraid of being caught
- i. Coach's rules
- j. No desire to experience the effects

The following section of questions asks for information about your college athletic and academic career.

26. What is your major sport? (Mark one)

- | <u>Men</u> | <u>Women</u> |
|-----------------|-----------------|
| a. Baseball | a. Basketball |
| b. Basketball | b. Track |
| c. Football | c. Softball |
| d. Track | d. Swimming |
| e. Tennis | e. Tennis |
| f. Other: _____ | f. Other: _____ |

27. What year of athletic eligibility are you in? (Mark one)

- a. First year
- b. Second year
- c. Third year
- d. Fourth year
- e. Fifth year

28. Compared with other athletes in your major sport, how would you rate your athletic ability? (Mark one)

- a. Far below average
- b. Below average
- c. Average
- d. Above average
- e. Far above average

29. During the last 12 months, how many times have you been injured during training or competition in your major sport? (Mark one)

- a. None \longrightarrow Go to Question 32
- b. One
- c. Two
- d. Three
- e. Four
- f. Five or more

30. What kind of injury was it? (If injured more than once, describe all)

31. Did you use prescribed drugs to help you recover from your injury?
(Mark one)

- a. Yes
- b. No

32. What is your current academic standing? (Mark one)

- a. Freshman
- b. Sophomore
- c. Junior
- d. Senior
- e. Graduate school

33. What is your overall college grade point average? (If you are a Freshman
what was your overall high school grade average?)

This section of this questionnaire deals with a variety of drugs. There is a lot of talk these days about this subject, but very little accurate information. We still have a lot to learn about the actual experiences and attitudes of college athletes. We hope you can answer all questions; but if you find one which you feel you cannot answer honestly, we would prefer that you leave it blank. Remember, all answers will be strictly confidential.

The following questions are about ALCOHOL use:

One drink = A 12-ounce can (or bottle) of beer
 A 4-ounce glass of wine
 A mixed drink or shot glass of liquor

34. Have you had any alcoholic beverages in the last 12 months? (Mark one)

- a. No \longrightarrow
 b. Yes, but I've stopped now \longrightarrow
 c. Yes

Go to Question #40

35. When did you start using alcoholic beverages? (Mark one)

- a. Junior high or before
 b. High school
 c. Freshman year of college
 d. After freshman year of college

36. During a typical school week (7 days), on how many occasions do you usually use alcoholic beverages? (Mark one)

- a. None
 b. One
 c. Two
 d. Three
 e. Four
 f. Five or more

37. When you drink alcohol, how many drinks do you usually have? (Mark one)

- a. One or two
 b. 3 to 5
 c. 6 to 9
 d. 10 or more

38. How often do you drink alcoholic beverages: (Mark one for each line)

	<u>Often</u>	<u>Sometimes</u>	<u>Seldom</u>	<u>Never</u>
a. Before practice.....	1	2	3	4
b. Before competition.....	1	2	3	4
c. After practice.....	1	2	3	4
d. After competition.....	1	2	3	4

39. During the competitive season of your sport, do you use alcoholic beverages more or less than during the off-season? (Mark one)

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- a. A lot more
- b. A little more
- c. No difference
- d. A little less
- e. A lot less
- f. I don't use alcoholic beverages during the competitive season

Go to Question #41

40. If you DO NOT USE or have STOPPED USING ALCOHOL, mark the ONE MAIN REASON why.

- a. Concerned about what it might do to my health
- b. It's against my beliefs
- c. Others would disapprove
- d. It's hard to get
- e. I had a bad experience with it
- f. I didn't get the desired effects
- g. Was afraid of being caught
- h. I don't like it
- i. Coach's rules
- j. No desire to experience the effects

The following questions are about MARIJUANA AND HASHISH.

Also called: Pot, Dope, Weed, Grass, Hash, Hash Oil

41. Have you used any marijuana or hashish during the last 12 months? (Mark one)

- a. No
- b. Yes, but I've stopped now
- c. Yes

42. Have you used any marijuana or hashish since the drug testing program started in August? (Mark one)

- a. No
- b. Yes, but I've stopped now
- c. Yes

Go to
Question #48

43. When did you start using marijuana or hashish? (Mark one)

- a. Junior high or before
- b. High school
- c. Freshman year of college
- d. After freshman year of college

44. On how many occasions have you used marijuana or hashish during the last 12 months? (Mark one)
- a. 1-2 times
 - b. 3-5 times
 - c. 6-9 times
 - d. 10-19 times
 - e. 20-39 times
 - f. 40 or more times

45. For each occasion, how many marijuana cigarettes (joints, reefers) or equivalent do you usually smoke? (If you shared them with other people, count only the amount you smoked.) (Mark one)
- a. Less than 1
 - b. 1-2
 - c. 2-3
 - d. 4-6
 - e. 7 or more

46. How often do you use marijuana or hashish: (mark one for each line)

	<u>Often</u>	<u>Sometimes</u>	<u>Seldom</u>	<u>Never</u>
a. Before practice.....	1	2	3	4
b. Before competition.....	1	2	3	4
c. After practice.....	1	2	3	4
d. After competition.....	1	2	3	4

47. During the competitive season of your sport, do you use marijuana or hashish more or less than during the off-season? (Mark one)
- a. A lot more
 - b. A little more
 - c. No difference
 - d. A little less
 - e. A lot less
 - f. I don't use marijuana or hashish during the competitive season

Go to Question #49

48. If you DO NOT USE or have STOPPED USING MARIJUANA AND HASHISH, mark the ONE MAIN REASON why.

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- a. Concerned about what it might do to my health
- b. It's against my beliefs
- c. Others would disapprove
- d. It's hard to get
- e. I had a bad experience with it
- f. I didn't get the desired effects
- g. Was afraid of being caught
- h. I don't like it
- i. Coach's rules
- j. No desire to experience the effects
- k. Because it is illegal

The following questions are about COCAINE.

Also called: Coke Snow
 Toot Blow

49. Have you used any cocaine in the last 12 months? (Mark one)

- a. No
- b. Yes, but I've stopped now
- c. Yes

50. Have you used any cocaine since the drug testing program started in August? (Mark one)

- a. No \longrightarrow
- b. Yes, but I've stopped now \longrightarrow
- c. Yes

Go to Question #55

51. When did you start using cocaine? (Mark one)

- a. Junior high or before
- b. High school
- c. Freshman year of college
- d. After freshman year of college

52. On how many different occasions have you used cocaine during the last 12 months? (Mark one)

- a. 1-2 times
- b. 3-5 times
- c. 6-9 times
- d. 10-19 times
- e. 20-39 times
- f. 40 or more times

53. How often do you use cocaine: (Mark one for each line)

	<u>Often</u>	<u>Sometimes</u>	<u>Seldom</u>	<u>Never</u> ⁹⁷
a. Before practice.....	1	2	3	4
b. Before competition.....	1	2	3	4
c. After practice.....	1	2	3	4
d. After competition.....	1	2	3	4

54. During the competitive season of your sport, do you use cocaine more or less during the off-season? (Mark one)

- a. A lot more
- b. A little more
- c. No difference
- d. A little less
- e. A lot less
- f. I don't use cocaine during the competitive season

Go to Question #56

55. If you DO NOT USE or have STOPPED USING COCAINE, mark the ONE MAIN REASON why.

- a. Concerned about what it might do to my health
- b. It's against my beliefs
- c. Others would disapprove
- d. It's hard to get
- e. I had a bad experience with it
- f. I didn't get the desired effects
- g. Was afraid of being caught
- h. I don't like it
- i. Coach's rules
- j. No desire to experience the effects
- k. Because it is illegal

The following questions are about PSYCHEDELICS.

Examples:	Mescaline	LSD
	Peyote	Acid
	Psilocybin	Mushrooms
	PCP	Blotter

56. Have you used any psychedelics during the last 12 months? (Mark one)

- a. No
- b. Yes, but I've stopped now
- c. Yes

57. Have you used any psychedelics since the drug testing program started last August? (Mark one)

- a. No →
- b. Yes, but I've stopped now →
- c. Yes

Go to
Question #62

58. When did you first use psychedelics? (Mark one)

- a. Junior high or before
- b. High school
- c. Freshman year of college
- d. After freshman year of college

59. On how many different occasions have you used psychedelics during the last 12 months? (Mark one)

- a. 1-2 times
- b. 3-5 times
- c. 6-9 times
- d. 10-19 times
- e. 20-39 times
- f. 40 or more times

60. How often do you use psychedelics: (Mark one for each line)

	<u>Often</u>	<u>Sometimes</u>	<u>Seldom</u>	<u>Never</u>
a. Before practice.....	1	2	3	4
b. Before competition.....	1	2	3	4
c. After Practice.....	1	2	3	4
d. After competition.....	1	2	3	4

61. During the competitive season of your sport, do you use psychedelics more or less than during the off-season? (Mark one)

- a. A lot more
- b. A little more
- c. No difference
- d. A little less
- e. A lot less
- f. I don't use psychedelics during the competitive season

Go to Question #63

62. If you DO NOT USE or have STOPPED USING PSYCHEDELICS, Mark the ONE MAIN REASON why.

- a. Concerned about what they might do to my health
- b. It's against my beliefs
- c. Others would disapprove
- d. They're hard to get
- e. I had a bad experience with them
- f. I didn't get the desired effects
- g. Was afraid of being caught
- h. I don't like them
- i. Coach's rules
- j. No desire to experience the effects
- k. Because it is illegal

The following questions are about BARBITURATES OR TRANQUILIZERS, which doctors sometimes prescribe to help people relax or get to sleep. These medications must be prescribed by a doctor.

Examples:	Librium	Atarax
	Valium	Phenobarbital
	Seconal	Meproamate
	Serax	Quaaludes

Also called:	Downers	Goofballs
	Reds	Rainbows
	Blues	Ludes
	Yellows	

63. During the last 12 months have you used any barbiturates or tranquilizers? (Mark one)

- a. No
- b. Yes, but I've stopped now
- c. Yes

64. Have you used any barbiturates or tranquilizers since the drug testing program started last August? (Mark one)

- a. No →
- b. Yes, but I've stopped now →
- c. Yes

Go to Question #69

69. If you DO NOT USE or have STOPPED USING BARBITURATES OR TRANQUILIZERS, mark the ONE MAIN REASON why.

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- a. No need to use them
- b. I recovered from my injury or illness
- c. Concerned about what they might do to my health
- d. It's against my beliefs
- e. Others would disapprove
- f. They're hard to get
- g. I had a bad experience with them
- h. I didn't get the desired effects
- i. Was afraid of being caught
- j. I don't like them
- k. Coach's rules
- l. No desire to experience the effects

The following questions are about AMPHETAMINES. These are sometimes prescribed by a doctor to help people lose weight or give them more energy. These medications must be prescribed by a doctor.

Examples:	Benzedrine	Preludin
	Dexedrine	Methamphetamine
	Ritalin	

Also called:	Speed	Dexies
	Uppers	Pep Pills (not over-the-counter)
	Bennies	Diet Pills (not over-the-counter)

70. Have you used any amphetamines during the last 12 months? (Mark one)

- a. No
- b. Yes, but I've stopped now
- c. Yes

71. Have you used any amphetamines since the drug program started last August? (Mark one)

- a. No
- b. Yes, but I've stopped now
- c. Yes

Go to Question #75

72. On how many different occasions have you used amphetamines during the last 12 months? (Mark one)
- a. 1-2 times
 - b. 3-5 times
 - c. 6-9 times
 - d. 10-19 times
 - e. 20-39 times
 - f. 40 or more times

73. How often do you use amphetamines: (Mark one for each line)

	<u>Often</u>	<u>Sometimes</u>	<u>Seldom</u>	<u>Never</u>
a. Before practice.....	1	2	3	4
b. Before competition.....	1	2	3	4
c. After practice.....	1	2	3	4
d. After competition.....	1	2	3	4

74. During the competitive season of your sport, do you use amphetamines more or less than during the off-season? (Mark one)
- a. A lot more
 - b. A little more
 - c. No difference
 - d. A little less
 - e. A lot less
 - f. I don't use amphetamines during the competitive season

Go to Question #76

75. If you DO NOT USE or have STOPPED USING AMPHETAMINES, mark the ONE MAIN REASON why.
- a. No need to use them
 - b. I recovered from my injury or illness
 - c. Concerned about what they might do to my health
 - d. It's against my beliefs
 - e. Others would disapprove
 - f. They're hard to get
 - g. I had a bad experience with them
 - h. I didn't get the desired effects
 - i. Was afraid of being caught
 - j. I don't like them
 - k. Coach's rules
 - l. No desire to experience the effects

The following questions ask information about alcohol/drug abuse services available at your school. "Services" refers to any formal course, session or program.

76. Does your school offer alcohol/drug abuse education or prevention services? (Mark one)
- Yes
 - No
 - Don't know
77. Have you ever attended alcohol/drug abuse education or prevention services offered by your school? (Mark one)
- Yes
 - No
78. How would you rate the effectiveness of your school's alcohol/drug abuse education or prevention services? (Mark one)
- Excellent
 - Good
 - Fair
 - Poor
 - Can't say
79. Does your school have alcohol/drug abuse counseling or treatment services? (Mark one)
- Yes
 - No
 - Don't know
80. Have you ever participated in alcohol/drug abuse counseling or treatment services offered by your school? (Mark one)
- Yes
 - No
81. How would you rate the effectiveness of your school's counseling and treatment services? (Mark one)
- Excellent
 - Good
 - Fair
 - Poor
 - Can't say

82. If a teammate needed help with an alcohol/drug abuse problem, where would you suggest he/she go? (Mark one)
- a. Coach
 - b. Trainer
 - c. Team physician
 - d. On-campus counseling/treatment program
 - e. Community counseling/treatment program

The following questions ask for some background information about yourself. We are asking these questions so that we can better compare college athletes to college students.

83. How old are you?

_____ years.

84. What is your sex? (Mark one)

a. Female

b. Male

85. How do you primarily describe yourself? (Mark one)

a. American Indian

b. Black or Afro-American

c. Mexican American or Chicano

d. Puerto Rican or other Latin American

e. Oriental or Asian American

f. White or Caucasian

86. What is your religious preference? (Mark one)

a. Protestant (Baptist, Presbyterian, Methodist, Lutheran, etc.)

b. Catholic

c. Jewish

d. Eastern Orthodox

e. None

f. Other _____

87. How often do you attend religious services? (Mark one)

a. Never

b. Rarely

c. Once or twice a month

d. About once a week or more

88. How important is religion in your life? (Mark one)

a. Not important

b. A little important

c. Pretty important

d. Very important

89. How would you describe your political preference? (Mark one)

- a. Strongly Republican
- b. Mildly Republican
- c. Mildly Democrat
- d. Strongly Democrat
- e. No preference, independent
- f. Other _____

Thank you for taking the time to answer these questions. We appreciate your cooperation in this important national study. If you have any comments about the study or the questionnaire, please write them below.

APPENDIX E

STUDENT QUESTIONNAIRE

This questionnaire is part of an NTSU study of students. The questions ask about your opinions and experiences with alcohol and different drugs. There is a lot of publicity these days about students and drugs, but very little accurate information. We are attempting to learn the actual opinions and experiences of college students.

If this study is to be helpful, it is important that you answer each question thoughtfully and honestly. If you find a question which you feel you cannot answer honestly, we would prefer that you leave it blank. All of your answers will be kept strictly confidential and anonymous. Only the researchers will see the completed questionnaires. It will be impossible for anyone to identify your answers.

Your participation in this study is voluntary. You can omit answers to any question or discontinue your participation in the study at any time without penalty. Your voluntary completion of this questionnaire constitutes your informed consent to participate in the study.

Other students have said that the questionnaire was interesting and that they enjoyed answering the questions. We hope you will too. Be sure to read the instructions carefully before you begin. If you have any questions, ask one of the researchers. Thank you for your help in this important national study.

J. H. Munson - Graduate Student

Dr. C. Chng - Advising Professor

INSTRUCTIONS

1. This questionnaire is divided into several sections. Read the information at the beginning of each section carefully.
2. Read the questions carefully. Most questions ask you to "mark one," but some ask you to "mark all that apply" or to write a short answer. Please print as clearly as possible for the short answer questions.
3. Darken completely the circle(s) that indicate your answer(s).
4. Do not write your name on the questionnaire.
5. When finished, return your questionnaire to the researchers.
6. If you have any questions, please ask one of the researchers.

SECTION 1

The following questions ask for your opinion about different sports-related topics. (Mark one for each line)

- | | | | | |
|--|---|---|---|---|
| 1. There is a problem of illegal drug use by professional athletes. | 1 | 2 | 3 | 4 |
| 2. There is a problem of illegal drug use by college athletes. | 1 | 2 | 3 | 4 |
| 3. College athletes are generally under more stress than other college students. | 1 | 2 | 3 | 4 |
| 4. College athletes should be tested for illegal drug use as part of routine physical exams. | 1 | 2 | 3 | 4 |
| 5. Certain college athletes must take drugs (like steroids) to keep up with their competitors. | 1 | 2 | 3 | 4 |
| 6. Colleges should provide drug and alcohol education programs for athletes. | 1 | 2 | 3 | 4 |
| 7. Too many athletes use drugs to improve their athletic performance. | 1 | 2 | 3 | 4 |
| 8. Over the last four years, the use of illegal drugs by professional athletes has increased. | 1 | 2 | 3 | 4 |
| 9. Colleges should provide a mandatory drug counseling program for athletes with drug and alcohol problems. | 1 | 2 | 3 | 4 |
| 10. The image of professional athletics has been hurt by the drug convictions of some professional athletes. | 1 | 2 | 3 | 4 |
| 11. The newspapers and television have unfairly reported the use of illegal drugs by professional athletes. | 1 | 2 | 3 | 4 |
| 12. College athletes use drugs more than other college students because they sustain more sports-related injuries. | 1 | 2 | 3 | 4 |

There has been a lot of discussion about whether or not athletes should be physically tested for illegal drug use. Do you agree or disagree with the following? (Mark one for each line.)

- | | | | | |
|--|---|---|---|---|
| 13. All professional athletes should be tested. | 1 | 2 | 3 | 4 |
| 14. Professional athletes should be randomly tested. | 1 | 2 | 3 | 4 |

- | | | | | |
|---|---|---|---|---|
| 15. All Olympic athletes should be tested. | 1 | 2 | 3 | 4 |
| 16. All Olympic medal winners should be tested. | 1 | 2 | 3 | 4 |
| 17. Olympic athletes should be randomly tested. | 1 | 2 | 3 | 4 |
| 18. All college athletes should be tested. | 1 | 2 | 3 | 4 |
| 19. College athletes should be randomly tested. | 1 | 2 | 3 | 4 |

The following questions are about ANABOLIC STEROIDS. These medications must be prescribed by a doctor.

20. Have you ever used anabolic steroids regularly? (Mark one)
- a. No
 - b. Yes, but not in the last 12 months
 - c. Yes, in the last 12 months
21. If you DO NOT USE or have STOPPED USING ANABOLIC STEROIDS, mark the ONE MAIN REASON why.
- a. I recovered from my injury or illness
 - b. Concerned about what they might do to my health
 - c. It's against my beliefs
 - d. Others would disapprove
 - e. They're hard to get
 - f. I had a bad experience with them
 - g. I didn't get the desired effects
 - h. Was afraid of being caught
 - i. Coach's rules
 - j. No desire to experience the effects

SECTION 2

The following section of questions asks for information about your college athletic and academic career.

22. What is your current academic standing? (Mark one)
- Freshman
 - Sophomore
 - Junior
 - Senior
 - Graduate school
23. What is your overall college grade point average? (If you are a Freshman, what was your overall high school grade average?)

SECTION 3

This section of this questionnaire deals with a variety of drugs. There is a lot of talk these days about this subject, but very little accurate information. We still have a lot to learn about the actual experiences and attitudes of college athletes. We hope you can answer all questions; but if you find one which you feel you cannot answer honestly, we would prefer that you leave it blank. Remember, all answers will be strictly confidential.

The following questions are about ALCOHOL use:

one drink = A 12-ounce can (or bottle) of beer
 A 4-ounce glass of wine
 A mixed drink or shot glass of liquor

24. Have you had any alcoholic beverages in the last 12 months? (Mark One)
- No _____
 - Yes, but I've stopped now _____
 - Yes
- Go to
Question #29
25. When did you start using alcoholic beverages? (Mark one)
- Junior high or before
 - High school
 - Freshman year of college
 - After freshman year of college

26. During a typical school week (7 days), on how many occasions do you usually use alcoholic beverages? (Mark one)
- a. None
 - b. One
 - c. Two
 - d. Three
 - e. Four
 - f. Five or more
27. When you drink alcohol, how many drinks do you usually have? (Mark one)
- a. One or two
 - b. 3 to 5
 - c. 6 to 9
 - d. 10 or more
28. If you DO NOT USE or have STOPPED USING ALCOHOL, mark the ONE MAIN REASON why.
- a. Concerned about what it might do to my health
 - b. It's against my beliefs
 - c. Others would disapprove
 - d. It's hard to get
 - e. I had a bad experience with it
 - f. I didn't get the desired effects
 - g. Was afraid of being caught
 - h. I don't like it
 - i. Coach's rules
 - j. No desire to experience the effects

The following questions are about MARIJUANA AND HASHISH.

Also called: Pot, Dope, Weed, Grass, Hash, Hash Oil

29. Have you used any marijuana or hashish during the last 12 months? (Mark one)
- No
 - Yes, but I've stopped now
 - Yes
30. When did you start using marijuana or hashish? (Mark one)
- Junior high or before
 - High school
 - Freshman year of college
 - After freshman year of college
31. On how many occasions have you used marijuana or hashish during the last 12 months? (Mark one)
- 1-2 times
 - 3-5 times
 - 6-9 times
 - 10-19 times
 - 20-39 times
 - 40 or more times
32. For each occasion, how many marijuana cigarettes (joints, reefers) or equivalent do you usually smoke? (If you shared them with other people, count only the amount you smoked.) (Mark one)
- Less than 1
 - 1-2
 - 2-3
 - 4-6
 - 7 or more

33. If you DO NOT USE or have STOPPED USING MARIJUANA AND HASHISH, mark the ONE MAIN REASON why.
- a. Concerned about what it might do to my health
 - b. It's against my beliefs
 - c. Others would disapprove
 - d. It's hard to get
 - e. I had a bad experience with it
 - f. I didn't get the desired effects
 - g. Was afraid of being caught
 - h. I don't like it
 - i. Coach's rules
 - j. No desire to experience the effects
 - k. Because it is illegal

The following questions are about COCAINE.

Also called: Coke Snow
 Toot Blow

34. Have you used any cocaine in the last 12 months? (Mark one)
- a. No
 - b. Yes, but I've stopped now
 - c. Yes
35. When did you start using cocaine? (Mark one)
- a. Junior high or before
 - b. High school
 - c. Freshman year of college
 - d. After freshman year of college

36. On how many different occasions have you used cocaine during the last 12 months? (Mark One)
- a. 1-2 times
 - b. 3-5 times
 - c. 6-9 times
 - d. 10-19 times
 - e. 20-39 times
 - f. 40 or more times
37. If you DO NOT USE or have STOPPED USING COCAINE, mark the ONE MAIN REASON why.
- a. Concerned about what it might do to my health
 - b. It's against my beliefs
 - c. Others would disapprove
 - d. Its hard to get
 - e. I had a bad experience with it
 - f. I didn't get the desired effects
 - g. Was afraid of being caught
 - h. I don't like it
 - i. Coach's rules
 - j. No desire to experience the effects
 - k. Because it is illegal

The following questions are about PSYCHEDELICS.

Examples: Mescaline	LSD
Peyote	Acid
Psilocybin	Mushrooms
PCP	Blotter

38. Have you used any psychedelics during the last 12 months? (Mark one)
- a. No
 - b. Yes, but I've stopped now
 - c. Yes
39. When did you first use psychedelics? (Mark one)
- a. Junior high or before
 - b. High school
 - c. Freshman year of college
 - d. After freshman year of college
40. On how many different occasions have you used psychedelics during the last 12 months? (Mark one)
- a. 1-2 times
 - b. 3-5 times
 - c. 6-9 times
 - d. 10-19 times
 - e. 20-39 times
 - f. 40 or more times
41. If you DO NOT USE or have STOPPED USING PSYCHEDELICS, mark the ONE MAIN REASON why.
- a. Concerned about what they might do to my health
 - b. It's against my beliefs
 - c. Others would disapprove
 - d. They're hard to get
 - e. I had a bad experience with them
 - f. I didn't get the desired effects
 - g. Was afraid of being caught
 - h. I don't like them

(Continued on next page)

- i. Coach's rules
- j. No desire to experience the effects
- k. Because it is illegal

The following questions are about BARBITURATES OR TRANQUILIZERS, which doctors sometimes prescribe to help people relax or get to sleep. These medications must be prescribed by a doctor.

Examples: Librium Atarax
 Valium Phenobarbital
 Seconal Meprobamate
 Serax Quaaludes

Also called: Downers Goofballs
 Reds Rainbows
 Blues Ludes
 Yellows

42. During the last 12 months have you used any barbiturates or tranquilizers?
- a. No
 - b. Yes, but I've stopped now
 - c. Yes
43. When did you first use barbiturates or tranquilizers? (mark one).
- a. Junior high or before
 - b. High school
 - c. Freshman year of college
 - d. After freshman year of college
44. On how many different occasions have you used barbiturates or tranquilizers during the last 12 months? (Mark one)
- a. 1-2 times
 - b. 3-5 times
 - c. 6-9 times
 - d. 10-19 times
 - e. 20-39 times
 - f. 40 or more times

45. If you DO NOT USE or have STOPPED USING BARBITURATES OR TRANQUILIZERS, mark the ONE MAIN REASON why.
- a. No need to use them
 - b. I recovered from my injury or illness
 - c. Concerned about what they might do to my health
 - d. It's against my beliefs
 - e. Others would disapprove
 - f. They're hard to get
 - g. I had a bad experience with them
 - h. Was afraid of being caught
 - i. I don't like them
 - k. Coach's rules
 - l. No desire to experience the effects

The following questions are about AMPHETAMINES. These are sometimes prescribed by a doctor to help people lose weight or give them more energy. These medications must be prescribed by a doctor.

Examples:	Benzedrine	Preludin
	Dexedrine	Methamphetamine
	Ritalin	

Also called:	Speed	Dexies
	Uppers	Pep Pills (not over-the-counter)
	Bennies	Diet Pills (not over-the-counter)

46. Have you used any amphetamines during the last 12 months? (Mark one)
- a. No
 - b. Yes, but I've stopped no
 - c. Yes

47. On how many different occasions have you used amphetamines during the last 12 months? (Mark one)
- a. 1-2 times
 - b. 3-5 times
 - c. 6-9 times
 - d. 10-19 times
 - e. 20-39 times
 - f. 40 or more times.
48. If you DO NOT USE or have STOPPED USING AMPHETAMINES, mark the ONE MAIN REASON why.
- a. No need to use them
 - b. I recovered from my injury or illness
 - c. Concerned about what they might do to my health
 - d. It's against my beliefs
 - e. Others would disapprove
 - f. They're hard to get
 - g. I had a bad experience with them
 - h. I didn't get the desired effects
 - i. Was afraid of being caught
 - j. I don't like them
 - k. Coach's rules
 - l. No desire to experience the effects

SECTION 4

The following questions ask information about alcohol/drug abuse services available at your school. "Services" refers to any formal course, session or program.

49. Does your school offer alcohol/drug abuse education or prevention services? (Mark one)
- a. Yes
 - b. No
 - c. Don't know
50. Have you ever attended alcohol/drug abuse education or prevention services offered by your school? (Mark one)
- a. Yes
 - b. No
51. How would you rate the effectiveness of your school's alcohol/drug abuse education or prevention services? (Mark one)
- a. Excellent
 - b. Good
 - c. Fair
 - d. Poor
 - e. Can't say
52. Does your school have alcohol/drug abuse counseling or treatment services? (Mark one)
- a. Yes
 - b. No
 - d. Don't know
53. Have you participated in alcohol/drug abuse counseling or treatment services offered by your school? (Mark one)
- a. Yes
 - b. No

54. How would you rate the effectiveness of your school's counseling and treatment services? (Mark one)
- a. Excellent
 - b. Good
 - c. Fair
 - d. Poor
 - e. Can't say

SECTION 5

The following questions ask for some background information about yourself. We are asking these questions so that we can better compare college athletes to college students.

55. How old are you?
_____ years.
56. What is your sex? (Mark one)
- a. Female
 - b. Male
57. How do you primarily describe yourself? (Mark one)
- a. American Indian
 - b. Black or Afro-American
 - c. Mexican American or Chicano
 - d. Puerto Rican or other Latin American
 - e. Oriental or Asian American
 - f. White or Caucasian

58. What is your religious preference? (Mark one)
- a. Protestant (Baptist, Presbyterian, Methodist, Lutheran, etc.)
 - b. Catholic
 - c. Jewish
 - d. Eastern Orthodox
 - e. None
 - f. Other _____
59. How often do you attend religious services? (Mark one)
- a. Never
 - b. Rarely
 - c. One or twice a month
 - d. About once a week or more
60. How important is religion in your life? (Mark one)
- a. Not important
 - b. A little important
 - c. Pretty important
 - d. Very important
61. How would you describe your political preference? (Mark one)
- a. Strongly Republican
 - b. Mildly Republican
 - c. Mildly Democrat
 - d. Strongly Democrat
 - e. No preference, independent
 - f. Other _____

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