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ABSTRACT

Part 1 of the report's three sections presents a general review of the published literature relevant to understanding the drug problem in the United States. Part 2 presents a summary of data obtained in an investigation into the nature and magnitude of the delinquency problem among youth living in the Wind River Indian Reservation area of Wyoming. The relationship between drug use and delinquency, various background factors, and alcohol use was examined. A self-report questionnaire was administered to 456 male and 391 female students in the 9th and 12th grades at Lander Valley High School and Wind River High School in May 1972. Part 3 presents data on the similarities and differences in drug use and attitudes toward drug use of American Indian and Anglo youth living in the Wind River Indian Reservation area. Data were obtained from 120 Indian and 391 Anglo 9th through 12th grade students from the Wyoming Indian High School, Lander Valley High School, Riverton High School, and Wind River High School. Some findings presented in Parts 2 and 3 were: Indian students had more favorable attitudes toward drug use; and those who had used drugs tended to have poorer relationships with their parents and the schools and a strong tendency to be involved in other delinquent acts. (NQ)

DRUG USE, DELINQUENCY AND ALCOHOL USE AMONG INDIAN AND ANGLO YOUTH IN WYOMING

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PREFACE

This research report is divided into three sections. Chapter I presents a general review of the published literature relevant to understanding the current drug problem in the United States. Chapter II deals with the relationship between drug use and background factors, drug use and delinquency, and drug use and alcohol use among ninth through twelfth grade students attending Lander Valley and Wind River High Schools located in Fremont County, Wyoming. Chapter III is concerned with Indian and Anglo differences in drug use and attitudes toward drug use among a sample of ninth through twelfth grade students attending Lander Valley, Wind River, Riverton and Wyoming Indian High Schools, all located in Fremont County, Wyoming. More detailed information with respect to the samples studied and the research procedures is presented in Chapters II and III. Chapter I was written by Rolland Raboin; Chapter II is based on data collected by Morris Forslund; and, Chapter III is based on data collected by William Cockerham. Overall responsibility for the production of this report rests with Morris Forslund.

We wish to thank the administrators, teachers and students of the schools involved for their cooperation in these studies.

CHAPTER I

DRUGS: AN INTRODUCTION AND OVERVIEW

Historical Perspective

The purpose here is not to present a comprehensive history of the use of drugs but, rather, to provide a perspective from which to view contemporary drug use in the United States. Probably few Americans are unaware of the current controversy surrounding the use of drugs. Accounts of drug smuggling, drug-related arrests, debates concerning drug legislation, etc. appear frequently in the mass media. There is a tendency, however, to view drug use and drug abuse as a specifically contemporary phenomenon--a view that is historically distorted. Human beings have in fact used drugs for a variety of purposes for many centuries.

Cultivation of the opium poppy apparently dates from prehistoric times and is believed to have originated in and around Mesopotamia. Archeological evidence from Cyprus, Crete and Greece indicates that opium was used ritualistically as early as 2000 B.C. (Blum et al., 1969a:15: Blum, et al., 1964:7). Ausubel (1958:57) has noted that the ancient Egyptians, Persians and Romans used opium for pleasure-seeking as well as medical purposes. Use of opium was widespread in Turkey and Persia by the sixteenth century, and was being exported from Cyprus to Egypt during that era.

Although opium seems to have originated in the Near East, its use gradually spread beyond this region. It was introduced to China by Arab traders as early as the seventh century, and appears to have been cultivated in India by about the beginning of the sixteenth century (Blum, et al., 1969a: 47-48).

The use of opium in the United States first became apparent in San Francisco in 1851, and is associated with the importation of Chinese laborers or coolies. Opium and its derivatives, particularly morphine, were used extensively during the Civil War (1961-1865) because of their painkilling and calming properties. And, of course, morphine and other opium derivatives continue

to be used for these same purposes today.

Cannabis sativa or marijuana is another drug that is widely used in American society and which has a long history. According to Brecher (1972:397), the hemp plant--source of hashish and marijuana--was valued as a painkilling drug in China as early as 2737 B.C. Marijuana use has also been traced to India during the second millenium B.C. (Blum, et al., 1969a:62), to Assyria about 650 B.C., to Greece during the fifth century B.C., and to Germany about 500 B.C. (Brecher, 1972:297-402).

The India hemp plant was introduced into the Western Hemisphere via Chile by the Spaniards in 1545 (Brecher, 1972: 403-409). The cultivation and use of marijuana spread northward to Mexico by 1886, and it was widely used there by 1898. Its regular use by some Americans became evident in 1916 when it was introduced to soldiers in the Panama Canal Zone and to those forces fighting Pancho Villa along the Mexican border (Blum, et al., 1969a:69).

This cursory review of the history and origins of opium and marijuana demonstrates that drug use is not new. Although our present drug crisis appears to be a product of our times, its roots extend back into prehistory. For centuries human beings have turned to drugs both to reduce pain and to produce what were defined as pleasurable experiences (The Child Study Association of America, 1971:5). Recently, however, the publicity given to drug use and abuse by the mass media and the emotional nature of much of the debate over drugs have made drug abuse one of the major social problems of our times.

Defining the Problem

One of the greatest difficulties in defining the drug problem is that of semantics. Often, the participants in the "drug debate" seem neither to be speaking the same language nor to be proceeding from the same assumptions. This lack of communication creates misunderstandings and is a major barrier to defining the "drug problem." The issue here has been described by Nowlis (1969:5) as the problem of "...tyranny of opinion, attitudes

and belief in the absence of knowledge."

The term "drug" has numerous meanings, and its definition is therefore subject to ambiguities. A pharmacological definition offered by Modell (1967:5) states that a drug is "...any substance that by its chemical nature alters structure or function in the living organism." Pharmacologically, a narcotic drug is any drug which "...in most people under most circumstances and at appropriate dose levels, produces sleep and stupor and relieves pain (Nowlis, 1969:34)."

Legally, the term narcotic drug has often been extended and applied to any drugs presumed to be habit forming or addicting. The layman's definition has frequently gone a step further, defining a narcotic drug as any drug which is socially disapproved or associated with delinquency and crime or any substance controlled by the Federal Bureau of Narcotics. (Nowlis, 1969:34).

According to Modell's definition, both alcohol and tobacco are drugs because they alter the functioning of the human organism. In general, however, Americans do not consider these substances to be "drugs," and their use is subject to relatively minor legal restrictions.

The above discussion has pointed up the fact that the definition of what constitutes a drug may be medical, legal or social. But for practical purposes over the long run, the social definition is perhaps the most significant. As noted, alcohol and tobacco are, pharmacologically, drugs. Both have been restricted by legal measures. But these legal restrictions have changed periodically as societal definitions and conceptions have changed. Thus social conceptions and definitions appear to be the key to understanding the current "drug problem."

Legitimation, Drug Use and Drug Abuse

The extensiveness of mind-altering drug use in the United States is, perhaps, surprising. For example, the National Commission on Marijuana and Drug Abuse (1973:38) has estimated

that upwards of fifteen percent of Americans aged eighteen and over, and fourteen percent aged twelve through seventeen, have experimented with marijuana use. This is perhaps a reflection upon our social norms. Ours is a social environment in which drugs are widely produced, advertised and used (Blum, et al., 1964:4). The intensity of our belief in the power of drugs to help us hold up under the stresses of life is indicated by the tremendous volume of pills consumed daily by the American people. As McGrath and Scarpitti (1970:12) have put it, 'we seem to subscribe to the premise that this life cannot be lived without drugs." When drugs are used for what are considered to be legitimate medical or other purposes, that use is accepted and "legitimized" by society. Drug use which falls outside of accepted norms tends to be labeled deviant or non-legitimate: and those who violate such norms tend to be defined as drug abusers.

The greatest concern in American society with regard to drug use and abuse seems to focus on youth who are experimenting either with types of drugs or types of drug use not generally considered legitimate by adults. There are undoubtedly numerous reasons why adolescents use drugs, but Nowlis has suggested (1969:22) that many of these reasons parallel those of adults--to find a change of pace or mood, reduce anxiety, relieve boredom, facilitate social interaction, help them sleep or "just for fun."

Correlates of Drug Use

Although illegitimate drug use is widespread in American society, it appears to be disproportionately concentrated among males regardless of the type of drug being used (Chein and Rosenfeld, 1964:52-53; Suchman, 1968: 145-155). As indicated in Uniform Crime Reports (FBI, 1972:122-129), in 1972 arrests of males accounted for 84.6% of those persons arrested for narcotic law violations. Of special interest, however, is the fact that during the period 1960 through 1972 the percent female of those arrested for narcotic law violations increased from less than five percent to more than fifteen percent. This increase in

arrests of females for narcotic law violations appears to reflect an increase in illegal drug use by females over this period. Nevertheless, illegal drug use remains predominantly a male phenomenon.

Data presented in Uniform Crime Reports also indicates that illegal drug use is concentrated among adolescents and young adults. A breakdown of arrests for narcotic law violations by age shows that in 1972 3.0% were under fifteen years of age, 22.8% were under eighteen, 52.6% were under twenty-one, and 78.4% were under twenty-five (FBI, 1972:128). Furthermore, the disproportionate concentration of adolescents and young adults among those arrested for narcotic law violations has been increasing in recent years. Between 1966 and 1972, the proportion of arrests of persons under eighteen years of age rose from 14.5% to 22.8%: the proportion of persons arrested who were under twenty-one years of age increased from 35.7% to 52.6%: and, the proportion of persons arrested who were under twenty-five years of age increased from 57.6% to 78.4%.

The conventional stereotype of the drug user is that he is a lower-class resident of a slum or deteriorated section of a large city. Whether or not this stereotype is essentially valid depends on the drug being considered. Chein (1956:51) charted areas of residence of known heroin users in Manhattan, Brooklyn and the Bronx in New York City based on court records of convictions. He found that users were concentrated in the most crowded, underprivileged and dilapidated areas of the city. These findings have been corroborated by Chein and Rosenfeld (1957:52-53) and Klein and Phillips (1968:139:145).

The use of so-called soft drugs seems, however, to be located more in the higher socioeconomic levels of our society. For example Goode (1972:36) found that, "the higher the education, income, and occupational prestige of one's parents, the greater the likelihood of trying and using marijuana."

The use of hallucinogens appears to be characterized by a different pattern. In a comprehensive study, Blum and his associates (1969b:136-138) found that the use of hallucinogens

was most prevalent among persons from either wealthy or poor families, with a relatively low level of use by persons from middle-class backgrounds. In general, then, it appears that drug use is not confined to persons of lower socioeconomic class background, and that the type of drug most typically used differs by socioeconomic level in American society.

Data presented in Uniform Crime Reports (FBI, 1972:131) points to an overrepresentation of Blacks among persons arrested for violations of the narcotic laws. In 1972, 77.9% of persons arrested for violations of these laws were white while 21.0% were Black. Given that Blacks constitute only approximately 11% of the population of the United States, it is obvious that they are overrepresented among those arrested for violation of the narcotic laws. There is, however, the possibility that at least a part of the overrepresentation in arrests of Blacks for these offenses is a result of selective law enforcement (Lemert and Rosberg (1949:1-28· Cressey, 1957:151-153).

Drug Use as a Social Phenomenon

Drug use tends to be a social phenomenon. Initiation to drug use typically takes place in a social setting and appears to be a social event. Drug users are usually not loners: they do not generally take drugs by themselves. Typically, there is at least one other person participating in the activity (Laskowitz, 1969:61-74). This pattern is apparent in heroin use, LSD use (Wells, 1969:459-467) and marijuana use (Norton, 1968: 169). Those who participate in drug use tend to be discrete in their activities, often largely if not entirely limiting their social relations to interaction with other users. Due to the nature of the activities involved, and the legal and social sanctions that could result from discovery of those activities, the participants are understandably secretive and tend to seek the fellowship of persons with similar interests (Wells, 1968: 464-467, Pearlman, 1970·42-49).

Contrary to popular belief, the novice is not usually initiated into drug use by an adult "pusher" trying to increase

his clientele and increase his profits. In the great majority of cases the novice receives his introduction to drugs from a friend or someone in his own age group. Frequently, the pattern of initiation follows peer-oriented status seeking behavior and occurs in a social setting (Ball, 1967:55). This pattern has been documented for initiation into the use of heroin (Chein, 1956:53; Chein and Rosenfeld, 1957:55), marijuana (Suchman, 1968: 145-155) and LSD (Blum, et al., 1964:23).

Similar to the myth of the "pusher" is the belief that once an individual has tried one drug he will go on to use other drugs. Typical here is the belief that the use of marijuana almost inevitably leads to the use of hard drugs--the "stepping stone theory." To date there is no evidence to support this belief. The origin of this fear appears to have been an erroneous interpretation of research findings indicating that a high percentage of hard drug users had had prior experience with marijuana (e.g., Steffenhagen, et al., 1969:29-96). However, Clausen (1957:34-35) researched the association between marijuana use and opiate addiction in the United States and concluded that marijuana smoking could not be linked as a causal antecedent to opiate addiction. Eells (1968:459:467) reached the same conclusion with regard to the connection between marijuana use and the use of LSD. Similar studies have been summed up by Suchman (1968:148-155) who concluded that, "there is no evidence in these findings to support the claims that smoking marijuana is a predecessor to the use of other more dangerous drugs."

Drugs and the Law

The first significant federal legislation dealing with drugs was the so-called Harrison Act passed in 1914. This act was designed to control the domestic sale, use and transfer of opium and coca products. It required the registration of persons handling these drugs and also required that they keep exact records of their transactions involving these drugs. In addition it prohibited the possession of these drugs except for legitimate medical purposes on the part of persons not registered under the

act. The Harrison Act is essentially a tax act that is used to control the drug traffic in the United States. It has been ammended a number of times since its initial passage, but primarily simply to change the tax rate and the penalities for its violation.

In 1937 the Marijuana Tax Act was passed. This act provided for the registration and taxation of all persons engaged in importing, manufacturing, producing, selling, dispensing, prescribing, administering or giving away marijuana. In 1946 the so-called Robertson Bill was passed, extending application of federal narcotic laws to any synthetic drug having addiction-forming or addiction-sustaining liabilities similar to morphine. The Drug Use Control Ammendments of 1965 extended federal control over depressent and stimulant drugs.

In 1966 the Narcotic Addict Rehabilitation Act was enacted. This act provides for the civil commitment and treatment of narcotic addicts, including those charged with or convicted of violating certain federal criminal laws. And, in 1970 the Drug Abuse Prevention and Control Act was enacted providing federal support for community treatment facilities for drug dependent individuals. This act gives the Secretary of Health, Education and Welfare rather than the Attorney General authority over medical and scientific matters related to drug use. Penalities for drug possession were greatly reduced, and judges were given wider discretion in dealing with first offenders. However, penalities for drug sale remain severe and marijuana remains in the same legal category as heroin.

Wyoming enacted a Uniform Narcotic Drug Act in 1931. Although marijuana was classified as a narcotic, it did not carry the severe penalties associated with other narcotic drugs. The substance of the Wyoming Uniform Narcotic Drug Act, as it pertains to this study, is as follows:

Section 85-114, Sale of Narcotics.

Except as hereinafter provided, it shall be unlawful for any person, whether acting for himself or as agent, to possess or sell or otherwise dispose of cocaine, eucaine, beta eucaine, alpha eucaine, morphine, heroin, chloral, chloral hydrate, indian hemp, opium or any salt, compound or derivative thereof, except upon the prescription of a licensed practicing physician registered in this state (Wyoming Revised Statutes, 1931:1232).

Section 85-116, Felony-Penalty

Any person found guilty of any violation of the provisions of section 85-114, ...shall be deemed guilty of a felony and shall be fined not less than five (5) hundred dollars nor more than one thousand dollars, or imprisoned in the state penitentiary for a term of not less than one year nor more than three years, or be punished by both such fine and imprisonment in the discretion of the court (Wyoming Revised Statutes, 1931:1232-33).

Section 85-117, Sale and possession of mescal, marijuana, and other narcotic drugs.

It shall be unlawful for any person, firm, corporation, or association to sell, furnish, or give away, or offer to sell, furnish, or give away, or to have in his or its possession peyote (pellote), botanically known as lophaphora williamsii, or agave americana, commonly known as the mescal button, cannabis americana, commonly known as marijuana or any compound, derivative or preparation thereof. (Wyoming Revised Statutes, 1931:1232-33).

Section 85-118, Penalty

Any person who shall violate any of the provisions of section 85-117, shall be guilty of a misdemeanor and upon conviction thereof shall be fined not to exceed five hundred dollars or imprisoned in the county jail for a period not to exceed six months or by both such fine and imprisonment (Wyoming Revised Statutes, 1931:1232-33).

These statutes were devised to fulfill the needs of Wyoming at the time of their inception. Changes in these statutes were, however, required as information about drugs and drug affects increased in recent years. Whereas the Uniform Narcotics Act of 1931 dealt with one category, "narcotics," current attempts at redefining narcotic drugs have resulted in a change in legal definitions. In 1971 the state of Wyoming passed the Wyoming Controlled Substance Act (section 35-347.1). This act provided

for the establishment of a commission headed by the State Attorney General and including as advisors, the directors of the divisions of Public Health, the Department of Health and Social Services, and the Administrative Assistant to the Wyoming State Board of Pharmacy. (Session Laws of Wyoming, 1971:467). This commission was empowered to investigate substances and recommend legal restrictions or controls. Before making a recommendation for control, the commission is instructed to gather facts pertinent to the disposition of each substance. To assist the commission in its decision, knowledge is to be accumulated in the following areas:

1. The actual or relative potential for abuse.
2. The scientific evidence of its pharmacological effects, if known.
3. The state of current scientific knowledge regarding the substance.
4. The history and current pattern of abuse.
5. The scope, duration, and significance of abuse.
6. The risk to the public health.
7. The potential of the substance to produce psychic or physiological dependence liability.
8. Whether the substance is an immediate precurser of a substance already controlled under this article; and
9. Its other uses, both medical and commercial.

(Session Laws of Wyoming, 1971:473-4)

Upon completing its investigation, the State Attorney General would recommend changes in current measures or the institution of control measures directed toward appropriate substances. Each drug examined would be categorized into one of five schedules with distinct characteristics and accompanied by its own set of penalties for violation of the control measures instituted. These schedules with examples of the types of drugs included, along with current legal penalties are provided in Tables B and C.

It is apparent from Tables B and C, and from the discussion earlier, that the Controlled Substance Act of 1971 provides for a flexible classification schedule. As new information is obtained through research, substances may be reclassified from one schedule to another, thereby automatically adjusting the legal

definition and penalty associated with violation of control measures. In all cases, the court is allowed to use its discretion in the disposition of a case.

Table B Schedules for the placement of substances.

Schedule and criteria for placement.			Substances
I.	a.	has high potential for abuse.	Heroin LSD Marijuana Mescaline Peyote
	b.	has no accepted medical use in treatment in the United States or lacks accepted safety for use in treatment under medical supervision.	
II.	a.	has high potential for abuse.	Opium, opiate, or poppy and poppy straw. Methadone Isomethadone
	b.	has currently accepted medical use in treatment in the United States, or currently accepted medical use with severe restrictions; and	
	c.	abuse of the substance may lead to severe psychic or physical dependence.	
III.	a.	potential for abuse less than substances in Schedule I & II.	Amphetamine Methoamphetamine Lysergic Acid
	b.	has currently accepted medical use in treatment in the U.S.	
	c.	abuse of the substance may lead to moderate or low physical or high psychological dependence.	
IV.	a.	substance has low potential for abuse relative to substances in Schedule III.	Barbital Paraldehyde Phenoharbital
	b.	substance has currently accepted medical use in treatment in the United States.	

Table B (continued)

Schedule and criteria for placement.			Substances
	c.	abuse may lead t limited physical dependence or psychological dependence relative to the substances in Schedule III.	
V.	a.	substance has a low potential for abuse relative to the controlled substances listed in Schedule IV.	These substances are compounds that are not to exceed limited amounts of controlled substances. Codeine in cough syrup is one example.
	b.	has currently accepted medical use in the United States.	
	c.	has limited physical dependence or psychological dependence liability relative to the controlled substances in Schedule IV.	

(Session Laws of Wyoming, 1971:475-81)

Table C Penalties Associated with Schedules I-V.

Schedules I, II, & III.

If the substance in violation is a narcotic, conviction would carry a penalty of imprisonment not to exceed twenty (20) years, or fine not to exceed Twenty-five Thousand Dollars ($25,000.00), or both such fine and imprisonment.

If the substance is not a narcotic, conviction would carry a penalty of imprisonment not to exceed ten (10) years, or fine not to exceed Ten Thousand Dollars ($10,000.00), or both.

Table C Penalties Associated with Schedules I-V, cont'd

Schedule IV.

Conviction for violation of the ordinances governing items in this schedule carry a penalty of imprisonment not to exceed two (2) years or fine not to exceed Two Thousand Five Hundred Dollars ($2,500.00), or both.

Schedule V.

Conviction for violation of the ordinances governing items in this schedule carry a penalty of imprisonment not to exceed one (1) year, or fine not to exceed One Thousand Dollars ($1,000.00), or both such fine and imprisonment.

(Session Laws of Wyoming, 1971:485-6)

CHAPTER II

DRUG USE, BACKGROUND FACTORS, DELINQUENCY AND ALCOHOL USE

The information summarized in this chapter was obtained in the process of an investigation into the nature and magnitude of the delinquency problem among youth living in the Wind River Indian Reservation area of Wyoming. The data were obtained through the use of a self-report questionnaire administered to the students of Lander Valley High School and Wind River High School in May of 1972. More detailed information may be found in Data Book III: Drug Use and Delinquency (Forslund, 1974). The first section of this chapter deals with the relationship between drug use and a variety of background factors. The second section presents data concerning the relationship between drug use and other types of delinquent acts. And, the third section deals with the relationship between drug use and alcohol use.

A drug user here is defined as any student who used marijuana or any other drug for kicks or pleasure during the year preceding the administration of the questionnaire. The total sample consists of 456 males and 391 females. Of the males, 79.8% had used neither marijuana nor other drugs "during the past year," 1.1% had used other drugs but not marijuana, 12.5% had used marijuana but not other drugs, and 6.6% had used both marijuana and other drugs. Of the females, 81.1% had used neither marijuana nor other drugs "during the past year," 2.3% had used other drugs but not marijuana, 7.7% had used marijuana but not other drugs, and 9.0% had used both marijuana and other drugs. Because of the small number of persons in some of the drug use categories, it was necessary to categorize the students simply as drug users or non-users in the data analysis. For the same reason, it was not possible to provide a meaningful analysis of the data in terms of frequency of drug use.

Levels of significance are indicated below the tables or in the text only when the differences that exist in the

distribution of responses by drug use have a probability of less than five in one hundred of being attributable to chance. The number of responses varies somewhat from table to table because a few respondents failed to answer some of the questions and because only students who had drunk an alcoholic beverage during the year preceding the administration of the questionnaire were asked to answer certain questions concerning alcohol use.

Table 1 presents the distribution of drug users by sex and high school. Differences in the proportion of drug users by school are not significant for either males or females.

Table 1

Percentage Distribution of Respondents by Drug Use, Sex and High School

	Male			Female		
High School	User	Non-User	N	User	Non-User	N
Lander Valley	19.3	80.2	379	19.3	80.7	337
Wind River	22.1	77.9	77	16.7	83.3	54
Total Both High Schools	20.2	79.8	456	18.9	81.1	391

Table 2 presents the distribution of drug users by sex and grade in school. For both males and females there is a tendency for the percentage of drug users to increase from the ninth to the twelfth grade, but this tendency is statistically significant only for males. As can be seen, approximately a quarter of eleventh and twelfth grade males admitted to having used a drug for kicks or pleasure during the year preceding the administration of the questionnaire, and, about one-fifth of eleventh grade females and a quarter of twelfth grade females admitted to having used a drug for kicks or pleasure during this period.

Table 2

Percentage Distribution of Respondents by Drug Use, Sex, and Grade in School

Grade	Male*			Female		
	User	Non-User	N	User	Non-User	N
Ninth	13.4	86.6	112	17.9	82.1	123
Tenth	17.2	82.8	134	15.3	84.7	111
Eleventh	26.2	73.8	107	20.0	80.0	80
Twelfth	26.3	73.7	99	25.3	74.7	75
Total All Grades	20.4	79.6	452	19.0	81.0	389

*X^2 = 8.55, 3df, $p \leq .05$

Table 3 presents the distribution of drug users by sex and race. Because of the small numbers of Spanish American, Black, Oreintal and "Other" students in the sample, no meaningful comparisons can be made among the members of these racial-ethnic groups. Although a higher percentage of both male and female Indian students used drugs as compared to Anglo students, this difference is statistically significant only for females. Among American Indians there is no significant difference in the percentage of drug users by tribe (Arapahoe, Shoshone, Other).

Table 3

Percentage Distribution of Respondents by Drug Use

Sex and Race

	Male			Female		
Race	User	Non-User	N	User	Non-User	N
Anglo	19.4	80.6	355	16.5*	83.5	315
American Indian	25.0	75.0	68	29.0*	71.0	62
Spanish American	21.1	78.9	19	25.0	75.0	12
Black	50.0	50.0	2			0
Oriental	0.0	100.0	2			0
Other	16.7	83.3	6	50.0	50.0	2
Total All Races	20.4	79.6	452	18.9	81.1	391

*Difference of proportions test indicates a significantly higher proportion of drug users among Indian than Anglo females: $Z = 2.317; p = .020$; the difference between Indian and Anglo males is not statistically significant.

There is no significant difference in the percent of drug users by religious affiliation (Protestant, Catholic, Jewish, Mormon, Other), but as indicated in Table 4 attendance at religious services tends to be more frequent among non-users than users. This relationship, however, is statistically significant only for females.

Table 4

Percentage Distribution of Respondents by Drug Use, Sex and Attendance at Religious Services

Attendance	Male		Female*	
	User	Non-User	User	Non-User
At least once a week	16.7	24.9	20.8	35.9
Several times a month	10.0	10.5	18.1	19.9
Several times a year	15.6	19.0	12.5	16.0
Once or twice a year	33.3	27.2	31.9	19.6
Never	24.4	18.4	16.7	8.7
Totals	100.0	100.0	100.0	100.1
Number	90	353	72	312

*X^2 = 12.39, 4df, $p < .02$

No significant differences were found in the social class distributions of drug users and non-users for either sex; and, no relationship was found between drug use and whether or not the mother works outside of the home for either sex. A significant difference was found, however, in the living arrangements of drug users and non-users. For both males and females a significantly higher proportion of youth not living with both parents as compared to youth living with both parents use drugs.

Table 5

Percentage Distribution of Respondents by Drug Use, Sex and Living Arrangement

Living Arrangement	Male*		Female*	
	User	Non-User	User	Non-User
Live with both parents	68.1	79.3	66.2	77.6
Live with mother	13.2	6.7	13.5	9.3
Live with father	5.5	3.6	2.7	2.6
Live with guardians	4.4	4.5	4.1	1.6
Live with mother and stepfather	5.5	3.6	4.1	5.1
Live with father and stepmother	0.0	0.8	5.4	1.3
Other	3.3	1.4	4.1	2.6
Totals	100.0	99.9	100.1	100.1
Number	91	358	74	313

*For both males and females a significantly higher proportion of youth not living with both parents as compared to youth living with both parents use drugs. For males, 17.9 percent of youth living with both parents as compared to 28.2 percent of youth not living with both parents use drugs: $Z = 2.269$; $p = .023$. For females, 16.8 percent of youth living with both parents as compared to 26.3 percent of youth not living with both parents use drugs: $Z = 2.054$; $p = .040$

The data presented in Tables 6 and 7 show that both male and female drug users tend to perceive that they get along less well with both their father and their mother than is the case with non-users. Further indication of problems in this area is evident in the data presented in Table 8; both male and female drug users feel that they can discuss fewer

problems with their parents than do non-users.

Table 6

Percentage Distribution of Respondents by Drug Use, Sex and Responses to the Question: How well do you get along with your father?

Response	Male*		Female**	
	User	Non-User	User	Non-User
Better than average	37.0	50.9	37.5	48.2
Average	35.8	39.6	29.2	38.1
Less well than average	27.2	9.5	33.3	13.7
Totals	100.0	100.0	100.0	100.0
Number	81	346	72	307

*X^2 = 18.67, 2df, $p<.001$

**X^2 = 15.66, 2df, $p<.001$

Table 7

Percentage Distribution by Drug Use, Sex and Responses to the Question: How well do you get along with your mother?

Response	Male*		Female**	
	User	Non-User	User	Non-User
Better than average	32.6	52.7	40.8	53.2
Average	50.6	40.5	39.4	37.4
Less well than average	16.9	6.8	19.7	9.4
Totals	100.1	100.0	99.9	100.0
Number	89	351	71	310

*X^2 = 15.65, 2df, p<.001

**X^2 = 7.30, 2 df, p<.05

Table 8

Percentage Distribution of Respondents by Drug Use, Sex and Responses to the Statement: With my parents I can discuss:

Response	Male*		Female**	
	User	Non-User	User	Non-User
Nearly all kinds of problems	25.3	37.7	18.1	31.1
Most kinds of problems	23.1	25.8	16.7	23.3
Some kinds of problems	23.1	20.7	20.8	22.0
Few kinds of problems	28.6	15.9	44.4	23.6
Totals	100.1	100.1	100.0	100.0
Number	91	353	72	305

*X^2 = 9.90, 3df, p<.02 **X^2 = 13.84, 3df, p<.001

No significant relationships were found for either sex between drug use and the number of awards won at school or the number of extracurricular activities participated in or how smart the students feel that they are in comparison with others of their own age. No significant difference was found between grades received by drug users and non-users among males, but there is a statistically significant tendency for female drug users to receive lower grades than those received by non-users.

Table 9

Percentage Distribution of Respondents by Drug Use, Sex and Grades Last Marking Period

Grades	Male		Female*	
	User	Non-User	User	Non-User
Above average (A-B)	35.1	39.0	27.7	48.1
Average (C)	42.9	41.9	49.2	39.3
Below average (D-F)	22.1	19.2	23.1	12.6
Totals	100.1	100.1	100.0	100.0
Number	77	313	65	285

*χ^2 = 10.20, 2df, p<.01

As shown in Table 10, there is a significant relationship between drug use and whether or not students of both sexes plan to graduate from high school: i.e., a higher percentage of non-users than users of both sexes definitely plan to graduate from high school. And, as indicated in Table 11, a higher percentage of female non-users than users plan to attend college. There is, however, no significant relationship between drug use and plans to attend college among male students.

Table 10

Percentage Distribution by Drug Use and Sex of Responses to the Question: Do you plan to graduate from high school?

Response	Male*		Female**	
	User	Non-User	User	Non-User
Definitely yes	79.3	89.2	73.0	87.4
Probably yes	12.0	8.3	17.6	9.8
Not sure	5.4	1.7	8.1	2.5
Probably not	2.2	0.6	1.4	0.3
Definitely not	1.1	0.3		
Totals	100.0	100.1	100.1	100.0
Number	92	362	74	317

*X^2 = 9.52, 4df, p<.05

**X^2 = 11.19, 3df, p<.02

Table 11

Percentage Distribution by Drug Use and Sex of Responses to the Question: Do you plan to attend college?

Response	Male		Female*	
	User	Non-User	User	Non-User
Definitely yes	21.7	27.8	21.6	25.2
Probably yes	29.3	34.7	23.0	35.3
Not sure	34.8	25.9	37.8	27.4
Probably not	7.6	6.6	9.5	9.1
Definitely not	6.5	5.0	8.1	2.8
Totals	99.9	100.0	100.0	99.8
Number	92	363	74	317

*X^2 = 9.64, 4df, p<.05

The data presented in Tables 12 and 13 show that among both males and females a higher percentage of drug users than non-users came to school in the morning and then skipped one or more classes later in the day without permission and also skipped a whole day of school during the year preceding the administration of the questionnaire. And the data presented in Table 14 show that among both males and females a higher proportion of users than non-users have dropped out of school. Finally, with respect to the school, the data presented in Table 15 show that a significantly higher proportion of female drug users than non-users feel that their classes are dull and boring. There is, however, no significant difference between male drug users and non-users with respect to the proportion who feel that their classes are dull and boring.

Table 12

Percentage Distribution by Drug Use and Sex of Responses to the Question: During the past year, have you ever come to school in the morning and then skipped one or more classes later in the day without permission?

	Male*		Female**	
Response	User	Non-User	User	Non-User
No	27.2	52.1	27.0	56.1
Yes, once	10.9	13.7	14.9	15.1
Yes, twice	8.7	10.6	14.9	10.3
Yes, three times	15.2	8.7	13.5	4.8
Yes, four times	10.9	3.4	6.8	3.5
Yes, five times	8.7	3.6	5.4	3.8
Yes, six times	1.1	0.3	5.4	1.6
Yes, seven times	0.0	2.0	0.0	1.0
Yes, eight or more times	17.4	5.6	12.2	3.8
Totals	100.1	100.0	100.1	100.0
Number	92	357	74	312

*χ^2 = 41.48, 8df, p<.001

**χ^2 = 32.02, 8df, p<.001

Table 13

Percentage Distribution by Drug Use and Sex of Responses to the Question: During the past year, have you ever skipped a whole day of school?

Response	Male*		Female**	
	User	Non-User	User	Non-User
No	28.3	62.4	47.3	67.8
Yes, once	18.5	17.3	17.6	17.5
Yes, twice	7.6	5.8	12.2	7.3
Yes, three times	12.0	3.6	2.7	2.9
Yes, four times	5.4	3.1	5.4	1.6
Yes, five times	6.5	1.4	6.8	1.3
Yes, six times	0.0	0.8	1.4	0.3
Yes, seven times	0.0	0.6	1.4	0.3
Yes, eight or more times	21.7	5.0	5.4	1.0
Totals	100.0	100.0	100.2	100.0
Number	92	359	74	314

*X^2 = 60.03, 8df, $p < .001$

**X^2 = 26.22, 8df, $p < .01$

Table 14

Percentage Distribution by Drug Use and Sex of Responses to the Question: Have you ever dropped out of school?

Response	Male*		Female**	
	User	Non-User	User	Non-User
No	87.0	98.9	94.5	98.7
Yes	13.0	1.1	5.5	1.3
Totals	100.0	100.0	100.0	100.0
Number	92	350	73	303

*X^2 = 29.58, 1df, $p < 001$

**X^2 = 5.31, 1df, $p < .05$

Table 15

Percentage Distribution by Drug Use and Sex of Responses to the Statement: Most of my classes are dull and boring.

Response	Male		Female*	
	User	Non-User	User	Non-User
Strongly agree	27.2	21.2	31.1	15.9
Moderately agree	34.8	36.7	31.1	39.2
Moderately disagree	27.2	31.9	33.8	32.0
Strongly disagree	10.9	10.2	4.1	12.9
Totals	100.1	100.0	100.1	100.0
Number	92	354	74	309

*$X^2 = 12.66$, 3df, $p < .01$

The last background factors to be considered have to do with the world of work. No significant relationships were found between drug use and the number of jobs that students had held or whether or not they had ever been fired from a job. Among females there is no significant relationship between drug use and perceived chances of attaining vocational or job aspirations, but among males a significantly higher proportion of users than non-users feel that their chances of achieving their vocational aspirations are less than average.

Table 16

Percentage Distribution of Respondents by Drug Use, Sex and Responses to the Question: What do you think your chances are of attaining your vocational (job) aspirations or goals?

Response	Male*		Female	
	User	Non-User	User	Non-User
Better than average	37.0	37.3	18.9	23.3
Average	50.0	58.2	75.7	71.6
Less than average	13.0	4.5	5.4	5.1
Totals	100.0	100.0	100.0	100.0
Number	92	354	74	313

*$X^2 = 9.32$, 2df, $p < .01$

To summarize the findings presented above with respect to the relationship between drug use and a variety of background factors: 1) there is a tendency for the proportion of drug users to increase from the ninth to the twelfth grade, especially among females; 2) there is a tendency for a higher percentage of American Indian than Anglo students to use drugs, especially among females; 3) frequency of attendance at religious services tends to be lower among users than non-users, particularly for females; 4) among both males and females a higher proportion of non-users than users are living with both parents; 5) both male and female drug users tend to perceive that they get along less well with both their father and their mother than is the case with non-users; 6) both male and female drug users tend to feel that they can discuss fewer problems with their parents than do non-users; 7) especially among females, non-users tend to receive higher grades in school than users; 8) among both males and females a higher percentage of non-users than users definitely plan to graduate from high school; 9) particularly among females, a higher percentage of non-users than users plan to attend college; 10) among both males and females a higher percentage of drug users than non-users came to school in the morning and then skipped one or more classed later in the day without permission and also skipped a whole day of school during the year preceding the administration of the questionnaire; 11) among both males and females a higher proportion of users than non-users have dropped out of school; 12) particularly among females, a higher percentage of users than non-users feel that their classes are dull and boring; and, 13) particularly among males, a higher percentage of users than non-users feel that their chances of achieving their vocational aspirations are less than average. These data, then, indicate that drug users tend to have poorer relationships with both their parents and the school than is the case with respect to non-users.

Drug Use and Delinquency

There are numerous references in the criminological literature to the relationship between drug use and other forms of criminal behavior among adults. For example, it is frequently pointed out that many female drug addicts turn to prostitution and many male addicts turn to one or another type of property crime to obtain money to purchase drugs. There are, however, very few references in the juvenile delinquency literature to the relationship between drug use and other types of delinquency among adolescents. Tables 17 and 18 present data concerning the relationship between drug use and a variety of other types of behavior that could be considered to be delinquent acts. The types of behavior involved range from acts that constitute felonies under Wyoming law to those that are relatively minor and are unlikely to result in an adjudication of delinquency unless engaged in repeatedly or as a part of a pattern of more seriously delinquent behavior.

Table 17 presents data concerning the relationship between drug use and twenty-six forms of delinquent behavior for the male students in the sample studied. Inspection of these data reveals that with respect to all twenty-six types of delinquent acts a higher percentage of non-users than users had never committed these acts "during the past year." At the other extreme, with respect to all of the twenty-six types of delinquent acts a higher percentage of users than non-users committed these acts three or more times "during the past year." For twenty-three of the twenty-six types of delinquent acts the difference between users and non-users with respect to frequency of commission is statistically significant.

Table 17

The Relationship between Drug Use and Frequency of Commission of Other Types of Delinquent Acts among Male High School Students

Delinquent Act	User			Non-User			
	% Never	% 1-2	% 3+	% Never	% 1-2	% 3+	P<
Truancy	28.3	26.1	45.6	62.4	23.1	14.5	.001
Skipped School	27.2	19.6	53.3	52.1	24.3	23.6	.001
Disobeyed teacher, school official	11.0	37.4	51.6	36.6	33.2	30.2	.001
Signed name to school excuse	64.1	17.4	18.5	86.0	9.5	4.5	.001
Disobeyed parents	5.5	18.7	75.3	10.6	32.4	57.0	.01
Defied parents to their face	37.0	31.5	31.5	61.8	25.6	12.5	.001
Ran away from home	73.9	18.5	7.6	91.6	6.7	1.7	.001
Said mean things to get even	14.1	27.2	58.7	19.9	34.6	45.4	
Made anonymous phone calls	55.4	15.2	29.3	68.4	14.4	17.2	.05
Trespassed	8.9	23.3	67.8	26.8	16.7	56.5	.01
Let air out of tires	50.0	21.7	28.3	67.1	21.4	11.4	.001
Marked on desk, wall, etc.	15.4	26.4	58.2	24.1	31.3	44.6	
Thrown eggs, garbage, etc.	39.6	26.4	34.1	61.2	16.6	22.2	.001
Broke windows	53.8	26.4	19.8	69.6	22.0	8.4	.01
Broke down clothesline, etc.	64.8	18.7	16.5	75.8	19.4	4.7	.001
Put paint on something	62.0	21.7	16.3	73.1	18.9	8.1	.05
Broke street light	63.0	16.3	20.7	76.5	16.1	7.5	.001
Taken things from desks, etc. at school	63.0	21.7	15.2	77.0	14.8	8.1	.02
Taken things worth under $2	39.1	28.3	32.6	58.3	26.3	15.4	.001
Taken things worth $2-$50	59.8	22.8	17.4	89.6	7.6	2.8	.001
Taken things worth over $50	80.4	10.9	8.7	96.9	1.7	1.4	.001
Taken car without owner's permission	76.1	16.3	7.6	88.0	8.7	3.4	.02
Drove car without license	33.0	23.1	44.0	34.5	26.1	39.5	
Fought - hit or wrestled	27.2	26.1	46.7	32.9	29.0	38.2	.05
Beat up someone	37.0	26.1	37.0	59.6	24.5	15.9	.001
Drank, parents absent	3.4	5.7	90.9	11.8	19.3	69.0	.001

Table 18

The Relationship between Drug Use and Frequency of Commission of Other Types of Delinquent Acts among Female High School Students

Delinquent Act	% Never	% 1-2	% 3+	% Never	% 1-2	% 3+	P
Truancy	47.3	29.8	23.1	67.8	24.8	7.4	.01
Skipped school	27.0	29.8	43.3	56.1	25.4	18.5	.001
Disobeyed teacher, school official	19.2	35.6	45.2	40.5	39.2	20.3	.001
Signed name to school excuse	53.4	31.5	15.1	80.2	14.7	5.1	.001
Disobeyed parents	1.4	15.1	83.6	7.3	31.0	61.7	.01
Defied parents to their face	40.3	29.2	30.6	57.1	28.9	14.0	.01
Ran away from home	67.1	26.0	6.8	88.2	9.2	2.5	.001
Said mean things to get even	8.2	38.4	53.4	12.3	41.8	45.9	
Made anonymous phone calls	53.4	17.8	28.8	61.4	19.0	19.5	
Trespassed	12.3	31.5	56.2	24.8	32.7	42.5	.05
Let air out of tires	75.3	19.2	5.5	82.3	12.3	5.4	
Marked on desk, wall, etc.	11.0	34.2	54.8	17.1	38.3	44.6	
Thrown eggs, garbage, etc.	78.1	9.6	12.3	82.6	10.1	7.3	
Broke windows	89.0	9.6	1.4	92.7	6.3	0.9	
Broke down clothesline, etc.	76.7	17.8	5.5	89.5	8.6	1.9	.02
Put paint on something	69.9	24.7	5.5	81.3	15.8	2.8	
Broke street light	93.2	4.1	2.7	94.0	4.4	1.6	
Taken things from desks, etc. at school	82.2	13.7	4.1	91.1	7.0	1.9	
Taken things worth under $2	46.6	26.0	27.4	69.6	21.2	9.3	.001
Taken things worth $2-$50	75.3	17.8	6.8	91.4	5.8	2.8	.001
Taken things over $50	93.2	4.1	2.7	98.4	1.3	0.3	.05
Taken car without permission	80.8	17.8	1.4	90.1	7.3	2.5	.02
Drove car without license	32.9	23.3	43.8	44.4	20.3	35.4	
Fought - hit or wrestled	46.6	21.9	31.5	56.3	25.6	18.0	
Beat up someone	69.9	16.4	13.7	83.2	11.7	5.1	.06
Drank, parents absent	1.4	5.4	93.3	13.8	21.7	64.5	.001

Table 18 presents data concerning the relationship between drug use and the same twenty-six forms of delinquent behavior for the female students in the sample. Examination of these data shows that in every case a higher percentage of non-users than users indicated that they had never committed these acts "during the past year." And, at the other extreme, in twenty-five of the twenty-six cases a higher percentage of users than non-users indicated that they had committed these acts three or more times "during the past year." For fifteen of the twenty-six types of delinquent acts the difference between users and non-users in the frequency of commission of the act is statistically significant.

Finally, here, Tables 19 and 20 present responses to the questions: "Have you ever been found guilty of a traffic offense other than a parking violation?" and "Have you ever been found guilty of an offense other than a traffic offense?" As is evident, a significantly higher percentage of both male and female users have been convicted of an offense other than a traffic offense; and, a significantly higher percentage of male users have been convicted of a traffic offense other than a parking violation. There is, however, virtually no difference in the percentages of female users and non-users who have been convicted of a traffic violation.

Table 19

Percentage Distribution by Drug Use and Sex of Responses to the Question: Have you ever been found guilty of a traffic offense other than a parking violation?

	Male*		Female	
Response	User	Non-User	User	Non-User
Yes	30.4	13.1	5.5	5.1
No	69.6	86.9	94.5	94.9
Totals	100.0	100.0	100.0	100.0
Number	92	358	73	315

*X^2 = 14.56, 1df, $p < .001$

Table 20

Percentage Distribution by Drug Use and Sex of Responses to the Question: Have you ever been found guilty of an offense other than a traffic offense?

	Male*		Female**	
Response	User	Non-User	User	Non-User
Yes	34.8	14.8	20.5	6.0
No	65.2	85.2	79.5	94.0
Totals	100.0	100.0	100.0	100.0
Number	92	357	73	316

*X^2 = 17.67, 1df, p<.001

**X^2 = 13.94, 1df, p<.001

These data demonstrate that there is a significant relationship between drug use and involvement in other forms of delinquent behavior for both male and female adolescents. This relationship does, though, appear to be stronger for male than female high school students. Thus there is a strong tendency for youth, and particularly male youth, who use drugs to be involved in a variety of other types of anti-social conduct ranging from juvenile status offenses to felonies. The data do not, however, permit inferences with respect to the answer to an important question. Does drug use tend to lead to a greater involvement in other forms of delinquency, or is engagement in other forms of delinquency conducive to drug use? There is, of course, also the possibility that some common "cause" underlies both drug use and engagement in a variety of other forms of delinquent behavior. Further research is needed to resolve this issue.

Drug Use and Alcohol Use

Detailed information concerning the relationship between drug use and alcohol use can be found in Tables 27 through 50 in Data Book III: Drug Use and Delinquency (Forslund, 1974). The following section summarizes the major findings to be derived from these tables and includes several tables where significant differences were found between drug users and non-users

There were no significant differences between drug users and non-users with respect to the distribution of their responses to the following questions: "Have your parents ever attempted to influence you not to drink alcoholic beverages under any circumstances whatsoever?" Have your parents ever attempted to influence you not to drink alcoholic beverages when they are not present?" "Do your parents usually keep wine, beer or hard liquor in the home?" "How often does your father drink alcoholic beverages?" "How often does your mother drink alcoholic beverages?" "Do you ever drink alcoholic beverages at home when parents are present?" The fact that there are no significant differences between users and non-users in the distribution of responses to these questions would seem to indicate that the home experiences of users and non-users with respect to alcohol are essentially similar.

No significant difference was found, either, in responses to the question asking: "How do you think that most of your fellow students feel about the drinking of alcoholic beverages by high school students when adults are not present?" It should be noted, though, that over 90% of both male and female users and non-users feel that their fellow students approve of the drinking of alcoholic beverages when adults are not present. However, a significantly higher percentage of both male and female users indicated that they personally approve of the drinking of alcoholic beverages when adults are not present.

Table 21

Percentage Distribution by Drug Use and Sex of Responses to the Question: How do you personally feel about the drinking of alcoholic beverages by high school students when adults are not present?

Response	Male*		Female**	
	User	Non-User	User	Non-User
Strongly approve	50.5	25.1	44.6	18.6
Moderately approve	29.7	26.2	35.1	27.7
Slightly approve	14.3	19.8	12.2	20.6
Slightly disapprove	4.4	9.2	6.8	8.4
Moderately disapprove	1.1	10.0	1.4	7.4
Strongly disapprove	0.0	9.7	0.0	17.4
Totals	100.0	100.0	100.1	100.1
Number	91	359	74	311

*X^2 = 35.04, 5df, $p < .001$

**X^2 = 36.95, $p < .001$

A significantly higher percentage of both male and female users feel that the legal age for drinking beer and wine should be 18 years of age or less, but there is no significant difference between users and non-users with regard to the age at which they feel that it should be legal to drink hard liquor.

As shown in Tables 22 through 25 below, compared to non-users: 1) a higher percentage of both male and female drug users have close friends who drink alcoholic beverages when adults are not present; 2) "during the past year" a higher percentage of both male and female users experienced at least some pressure from their friends to drink when adults were not present; 3) "during the past year" a higher percentage of both male and female users drank alcoholic beverages and drank them on more occasions; and, 4) "during the past year" a higher

percentage of both male and female users drank in the absence of a parent or guardian, and drank more frequently under this circumstance.

Table 22

Percentage Distribution by Drug Use and Sex of Responses to the Question: Do any of your three closest friends drink alcoholic beverages when adults are not present?

Response	Male*		Female**	
	User	Non-User	User	Non-User
Yes	97.7	85.2	92.9	82.0
No	2.3	14.8	7.1	18.0
Totals	100.0	100.0	100.0	100.0
Number	88	345	70	300

*X^2 = 9.03, 1df, p<.01

**X^2 = 4.34, 1df, p<.05

Table 23

Percentage Distribution by Drug Use and Sex of Responses to the Question: During the past year, have your friends ever attempted to influence you to drink an alcoholic beverage when adults were not present?

Response	Male*		Female**	
	User	Non-User	User	Non-User
No, never	12.2	24.3	18.9	31.2
Yes, one or two times	11.1	25.1	10.8	23.1
Yes, three or four times	7.8	12.8	5.4	14.9
Yes, five to ten times	7.8	10.1	8.1	9.1
Yes, more than ten times	61.1	27.7	56.8	21.8
Totals	100.0	100.0	100.0	100.1
Number	90	358	74	308

*X^2 = 36.51, 4df, p<.001

**X^2 = 37.26, 4df, p<.001

Table 24

Percentage Distribution by Drug Use and Sex of Responses to the Question: Did you drink an alcoholic beverage at any time during the past year?

Response	Male*		Female**	
	User	Non-User	User	Non-User
No, never	2.2	13.8	0.0	17.2
Yes, one or two times	7.6	20.6	1.4	24.0
Yes, three or four times	3.3	14.6	4.1	19.2
Yes, five to ten times	8.7	12.1	23.3	12.3
Yes, more than ten times	78.3	38.9	71.2	27.3
Totals	100.1	100.0	100.0	100.0
Number	92	355	73	308

*X^2 = 48.09, 4df, p<.001

**X^2 = 73.01, 4df, p<.001

Table 25

Percentage Distribution by Drug Use and Sex of Responses to the Question: During the past year, how many times did you drink an alcoholic beverage when a parent or guardian was not present?

Response	Male*		Female**	
	User	Non-User	User	Non-User
None	3.4	11.8	1.4	13.8
One or two times	5.7	19.3	5.4	21.7
Three or four times	2.3	16.7	6.8	18.2
Five to ten times	13.6	14.1	13.5	17.4
More than ten times	75.0	38.2	73.0	28.9
Totals	100.0	100.1	100.1	100.0
Number	88	306	74	253

*X^2 = 43.03, 4df, p<.001 **X^2 = 50.58, 4df, p<.001

As indicated in Tables 26 through 31 below, compared to non-users, a significantly higher percentage of users have, "during the past year": 1) felt high as a result of drinking; 2) been drunk as a result of drinking; 3) been sick as a result of drinking; 4) passed out as a result of drinking, 5) experienced a loss of memory for a brief period as a result of drinking; 6) and, gotten into trouble with their parents as a result of drinking. In addition, a higher percentage of both male and female users have had an accident with a car after drinking, although the difference between users and non-users here is statistically significant only for males.

Table 26

Percentage Distribution by Drug Use and Sex of Responses to the Question: During the past year, how many times have you "felt high" as a result of drinking?"

	Male*		Female**	
Response	User	Non-User	User	Non-User
None	2.2	26.4	4.1	27.1
One or two times	7.9	23.1	11.0	33.5
Three or four times	11.2	10.7	19.2	14.7
Five to ten times	11.2	11.1	21.9	11.2
More than ten times	67.4	28.7	43.8	13.5
Totals	99.9	100.0	100.0	100.0
Number	89	307	73	251

*$X^2 = 55.08$, 4df, $p<.001$

**$X^2 = 54.72$, 4df, $p<.001$

Table 27

Percentage Distribution by Drug Use and Sex of Responses to the Question: During the past year, how many times have you been "drunk" as a result of drinking?

Response	Male*		Female**	
	User	Non-User	User	Non-User
None	3.4	38.8	6.8	46.0
One or two times	19.1	21.8	28.8	29.2
Three or four times	13.5	12.7	21.9	9.2
Five to ten times	19.1	8.8	15.1	8.8
More than ten times	44.9	17.9	27.4	6.8
Totals	100.0	100.0	100.0	100.0
Number	89	307	73	250

*X^2 = 55.93, 4df, p<.001

**X^2 = 53.98, 4df, p<.001

Table 28

Percentage Distribution by Drug Use and Sex of Responses to the Question: During the past year, how many times have you been "sick" as a result of drinking?

Response	Male*		Female**	
	User	Non-User	User	Non-User
None	25.8	58.0	28.8	59.4
One or two times	36.0	28.7	47.9	28.7
Three or four times	21.3	7.2	16.4	8.0
Five to ten times	10.1	2.6	1.4	2.8
More than ten times	6.7	3.6	5.5	1.2
Totals	99.9	100.1	100.0	100.1
Number	89	307	73	251

*X^2 = 39.31, 4df, p<.001

**X^2 = 25.82, 4df, p<.001

Table 29

Percentage Distribution by Drug Use and Sex of Responses to the Question: During the past year, how many times have you "passed out" as a result of drinking?

Response	Male*		Female**	
	User	Non-User	User	Non-User
None	44.9	74.8	64.4	86.1
One or two times	23.6	17.3	24.7	10.8
Three or four times	14.6	3.6	8.2	1.6
Five to ten times	11.2	2.9	1.4	1.2
More than ten times	5.6	1.3	1.4	0.4
Totals	99.9	99.9	100.1	100.1
Number	89	306	73	251

*X^2 = 39.74, 4df, p<.001

**X^2 = 20.06, 4df, p<.001

Table 30

Percentage Distribution by Drug Use and Sex of Responses to the Question: During the past year, how many times have you experienced a loss of memory for a brief period as a result of drinking?

Response	Male*		Female**	
	User	Non-User	User	Non-User
None	42.7	70.2	53.4	72.4
One or two times	31.5	18.4	32.9	17.6
Three or four times	15.7	4.9	5.5	5.6
Five to ten times	5.6	3.9	5.5	1.6
More than ten times	4.5	2.6	2.7	2.8
Totals	100.0	100.0	100.0	100.0
Number	89	305	73	250

*X^2 = 25.86, 4df, p<.001 **X^2 = 12.69, 4df, p<.02

Table 31

Percentage Distribution by Drug Use and Sex of Responses to the Question: How many times have you gotten into trouble with your parents as a result of drinking?

Response	Male*		Female**	
	User	Non-User	User	Non-User
Never	43.8	61.0	49.3	72.3
Once or twice	43.8	33.1	35.6	24.1
Several times	12.4	5.9	15.1	3.6
Totals	100.0	100.0	100.0	100.0
Number	89	305	73	249

*X^2 = 9.68, 2df, $p < .01$

**X^2 = 19.17, 2df, $p < .001$

Table 32

Percentage Distribution by Drug Use and Sex of Responses to the Question: Have you ever had an accident with a car after you had been drinking?

Response	Male*		Female	
	User	Non-User	User	Non-User
Yes	16.9	7.6	7.8	2.4
No	83.1	92.4	92.2	97.6
Totals	100.0	100.0	100.0	100.0
Number	71	251	64	211

*X^2 = 4.52, 1df, $p < .01$

To summarize the data presented in this section, it is apparent that both drug users and non-users have had very similar family background experiences with respect to the consumption of alcoholic beverages. Nevertheless, compared to non-users, users tend to approve of the drinking of alcoholic beverages when adults are not present, feel that the legal age for drinking beer and wine should be 18 years of age or less, have close friends who drink when adults are not present, experience pressure from friends to drink when adults are not present, both drink and drink when adults are not present, and experience a number of problems subsequent to drinking. There is some indication here that drug users, as compared to non-users, are beginning to experience problems with respect to the consumption of alcoholic beverages at a relatively young age.

CHAPTER III

INDIAN AND ANGLO DRUG USE

The analysis presented in this chapter is concerned with ascertaining similarities and differences in drug use and attitudes toward drug use of Indian and Anglo youth living in the Wind River Indian Reservation area. The data are drawn from a larger survey of the attitudes of Wyoming adolescents conducted in 1973 (Cockerham, 1974). The findings are based upon a sample of ninth through twelfth grade students attending four high schools located within or near the boundaries of the Reservation--The Wyoming Indian High School, Lander Valley High School, Riverton High School and Wind River High School. The sample consists of 180 Anglo males, 211 Anglo females, 66 Indian males and 54 Indian females. The few students in the original sample of other racial-ethnic backgrounds have been eliminated from data tabulation and analysis in order to provide greater control over the race variable. The data analyzed are responses to fourteen questions concerning drug use and attitudes toward drug use. Since there were no statistically significant differences in responses to any of the fourteen questions by sex, the data are considered only by race rather than by race and sex to simplify both presentation and discussion.

There were few differences in responses to the fourteen questions by grade in school. In reply to the question, "Have you ever tried marijuana?" 22.3% of the ninth graders, 32.0% of the tenth graders, 41.7% of the eleventh graders and 36.0% of the twelfth graders indicated that they had tried marijuana. Differences in responses to this question by grade are statistically significant ($X^2 = 9.90$, 3df, $p < .02$). It should be noted that although the percentage of youth who have tried marijuana increases from the ninth through the eleventh grades, a slightly smaller percentage of twelfth than eleventh grade students indicated that they had tried marijuana.

The same pattern noted in the preceding paragraph also obtains with respect to the use of drugs other than marijuana: 12.2% of the ninth graders, 14.8% of the tenth graders, 20.2% of the 11th graders, and 12.3% of the 12th graders indicated that they had tried a drug other than marijuana--such as hallucinogens, amphetamines, barbiturates, cocaine, heroin or morphine. At the time of the study, 20.2% of the freshmen, 27.8% of the sophmores, 30.2% of the juniors and 28.0% of the seniors indicated that they were using marijuana. Again the same pattern. And, at the time of the study, 5.2% of the freshmen, 6.7% of the sophmores, 9.9% of the juniors and 1.6% of the seniors said that they were using other drugs. Once again, although the percentage of twelfth grade students using drugs is not only lower than the percentage of juniors but also lower than the percentages of sophmores and freshmen, the pattern is similar.

Data are not available to offer a conclusive interpretation of the pattern noted above. Nevertheless, of ninth graders in the sample, 17.9% had tried marijuana at age 14 or younger, as compared to 10.9% of the tenth graders, 11.3% of the eleventh graders and only 6.7% of the twelfth graders. With regard to the use of drugs other than marijuana, 16.3% of the freshmen, 9.0% of the sophmores, 9.7% of the juniors and only 5.6% of the seniors had first used these drugs at age 14 or younger. These figures suggest the possibility that changes are beginning to occur in drug use patterns in the Fremont County area, with a higher proportion of youth at least trying marijuana and other drugs at increasingly younger ages. If this interpretation is correct, and if after having tried these drugs, a substantial proportion of youth continue to use them, it is probable that within a few years a much higher percentage of high school age youth of the area will be using marijuana and other drugs than is the case today.

Drug Use by Race

About three out of ten students in the sample feel that it is all right for people to use drugs if they want to, about one in four is undecided, and somewhat fewer than half feel that it is not all right for people to use drugs. There is a statistically significant difference in the responses of Anglo and Indian students to this question, with a higher percentage of Indian than Anglo youth stating that they feel that it is all right for people to use drugs.

Table 33

Percentage Distribution by Race of Responses to the Question: In general, do you believe it is all right for people to use drugs if they want to?

Response	Anglo	Indian	Total
Yes	24.6	46.6	29.8
Undecided	24.9	28.0	25.6
No	50.5	25.4	44.6
Totals	100.0	100.0	100.0
Number	386	118	504

$X^2 = 27.78$, 2df, $p < .001$

Of the total sample 47.4% say that the majority of their friends feel negatively about the use of marijuana. However, a significantly higher percentage of Anglo than Indian students stated that the majority of their friends feel negatively about marijuana use while, conversely, a higher percentage of Indian youth feel that their friends have favorable or neutral attitudes toward marijuana use.

Table 34

Percentage Distribution by Race of Responses to the Question: How would you say the majority of your friends feel about the use of marijuana?

Response	Anglo	Indian	Total
They would strongly agree that it is o.k.	8.5	18.1	10.8
They would agree that it is o.k.	16.1	24.1	17.9
They would have no particular opinion	21.5	31.9	23.9
They would disagree with anyone who said using marijuana is o.k.	26.2	12.9	23.1
They would strongly disagree with anyone who said using marijuana is o.k.	27.7	12.9	24.3
Totals	100.0	99.9	100.0
Number	386	116	502

$X^2 = 29.63$, 4df, $p < .001$

Responses to the question, "Have you ever tried marijuana?" are presented in Table 35. Of the total sample, about one in three youths admitted that they had tried marijuana. Again, the distribution of responses is significantly different by race, with a higher percentage of Indian than Anglo students indicating that they had tried marijuana.

Table 35

Percentage Distribution by Race of Responses to the Question: Have you ever tried marijuana?

Response	Anglo	Indian	Total
I have tried marijuana	27.5	52.9	33.5
I have not tried marijuana	72.5	47.1	66.5
Totals	100.0	100.0	100.0
Number	385	119	504

$X^2 = 25.20$, 1df, $p < .001$

Table 36 presents data concerning the age at which marijuana was first used by those persons who have tried it. There is a statistically significant tendency for Indian youth to have first tried marijuana at a younger age than Anglo youth.

Table 36

Percentage Distribution by Race of Responses to the Question: If you use marijuana, how old were you when you first used it?

Response	Anglo	Indian	Total
13 or younger	10.2	25.8	16.3
14	15.3	17.7	16.3
15	36.7	21.0	30.6
16	28.6	17.7	24.4
17 or older	9.2	17.7	12.5
Totals	100.0	99.9	100.1
Number	98	62	160

$X^2 = 12.98$, 4df, $p < .02$

The data presented in Table 37 show the frequency of marijuana use by race for those who have tried it. Of those who have tried marijuana, 54.5% have used it only one or two times, 32.5% indicated that they use marijuana several times a month, and 13.0% said that they use it at least several times a week. Differences by race are not statistically significant.

Table 37

Percentage Distribution by Race of Responses to the Question: How often would you say you use marijuana?

Response	Anglo	Indian	Total
Once or twice in my life	52.1	58.3	54.5
Several times a month	31.9	33.3	32.5
Several times a week	16.0	8.3	13.0
Totals	100.0	99.9	100.0
Number	94	60	154

The students were asked, "If you do not use marijuana, please list your reason why." Responses of Indian and Anglo students to this question were quite similar, with both listing "not interested" first and "danger to health" second followed by a variety of reasons each of which was given by only a small proportion of the students.

Table 33

Percentage Distribution by Race of Responses to the Question: If you do not use marijuana, please list your reason why.

Response	Anglo	Indian	Total
Danger to health	26.7	34.2	28.2
Expensive	2.3	4.1	2.7
Because of religious reasons	4.0	4.1	4.0
Because it is illegal	6.9	2.7	6.1
Because my family disapproves	2.6	2.7	2.7
Because my friends disapprove	1.3	1.4	1.3
Because of a bad experience	1.0	1.4	1.1
Not interested	45.9	38.4	44.4
Other	9.2	11.0	9.6
Totals	99.9	100.0	100.1
Number	303	73	376

The students were also asked, "If you use marijuana, please list your reason why." Although reasons given for using marijuana were quite similar for both Anglo and Indian youth, some differences should be noted. Substantially higher percentages of Anglo youth stated that they use marijuana because they "enjoy it" or for "relaxation," while higher percentages of Indian users said that they use it to have "fun with the gang" or to liven up a party." Thus, there is an indication here of a somewhat more socially oriented use of marijuana by Indian than Anglo students.

Table 39

Percentage Distribution by Race of Responses to the Question: If you use marijuana, please list your reason why.

Response	Anglo	Indian	Total
I enjoy it	34.6	23.6	30.1
I like to get silly	2.5	5.5	3.7
To be social	2.5	3.6	2.9
Physical feeling-- like to get high	28.4	23.6	26.5
Feeling of adult status	0.0	0.0	0.0
Have fun with the gang	7.4	16.4	11.0
Relaxation	12.3	5.5	9.6
To liven up a party	0.0	5.5	9.6
It tastes good	0.0	0.0	0.0
Because my best friend or favorite date likes it	2.5	1.8	2.2
Other	9.9	14.5	11.8
Totals	100.1	100.0	100.0
Number	81	55	136

From the data presented in Table 40, it is clear that the students feel that the majority of their friends feel more negatively toward the use of drugs other than marijuana than toward marijuana use. It is also evident that Anglo youth tend to feel that their friends have more negative attitudes toward drug use than is the case for Indian youth.

Table 40

Percentage Distribution by Race of Responses to the Question: How would you say the majority of your friends feel about the use of drugs?

Response	Anglo	Indian	Total
They would strongly agree that it is o.k.	2.6	11.3	4.6
They would agree that it is o.k.	10.1	16.5	11.6
They would have no particular opinion	22.1	34.8	25.0
They would disagree with anyone who said using drugs was o.k.	27.8	23.5	26.8
They would strongly disagree with anyone who said using drugs was o.k.	37.4	13.9	32.0
Totals	100.0	100.0	100.0
Number	395	115	500

$X^2 = 39.31$, 4df, $p < .001$

As shown in Table 41, a significantly higher percentage of Indian than Anglo youth have used some drug other than marijuana.

Table 41

Percentage of Respondents Who Have Ever Used Some Drug Other than Marijuana, by Race.

Response	Anglo	Indian	Total
No	88.5	71.2	84.5
Yes	11.5	28.8	15.5
Totals	100.0	100.0	100.0
Number	349	104	453

X^2 = 18.54, 1df, p .001

For those who have tried some drug other than marijuana, the drug first used is given in Table 42. Both Indian and Anglo youth tended to try a hallucinogen first, with much smaller percentages having first tried amphetamines or barbiturates and only a very few having first tried cocaine, heroin, or morphine.

Table 42

Percentage Distribution by Race of Responses to the Question: What was the first drug (other than marijuana) that you used?

Response	Anglo	Indian	Total
Hallucinogen	57.5	66.7	61.4
Amphetamine	15.0	20.0	17.1
Barbiturate	17.5	10.0	14.3
Cocaine	7.5	3.3	5.7
Heroin	0.0	0.0	0.0
Morphine	2.5	0.0	1.4
Totals	100.0	100.0	99.9
Number	40	30	70

At the time of the administration of the questionnaire, 3.97 of the Anglo respondents and 16.57 of the Indian respondents were using drugs other than marijuana. The numbers of Indian and Anglo youth who were using other drugs and the drugs that they were using are shown in Table 43. As is evident, the pattern is similar for Indian and Anglo youth--with hallucinogen use ranking first followed by amphetamines and barbiturates and with very few students using other drugs.

Table 43

Distribution by Race of Responses to the Question: What drug are you using now?

Response	Anglo	Indian	Total
Hallucinogen	7	6	13
Amphetamine	3	5	8
Barbiturate	2	3	5
Cocaine	1	0	1
Heroin	0	1	1
Morphine	0	0	0
Number	13	15	28

For those persons who have used drugs, Table 44 presents responses to the question, "How old were you when you first started using drugs?" Although there is no overall statistically significant difference by race, it is apparent that as with marijuana use Indian children who have used drugs tend to begin their use at a younger age than do Anglos.

Table 44

Percentage Distribution by Race of Responses to the Question: How old were you when you first started using drugs?

Response	Anglo	Indian	Total
13 or younger	14.0	38.5	24.7
14	24.0	17.9	21.3
15	28.0	20.5	24.7
16	30.0	15.4	23.6
17 or older	4.0	7.7	5.6
Totals	100.0	100.0	100.0
Number	50	39	89

As shown in Table 45, reasons for not using drugs are quite similar for both Indian and Anglo youth, although a higher percentage of Anglo youth cited "danger to health" while higher percentages of Indian youth cited the "expense" or "bad experience with drugs."

Table 45

Percentage Distribution by Race of Responses to the Question: If you do not use drugs, please list your reason why.

Response	Anglo	Indian	Total
Danger to health	40.9	33.3	39.4
Expensive	2.6	7.4	3.5
Because of religious reasons	4.1	3.7	4.0
Because it is illegal	4.3	2.5	4.0
Because my family disapproves	3.5	3.7	3.5
Because my friends disapprove	0.9	1.2	0.9
Because of a bad experience	1.2	6.2	2.1
Not interested	38.6	34.6	37.8
Other	4.1	7.4	4.7
Totals	100.1	100.0	99.9
Number	345	81	426

$\chi^2 = 15.59$, 8df, $p < .05$

Responses of Indian and Anglo youth were also similar to the question asking, "If you have used drugs regularly but have quit for some reason, please list your reason for quitting." "Not interested," "danger to health," "expensive" and a "bad experience" are the reasons most frequently given by both Anglo and Indian youth for quitting drug use.

Table 46

Percentage Distribution by Race of Responses to the Question: If you have used drugs regularly but have quit for some reason, please list your reason for quitting.

Response	Anglo	Indian	Total
Danger to health	18.5	19.1	18.8
Expensive	18.5	12.8	15.8
Because of religious reasons	1.9	0.0	1.0
Because it is illegal	5.6	6.4	5.9
Because my family disapproves	3.7	6.4	5.0
Because my friends disapprove	0.0	0.0	0.0
Because of a bad experience	13.0	14.9	13.9
Not interested	31.5	25.5	28.7
Other	7.4	14.9	10.9
Totals	100.1	100.0	100.0
Number	54	47	101

Responses to the question, "If you use drugs now, please list your reason why." were similar for Indian and Anglo youth with a few notable exceptions. A much higher percentage of Anglo than Indian drug users said that they use drugs because they "enjoy" it or because of the "physical feeling" while higher percentages of Indian youth said that they use drugs to "have fun with the gang" and for "relaxation." Again, as with marijuana use, there is some suggestion here of a more social orientation toward drug use among Indian than Anglo youth.

Table 47

Percentage Distribution by Race of Responses to the Question: If you use drugs now, please list your reason why.

Response	Anglo	Indian	Total
I enjoy it	48.1	24.1	35.7
Like to get silly	0.0	0.0	0.0
To be social	0.0	0.0	0.0
Physical feeling--like to get high	29.6	17.2	23.2
Feeling of adult status	0.0	0.0	0.0
Have fun with the gang	3.7	17.2	10.7
Relaxation	7.4	13.8	10.7
To liven up a party	0.0	0.0	0.0
It tastes good	0.0	3.4	1.8
Because my best friend or favorite date likes it	3.7	3.4	3.6
Other	7.4	20.7	14.3
Totals	99.9	99.8	100.0
Number	27	29	56

In summary, this section has examined similarities and differences in drug use and attitudes toward drug use among Indian and Anglo students attending four high schools in the Wind River Indian Reservation area. The findings indicate that: 1) a significantly higher proportion of Indian than Anglo youth feel that it is all right for people to use drugs if they want to; 2) a significantly higher proportion of Indian than Anglo youth think that their friends have favorable attitudes

toward both marijuana use and the use of other drugs, 3) a significantly higher proportion of Indian than Anglo students had tried marijuana; 4) there is a statistically significant tendency for Indian youth to have first tried marijuana at a younger age than Anglo youth; 5) among those who have tried marijuana, there is no significant difference by race with respect to frequency of use; 6) a significantly higher proportion of Indian than Anglo students have used some drug other than marijuana; 7) there is a tendency for Indian youth who have used other drugs to have begun drug use at a younger age than is the case for Anglo youth; 8) the rank orderings of drug first tried (other than marijuana) and drug being used at the time of the study are similar for Indian and Anglo youth--with hallucinogens ranking first, followed by amphetamines, barbiturates and other drugs; 9) reasons for not using marijuana or other drugs are similar for Indian and Anglo youth, with "not interested" and "danger to health" ranking first in importance; 10) reasons for using marijuana or other drugs are also similar for Indian and Anglo students, although there is some suggestion of a more social orientation toward drug use among Indian students.

CONCLUSION

The data presented in Chapters II and III indicate that about one-third of the students studied had tried marijuana and about half that many had tried some other drug for kicks or pleasure. At the time these studies were conducted, perhaps one fifth of the students were using marijuana and about one in twenty were using other drugs, at least occasionally. Some, of course, were using these drugs much more frequently. Apparent, too, is a tendency for first marijuana or other drug use to have occurred at younger and younger ages over the past few years.

The findings show that the attitudes of Indian students are more favorable than those of Anglo students toward the use of both marijuana and other drugs and that a higher percentage of Indian than Anglo students have at least tried marijuana or other drugs. Reasons given for using or not using both marijuana and other drugs are, however very similar for Indian and Anglo respondents, although there is some evidence of a more socially oriented use of drugs by Indian than Anglo youth.

The data also demonstrate that those students who have used marijuana and/or other drugs tend to have poorer relationships with both their parents and the schools than non-users. In addition there is a strong tendency for drug users to be more involved in other delinquent acts than is the case with respect to non-users.

Finally, the data presented show that drug users have much more favorable attitudes toward alcohol use than non-users and that drug users have, on the average, experienced many more problems subsequent to drinking than non-users.

There is little question, then, that those students who are using marijuana and/or other drugs are much more of a problem to their parents, the schools, the community--and even themselves--than are those students who do not use drugs; nevertheless, it appears probable that drug use does not directly cause other forms of anti-social behavior but that it is rather a part of a pattern or syndrome of anti-social behavior in which a relatively high proportion of youth are involved to a greater or lesser degree.

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