

AN ABSTRACT OF THE THESIS OF

Marcia R. Roi for the degree of Doctor of Philosophy in Education presented on
December 7, 1993.

Title: A Descriptive Study of Substance Abuse Programs in Oregon's Public
Universities

Abstract approved: *Redacted for Privacy*
Charles E. ~~Carpenter~~

The subject of drug and alcohol abuse on college campuses across the country is the concern of many college administrators. There exists a relatively high consumption pattern of drug and alcohol abuse among college students when compared to the general population. This pattern of alcohol abuse has remained stable despite the presence of substance abuse programs on campuses that are specifically targeted toward the student population. There exists little research on how these programs operate and how they address the problem of substance abuse on campuses. Most of the research that exists is of survey design. This study examined through a descriptive case study, the substance abuse programs in three public universities in Oregon. The study used descriptive case study to describe what components comprised the programs as well as how the programs functioned under the various organizational structures. Three organizational structures were identified. The first university's organizational structure was under

the health center, both administratively and physically. The second university studied had part of the program under the counseling center and other components under the athletic department and the health center. The third university had what was termed as a de-centralized structure, with the treatment component under the health center, the prevention component under an academic department, and the peer education component under the health center. The various organizational structures were also examined for their influence on the respective program.

The 1989 Drug-Free Schools and Campuses Act Amendment, required institutions of higher education receiving federal funds to have programs. The impact of the Act on both the program and the organizational structure of the program was also examined. The study demonstrated an impact of the legislation on the programs in the form of funding that made possible new services. The study also suggested an influence of the organizational structure on the programs in the form of the funding of new program components that changed the organizational structure. Implications for programming as well as research as a result of this study's findings are presented. Recommendations for program models are also presented.

A Descriptive Study
of
Substance Abuse Programs
in
Oregon's Public Universities

by

Marcia R. Roi

A THESIS

submitted to

Oregon State University

in partial fulfillment of
the requirements for the
degree of

Doctor of Philosophy

Completed December 7, 1993

Commencement June 1994

Redacted for Privacy

Redacted for Privacy

Redacted for Privacy

Date thesis is presented December 7, 1993

Typed by researcher for _____ Marcia R. Roi

© Copyright by Marcia R. Roi

December 7, 1993

All Rights Reserved

Acknowledgement

An endeavor such as this could not be accomplished without the assistance of many other people. I wish to first thank Dr. Charles Carpenter. His expertise, advice, patience and flexibility were indispensable in helping me conduct this research. Dr. Robert Rice was instrumental in guiding me through the coursework phase of the program. I would also like to thank the other members of my committee, Dr. Mariette Brouwers, whom I could rely on for straight and simple advice, and who extended her friendship to me as well. Dr. Leslie Dunnington, was kind enough to step in and lend his expertise when needed. Dr. John Buckhouse, was exemplary in his role as graduate representative, Dr. Joseph Hlebichek, and Dr. Frank Bernieri also provided their expertise. I wish to thank the respondents in the study for their candor and their time. I also express my appreciation to my friends and colleagues, in granting me their patience and support, especially Diana Thorpe who was kind enough to help with the task of transcription. I thank my family for the incentive to accomplish this process, especially my father, Norge Roi, deceased, who gave me the confidence which enabled me to accomplish this goal.

TABLE OF CONTENTS

CHAPTER 1: STATEMENT OF PROBLEM	1
Background	1
The Nation's Problem Today	4
College Students and Drugs and Alcohol	4
Higher Education's Response	6
Definition of Terms	7
Statement of Research Problem	10
Objectives	10
Research Questions	11
Delimitations and Limitations of the Study	12
CHAPTER 2: REVIEW OF THE LITERATURE	13
Introduction	13
History of Drugs and Alcohol in America	13
Drug and Alcohol Use in America Today	18
Alcohol Consumption	18
Problems	19
Drug Abuse	24
Youth and Drugs and Alcohol	31
College Students and Consumption	32
Institutional Response	37
CHAPTER 3: METHODOLOGY	46
Description of Population	46
Design	47
Data Collection Procedures	48
Data Collection Instrument	48
Interviews	49
Interviewees	50
Record and Document Analysis	50
Data Analysis	51
CHAPTER 4: FINDINGS	53
University A	53
Description of Program, Research Questions 1 & 2	53
Research Questions 3-11	58
University B	65
Description of Program, Research Questions 1 & 2	65
Research Questions 3-11	68
University C	75

Description of Program, Research Questions 1 & 2	75
Research Questions 3-11	78
Cross-Case Analysis	87
Research questions 1-11	87
CHAPTER 5: SUMMARY, CONCLUSIONS, AND IMPLICATIONS	96
Purposes of the Study	96
Summary of Relevant Literature	98
Summary of Findings	107
Conclusions	108
Implications and Recommendations	111
Implications for Administrative Change	111
Recommendations for Further Research	114
Recommendations for Program Models	116
Summary	120
REFERENCES	122
APPENDICES	131
Appendix A: Controlled Substances Act of 1970	131
Appendix B: Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse Membership Guidelines	134
Appendix C: Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse Standards	137
Appendix D: Interview Guide	141
Appendix E: Drug-Free Schools and Communities Act Amendments of 1989	144
Appendix F: Consent Form	147

A DESCRIPTIVE STUDY OF SUBSTANCE ABUSE PROGRAMS IN OREGON'S PUBLIC UNIVERSITIES

CHAPTER 1

STATEMENT OF PROBLEM

Background

Substance abuse in the United States is a current topic because it is a major problem in this country. College campuses are not exempt from the problems that alcohol and drugs cause. Consumption of drugs and alcohol by the college student population parallels, and in some cases exceeds that of the American population (National Institute of Drug Abuse [NIDA], 1991c).

America as a nation has a history of being a drug-producing, drug-consuming nation. The shortage of beer among the Pilgrims was a major incentive for their landing at Plymouth rock in 1620 (Kinney & Leaton 1987). Alcohol was a staple in many households in the colonies, being touted as a remedy for almost anything that ails one. Indeed, abstainers of alcohol were referred to as "crank brained " (p.2). The Colonists, contrary to popular belief, drank alcohol daily, in generous amounts. The recognition of the problems associated with the abuse of alcohol came as early as 1636 in Massachusetts, where a law was enacted that forbade drunkenness. The Bay Colony established the office of Tithingman in 1675 to oversee 10 or 12 families and

report on any drunkenness to the colony officials (Lender & Martin, 1982).

Thus, the problems associated with alcohol abuse and the attempts to control these problems have been a part of the heritage of America. Use of other drugs in the history of the country was common also. Marijuana has a long history in the United States. Before it was recognized as a drug it was grown for hemp and used to make rope. George Washington grew it on his plantation for this purpose (Nahas, 1973). The plant first became popular as a drug in the early 19th century, mixed in potions for ailments and dispensed by physicians. Marijuana was popular among middle class women for headache, taken orally in drinks or simply eaten (Morgan, 1981).

Opium in various solutions was prescribed in the early 19th century for a wide variety of maladies. Laudanum and Paregoric, both of which contained opiates as their major ingredient, were standard remedies used by the physician to treat everything from rheumatism in older patients, to colic in babies.

Morphine was discovered in the 1840's, and became so widely used during the Civil War as a pain killer that addiction to the drug became known as the "Army Disease " (p. 108). The invention of the hypodermic needle hastened the popularity of the drug among physicians who were apt to prescribe an injection for a variety of ills. Stylized hypodermics became fashionable worn as jewelry for upper-class women who injected morphine for headaches and numerous other complaints. Many avid temperance ladies

were unknowingly ingesting quantities of morphine daily in the "health maintenance" tonics of the time (Morgan, 1981).

Cocaine first appeared on the American scene in 1870's and was touted as a "cure for the blues." Products containing cocaine including Coca-Cola were in proliferation. Parke-Davis pharmaceutical company at one time marketed cocaine in cigars to give one a "lift" after a heavy meal (Morgan, 1981).

In 1914 the Harrison Narcotic Act (1914) was passed to control opiate use in the country. This put opiates under a separate category and controlled their dispensing by physicians. In 1937 the Marijuana Tax Act (1937) was passed. This was aimed at stemming the flow of the drug into the country from Mexico, where the Mexican immigrants introduced the plant to the U.S. as a drug to be smoked. In 1920 the Volsted-Jones National Prohibition Act,(1919) or as it is commonly known, Prohibition, was enacted. This act was later repealed in 1933. Substance abuse and the problems associated with it have been recognized for a long time by the federal government. Attempts to control the use and abuse of mood altering chemicals on a federal level have been ongoing.

The Nation's Problem Today

Despite federal and state legislation to limit supply, drug and alcohol use in the United States has proliferated. In 1987, the average American consumed 2.34 gallons of hard liquor, 2.77 gallons of wine, and 30.4 gallons of beer annually (Kinney & Leaton, 1987). In 1990, an estimate of between 263 and 443 metric tons of cocaine were available for consumption in the country (Office of National Drug Control Policy [NDCP], 1991). Americans spend \$40 to \$50 billion annually on illegal drugs, and \$37 billion on alcohol products (Office of National Drug Control Policy [NDCP] 1991). The direct economic costs from substance abuse in 1988 was estimated at \$58.3 billion (Rice, Kelman, Miller, & Dunmeyer 1990). In 1990, a survey by the National Institute on Drug Abuse, of youth between the ages of 12-17 had revealed 23% had used illicit drugs and 48% had used alcohol (NIDA, 1991c). These figures did not reflect other problems that were associated with substance abuse. In 1988, it was estimated that 30,000 to 50,000 "crack" babies were born in this country to cocaine-addicted mothers (Besharov, 1989).

College Students and Drugs and Alcohol

Is the college student population exempt from this trend? College students, when compared to their non-college same aged, peers do not exhibit

overall significant differences in drug use; 33% for college students as opposed to 32% for non-college age peers (NIDA 1991c). When alcohol use among college students was compared to the population as a whole, 89% of the college student population used alcohol annually as compared with 86% of the non-college age peers, and 80% of the general population nationally (NIDA, 1991c). Traditionally, alcohol has been one of the staples of college life. One of the first studies of college drinking practices was conducted in 1953 by Strause and Bacon, they revealed a high percentage of students using alcohol.

Overall, drug abuse in the nation is declining; the 1990 National institute on Drug Abuse household survey indicated that, between the years 1981 and 1990, high school seniors use of alcohol declined 9.2%, non-college age youth declined in use 9.9%, however the college student population use declined only 2.6% (NIDA 1991c) The rate of heavy drinking among college students is alarmingly high. Many of the problems that occur on campuses today are drug and alcohol related. We can speculate on why the college student population appears resistant to the general trend in the country to use less alcohol and remain at the same level of drug use as their same age non-college age peers. In order to do this we must first determine what is happening in institutions of higher learning that insulates students to the trend of general decline of the nation's young adults in consumption of alcohol.

Higher Education's Response

Institutions of higher education have responded by establishing substance abuse prevention programs on campuses for students. This effort was fueled by the federal government in 1986 by the passage of the Drug Free Schools and Campuses Act of 1986. In 1989 this act was amended to require institutions of higher education to maintain substance abuse prevention programs in order to qualify for federal funds (Drug-Free Schools and Campuses Act Amendment of 1989). Federal funding was made available to the institutions to establish these programs. Even though substance abuse prevention programs are mandated as a precondition to institutions receiving federal funding, little is written in the literature on how the structuring of these programs comes about. Higher education administrators, beset with the problems that substance abuse cause on college campuses, are eager to find programs that work, however much of the research in the area has been inconclusive. Most of the literature focuses on alcohol education approaches, with little evaluation of how the education ameliorates problems on campuses among students engaged in substance abuse. The research that has been done on programs has been primarily survey (Anderson & Gadleto, 1991; Ponder, 1987). Therefore, this study sought to approach the problem in another way, namely a qualitative method. It was the intent of this study to

use case study methods to describe the ways in which three public university substance abuse programs operated. This was done by interview of pertinent individuals, and record and document analysis. The intent was to provide researchers and practitioners with a base of knowledge which may be used in formulating and/or evaluating methods of programs.

Definition of Terms

Addiction is defined in the Diagnostic Statistical Manual IIIR as Psychoactive Substance Dependence, which includes alcoholism:

The essential feature of this disorder is a cluster of cognitive, behavioral, and physiologic symptoms that indicate that the person has impaired control of psychoactive substance use and continues use despite adverse consequences. The symptoms of the dependence syndrome include, but are not limited to, the physiologic symptoms of tolerance and withdrawal... The symptoms of the dependence syndrome are the same across all categories of psychoactive substances. Symptoms characteristic of dependence are;

1. The substance is often taken in larger amounts or over a longer period than the person intended.
2. Persistent desire or one or more unsuccessful efforts to cut down or control substance use.
3. A great deal of time spent in activities necessary to get the substance (e.g. theft), taking the substance (e.g. chain smoking), or recovering from it's effects.
4. Frequent intoxication or withdrawal symptoms when expected to fulfill major role obligations at work, school, or home, or when substance use is physically hazardous.
5. Important social, occupational, or recreational activities given up or reduced because of substance use.

6. Continued substance use despite knowledge of having a persistent or recurrent social, psychological, or physical problem that is caused or exacerbated by the use of the substance.

7. Marked tolerance: the need for markedly increased amounts of the substance in order to achieve intoxication or desired effect, or markedly diminished effect with continued use of the same amount.

8. Characteristic withdrawal symptoms.

9. The substance is often taken to relieve or avoid withdrawal symptoms; Additional criteria are that some symptoms of the disturbance have persisted for at least one month, or repeatedly over a longer period of time (American Psychiatric Association, 1987, p. 167).

Psychoactive Substance Abuse, which includes alcohol abuse is defined by the DSM IIIR as:

Maladaptive patterns of psychoactive substance use that have never met the criteria for dependence for that particular class of substance. The maladaptive pattern of use is indicated by either

1. Continued use despite knowledge of having a persistent or recurrent social, occupational, psychological, or physical problem that is caused or exacerbated by use of the psychoactive substance or:

2. Recurrent use in situations in which use is physically hazardous (e.g., driving while intoxicated) The diagnosis is made only if some symptoms of the disturbance have persisted for at least one month or have occurred repeatedly over a longer period of time (American Psychiatric Association, 1987, p. 169).

Heavy drinking is defined as consuming five or more drinks on occasion, at least five times per month.

Illegal drugs are defined as unlawful possession of a controlled substance included in Schedule I (heroin, hallucinogens and marijuana) or II (some opiates, cocaine, amphetamine, and secobarbital), of the Uniformed

Controlled Substances Act. The term "illegal drugs" does not mean the use of a controlled substance pursuant to a valid prescription or other uses authorized by law. The term does not include distilled spirits, wine, malt beverages or tobacco (Drug Free Federal Workplace Act of 1988).

MDMA is the common name for 3, 4-methylenedioxymethamphetamine, classified as a schedule I hallucinogen, under the category of amphetamine variants. MDMA is a synthetic combination of amphetamine and hallucinogen (U.S. Department of Justice, 1985).

Primary Prevention in the area of alcohol problems is defined as educational efforts directed at those individuals who engage in abstinent or social drinking behavior (Dean, 1982).

Secondary Prevention are efforts that are directed at early detection and treatment, aimed at individuals whose drinking behavior may presently involve problems indicative of future addictive behavior (Dean, 1982).

Tertiary Prevention efforts that are concerned with chronic or irreversible disease processes, such as those individuals who demonstrate addictive behavior and are in need of treatment (Dean, 1982).

Crack is the common term for the white or tan precipitate formed when cocaine hydrochloride powder is refined by cooking it with baking soda and water. It is ingested by smoking (U.S. Customs Service, 1989).

The term Crack Babies is used to identify those infants who display withdrawal symptoms, and neurological damage due to exposure to cocaine in

utero as a result of the mother's use of the crack form of cocaine during the pregnancy (Bresharov, 1989).

Statement of Research Problem

The problem of this study was to use descriptive case study methods to describe substance abuse programs on OSSHE university campuses.

Objectives

There were three objectives of this study; the first was to examine the Influence of federal legislation, specifically the 1989 Drug Free Schools and Campuses Act amendment on the programs in Oregon State System of Higher Education universities.

The second objective of this study was to examine, through a descriptive case study, how each program operated within each organizational structure.

The third objective was to examine the influence of the federal legislation on the organizational structure itself, in other words, describe how the organizational structure that houses the substance abuse program has changed

since the 1989 Drug Free Schools and Campuses Act amendment. To accomplish these objectives, several initial research questions were formulated.

Research Questions

The objectives of this study led to the following questions:

1. How were substance abuse programs on the three public university campuses in Oregon defined?
2. How were substance abuse programs organized on the university campuses?
3. What impact did the 1989 federal Drug-Free Schools and Campuses Act have on the substance abuse prevention programs in OSSHE universities?
4. What effect did this federal legislation have on the organizational structure of the substance abuse prevention programs in OSSHE universities?
5. How was program effectiveness defined on the various campuses and under the various organizational structures?
6. What did respondents feel were the advantages and disadvantages of their particular organizational structure?
7. How was staffing and funding different under the various organizational structures?
8. How was philosophy of substance abuse different under various components of the organizational structures?

9. What was the organizational rationale behind the substance abuse programs on the various campuses?

10. What were the typical sources of intake referral to the program on the various campuses?

11. How did organizational structure affect the referral of clients to other agencies?

Delimitations and Limitations of the Study

This study examined three universities in the Oregon State System of Higher Education. This population was used in order to limit extraneous variables due to type of institution. No attempt was made to generalize these results to other institutions, however these results may be applicable to other institutions.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

This chapter reviews the literature that addresses the problem of substance abuse in America and substance abuse among college students in particular. The various methods that colleges and universities have used to respond to the problem are also reviewed. The first section of this chapter describes substance abuse historically in America. The next section discusses the problem that the nation faces today with regard to substance abuse. The third section addresses the problems facing youth in America concerning substance abuse. Section four reviews the use of drugs and alcohol by college students. The fifth section outlines the colleges response to the problem, including important federal legislation that has affected the college student population.

History of Drugs and Alcohol in America

American as a nation has been shaped by drugs and alcohol from our beginning. Alcohol was the first drug to be used in America by the settlers. One of the deciding factors for the Pilgrims landing at Plymouth rock was the

shortage of beer (Kinney & Leaton, 1987). Rather than continue to drink from the crew's ration of beer, as theirs had already been consumed, the diarist William Bradford wrote that the Pilgrims were "hastened ashore and made to drink water " (Calahan, 1987, p.3). The English were a beer and hard cider drinking population out of necessity, as water in England was often of questionable purity (Lender & Martin, 1982). Despite the fact that the water in America was potable, the Pilgrims retained their drinking customs. The brewing of beer and the making of hard cider was included in the domestic chores of every colonial housewife. Alcohol was considered to be essential for good health, Increase Mather described drink to be a "good creature of God" (Lender & Martin, 1982, preface). The English tradition of providing drink on the job was welcome in the New World during the hard work of building and farming. Despite the quantities of alcohol consumed on a daily basis, there was a general lack of concern over societal problems caused by drinking, as the Colonies had enacted a complicated network of laws to control excesses. The strict societal code of the closely knit colonial Puritans also held problems down to a minimum. As the country matured, the emergence of the more portable distilled spirits, which were 4 to 5 times stronger, replaced colonial beer. Beer and cider were replaced by rum and then whiskey, first Rye whiskey and then Bourbon, which was named after the county in Kentucky where it was invented. In addition to this change in drinking habits, there was now a wave of immigration from other countries to the New World, creating

ethnic, as well as socioeconomic groupings within the society. The population was no longer homogeneous, and the immigrants did not always conform to the Puritans' strict societal code for excesses. There was more emphasis on individualism in the overall attitudes, especially after the Revolutionary War. The shift to hard liquor and the emphasis on individualistic attitudes of those involved in the westward expansion combined to create an atmosphere in which excesses of use were tolerated, and in some cases expected, as in the case of cowboys coming into town from a long cattle drive. The Temperance movement developed as a response to the societal problems that were surfacing as a result of this pattern of drinking. The attitude toward alcohol between 1776 and 1826 was changing from "the good creature of God" to the "demon " (Calahan, 1987, p. 28).

By the 19th century, alcohol was not the only drug in use in America. Opium eating and morphine addiction were prevalent by the 1840's. Opium imports rose faster than the growth in population in the 1840's (Morgan, 1981). Opium was found in many elixirs and tonics. Due to the shortage of doctors, the population commonly self-medicated their ailments, and physicians readily prescribed opium and its derivative, morphine to patients for various maladies. Marijuana, grown in this country for its hemp in order to make rope, was introduced to physicians as a "cure-all" drug in the 1840's. The plants were used in various forms, such as candy, food and potions.

Cocaine appeared on the scene in 1880 and was mixed in many potions. Sigmund Freud praised cocaine as an antidote for depression. Wines containing cocaine were in proliferation. It was Coca wine that assisted Ulysses S. Grant in the writing of his memoirs (Morgan, 1981). The impact of drug and alcohol was beginning to be felt throughout the country, with various cures for addiction being sought. Morphine addiction was readily observable after the Civil War. It was dubbed as the "Army Disease" due to the number of soldiers who returned home with the addiction after being medicated at the battlefield hospitals (Morgan, 1981, p. 108). Cocaine, among other claims for it, was touted as a cure for morphine addiction. Heroin was developed in 1874 by the Bayer pharmaceutical company for the same purpose. As the problem of addiction grew, various narcotics were included in tonics and sold as a cure for habitual drunkenness.

The Temperance movement culminated in the enactment of the Volstead-Jones National Prohibition Act of 1920. After repeal in 1933, the sale of liquor was regulated by the federal government. Before that, the Harrison Narcotic Act of 1914 put narcotics solely under the control of physicians. It was evident by the passage of legislation that the country began to recognize that drug and alcohol use could lead to social disruption. Prohibition was referred to as the "Noble Experiment" and contrary to popular belief, the failure of the Act was not really due to national opinion as much as politics (Calahan, 1987, p. 30). The Volstead Act stated that the buying or

selling of alcohol was illegal, but the possession or drinking of it was not covered in the Act. Enforcement of the Act was left up to the states, with no real effort made to enforce the law until the late 20's. The repeal of Prohibition was not due to any major changes in the national attitude, but the inception of income taxes in the country. The wealthy industrialist families of the time saw the legalization of alcohol and subsequent taxation of the beverage, as a means to abolish both personal and corporate income taxes, and thus reversed their stand by the late 1920's, and lobbied for the legalization of alcohol (Calahan, 1987). The portrayal of Prohibition as a complete failure in it's impact on alcohol addiction was also not accurate. During years 1921-1922 there was a sharp decline in deaths due to cirrhosis which corresponded with the drop in the consumption of hard liquor (Calahan, 1987).

Two of the characteristics that comprised the American culture were the diversity of the population, and an individualistic attitude. The diversity of the population also meant a diversity in habits and mores. Individualistic attitudes of Americans culminated in individuals not accepting governmental regulation in many aspects of their lives. Both of these characteristics have comprised to help create a climate for the use and misuse of drugs and alcohol in the nation.

Drug and Alcohol Use in America Today

This section will address the use of drugs and alcohol in the nation today, and discuss the consequences of use and abuse. First alcohol will be discussed and then illegal drug use and abuse will be discussed.

Alcohol Consumption

More than 80 % of the population aged 12 and over reported having used alcohol. Sixty-six percent have used it in the past year, and 51% have used it in the past month (NIDA 1991d). Out of the population who used alcohol, the consumption rate was not uniform as most Americans were not heavy drinkers. To illustrate, 70% of the drinkers consumed 20% of all of the alcohol. The remaining 80% of all alcohol was consumed by only 30% of the population. One third of that 30% consumes 50% of all the alcohol consumed (Kinney & Leaton, 1987). National use of alcohol peaked in 1979 and has declined only slightly since. Most of the decline is in the consumption of spirits. Beer has remained at its lowest level since 1978 from its peak in 1981 (NIDA, 1991d). Alcohol is used by more people than all other drugs, including tobacco with a per capita consumption in 1988 of 2.54 gallons of pure alcohol. Males are more likely to be users of alcohol than females with 59% reporting use in the past month as opposed to 44% of females. Of those individuals 21

years and under, 34% reported monthly use, and 4% were classified as heavy drinkers (See definition of terms). Among those individuals who were of legal drinking age in most states, 54% reported monthly use, with 5% in the heavy drinking category. The age group most likely to be heavy drinkers are between 18 and 25 years old (11%) (NIDA, 1991c).

Problems

Nationally, estimates of the costs of alcohol abuse and dependency have ranged from a conservative estimate of \$58.3 billion in 1988, (Rice, et al., 1990), to a 1990 figure of \$136.3 billion and a projected \$150 billion by 1995 (Harwood, Kristiansen, & Rachel, 1985, as cited in (National Institute of Alcohol Abuse and Alcoholism, [NIAAA] 1990). To put these figures into perspective, the state, federal and local governments combined spend \$46 billion on the entire criminal justice system in this country (Office of National Drug Control Policy [NDCP], 1991). A study of economic costs of alcohol in Minnesota revealed a total cost for that state of between \$1.4 and \$2.1 billion in 1983. This figure represented between 2.8 and 4.3 percent of the annual personal income for the entire population of Minnesota (Parker, Schultz, Gertz, Berkelman, & Remington, 1987).

The mortality figures attributed to alcohol abuse were three percent of all deaths, however, as Van Natta, et al., point out this figure is probably

undereported. Alcohol is seldom reported as the direct cause of death, even if it is a contributing factor, and hence is not counted many times in the mortality figures. For example, cardiac problems that were exacerbated by alcohol abuse and lead to heart failure would not be reported as an alcohol fatality. Reporting bias by physicians in listing alcohol as cause of death, as well as lack of information on the decedents drinking history also served to minimize the number of deaths attributed to alcohol (VanNatta, Malin, & Bertolucci, 1985). Maull, (1988) reported that there was a greater probability of death from a lesser trauma with the presence of alcohol because the body's compensatory mechanisms were impaired by the alcohol. Nationwide, the prevalence of alcohol related problems among the hospitalized patients has been estimated at about 25%. Health problems range from cirrhosis, rated as the ninth leading cause of death in the United States, to cancer, which has been linked to alcohol use (NIAAA, 1990).

Fetal alcohol syndrome. The rate of Fetal Alcohol Syndrome (FAS) and Fetal Alcohol Effects (FAE) among newborns in the country has been estimated to be between .6 per to 2.6 per 1,000 births. Among the population of alcohol-dependent women this figure climbed to 25 per 1,000 births. FAS was discovered in 1973 and alcohol was determined then to be a teratogen, meaning an agent proven to cause birth defects. The symptoms of FAS range from gross morphological effects on the child to the more subtle cognitive-behavioral functions that may appear later. FAE is defined as a

partial list of the FAS symptoms, and not completely within the category of FAS. When the more inclusive FAE is included in the rate of alcohol affected births, the estimation climbs fourfold (Abel, Jacobsen, & Sherwin, 1984, cited in NIAAA, 1990). FAS and FAE cost 1/3 of a billion dollars annually to treat nationwide, and were the leading cause of mental retardation (Abel & Sokol, 1986).

Traffic Fatalities. Traffic fatalities were the greatest single cause of death in the United States for every age group between 5 and 32 years of age. In 1990, 49.6% of all traffic fatalities were alcohol-related. This works out to an average of one alcohol-related traffic fatality every 24 minutes. Two out of five Americans will be involved in an alcohol-related crash in their lifetime (National Highway Traffic Safety Administration,[NTSA] 1991a). The proportion of intoxicated persons killed in crashes was declining slightly however, in 1982 46.3% of all fatalities were intoxicated, and in 1990 this figure had dropped to 39.7% (NTSA 1991b). The rise in the legal drinking age to 21 years had been estimated to have reduced fatal crashes 13% overall (NTSA, 1991a).

Falls. Falls were the second most common cause of fatal accidents in the country, and the most common cause of non-fatal injuries. The data generally correlated an increased risk for falls, with a range of between 17-53% of fatal falls being attributed to alcohol use (Honkanen, et al. 1983). Hingson and Howland (1987) reported on 21 studies which used emergency

room data that concluded that alcohol use contributes to 30% of the injuries due to falls.

Drowning. Third on the list as cause of death in the country is drowning, with 38% - 41% of the victims exposed to alcohol (Howland & Hingson, 1988; Wintemute, Teret, Kraus and Wright, 1990). Boating accidents were also linked to alcohol use. In a national study a range of 35-80% of boating related drownings were established to be alcohol related (National Transportation Safety Board, [NTSB] 1983).

Fires. The fourth cause of accidental death in the country was fires and burns. Studies reported a range of between 37 to 64% of burn victims being intoxicated at the time of the fire (Howland & Hingson, 1987, cited in NIAAA 1990).

Injuries and other causes of death. Alcohol figured in significantly in fatalities due to other causes. Overall, employees who drank heavily were reported to have a significantly higher incidence of injury requiring medical attention than abstainers (38% vs 17%). Of those who drank on the job at least once a week, the incidence of injury in the previous year was 40% compared to 12% for the abstainers (Hingson, Lederman, & Walsh, 1985).

Suicide and alcohol had been shown to be positively correlated also. Roizen (1982), revealed that between 15 and 64% of those who have attempted suicide had been drinking at the time. Of those who were successful in their attempts, 80% had been drinking at the time of the suicide. Suicides

were not reported in the category of alcohol deaths but in the area of mental health. Because of this classification, the rate of those with a history of alcoholism and alcohol abuse who complete suicide are normally diagnosed with depression as opposed to alcohol related death, because the diagnosis between depression and alcohol problems is difficult to differentiate (Rice, et al. 1990).

Violence. Family violence is correlated with alcohol abuse and dependency. Forty-four percent of males interviewed, who acknowledged violence toward their spouse met the clinical criteria for alcohol dependency, as opposed to 14% that did not (Van Hasselt, Morrison, & Bellack, 1985). The dynamic of alcohol-related family violence was not confined to the abuser. According to Miller, Downs and Gondoli (1989) Across all types of violence, more alcoholic women reported violence of some type in their relationship. Approximately 25% of the alcoholic women in the sample experienced extreme violence, (kicking, punching, stabbing, etc.) compared to five percent in the control sample.

Interpersonal violence was also alcohol-related. Between 42% and 46% of homicide victims have tested positive for alcohol in their blood (Goodman, Mercy & Loya, 1986; Parker, et al. 1983). As formerly stated, most Americans were not heavy or abusive drinkers. The incidence of morbidity and mortality are generally attributed to alcohol be alcohol-related. However the

abuse of alcohol by a minority of individuals has had a major impact in this country.

Drug Abuse

The definition for illegal drugs comes from the Federal Code, and is synonymous with controlled substance. A controlled substance is defined as any substance that is included in the Schedule I, II, III, IV, V of the Uniform Controlled Substances Act of 1970, based on the Federal Comprehensive Drug Abuse Prevention and Control Act of 1970. Schedule I contains substances thought to have a high potential for harm and no real medical use. Heroin, hallucinogens, and marijuana are on this schedule. Schedule II contains most opiates and cocaine, and are defined as having high potential for harm and limited medical use. Schedule III contains most depressants and stimulants, except secobarbital and amphetamine which were moved up to Schedule II when their potential for abuse was determined to be high. Schedule IV contains the mild tranquilizers, and Schedule V has the codeine used in cough control mixtures, the criteria being that these substances are considered medically useful however, have the potential for limited physical and psychological dependence. Schedule V are drugs that have a low potential for abuse relative to the other schedule drugs, and have a current medical use .

Illegal drugs are defined as:

A controlled substance included in Schedule I or II, as defined by section 802(6) of Title 21 of the United States Code, the possession of which is unlawful under chapter 13 of that title. The term "illegal drugs" does not mean the use of a controlled substance pursuant to a valid prescription or other uses authorized by law. (See Appendix A)

There is a vast amount of resources being spent on the consumption of illegal drugs in this country. In 1990, it was estimated in a report from an Office of National Drug Control Policy, that Americans spent approximately \$12 billion on heroin, \$9 billion on marijuana, \$18 billion on cocaine, and \$2 billion on other illegal drugs in 1990. Also in 1990, there were 263-443 metric tons of cocaine available for consumption in the United States (NDCP, 1991).

The total economic costs for drug abuse in 1988 were estimated at \$ 58.3 billion (Rice, et al. 1990). In 1990, the National Institute of Drug Abuse in it's National Household Survey on Drug Abuse (1991d) reported that 37% of the U.S. population aged 12 and over reported use of an illicit drug in their lifetime, 13% reported using in the past year, and 6% reported use of an illicit drug in the past month. The survey cites marijuana as the most commonly used illicit drug, with 33% of the population reporting ever using the drug. Twelve percent of the population used a prescription-type psychotherapeutic drug for non-medical use, and 11% reported using cocaine at least once. The most common age range stated in the report for users was 18-25 years old. Drug use was declining slightly among the population, however the decline was not important. Among the main findings of this survey, 16% of those reporting

marijuana or cocaine use reported one or more problems due to use of the drug. These problems were cited as feeling very nervous or anxious, for both the cocaine and marijuana users. Marijuana users also reported a problem with the ability to think clearly (8.0%).

Drug abuse in the work force. In a study conducted in the United States Postal Service to determine the economic value to industry of drug testing, job applicants were tested for illicit drugs as a condition of pre-employment. Of all of the eligible job applicants, 9.4% tested positive for illicit drugs. The results of the testing were kept confidential, including those who tested positive, from the hiring staff. Even though the hiring staff was not apprised of the test results, those who tested positive were more likely to be disqualified before the final selection process, with 27% being disqualified as opposed to 19% of those who tested negative. After 1.3 years, the employees that tested positive had a 59.3% higher rate of absenteeism, and 47% more likely to have been involuntarily discharged during that time (Normand, Salyards & Mahoney, 1990). Cook (1989), reported 18% of an overall sample of workers reported using marijuana in the past year, and six percent of workers used cocaine in the past year. Eleven percent of workers were described as current users of marijuana, and two percent of workers were described as current users of cocaine. Age was identified as the most significant predictor of drug use among workers, with the 18-34 year age group the most likely to be current users (20%). The next age groups were 35-44, with current users at six

percent, and >45 age group at two percent identified as current users. In the 18-34 age group, males were more likely to be current users with 24% and females at 8%. Current cocaine usage for this age group also revealed males twice as likely to use as females with rates at 8% and 4% respectively.

Educational status had some impact on current marijuana use. Thirty-five percent of those workers in the 18-34 age range were identified as current marijuana users. Sixteen of workers with a high school education or more used marijuana.

Mortality from drug abuse. NIDA reported (1991d) that in 1990 there were 5,830 deaths involving drug abuse reported to the Drug Abuse Warning Network (DAWN). Of these, 60% were accidental and 23% suicides.

Cocaine is the drug most frequently reported in coroners reports, in 43% of the cases, and alcohol-in-combination next, reported in 40% of the deaths. There has been an overall decrease in the number of drug mentions by 20% from 1989, from 7,260 deaths reported in that year to 5,830 in 1990. Overdoses have decreased 22% from 1989 also. In a report on emergency room visits, (NIDA, 1991b) of the 82,323,486 hospital emergency room visits reported to DAWN, 635,460 had some type of drug mention in the episode. The most frequently drug mention was alcohol-in-combination in 31% of the cases.

Alcohol incidence alone are not reported to the network, indeed there is no formal reporting system nationally to monitor the correlation of alcohol as a primary agent and emergency room visits. Cocaine was the second most

frequently mentioned, with 22% of the cases involving the drug. Of the total drug mention emergency room visits, 60% were drug overdoses, and 47% were suicides (NIDA, 1991a).

Crime. Drug abuse has been linked with criminal activities. The Bureau of Justice, in its Data report in 1989, cites that victims of assault, rape, or robbery believed that their assailant was under the influence of drugs or drugs and alcohol 36% of the time. (Bureau Justice Statistics [BJS], 1990). Seventy-five percent of jail inmates, 79.6% of state prisoners, and 82% of youth in a long-term public facility have reported use of illicit drugs. Of this same population, 25%, 33% and 40% respectively were under the influence of drugs during the time of the crime for which they were currently serving their sentence. In 1986, 54% of the state prisoners reported being under the influence during the crime for which they were currently serving sentence (National Institute of Justice, 1990).

Women and drugs. One of the problems associated with drug abuse in the country is the rising incidence of women using cocaine. In New York City in 1982, four times as many men as women were admitted for treatment for cocaine, by 1987 men outnumbered women by 2 to 1. Kansas City, Kansas has seen the number of women admitted for treatment increase 239% from 1986-1988 (Wynhausen, 1988). Given the population of women of childbearing years, (15-44) the estimated population of women in this country who reported use of cocaine in the past month was 9%, or roughly 60 million women (NIDA,

1989). The National Association of Perinatal Addiction Research and Education, (NAPARE) in its study of 36 hospitals, estimated that 375,000 infants per year are fetally exposed to either marijuana, heroin, methadone, cocaine, amphetamines, or PCP. This constituted 11% of all live births (NAPARE, 1988). Bresharov, (1989) disputed this with a more conservative estimate of between 30,000 to 50,000 drug-exposed infants, which constituted one or two percent of all live births. Cocaine increasingly appears to be the most prevalent drug used by pregnant women. In Los Angeles County, fetal deaths due to cocaine increased from 9 in 1985 to 56 in 1989 (Clement, 1989, cited in Bersharov, 1989). In Philadelphia, in 1984, seven percent of pregnant women who were tested, registered positive for cocaine, by 1987 this figure had risen to 58% (Finnegan, 1987, unpublished data, cited in Jones & Lopez, 1990). The increase in babies born with drug withdrawal symptoms in D. C. General Hospital in Washington, D. C. rose from 3.2% in 1982 (52), to 5.7% in 1985 (108), to 22% in 1989 (479) (D.C. General hospital, unpublished data 1990, cited in Jones & Lopez 1990). The number of fetally exposed infants increased 3-4 times between 1985 and 1989 (Miller, 1989, cited in Jones & Lopez, 1990). The initial symptoms of drug exposure in the infant continue for up to four months after birth, which denotes a longer term risk to infants during this time than with other drugs. Frank, et al., (1988), reported of the pregnant women tested, 17% had tested positive for cocaine. The immediate effects of the drug are, an increase of the mothers blood pressure which produce a

decrease of the blood flow to the fetus due to vascular constriction (Frank, et al., 1988). The fetal risk includes, but is not limited to, congenital abnormalities, neonatal neurobehavioral functions, increase in incidence of spontaneous abortion, visual and auditory dysfunction, seizure, and long-term neurobehavioral disabilities (Jones & Lopez, 1990). Related problems of maternal drug use are increased incidence of child abuse. In 22 states, substance abuse is cited as the dominant characteristic in child abuse cases (Bresharov, 1989). In 1985 25% of child abuse cases involved substance abuse in Washington, D. C. by 1988 this figure had risen to 80%. Foster care for drug affected children ranges between \$5,000 and \$20,000 per year (Greene, 1988, cited in Bersharov, 1989).

Drug use and sexually transmitted diseases. Drug use has also triggered a dramatic rise in sexually-transmitted diseases. The incidence of cocaine use and sexual promiscuity accompanying the sale and use of the drug, is blamed for the rise in the incidence of syphilis in the country by the Center for Disease Control. Nationally, the cases of syphilis reported rose 30% between 1985 and 1987. Miami, which has a major problem with crack cocaine and cocaine use, experienced a 100% increase in reported syphilis cases between 1985 and 1989 (Koppelman & Miller-Jones, 1989).

In 1991, the National Commission on Acquired Immune Deficiency Syndrome, (NCAIDS) report on the twin epidemics of substance use and HIV reported, that approximately 32% of all adult/adolescent AIDS cases were

related to IV (intravenous) drug use, and that 71% of all female cases were linked to drug use. The city of New York has an estimated 200,000 IV drug users, 50% of whom were HIV positive. The number of users who used needles in their use of drugs ranged from 500,000 to 1.5 million (National Commission on Acquired Immune Deficiency Syndrome, [NCAIDS] 1991). From the evidence presented to Americans regarding substance abuse, of alcohol and other drugs are a major part of American culture, and the consequences are also a major impact on our society. Age is the best predictor to determine who is at risk in drug usage (Norman, et al., 1990).

Youth and Drugs and Alcohol

In 1991, the percentage of youth in the country aged 12 to 17 reported that 21% had used illicit drugs and 46% had used alcohol at some time. These figures were down from a 1979 peak use of illicit drugs at least one time in their life use of 34% and alcohol use of 70%. The percentages of use during the past month, which is designated as current use, during 1991 revealed a rate of seven percent for illicit drugs and 20% for alcohol. These figures also showed a decline since the 1979 peak of 18% for drugs and 37% for alcohol (NIDA,1991c).

The trend also appears to hold true for those aged 18-25. In 1991 54% reported using illicit drugs at least once in their life, which is a decline from the

1979 peak of 70%. Reported use for alcohol in the same category, of at least once in the lifetime, was also declining although not as drastically, the peak being in 1979 also in which 92% reported use, as opposed to a 1991 percentage of 89%. Use within the past month for the same age group is 15% for drugs, and 64% for alcohol. Within this category of usage, figures have declined also since 1979 from 38% reporting drug use then and 76% reported alcohol use (NIDA, 1991c).

College Students and Consumption

Johnston, O'Malley, and Bachman (1991), in their comparison of college students and their non-college age peers nationally, found little differences in the consumption of drugs overall between the two groups. Both college students and their non-college cohorts, in reporting the use of any illicit drug during their lifetime, displayed few differences, (33% vs. 32%). Some differences in use were; (a) the daily use of marijuana for college students was significantly lower, (1.7% college students reporting daily use of marijuana, compared to 3.0% of the non-college cohorts and, (b) the college students use of inhalants and MDMA (See Definition of Terms) was higher, with 3.9% and 2.3% reporting use of the drugs respectively, compared to the use of the non-college cohorts use of 2.6% and 1.9%.

The one area in which there were very substantial differences was in the heavy use of alcohol. While the annual prevalence of use was only slightly higher among college students, (89% vs. 86%), and the percentage of students who drank daily was lower, (3.8% vs. 4.9%), the portion of the student population that reported heavy drinking was significantly higher, (41% vs. 33%). This pattern of heavy drinking has been confirmed in the literature by many others. Eigen (1991) revealed that college students drank enough beer, wine, and spirits annually to fill 3,500 olympic-size swimming pools, (since olympic size pools are approximately six times the size of residential pools, the residential equivalent would be 20,000 pools). On the campuses, the literature reporting the pattern of drug use among college students supported the finding of alcohol as the drug of choice in virtually every study. The majority of studies reported an average of 20 % of students in the category of heavy drinkers (Banks & Smith, 1980; Engs 1977; Engs & Hanson, 1985; Klein, 1989; Straus & Bacon 1953; Wiggins & Wiggins, 1987), with an upper range of 31% to 36% (Gonzalez 1986; Sherry & Stolberg, 1987). This statistic has persisted for almost four decades, beginning with Straus and Bacon's study in 1953. The amount of money that the typical college student will spend in a year for alcohol exceeded that spent on textbooks (Eigen, 1991). Gender differences in the drinking patterns of college students were also observed in virtually all of the studies with the exception of Banks and Smith, (1980) who found no notable gender differences. Males consumed more than females in terms of

quantity and frequency (Blane & Hewitt 1977; Engs 1977; Gusfield, 1961 Hanson 1977; Hughes & Dodder 1983; Johnston et al., 1991; Saltz & Elandt 1986). Male college students also reported experiencing substantially more problems as a result of drinking than female students (Eigen, 1991; Engs, 1977; Hughes & Dodder, 1983; Kuder & Madison, 1976; Wechshler & Rohman, 1981). The choice of alcoholic beverage in all studies was beer. College students consume annually approximately 4 billion cans of beer (Eigen, 1991). Presley & Meilman (1992), in a national CORE instrument survey found the average student drank 5.11 drinks per week, which translates out to just under the four billion figure. There has been some evidence that grade point average was inversely correlated with consumption. Hanson and Engs (1986); Kaplan (1979); Kraft (1988); Milman and Su (1973); Saltz and Elandt (1986), all reported that those students who were among the abstainers or infrequent drinkers had significantly higher grade point averages than the heavy drinkers. Hughes and Dodder (1983), reported the same pronounced inverse correlation between G.P.A. and consumption.

Racial differences among students with regard to alcohol consumption have also been noted. White students drank significantly more than non-whites, with black students drinking the least (Crowley, 1991; Engs, 1977; Hanson & Engs, 1986; Kaplan, 1979; Saltz & Elandt, 1986;). Most of the studies have reflected a pattern of alcohol consumption that dated well before college, (Crowley, 1991; Hughes & Dodder, 1983; Saltz & Elandt, 1986; Straus

& Bacon, 1953). There was some evidence that there is significant increases in alcohol consumption after entering college, 50% of students in Lowe, Fagan, Fagan & Free's (1987) study reported that they drank the same amount that they did in high school, and 23% reported an increase in drinking with 18% decreasing their intake. Only eight percent of the students reported that they began drinking in college. Gonzalez (1989) reported similar findings; with seven percent of college students reporting their first drink in college. Some studies have found differences in consumption correlating with living arrangements of students. Gusfield (1961) found that those students who lived in the fraternity houses drank significantly more. Klein (1992) found all Greek students had significantly higher consumption of alcohol than students living on campus. This difference was not borne out by Lowe, et al., (1987) however, who found no differences in consumption patterns between Greek students and students residing on campus. There was also disputing evidence as to whether year in college had anything to do with consumption patterns. Many studies reported that there was no difference in the consumption of alcohol among students regardless of year in college, (Engs, 1977; Engs, 1982; Glassco, 1975; Hanson, 1974; Hockhauser, 1977). Alternatively, other studies reported that freshmen drank more and tapered off by senior year, (Hanson, 1972; Rogers, 1970; Straus & Bacon, 1953). The use of drugs in conjunction with alcohol has been noted also. Saltz and Elandt (1986), reported that students who were heavy drinkers were more likely to be users of marijuana.

Schall, Weede & Maltzman (1991) also found alcohol to be a gateway drug to marijuana and cocaine. Schall's et al., (1991) and Snodgrass and Wright's (1987) findings paralleled Johnston, et al.'s (1991) findings that marijuana was the second most frequently used drug among students, though not in the amounts or frequency that alcohol was used on the campuses. Thus as Eigen (1991) stated, "most students 'know' better about other drugs except alcohol " (p. 4).

In summary, the drug of choice among college students was alcohol, specifically beer. It was chosen over other drugs to a very large degree and used in a binge pattern of consumption. The abuse of other drugs by non-college cohorts in the same age range paralleled or was slightly less than the college student population of both sexes. The heavy use of alcohol has been a pattern for approximately 20% of college students. White male students residing in fraternal organizations consumed the greatest amount of alcohol on average. Those students who were heavy drinkers had more negative consequences as a result of their drinking. The population that reported fewest problems and lowest consumption was black females. Among those who were heavy drinkers, grade point average was inversely correlated with consumption. The next section discusses how this pattern impacted colleges and universities.

Institutional Response

Since the study done by Straus and Bacon in 1953 on college students and drinking, there was not much done by the institutions of higher education to address the issue until 1974. Traditionally, alcohol-related problems of college students were handled by the dean of students in the form of a reprimand and some form of disciplinary action. This approach to alcohol related behaviors on campus was prevalent well into the mid-seventies (Fischer, 1987). In 1974 however there was a study undertaken by the National Institute of Alcohol Abuse and Alcoholism (NIAAA). The study was named the 50+12 project, and involved fifty colleges and universities, one from each state, as well as 12 minority and private colleges, (one additional private institution was added later, bringing the total to 63 colleges). The stated goals of the project were:

- (1) To gather information about drinking practices and attitudes on the campus, and about existing programs and needs in the area;
- (2) to disseminate information about alcohol use and abuse; and
- (3) to encourage the university to focus on the issue of use and abuse, and to stimulate new education and communication efforts (Kraft, 1977, p.2).

The results of the study confirmed the pattern of use by the students that has been reported in the literature above. The result of the project was a collection of suggested ideas that colleges could use in formulating their own programs.

The Whole College Catalogue about Drinking--A Guide to Alcohol Abuse Prevention, was published in 1977 (Hewitt, 1977). This publication was in response to the administrators who recognized the abuse of alcohol on their campuses and were seeking solutions to the problem. In the book, strategies were given to administrators as to how to go about formulating programs, as well as ideas of what other colleges were doing, as this was in response to what the 50+12 project revealed, "higher education administrators wanted to know what was going on at other schools." The first nationwide student organization for alcohol education was formed in 1976. BACCHUS (Boost Alcohol Consciousness Concerning the Health of University Students) was formed at the University of Florida and soon had over 200 chapters on campuses across the nation. In 1982 the Inter-Association Task Force on Alcohol Issues was formed. Among the organizations that comprised this task force were: (a) National Association of Student Personnel Administrators (NASPA), (b) the Association of College and University Housing Officers-international (ACUHO-I), (c) the American College Personnel Association (ACPA), (d) the United States Student Association (USSA), (e) and BACCHUS. The goals of the task force were to develop and implement alcohol education programs on individual campuses, as well as to coordinate efforts that focused attention on the problems of student alcohol abuse. The guidelines recommended a comprehensive campus alcohol policy (See Appendix B). One of the accomplishments of the organization was the establishment of the

National Collegiate Alcohol Awareness Week, held on the second week of October every year on participating campuses (Fischer, 1987). The issue of alcohol use by college students has been the focus of many of the prevention efforts. In 1986 Secretary of Education William J. Bennett shifted the focus toward the problem of drug use by students when he suggested withholding federal funds from colleges that did not have viable efforts to address drug abuse (Meyer, 1986). The Drug-Free Schools and Campuses Act was then instituted. This act provided funds for the development of programs in institutions of higher education. In 1987, under the direction of the Department of Education, a group of educators were requested to develop standards for colleges and universities for use in developing substance abuse programs. Thus the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse was created. These standards have been developed to accommodate a campus wide comprehensive program (See Appendix C). As of 1990 there were 1,300 colleges and universities that were members of the Network and subscribed to the guidelines (Upcraft & Welty, 1990). In 1989 the Drug-Free Schools and Campuses Act was amended to require institutions of higher education to institute programs on campuses in order to qualify for federal funds (See appendix D). The standards of the Network required that an institution implement the following five strategies in developing a comprehensive substance abuse program: 1. Develop alcohol and drug policies. 2. Enforce alcohol and other drug regulations. 3. Provide alcohol

and other drug education and prevention programs. 4. Ensure intervention and referral for treatment students, faculty, and staff. 5. Assess attitudes and behavior toward alcohol and other drugs, as well as the effectiveness of education, prevention, intervention, and treatment programs. The most consistent studies on the state of alcohol and drug programs in higher education have been conducted by Anderson and Gadeleto. The condition of programs has been monitored since 1979. Surveys conducted in 1979, 1982, 1985, and 1991 by Anderson and Gadaletto have revealed trends regarding alcohol and drug programs on college campuses across the country (Anderson & Gadleto, 1991).

The present status of programs was examined a recent study conducted by Anderson and Gadeleto in 1991 in each of the areas that the Network has outlined as being essential for a comprehensive program. The first standard, the development of alcohol and drug policies on campuses was examined in the study. Seventy-one percent of administrators reported conducting a formal assessment of policies, procedures and practices as they relate to institutional liability. The Drug-Free Schools and Campuses Act Amendment of 1989 required institutions of higher education to implement policies and insure that they were distributed annually to each student, employee, and faculty member.

The second standard that the Network recommended was the enforcement of alcohol and other drug regulations. There was little in the literature as to how regulations were enforced within institutions. Goodale

(1986) stated that enforcement of policies should be consistent with educational mission. Fenilli (1987) cited several legal decisions that have made it imperative for institutions to enforce regulations or be found legally liable for any consequences of student drinking or abuse of drugs. Janosik and Anderson (1989) reported in their survey that many institutions lacked in risk management strategies regarding enforcement of alcohol policies that may have exposed them to liability. Anderson and Gadleto (1991) asked the question, what sanction is applied when a student is found guilty of using a false I.D.? Fifty-eight percent of institutions reported that the student was put on institutional probation or fined, this was a decrease from a 1988 response of 75%. Institutional suspension was instituted in nine percent of the cases, down from 12% in 1988, and the violation was reported to an outside agency by 22% of the colleges, comparable to 21% reported in 1988.

The third standard that was examined was the requirement by the Network that the institution provide alcohol and other drug education and prevention programs. This was the only area in which there was abundant research. Alcohol education has been the subject of debate for a long while. Sanford (1968) discussed the need for alcohol education and studies abound concerning various theories of alcohol education (Berkowitz & Perkins, 1987; Brown, 1990; Cook, Lounsbury, and Fountelle, 1980; Dean 1982; Gonzalez, 1989; Lenhart & Wodarski, 1984). As Gonzalez (1990) pointed out, the 1980's was a decade of alcohol education programs on campuses. Abuse of other

drugs was not addressed until 1986 with the advent of legislation, as well as the availability of funds earmarked for the prevention of drugs other than alcohol. Evaluation of these programs had been generally mixed. As Berkowitz and Perkins (1987) suggested, evaluation of an alcohol education program is difficult. If the goal was to measure an increase in knowledge, this could have been done readily enough, however could this constitute a successful program? If the goal was to change attitudes in order to change drinking behavior, how is this measured, and how is the resulting behavior change assessed? Goodstadt and Caleekal-John (1984) discussed the difficulty of evaluating other approaches to alcohol education. If other procedures were taught as an alternative to alcohol use, i.e. relaxation techniques, stress management, social skills training, how was the success of these approaches to be empirically measured? According to Anderson and Gadletto's (1991) findings, the majority of campuses were involved with education and prevention. Almost all, (98%), of the campuses reported current education and prevention efforts on campuses. Ninety percent of respondents believed there was an increased trend toward more alcohol education and prevention on campus. Regarding other drugs, 92% reported current efforts on their campuses with 80% of respondents reporting they believed there was an increased trend.

The fourth standard, which was ensuring intervention and referral for treatment for students, faculty, and staff had shown great improvement since 1979. An increase from 33% colleges in 1979 offering group counseling to

students who are problem drinkers to 72% in 1991, and an increase from 21% to 79% in colleges offering support groups to students whose lives are negatively affected by the alcoholic. Peer counselors were utilized on 46% of campuses, and 80% of campuses trained the paraprofessional staff to deal with students having drinking problems. Sixty-two percent of campuses had alcohol/substance abuse coordinators. This was a substantial increase from the 26% in 1982.

The final standard was, assessing the attitudes and behavior toward alcohol and other drugs, and the effectiveness of education, prevention, and treatment programs. Seventy-one percent of respondents in 1991, had conducted a survey on drinking behaviors of students, 64% on student attitudes about drinking, 55% on attitudes about other drugs and 54% and 46% concerning knowledge of alcohol and drugs respectively. Surprisingly, even with those administrators reporting current efforts underway to address the problem of substance abuse on campus, 74% of them reported in the category of "the same, some, or a great increase," of alcohol-related problems. Eighty-two percent perceived "the same, some, or a great increase," in the frequency of drinking on campus. The use of other drugs was seen as the same or an increased level by 56% of respondents.

There appears to be inconsistency in the literature as to what is effective in abating substance abuse on campuses. Ingalls (1984) described programs as being ineffective, and citing Blane, considered the results of alcohol

education courses as being "spotty " (Ingalls, 1984, p.17). Magner (1988a) reported similar findings, although acknowledging that most campuses have expanded their efforts in the area of substance abuse prevention and education. Gonzalez (1991) in evaluating the overall differences in alcohol consumption, knowledge, or problems, could find no important differences over a five-year period despite the students' exposure to one of the most comprehensive and widely-acclaimed programs in the country. Gonzalez, the founder of BACCHUS, in discussing administrators' search for programs that work, stated:

Little research is available on what actually works and under what circumstances. The irony is that we are research institutions-with no research on alcohol and drug abuse among college students (Gonzalez, cited in Magner, 1988b p. A35).

In discussing a forum of the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse, Robert F. Ariosto stated:

The research we have tends to be survey data. We need to look at the work that's been done and it's effectiveness. Sketchy data indicate peer influence is good, but what is its real impact? (Ariosto, cited in Magner, 1988b p. A37).

This study attempted to address the issue of what works in the area of substance abuse by utilizing a different research design, with a different focus. Before we can decide what programs work, there needs to be a sense of what exists out in the field. By using a descriptive case study method, and describing what these programs consist of in depth and how they function

within their respective organizational frameworks, practitioners and researchers will be able to build the data base from which to design programs in the future.

CHAPTER 3

METHODOLOGY

This chapter outlines the population samples used in the study and the rationale for selection of this population. The research design will then be presented along with the reasons for selecting this particular research design. The method of data collection procedures and data analysis with regard to the purpose of the study will also be presented.

Description of Population

The population consisted of the three universities in the Oregon State System of Higher Education (OSSHE). These three universities were selected for this study in order to provide a rich base yet limit extraneous variables. No attempt was made to generalize findings beyond this population.

The unit of analysis was the substance abuse prevention program within each university. Programs were investigated with respect to the following common activities, processes, and policies:

1. The prevention activities that each program was involved with in addressing the area of substance abuse on campus among students.
2. The education activities of the program concerning student substance abuse

3. The intervention activities of the program with students engaged in substance abuse.
4. The referral policies and procedures of the program towards those students abusing drugs and alcohol.
5. Other activities that the program was engaged in as described by participants in this study, or secondary source materials.

Design

The research design was a qualitative, descriptive, multiple case study. As mentioned in the review of the literature, there is little research to reveal what is effective in the area of substance abuse prevention among college students, and the research that has been done has been of survey design, (Magner 1988b; Ponder, 1987). A qualitative research design was chosen because of its value for those situations in which the relevant variables have yet to be identified (Marshall, 1985, cited in Marshall & Rossman 1989). The descriptive method was chosen to secure a comprehensive knowledge base from which practitioners and researchers may draw in designing or evaluating programs. Yin (1989), defined the case study as,

" Appropriate for those instances that investigate a contemporary phenomenon within real-life context, when boundaries between the phenomenon and context are not clearly evident, and when multiple sources of evidence are used." (p. 23).

The purpose of this study was not to evaluate the programs, rather to describe them and how they "lived" in their respective organizational frameworks. Multiple cases were chosen to lend robustness to the design (Yin, 1989). Also to define any patterns that might emerge across cases.

Data Collection Procedures

Data Collection Instrument

As is the nature of many qualitative designs, the primary data collection instrument in this study was the researcher. Guba and Lincoln (1981) state "The naturalistic inquirer refuses to manipulate his environment, seeking rather to understand how the environment acts on itself, as well as how the inquirer causes it to behave in different ways " (p. 129). In keeping with the flavor of this type of research the abilities of the researcher to collect, analyze, and report the data through her personal perceptions rely on qualities of that researcher as the instrument. Guba and Lincoln further assert that the "instrument" (Guba & Lincoln, 1981, p. 128) in this form of research possesses the qualities of responsiveness, flexibility, adaptability, with a holistic emphasis, and the ability to process immediately. The researcher's academic training and professional experience as a counselor encompassed these qualities. The

ability to enter a situation without a priori bias is at the core of the counseling process. This process also demands the ability to detect relevant information from exceedingly unstructured data given by a client in very subjective terms, frequently in an emotionally charged atmosphere in order to formulate diagnosis and treatment. This type of training and experience was well suited for conducting this type of research design. The ability of the researcher to seek relevant patterns from substance abuse policies and procedures given the nature of the field is assured by the researcher's experience and training in addictionology. The researcher was a trained and credentialed substance abuse counselor. This allowed her a framework of data interpretation that comprehended the components of substance abuse and addiction processes and lent validity to the researcher as instrument.

Interviews

The means of data collection was interview plus record and document analysis. Interview criteria were open-ended, semistructured, timed, tape recorded interviews (see Appendix D for interview guide). Interviews were conducted on site. The role of the interviewer in the research setting was as an onlooker as opposed to a participant-onlooker. The portrayal of the researcher was overt, as was the intent of the research. The focus of the observations and interviews was of a broad, holistic nature (Yin, 1989).

Interviews were transcribed, and then read for differences and similarities across case as well as within case. Duration of interviews generally was one hour.

Interviewees

Interviewees were program administrators, employees of the program, and other relevant persons identified by document analysis and interviews. Therefore the number of persons interviewed varied from program to program as did the appropriate questions for each person's position relative to the program.

Record and Document Analysis

A case-study aggregation method was used with regard to those documents and records that enabled a complete description of the program. Guba and Lincoln (1981) described a case-study aggregation as a form of document analysis in which:

The investigator may be concerned with a collection of documents that will, in general, display neither the same format, organization, of content categories but will deal with different instances of the same or a like phenomenon. That is to say, the documents are case studies of similar events, programs, settings, situations, but they do not all concern themselves with the same phenomenon. (p. 238)

In the context of this study, this researcher examined records and documents that described different aspects of the substance abuse programs. Some examples of documents and records included in the analysis were:

- Institutional policies and methods for dissemination
- Funding proposals
- Organizational chart of program and organizational structure
- Job descriptions of program employees
- Employee resumes
- Mission statement of organizational framework and program
- Program goals
- Annual reports of program
- Description of educational activities
- Network affiliations of program
- Written prevention plan activities
- Other documents relevant to the program description

Data Analysis

All interview tapes were transcribed in entirety. In addition, the researcher logged impressions immediately after each interview to record nuances and impressions that were considered relevant to the interview. Case-study aggregation analysis was used to complete program description as well as identify additional interviewees.

Cases were analyzed for patterns within cases as well as across cases. Categories of coding the interviews evolved partially from the interviews. There was a base coding system to organize data initially, (e.g. source of information, coordinator, administrator) as advocated by Marshall and Rossman (1989).

Because the programs were not being evaluated, cross case analysis consisted of observations of the researcher regarding similarities and differences. The impact of the organizational structure on the program was treated as a subjective observation on the part of the interviewee.

CHAPTER 4

FINDINGS

Interviews were conducted at the three universities and consisted of those individuals that were identified through the interview process, by staff members involved in the substance abuse programs. Six interviews were conducted at university A.

University A

Description of Program, Research Questions 1 & 2

The substance abuse treatment program at university A was identified by the coordinator of the peer-helper program as consisting of four components, a peer-helper program, a one-day alcohol information school, an addictive behaviors treatment program, and a substance abuse policy making committee for the university.

The peer helper program, alcohol information school and the addictive behaviors treatment program were all housed both physically and administratively in the student health center. The peer helper and alcohol information school were physically and administratively in the health promotion

department of the student health center, and staffed by two health educators. There was an office assistant assigned to that department to provide clerical support. The addictive behaviors treatment program was on another floor of the health center, under another department of the student health center, specifically the Mental Health Center. The policy making body consisted of eight members, four of whom were students, and the remaining four were faculty and staff from various departments.

The peer-helper program. The peer-helper program was staffed by a coordinator who had a background in psychology and counseling. The coordinator trained 16-28 student peer helpers per term. The training focused on five facets, peer listening, peer education, the promotion of campus-wide events, marketing of the program, and a performing arts group to advertise the program. The peer listening facet taught listening skills to the peer helpers and prepared them to work in the peer-helper office located in the student health center and assist students on a one-on-one basis with personal problems, some of which might be related to substance abuse. The peer education facet trained the peer helpers to give presentations to on and off-campus groups on health related topics. The promotion of campus events used students in various departments to produce and stage events on campus related to topics on health as well as substance abuse, for example, they worked on events for National Collegiate Alcohol Awareness Week. The performing arts group was in the process of forming and the intended goal of this facet was to use theater

arts majors to work in productions that advertised health-related topics. The students were trained in all facets of the program. They then decided which aspect of the program on which to focus. This decision was based on their interests and the department from which they were taking the class. In subsequent terms the students received practicum credit for the class in their department. Departments that were represented were marketing, business, psychology, sociology, human development, and others. The peer educators had an office in the student health center from which they used their listening skills in an effort to refer the student to the most appropriate source for their problem. The coordinator reported that the students were the ones who did the peer-counseling and referrals, as opposed to the professionally-trained coordinator. The coordinator explained the rationale for this:

The students are like a grassroots effort, they go out and they're with their friends, they see other students in their everyday setting. They're the ones that do the referral not me (personal communication, February 8, 1993).

The peer helper program was in its third year of operation.

The Alcohol Information School. The alcohol information school, (AIS) was staffed by the director of the substance abuse prevention program in the health promotion department. It had been in existence since 1984. Students were mandated to attend by the dean of students for infractions of the student conduct code in which alcohol was a factor in the student's behavior. Since the school's inception it had served 125 students. AIS is a one-day school that is held on Saturdays. Students are given information on alcohol effects on the

body, as well as responsible drinking guidelines and decision making. The director of health promotion conducted formal alcohol assessments of the students enrolled in the school. These were based on standardized evaluation instruments. The recidivism rate, was one criterion for measuring effectiveness. There have only been three repeaters in the course of the school's existence. The other criterion for effectiveness was the results of a one-time study conducted in 1986-87 school year in which knowledge gains and the retention of that knowledge was tested. The results showed considerable knowledge gains of the students attending the school as well as substantial knowledge retention over a period of three months.

Addictive Behaviors Treatment Program. The Addictive Behaviors Treatment Program was staffed solely by the director of this program, a clinical psychologist who devoted half-time to substance abuse treatment and half-time to general mental health issues. The program offered individual and group outpatient therapy for students affected either directly by their own use, or indirectly by someone else's substance abuse. Alcohol assessments and referral to other agencies were also offered. The director specified that the program is different from the peer helper program because, "one of the distinctions of this program is [that it is] called therapy as opposed to self-help or support," (personal communication, March 10, 1993). The director related that the next academic year the position would be devoted full time to substance abuse therapy. The director did very little prevention work:

I do less prevention work because that niche is being filled so nicely by the work [the director of the health promotion department] is doing. I was hired specifically to look at treatment (personal communication, March 10, 1993).

At the end of the first year of operation, criteria for determining the existence of a student's substance abuse problem were behavioral, which were consistent with the criteria used in the health promotion department, however in this program DSM IIIR (American Psychiatric Association, 1987) criteria for substance abuse were also used (See definition of terms for criteria). This was the program's first year.

Policy making committee. The policy making body for the university on substance abuse issues consisted of a committee of eight members, four of whom were students and four faculty and staff. The committee was formed in 1987. The committee existed to create and enforce policies pertaining to the use of alcohol and drugs at the university, by faculty and staff as well as students. The mission statement of the committee read as follows:

The [committee] has, as its mission, the desire to minimize the effects of substance abuse as it impacts the life of the University and community. Therefore [the committee] will:

1. Develop a comprehensive, ongoing substance education prevention program for the campus.
2. Serve as a coordinating body for substances abuse programs between the campus, the community, and the state in order to avoid fragmentation or duplication, and to make the best of available resources.
3. Advocate the establishment and maintenance of assistance programs for students, staff, and faculty (personal communication, February 19, 1993).

The committee was responsible to the university president, and overseen by the vice president of student affairs who acted as liaison between the committee and president. The committee had not been active during the current academic year under study, 1992-1993. The director of the AIS, the coordinator of the peer-helper program, as well as the chair of the policymaking committee all voiced the opinion that the university administration was not responsive to input from the committee on matters that were within the scope of the committee's duties after the initial guidelines were drafted that brought the program into compliance with the federal legislation. These three respondents felt that this attitude on the part of the university administration was the reason for the inactivity of the committee that year.

Research Questions 3-11

The above program description dealt with the first two research questions, namely the description as well as the organization of the program. The following discussion deals with the remaining nine questions.

Research question 3. "What impact has the 1989 Drug Free Schools and Campuses Act had on substance abuse programs in OSSHE universities?" In this university, there were varying degrees of perception as to the impact of this Act. The vice president for student affairs disclosed no awareness of

impact, but the treatment specialist and the peer-helper coordinator related that the grant that stemmed from the Act created their positions as well as the office specialist's position, and therefore they deemed it as having a major impact on the program. One of the faculty members on the policymaking committee believed the Act directly responsible for the inception of the committee's mandate to re-write the policies on substance abuse for the university. One of the program directors suggested a profound impact, pointing out that the AIS had more attention turned to it, which in turn led to the university creating a treatment program in addition to a prevention program as a result of the Act:

... and that in turn led to a recognition that we had to do more than just prevention, we had to do treatment also. I think overall it's just an increased awareness of how big the problem is, that the spotlight comes back more on us and we get more requests for assistance (personal communication, March 10, 1993).

Research question 4. "What effect has this legislation had on the organizational structure of the substance abuse prevention programs in OSSHE universities?" In this case, there was little recognition of the organizational structure being affected by the legislation. Except for the impact of funding as a result of grant monies that were made available by the Act. The director of the addictive behaviors program described the most profound impact as being in the inception of the treatment phase of the program:

I think it influenced in hiring me, and I think that's the only change in the organizational structure, because everything else was here [in the health center], we've been an organization that's been here for a long time (personal communication, March 10, 1993).

Research question 5. "How is program effectiveness defined on the various campuses and under the various organizational structures?" The director of the Addictive Behaviors Treatment Program was still grappling with this question in formulating the definition of effectiveness for the program as it was a new program. According to three of the interviewees, the results of a CORE survey instrument administered to the university student population was cited as one measure of effectiveness. The CORE instrument is a national alcohol and drug survey designed and compiled by the Office of Measurement Services at the University of Minnesota for the U.S. Department of Education. The survey measured college student attitudes, opinions and usage of drugs and alcohol. The survey was administered as a pretest and posttest to the students of the university. The results were based on a pretest random sample of 517 and a posttest random sample of 446 students at university A. The pretest was administered in fall of 1990 and the posttest administered in spring 1992. The results revealed a decline in students who reported binge drinking on this campus. In reflection on the results of the survey as a definition of effectiveness, the peer education coordinator said:

Now was my program the direct cause of that? There's no way to prove that you know, I don't know. For me personally effectiveness is being able to see the students that I work with directly in training change what they're doing, because that may go out to other students (personal communication, February 8, 1993).

The vice president of student services, who oversees the policymaking committee gave another dimension to this dilemma:

...but again it's hard to get a handle on because your population changes all of the time. If you want to measure your group for one year and then three years again, your whole population is different (personal communication, April 1, 1993).

Overall there was a recognition that effectiveness was a difficult dimension to measure in this area. Some of the varied answers were: number of students attending events, number of arrests on campus, number of students successfully completing treatment, decreased incidents of vandalism, personal testimonies from students as to an awareness of prior destructive behaviors resulting from alcohol and drug use, and sorority women recognizing that they are not comfortable in situations in which the men are drunk and not in control.

Research question 6. "What do respondents feel are the advantages and disadvantages of their particular organizational structure? University A's program was housed physically and financially under the organizational structure of the student health services. Some of the advantages that were attributed to this structure were, the ability to maintain a higher level of confidentiality by being able to communicate with other staff who were in the same building, the recognition that students would naturally seek the health center as a source of information related to substance abuse problems as a health issue, and the access of medical and ancillary personnel to create a comprehensive treatment plan for the student. The organizational structure was also lauded as being an advantage for the program by virtually all of the interviewees because of the supportive attitude of the health center director toward the program.

The disadvantage of being under this organizational structure included the inaccessibility to the main student body, such as the student union where there is more of a traffic flow. There was also a concern expressed that locating the program under one roof would give the impression that the problem of substance abuse was not a campus-wide issue. Another disadvantage, mentioned by the director of the addictive behaviors treatment program, was the possible stigma of being under the structure of the mental health clinic.

Research question 7. "How is staffing and funding different under the various organizational structures?" The prevention program was staffed under the health promotion department. The consensus was that alcohol problems were addressed in the broader prevention context of wellness issues, and health concerns. The addictive behaviors treatment program was under the mental health department of the student health center, and staffed by a clinical psychologist with a background in addictive disorders. The AIS was staffed solely by the director of health promotion with clerical support from one office assistant. The policymaking body was comprised of a cross section of personnel of the campus.

Funding for the program began for the peer helper program and the addictive behaviors treatment program from a (Fund for the Improvement of Post-Secondary Education) FIPSIE grant obtained in 1990. The programs were then institutionalized under the budget of the health center, The director of the health center described this as an advantage, as the funds for the

program were paid for with the students' health center fees and not subject to state financial budget constraints, or tuition. This will be further discussed in cross-case analysis.

Research question 8. "How is the guiding philosophy of the substance abuse program different under the various components of organizational structure? The philosophy was determined by the definition of the existence of a substance abuse problem with a student. This definition remained consistent across structures. All respondents described as indicators behavioral signs, problems with school, family, friends, job, self esteem. The addictive behaviors program director described these also in addition to the DSMIIIR (American Psychiatric Association, 1987) criteria (See definition of terms) as being used to diagnose addictive or abusive patterns.

Research question 9. "What is the organizational rationale behind the substance abuse programs on the various campuses? The administrator that made the determination of locating the program in the student health center stated that the reasons for locating the program under the particular organizational structure were:

One was there was interest in doing the program there, the [director] of the health promotion department has had an interest in substance abuse and working with people with alcohol issues. Secondly, prior to that the whole area was diffuse, it was in different places, we had a person in the dean of students office who worked with the [issues]. ..I think the second reason was that the staffing and the resources were more available in the student health center than they were in other areas (personal communication, April 1, 1993).

The vice president of student services felt that the main criteria for placing a program under a particular organizational structure was the staff who would be involved in the program, and that the structure was secondary to the success of the program if the personnel were knowledgeable and dedicated.

Research question 10. "What are the typical sources of intake referral on the various campuses?" The main sources of referral for treatment were described by the treatment program director as being self referral. The Alcohol Information School gained referrals from the dean of students, from those students who had broken the conduct code. The peer-helper program, as the coordinator stated above, gained the referrals through the contacts the peer helpers made in the college through their living groups, classes and personal contacts with other students on campus. Other sources were identified as residence hall advisors, student affairs personnel and faculty.

Research question 11. "How does the organizational structure affect the referral of clients to other agencies?" The AIS received education and assessment referrals from the dean of students. The AIS director then referred to the treatment program or outside agencies depending on the individual's needs.

From the peer-helper program, peer helpers referred students to either outside agencies or the university treatment program. The treatment program director also referred students, and stated one caveat used in referral of students to outside agencies was not to refer a student, who was experiencing

individualization issues, to a family-oriented treatment facility. Other considerations that were voiced by the treatment director were financial and the geographic location of the outside agency. Aside from the treatment director's clinical considerations, there was no evidence that the organizational structure affected the referrals to outside agencies.

University B

Description of Program, Research Questions 1 & 2

The program at university B was physically located in the counseling center. Services that the program provided were identified as prevention, assessment and referral. These services were provided by means of a peer-helper training program, a substance abuse program, a policymaking committee for the university, and a Chemical Health Program for athletes. The peer-helper program, as well as the substance abuse program were staffed by the counseling center. The policymaking body was chaired by the assistant director of the counseling center. The Chemical Health Program for athletes was housed under the athletic department and staffed by the athletic trainer.

The peer-helper program. The peer-helper program was located in the counseling center, and was staffed by the assistant director of the counseling

center who served as the coordinator of that program. Other staff that were involved in the peer-helper training were the director of the Student Health Services and a faculty member in Health Studies who also served on the policymaking committee. Literature on the program identifies it as being sponsored by the Counseling Center, Student Health Center, Health Studies Department, and Office of Student Development. The peer-helper program had four workshops, three of which dealt with substance abuse issues in conjunction with the main topic of the workshop and the fourth with general diversity issues. The titles of the three workshops were, "Sexual Decision Making, (HIV and STD Prevention)," "Sex in Dating: When is it Rape?," and "Identifying and Helping a Troubled Friend." Substance abuse was addressed in each of these topics as being a major component. The peer-helper program also had an Absent Professor Program. In this program the peer educators would present one of the four workshops at the request of the professor if the professor was going to be absent from that class. The peers were also available to present the workshops to other interested groups both on and off campus as requested. There were 12 peer helpers at the time, six of them were trained as substance abuse peer helpers and six were general lifestyle/diversity peer helpers. The students were from such departments as, health, psychology, general studies, and speech communication. The students received three credits per term in either health studies, psychology, or sociology.

Substance abuse program. The substance abuse program was staffed by one full-time coordinator whose professional background was in social work. The coordinator stated that the program offered assessment, referral, education, consultation and prevention activities in the form of outreach. The coordinator stated that the program offered treatment to the extent of making the student aware of his/her level of risk and/or their diagnosis and then made the appropriate referral, "We don't do alcohol and drug treatment" (personal communication, March 17, 1993). Other staff that were involved on a part-time basis were the counseling center director and the director of the health center both of whom also did alcohol and drug assessment and referral. Prevention was also addressed by course offerings. Two courses were offered once a year, one titled, "Alcohol and the College Student," and the second, "Other Drugs and the College Student." The director of the counseling center taught these classes.

Policymaking body. The policy making body consisted of a committee of 12 members. The committee met monthly. It was formed in 1987 from a task force and started meeting regularly in 1990. The chair of the committee was the assistant director of the counseling center, who was also the coordinator of the peer-education program. The policymaking body reviewed university policies to insure they were consistent with the goals of the university.

Chemical Health Program. The Chemical Health Program for athletes was in it's first year. The program was housed under the athletic department

and staffed by the university athletic trainer. It consisted of a consent and release form that all athletes were required to sign as a condition of participating in the college athletic program. Under this program, the team physician could require the athlete to undergo urinalysis drug testing and/or assessment for "reasonable suspicion." Trainers, coaches, other athletes or others may meet with the team physician to present their reasons for suspecting the athlete of drug or alcohol use. Upon agreement of the existence of "reasonable suspicion," the team physician could then order either an assessment and/or urinalysis for the athlete. There were also regularly scheduled educational presentations that the athletes were required to attend throughout the year.

Research Questions 3-11

The above program description for university B answers the first two research questions regarding the description of the program and organizational structures of the program. The remainder of the research questions are answered as follows:

Research Question 3. "What impact has the 1989 Drug Free Schools and Campuses Act had on the substance abuse prevention programs in

OSSHE universities?" In response to this question there were different degrees of perception as to whether there was any impact at all. The chair of the policymaking body for the university stated:

Upon receiving the Act the first thing we did was revise our policy so it was consistent. And it seems to me that one of the things that we did was that we did make sure that when we instituted our peer program, that we addressed the how to, so there were actually specific outcomes, not just policy changes, but policy changes that produced specific outcomes (personal communication, April 4, 1993).

The coordinator of the peer-helper program stated that the Act did not impact the implementation of that program at all, as it was going to be instituted anyway. The view was shared by the counseling center director and the coordinator of the substance abuse program that the Act made substance abuse more of a priority on campus among the administration. The Chemical Health Program director for the athletes recognized no impact.

Research question 4. "What effect has this legislation had on the organizational structure of the substance abuse prevention programs in OSSHE universities?" In university B, there was not much recognition of effect on the organizational structure, except in the policymaking committee. There were employee assistance members added to the committee in response to that Act. There were a couple of references made to the paperwork that the Act generated, however that was the only recognition.

Research question 5. "How is program effectiveness defined on the various campuses and under the various organizational structures?" The

coordinator of the peer-helper program said that the definition of effectiveness for this program was still being formulated, as the program was in its first year.

The program evaluations completed by the audience of the peer-helper presentations were cited by the substance abuse coordinator and the director of the counseling center as one means by which effectiveness was measured.

The director of the health center cited a decline in vandalism as well as overall attitudes among students towards substance abuse as additional means for measuring effectiveness. The director of the counseling center talked about the incidence of substance abuse problems as reported by counselors in the center, as well as in a CORE survey conducted in 1992:

We know from our surveys, that 38% of our student body engages in binge drinking. . . so if we have at all a representative sampling [of clients in the counseling center], and I suspect that we might even have a little higher utilization rate . . . Students come to us generally because something is not going okay. . . It would seem that upwards of 50% of our clientele would likely have some aspect of difficulties with using alcohol or other drugs. . . We had a utilization rate report of under five percent when we first began to keep our records . . . Now close to fifty percent though are noted. . . Somewhere between 20-25% of our student [body] acknowledge difficulty with alcohol or other drugs at least in some aspect of their lives. So that's another way to evaluate . . . (personal communication, March 17, 1993).

In general, while there was variation in answers about the measurement of effectiveness, the evaluation forms that were filled out after the peer-helper presentations were cited as being useful.

Research question 6. "What do respondents feel are the advantages and disadvantages of their particular organizational structure?" The director of the counseling center stated that the advantages of the program being situated in the counseling center were that there was a full range of mental health services available, and that the counseling center was better able to establish relationships with treatment resources in the community. The coordinator of the substance abuse program stated that because the counseling center was also the testing center on campus, there was not the problem of students being stigmatized by going into the counseling center. The coordinator also addressed this aspect by stating that the alcohol assessments were given in a framework of health prevention. The attitude that was promoted was that the alcohol assessment was comparable to having cholesterol screening done, as a health issue. Overall, the program being in the counseling center was seen as an advantage because of the staff expertise. The athletic trainer put it this way, "The idea of a campus is that there is supposed to be a lot of experts here, hopefully we are taking advantage of those experts" (personal communication, April 16, 1993).

There were some disadvantages seen in location of the center also. The idea that the mental health center was viewed by some students as being pathology oriented as opposed to prevention oriented. There were issues of boundaries and confidentiality concerning the counselors, peer educators and students that were still being defined. The athletic trainer stated that by

operating in the role of enforcing the Chemical Health Program for the athletes, the relationship of trainer and athlete is compromised. Two of the respondents, the coordinator and the peer-education coordinator related one drawback of the location of the program was awareness of the program's existence on campus, as being in the counseling center obscured it from view.

Research question 7. "How is staffing and funding different under the various organizational structures?" Funding for the program came out of the counseling center's budget which was under the health center's budget. The counseling center and the student health center each had directors and operated fairly independently, however the director of the student health center oversaw the funding for both centers. The health center director had a dual appointment, half-time at the counseling center and half-time at the student health service. The director of the student health center had a background in nursing and did assessments, referral and coordinated substance abuse prevention education on a regular basis for the athletes.

Both the director of the counseling center and the coordinator of the peer-helper program were clinical psychologists.

The athletic trainer had some background in substance abuse stemming from paraprofessional seminars and workshops. The athletic trainer also served on the policymaking committee. The chair of the policymaking body was a faculty member in health sciences and also did training of peer educators.

Research question 8. "How is the philosophy of substance abuse different under the various components of organizational structure?" The philosophy of what constitutes substance abuse was somewhat varied. All of the respondents cited impaired functioning in any area of the student's life as a criterion for the existence of problem use. The counseling center director reported using several formalized assessments in determining the extent of a substance abuse problem, they were, the "Michigan Alcohol Screening Test (MAST)," "Alcohol Use Survey," and "Drinkers Profile Checklist." The substance abuse coordinator reported the use of behavioral criteria in determining the existence of a substance abuse problem.

Research question 9. "What is the organizational rationale behind the substance abuse programs on the various campuses?" The student health center director related that the counseling center was under the student health center at one time. However, the administration decided to separate the two about four years ago. The rationale cited for separating the two departments was the acquisition of FIPSIE grants, written by the counseling center director which provided for the hiring of the substance abuse coordinator.

Research question 10. "What are the typical sources of intake referral to the program on the various campuses?" The director of the counseling center reported that most of the referrals were self-referred, from family or friends, or from residence life program. Other referrals cited were from the university disciplinary system, and other offices in student services, and occasionally from

faculty. The peer-helper coordinator recounted that the most common source of referral was in-house referral from other counselors to the peer-counseling program for evaluations. The substance abuse coordinator mentioned faculty members as the most common source of referral with the in-house referral from counselors in the counseling center as the second most common source. The director of the student health center stated that the most common source was the residence life program.

Research question 11. " How does organizational structure affect the referral of clients to other agencies?" The counseling center director stated that all of the counselors do an informal assessment of alcohol and drug problems routinely on their intake sheet for all students who are clients in the counseling center. Before there would be any type of referral there would be a formal assessment done for the student.

The athletic trainer stated that the protocol of the Chemical Health Program was that the athlete was referred to the counseling center for assessment before referral, and that the counseling center would handle the referrals.

The director of the student health center related that some of the physicians at the health center had some specialized treatment from a medical treatment facility in the community and this enabled them to be able to identify students who might have a substance abuse problem and to refer them for assessment.

University C

Description of Program, Research Questions 1 & 2

At university C, the program was characterized as a decentralized program. There was a treatment component, prevention component, a coordinating body in the dean of students office, and a peer-health advising component.

Treatment program. The treatment program was staffed by a counselor in the counseling center and two half-time doctoral interns in counseling psychology. The treatment director had a background in social work and has been employed in the capacity of substance treatment for seven years on this campus. The director and the doctoral interns do assessments, treatment, and referral. The program offered individual and group counseling specific to alcohol and drug issues. The program also offered group therapy for students who were adult children of alcoholics. The treatment director also taught a course titled "New Directions" that dealt with issues of substance abuse for students.

Substance Abuse Prevention Program. The prevention program was titled the Substance Abuse Prevention Program (SAPP). This program was staffed by two full-time faculty members and three part-time staff who served in an as needed capacity to grade papers. The organizational structure was that

the program was physically housed in the Leisure Studies department, sponsored by the continuing education center, and student services. This was described by the director as a "sort of tripod structure." The program consisted of three components, course offerings, a practicum for students interested in the area of substance abuse prevention, and conferences and workshops offered to students and the community on a credit or non-credit basis. The program was started three years ago. Its director was a faculty member in Health Education. The coordinator had a background in marketing; the three part-time graders had backgrounds in the public schools.

The course offerings were offered at either undergraduate or graduate level under Human Development. Some of the general course offerings for academic credit were "Drugs in Society, Chemical Dependency, Resources for Adolescent Substance Abuse, Chemical Dependency."

The practicum component was offered to students interested in certification as substance abuse counselors. The program had entered into an agreement with a local substance abuse treatment facility to provide education for partial fulfillment of requirements of a year-long internship in chemical dependency counseling.

The third component was the conferences. There were also practicum students that were tourism majors in Leisure Studies department that helped plan and set up the conferences. The director stated that they held 14 three-day conferences per year at hotels in the area. The conferences were attended

by an average of 700 persons per conference. Students could attend all three days for two credits or two days for one credit. The conference fees were \$80.00 per conference for students other than at this university, \$99 for non-academic credit participants and regular tuition for students from that university. Exams were given at the conferences for those taking the conference for credit and graded by the part-time graders.

The coordinating body. The coordinating body was the responsibility of the dean of students office. This consisted of the assistant dean of students and the vice provost for academic support and student services. The vice provost was the coordinator of all of the services on campus. The assistant dean of students was charged with coordination of alcohol and drug abuse prevention activities for the campus. The assistant dean of students also coordinated the Drug-Free Schools and Campuses Act compliance for the university, and its biennial review , provided workshops and materials campus-wide to address prevention, intervention and resources, and to promote and coordinate the "New Directions" course, a curricular course that addressed the issues of alcohol and drug use. The assistant dean of students also oversaw the budget for alcohol and drug abuse prevention within the dean of students office.

Peer-health advising program. The peer-health advising program was housed in the student health center, in the Health Promotion department. The program consisted of a coordinator and a director, both of whom had teaching

backgrounds in the public schools as well as academic and professional backgrounds in health education. The program consisted of 24 student peer-advisors who received practicum credit for putting on presentations for living groups, both on and off campus. They were also involved in designing a health promotion activity on campus for the second term of the two term practicum. The peer-advisors also had an information office that was staffed by the student peer-advisors to give information to students on a drop-by basis. The director and the coordinator both supervised the students, gave presentations on and off campus, and coordinated the health promotion activities with the students.

Research Questions 3-11

The description of the program at university C answered the first two research questions. The first two research questions called for a description of the program and a description of the organizational structure under which that program operated. The remainder of the research questions were addressed as follows:

Research Question 3. "What impact has the 1989 Drug Free Schools and Campuses Act had on the substance abuse prevention programs in OSSHE universities?" The peer-advising program personnel did not report any

impact, indeed they were not familiar with the Act at all. The assistant dean of students related that it impacted that office's duties greatly,

It pulled a lot of my time. When we received the dear colleague letter that came out, I think in February 1990 or something, and pulled a lot of time and staff time to figure out what and whom was supposed to be working on getting that ready to go. After that, I've had primary responsibility for updating information and making sure it's accurate. And again I've pulled time away [from] other possible prevention education types of activities, [for] bi-annual reviews and other examples (personal communication, February 26, 1993).

The treatment director related that the university became involved in treatment in 1986 and that the Act really had no real impact on the program. The director of the prevention program described some impact,

Its had some impact as we're serving a lot of those needs. One thing the grants say you're supposed to have a program in place for students. So we're the program and the place (personal communication, February 17, 1993).

Research question 4. "What impact has this federal legislation had on the organizational structure of the substance abuse prevention programs in OSSHE universities?" The overall consensus was that there was no real impact on the organizational structure. The assistant dean of students related that the 1989 Act was similar to the Drug Free Workplace Act of 1988 in philosophy and that compliance with one Act would overlap with compliance with the other, however the dean cited some impact on the organizational structure,

I think it's a dual edged sword. On one side it's brought more visibility and credibility and we use it as a leverage saying that this is one of the reasons why we have to continue the efforts at this level of intensity. The down side is that we have assumed responsibility for the on-going coordination, supervision, and monitoring and all of that without any additional resources being allocated. (personal communication, February 26, 1993).

Research question 5. "How is program effectiveness defined on the various campuses and under various structures?" The director of the treatment program stated,

If you can see that a student is willing to make changes, and whatever those changes are in a positive direction actually, then I think we are effective. I don't define effectiveness by abstinence. For some students I define [effectiveness] by abstinence, but not by everyone (personal communication, April 23, 1993).

The coordinator of the prevention program cited the number of people attending the conferences and also the outcomes of the conferences.

I think that we measure it on our evaluations that we do every time, we measure it by the papers that we get, the quality of the papers that are turned in to us, what the students have actually gotten out of the conferences, taken away with them, and how they are applying it to their daily lives, or professional lives (personal communication, February 17, 1993).

Both the director and the coordinator of the peer-advising program referred to evaluations that were given after peer-advisor presentations as means of assessing effectiveness. The coordinator also cited a cultural definition, "In an ideal world effectiveness I think would be this cultural shift, whereby alcohol consumption to excess is not acceptable."

The assistant dean of students regarded effectiveness in this way,

The way I assess effectiveness is whether or not we are reaching the campus community, and there's really no way of gauging that. [Also] whether or not I'm seeing more ownership by different campus units and departments about wanting to work on that, or at least recognizing that it's a problem (personal communication, February 26, 1993).

The assistant dean addressed effectiveness for the organizational structure as follows,

I don't know if we even talk in those terms. I think that we identify as an on-going need based on anecdotal information. . . with number of reports, problem behaviors, what are the consequences that we can see that alcohol and drug use is a contributing factor, the number of referrals in the counseling center, the percentage of cases that indicate that they are either in [the counseling center] as a primary concern of being drug and alcohol or secondary, or something else[that] comes up in the interview process, whether or not we in fact identify whether or not what we are doing is effective is very subjective. We recognize the need for a lot of the efforts we do because that seem to be trouble shooting things that could get out of hand and become strong problems (personal communication, February 26, 1993).

The director and coordinator of SAPP both reported that the academic department that housed them relied on numbers mostly to define effectiveness.

The director referred to the year end report that the department requested of all faculty that asked for number of conferences, course credits generated, publications, number of practicum students, and on which committees the staff serves.

The treatment director, felt that the counseling center defined effectiveness in the same manner that the treatment program did. The director and coordinator

of the peer-advising program related that they felt that the organizational structure relied on evaluations from students for a measure of effectiveness, but were unclear on the health center's exact definition of effectiveness.

Research question 6. "What do respondents feel are the advantages and the disadvantages of their organizational structure?" The assistant dean discussed the advantage of the policymaking body being overseen by the vice provost's office as garnering more support from top administration and a wider scope. The treatment director reported that the advantage to being housed in the counseling center was that confidentiality could be maintained and that there was no conflict with dual relationships, meaning if the program were housed in the dean's office where there were issues of student conduct and sanctions involved. The director reported no disadvantages with the organizational structure.

The director of SAPP related that the advantage of the organizational structure was that there was more freedom to operate with other universities and departments. The disadvantage for this structure was cited in the fact that the program did not have its own department. The director suggested that with a department, they could then offer a degree in substance abuse treatment and / or prevention. There were three community colleges in the area that offered two-year degrees in the field. The director felt this program would have been able to accommodate those students by offering them a four-year degree.

The peer-advisor coordinator cited the program's organizational structure as adding legitimacy to the presentations,

I think that the health center being sort of medical institution on campus gives our programming some clout. I mean in this culture the M. D. and the medical model holds a lot of weight. So having that as a by-line for all your activities I think even if it's subconscious, give some of what's the word, legitimacy to what we're doing (personal communication, March 5, 1993).

The disadvantage cited was, that overall health issues overrode alcohol and drug issues as a primary focus. The director of the program saw the advantages of the organizational structure as being reliant on student fees as opposed to general fund revenues, and the flexibility of the program stemming from the support of the health center administration. The disadvantages that the director cited were that recruitment was more difficult because of the recent elimination of the academic department that granting the credit and also that there was little visibility for the program.

Research question 7. "How is staffing and funding different under the various organizational structures?" The funding for the SAPP was provided by the Continuing Education department. The director had a half-time appointment with the provost's office and half-time in the department of Leisure Studies. The program was overseen and partially financed by the provost's office, housed in Leisure Studies. The department of Continuing Education provided clerical support and funding also. All of the other salaries were paid from proceeds of the conferences. The director stated that except for his salary the program was self-supporting.

The peer-advising program was staffed by two health educators and was financed as formerly stated from student health center fees. The treatment program was funded through the counseling center and staffed by the director and two half-time graduate student doctoral fellows in counseling psychology.

Research question 8. "How is philosophy of the substance abuse program different under the various components of organizational structures?" Individuals were asked what criteria they used to assess whether a student had a substance abuse problem. The treatment director related that behavioral criteria were used to assess a student's degree of involvement with alcohol or drugs, along with formal assessment instruments. The director of SAPP reported that all of the conferences had designated "safe rooms" staffed by counselors who would assist any of the attenders who might experience emotional discomfort triggered from the content of the conferences. The director of the peer-advising program also reported using behavioral criteria. The assistant dean of students related that behavioral criteria used in that department was the nature and frequency of the incidents of conduct violations. All of the respondents related that they lacked the expertise to assess the degree of involvement that student had with drugs or alcohol. They indicated that they referred students to the treatment director for assessment based on the student's request or behavioral criteria of the student.

Research question 9. "What is the organizational rationale behind the substance abuse programs on the various campuses?" The program was

termed a decentralized model. The former assistant dean of students was interviewed to determine the rationale for structuring the program in that way. The former dean related that when the program was set up there was not really any plan. There was not any financial support available from the university administration and the idea was to involve as many departments as possible in order to provide the financial resources. Each department, the counseling center, the dean of students office, the student health center, and the academic departments all contributed resources for substance abuse prevention and/or treatment. The rationale for this was twofold, first there was a feeling that if financial resources for substance abuse prevention or treatment were integrated into a department's budget, then it would be more difficult to cut those funds, as they would not be a separate account. The second rationale was that each department would have ownership of the issue and the solution.

Research question 10. "What are the typical sources of intake referral on the various campuses?" The treatment director stated that most of the referrals were self-referred, many from the conduct system, the athletic department, academic advising, and the least number from student's families. The director explained that the families are not very involved in the student's life on the campus and that this was the reason for the small number of referrals from family members.

The peer-advising staff also reported that the greatest number of referrals were self-referrals, with referrals from friends being ranked as second

in number. The assistant dean of students reported that referrals came into that office as a result of conduct violations on campus.

The SAPP staff reported that some of the students that were enrolled in the courses and conferences were students from three community colleges in the area that had an associated degree from that college in substance abuse prevention and treatment. There were also the practicum students from the local treatment center that were in that center's internship program and were able to satisfy their internship's academic requirements with the SAPP courses and conferences.

Research question 11. " How does organizational structure affect the referral of clients to other agencies?" The treatment director reported that students that were referred out to other agencies were first assessed and then contact to the agency was made by the director, setting up the appointment for the student, as opposed to relying on the student to make the contact with the treatment agency. Referrals from the peer-advising program, the SAPP, and the dean of students office were all made to the counseling center. The student was then assessed by either the treatment director or another counselor. If the student was assessed as requiring referral to the community, then the student was directed to the treatment director who reassesses the student, makes the contact with the agency and does the follow-up.

Cross-Case Analysis

Research questions 1-11

Research question 1. "What is the description of the programs at OSSHE universities?" The parameters of what constituted "program" were defined by the staff members involved in various aspects of substance abuse issues on the campuses. All three of the universities had similar programs. For example, all of the universities had some type of peer-helper/ educator program. The Alcohol Information School (AIS) at university A was similar to the "New Directions" class at university C in that both classes were used as conduct referrals from the dean's office. On the other hand, the AIS was a one-day school and the "New Directions" class lasted three weeks. All of the universities had policymaking bodies that consisted of a cross-section of representation from campus. In terms of differences, one university, university B did not have a treatment component. This was explained as part of the university's urban mission, which was to integrate as much as possible into the community. This mission was accomplished in part by using resources in the community for treatment. University B was the only campus to identify the urinalysis program for athletes as part of its program. University C was the only campus to have a separate prevention / education component that did not involve referrals.

Research question 2. "What were the organizational structures of the substance abuse programs at OSSHE universities?" Most of the components of the programs were under some aspect of Student Affairs, typically the health center or the counseling center. Exceptions to this were the prevention component at university C which was housed in an academic department. This component although housed in an academic department, was supervised by the vice provost's office for Student Affairs. The other exception was the Chemical Health Program for athletes which was under the athletic department.

Research question 3. "What impact has the 1989 Drug Free Schools and Campuses Act had on the substance abuse prevention programs in OSSHE universities?" All of the programs fell under the jurisdiction of this legislation and therefore were affected in that they were required to comply with the provisions of the act. The perceptions by the respondents of how the Act impacted their programs were greatly varied. Overall, the respondents described the impact of this legislation in the following ways: (a) The act gave the program a higher priority to substance abuse issues on campus (b) The infusion of funds emanating from this legislation was deemed as having an impact on the program and (c) The increased supervisory and reporting requirements mandated by the legislation were perceived as a burden of the Act. The Act set aside funding for programming through the Funds for the Improvement of Postsecondary Education Program (FIPSIE). This was

perceived to have impact on the program if there were positions or services created by FIPSIE grant monies authorized by the Act.

Research question 4. "What effect has this legislation had on the organizational structure of the substance abuse programs in OSSHE universities?" The only effect that respondents reported was the inclusion of positions and services at university A. This was described as the addition of a treatment component which modified the organizational structure by the inclusion of that position and those services.

Research question 5. "How is program effectiveness defined on the various campuses and under various organizational structures?" The one overriding similarity to the responses to this question is that all of the respondents perceived the definition of effectiveness as diverse and complex. The answers to this question varied greatly. The responses could be categorized as qualitative and quantitative. Qualitative definitions were those definitions of effectiveness that were on the whole a subjective observation on the part of the respondent. Quantitative responses were those definitions of effectiveness that could be measured objectively. Examples of quantitative definitions given were numbers of students attending presentations, evaluations of presentations, or the results of studies that measured substance abuse behavior on campus. There was a mixture of both types of definitions from all of the respondents contrary to expectation. Policymakers gave qualitative definitions of effectiveness, some treatment staff gave quantitative definitions

and vice versa. The most common qualitative response was that the respondent was able to see individual students make positive changes in their attitudes, behaviors and lifestyles. The most popular quantitative answer was the result of evaluations from presentations given by peer educators or prevention staff.

Research question 6. "What do respondents feel are the advantages and disadvantages of their organizational structure?" Those components that were housed under the organizational structure of a student health center voiced the advantage of the program being financed by student health center fees as a more stable source of funding than the general fund.

The disadvantage of location was cited in two instances, one in university A by the peer-helper coordinator and the substance abuse coordinator in university B. The peer-helper program in university A was in the student health center and the program at university B was in the counseling center. In both instances the location was described as being less visible to the campus community at large than was desired.

Three of the respondents raised the issue of students feeling stigmatized for seeking help for substance abuse problems. For example, two of the respondents, the treatment director in university A from the Mental Health Department and the peer-educator coordinator at university B, from the Counseling Center reported that their program could be viewed by the campus community as more pathology oriented because of its location. Both the

centralized and the de-centralized structures were reported as being advantageous by each of the administrators who had created the structures. One of the advantages mentioned by three respondents was the support of the administration of the organizational structure. This was true at both departmental and university levels. Conversely, three respondents at one university mentioned the lack of support of the university administration as being instrumental in the policymaking body being negatively affected. There was also some indication of tensions between three individuals in the various components at university B that was vaguely attributed by the respondents to the modification of responsibilities when the present organizational structure was created in 1989.

Research question 7. "How is staffing and funding different under the various organizational structures?" Local funding for the programs was somewhat diverse. The majority of the program components were funded from some area of student services. The entire budget for the program at university A came from student health center fees, as did the peer-advisor program at university B. The most diverse funding structure was the prevention program at university C. This program component was funded by the department of Continuing Education and proceeds from the conferences and workshops. The directors salary was funded through an academic department.

Staffing was similar in the treatment component in that staff were all from some area of mental health.

At university B there was more overlap in roles than in the other universities. The chair of the policymaking body was also the peer-education coordinator. The vice-chair of that body was the substance abuse coordinator. The director of the student health services did assessments and trained peer-educators. This differed greatly from university A's policymaking body which had as its chair a faculty member unrelated to the program. There appeared to be a deliberate effort on the part of all three universities to ensure that diverse areas of the campus were represented on the policymaking bodies.

Research question 8. " How is the guiding philosophy of substance abuse different under the various components of organizational structure?" Philosophy in this case consisted of two parts, the preferred treatment method and the determination of a substance abuse problem. Among the staff of treatment programs the mental health model in treating substance abuse was seen as the preferred method as opposed to the medical model. The peer-advisor staff at university C related that the general wellness framework of health education thinned out the role of substance abuse, in that they were required to provide presentations on a variety of other health issues. Conversely, the peer-helper coordinator at university A saw the wellness framework as an advantage in introducing the topic of substance abuse into presentations. All respondents cited behavioral criteria as indicators of substance abuse problems. The peer-education staff at university A, B, and C all agreed that assessment of a substance abuse problem was beyond the

expertise of the peer-educators. All of the treatment staff, as well as the director of the counseling center cited the additional criteria of the Diagnostic Statistical Manual (DSMIII-R), (American Psychiatric Association, 1987). The assistant dean of students at university C and the vice president for student services at university A cited conduct offenses involving alcohol or drugs as criteria for determining whether to refer for assessment. The director of the Chemical Health Program for athletes cited physical characteristics in the case of steroid abuse. Nearly all of the respondents were in agreement that the behavioral criteria for substance abuse problems were if any area of the student's life was less than satisfactory due to the use of alcohol or drugs. This was acknowledged by all respondents as a highly subjective criterion area.

Research question 9. "What is the organizational rationale behind the substance abuse programs on the various campuses?" Funding was a major consideration in the rationale of all three of the programs. Funding of the program through the use of student health center fees was viewed as a more stable source by all respondents. Therefore, either the entire program, as in the case of university A or components of the program as in the case of university B and C was funded by student health center fees. Grant monies that were available were also a consideration. In universities A and B the organizational unit that was awarded the grant became the unit for the program or program component. There was initially no intentional rationale for the de-

centralized model at university C. Rather, it evolved in the absence of earmarked funding by asking each department to provide services.

Research question 10. "What are the typical sources of intake referral on the various campuses?" Both of the treatment center directors cited self-referral as the most common source of referral for treatment. At university A the director of the AIS reported that about 96 percent referrals to the school were by residence advisors and campus police.

At university B, the coordinator of the substance abuse program and the coordinator of the peer-educator program cited the most common source of referral as being internal referral in the counseling center from another counselor working with the student on other issues. The director of the counseling center reported the most common source was self-referred or family and/ or friends. This is in contrast to the treatment director at university C who stated that family members are not typically involved in the student's life on campus. The difference between these two patterns appears to be university related. University B is an urban university with a small residence life facility, and universities C and A were located in smaller communities and had a more extensive residence hall system.

Research question 11. "How does organizational structure affect the referral of clients to other agencies?" Organizational structure appeared to have little impact on the referral of clients to other agencies. As stated above, university B has no treatment component because of the urban mission of the

university. Because there was no treatment component, the emphasis was to ensure that the student health insurance carrier covered the costs of treatment in the community for the student, or if the student was uninsured, that treatment could be arranged on a sliding scale fee. This was a function of the urban nature of the university.

In universities A and C, the referrals are determined by the wishes of the student. The director or one of the other counselors provided outpatient treatment in conjunction with the treatment facility, either during treatment, or after the student is discharged. The director also stated that a brief therapy model is employed because of the counseling center policy imposing a maximum number of visits per student per year. The use of the brief therapy model affected the referral of students to other agencies, in that those students not suited for this treatment model were referred elsewhere.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

This chapter contains three sections. The first section describes the purposes of the study, a brief review of relevant literature, a description of the methods used to collect the data, and a summary of the findings from the study. The second section contains the conclusions that were generated from the study. The third section is comprised of the implications of this study for further scholarship as well as suggestions for changes in practice in the area of substance abuse programming for college students.

Purposes of the Study

There were three objectives to this study, they were:

1. To examine the influence of federal legislation, specifically the 1989 Drug Free Schools and Campuses Act amendment on the programs in Oregon State System of Higher Education universities.
2. To examine through a descriptive case study, how each program operates within each organizational structure.
3. To examine the influence of the federal legislation on the organizational structure that houses the substance abuse program, by description of how the

organizational structure has changed since the 1989 Drug Free Schools and Campuses Act amendment.

In order to assess the impact of substance abuse programs in higher education there first has to be an idea of what programs are out there. At this point in the literature there is little research that concerns itself with substance abuse programs in higher education. This continues to be the case, despite the fact that as Eigen, (1991) pointed out there is an alarming rate of alcohol consumption on our campuses. The consequences of this consumption among the college student population range from disciplinary problems on campus to death. Thus this study was conducted in order to begin a body of data that practitioners and researchers could build upon in order to design substance abuse programs that significantly reduce the consumption and consequences of alcohol and drug use and abuse on the nation's campuses. The statement of the problem generated eleven research questions that explored the parameters and practices of substance abuse programs on the university campuses.

These eleven questions are as follows:

1. How are the substance abuse programs in the three public university campuses in Oregon defined?
2. How are substance abuse programs organized on the university campuses?
3. What impact has the 1989 federal Drug Free Schools and Campuses Act had on the substance abuse prevention programs in OSSHE universities?

4. What effect has this federal legislation had on the organizational structure of the substance abuse prevention programs in OSSHE universities?
5. How is program effectiveness defined on the various campuses and under the various organizational structures?
6. What do respondents feel are the advantages and disadvantages of their particular organizational structure?
7. How is staffing, and funding different under the various organizational structures?
8. How is philosophy of the substance abuse program different under the various components of the organizational structure?
9. What is the organizational rationale behind the substance abuse programs on the various campuses?
10. What are the typical sources of intake referral to the program on the various campuses?
11. How does organizational structure affect the referral of clients to other agencies?

Summary of Relevant Literature

The review of literature began with a description of the history of substance use and abuse in America. Alcohol and drugs have been a part of American history, politics, and social mores since the nation's beginning.

Lender and Martin (1982) chronicled the patterns of alcohol use as an aspect of the American character interwoven in the history of the country. The influx of immigration brought various drinking practices and mores into the American culture. This made enforcement of rules regarding alcohol consumption more complex.

The first widespread use of drugs in this country began with the use of opium in the 19th century. Opium was either eaten or ingested in tonics and elixirs (Morgan, 1981). Morphine was in extensive use during the Civil War, as an anesthetic, and for a wide variety of ailments. The invention of the hypodermic syringe at about the same time increased the popularity of morphine. Heroin, like morphine, was developed as a palliative for opiate addiction. Heroin, in turn, was developed to treat morphine addiction (Morgan, 1981). Marijuana arrived on the American scene initially for its hemp from which rope was made. Eventually the sedative properties of the plant became known and, as in the case of morphine and opium became mixed in various tonics and touted for a variety of ills. Cocaine was discovered relatively late, in the 1880's and as all of the other drugs preceding it, became an ingredient in a wide assortment of medications, with claims to cure many afflictions. Because of the scarcity of physicians in the country, especially on the western frontier, self-diagnosis and self-medication were common. Until 1914 there were also no regulations controlling any of these drugs. Hence, business in tonics and elixirs was profitable. The Harrison Narcotic Act of 1914 delineated a

Schedule of addictive qualities and medical usefulness for all drugs. With the Act, drugs were now regulated and available only by prescription (Morgan, 1981). The "Noble Experiment" or Prohibition was enacted during the years 1920 to 1933. Contrary to popular belief the legislation was not the dismal failure attributed to it. It was repealed largely due to the initiation of federal income taxes. However, when it was repealed in 1933, alcohol was regulated and taxed by the federal government.

The pattern of use and abuse of alcohol and drugs prevalent today were also reported. The consequences of drug and alcohol abuse in America today reach into virtually every sphere of our lives. Kinney and Leaton (1987), reported that alcohol consumption is disproportionate among the population, with most people being social drinkers. They reported that 70% of the country's population consumes 20% of all of the alcohol consumed, and ten percent of the remaining thirty percent consume 50% of all of the alcohol consumed in America. Numerous problems stem from the abuse of alcohol from a relatively small proportion of the population. Economically, estimates of the costs of this abuse range from \$58.3 billion (Rice, et al. 1990) to \$150 billion annually (Harwood, et al., 1985). Three percent of all deaths are attributed to alcohol abuse (VanNatta, et al., 1985). Other problems include Fetal Alcohol Syndrome, traffic fatalities, (NTSA, 1991b), violence, both spousal, (Van Hasselt, et al., 1985), suicides, (Roizen, 1982), and homicidal, (Goodman et al., 1986; Parker et al., 1983).

Thirty-seven percent of the population aged 12 and over have reported in 1990 illegal drug use at some time in their lives (NIDA, 1991d). The problems that stem from illegal drug use parallel alcohol abuse with some notable exceptions. Seventy-five percent of jail inmates report illegal drug use, with 25% reporting being under the influence at the time of the crime. Of juvenile offenders these figures are 82% reporting use and 40% being under the influence at the time of committing the crime (Bureau of Justice Statistics, [BJS] 1990). Drug use among women of child-bearing age has resulted in a drastic increase in the number of drug-affected infants born. Estimates range from 1-2% of all live births (Bresharov, 1989) to 11%, (NAPARE, 1988). Illegal drug use, especially the use of "crack" cocaine has been viewed as responsible for the dramatic rise in the rate of sexually transmitted diseases since the latter part of the 1980's. The national increase of 30% in the incidence of syphilis and the 100% increase of this disease in the Miami area between 1985 and 1989 attest to the correlation of cocaine use and sexually-transmitted disease (Koppleman & Miller-Jones, 1989). The incidence of drug use accounts for 32% of all adult/adolescent cases of AIDS in 1991 (NCAIDS, 1991).

The use of drugs and alcohol among youth in the country is also higher than might be expected. Twenty-one percent of youth aged 12 to 17 reported the use of illicit drugs at some time in their lives, and 46% reported the use of alcohol. In the age group 18-25 the prevalence of use, at least once, was 54% for illicit drugs and 89% for alcohol. Fifteen percent of youth

aged 18-25 currently use illegal drugs and 76% report currently using alcohol (NIDA, 1991b).

The pattern for college students was found to be roughly equivalent to those non-college age cohorts. The exception was in the consumption of alcohol. Annual prevalence of alcohol was slightly higher among college students than non-college peers, with 89% of college students reporting use as compared to 86% of non-college age peers. The notable differences in alcohol consumption among college students was with regard to binge drinking, which was defined as five or more drinks consumed on five or more occasions per month. Forty-one percent of college students engage in binge drinking compared to 33% for the non-college-aged peers. This pattern of heavy drinking among college students has been reported as being consistent over time in the literature (Banks & Smith, 1980; Engs, 1977; Engs, 1985; Klein, 1989; Straus & Bacon, 1953; Wiggins & Wiggins, 1987). The drug of choice among college students clearly seems to be alcohol. The choice of alcohol in all studies is beer, approximately 4 billion cans consumed annually (Eigen, 1991), which is supported by Presley & Meilman (1992). Overall, male students consume more beer than females (Blane & Hewitt, 1977; Engs, 1977; Gusfield, 1961; Hughes & Dodder, 1983; Johnston, O'Malley & Bachman, 1991; Saltz & Elandt, 1986;), and white students more than black,(Crowley, 1991; Engs, 1977; Hanson & Engs, 1986; Kaplan, 1979; Saltz & Elandt, 1986;), and those residing in fraternal organizations consume more than those in residence halls (Gusfield,

1961; Klein 1992). Consequences for students engaged in this type of consumption pattern range from disciplinary problems at the college to death.

The traditional response of colleges faced with alcohol-related incidents has been to refer the student to the dean of student's office. Until the mid 1970's this approach consisted of a reprimand and some type of disciplinary action.

In 1974 the 50+12 study was undertaken. The purposes of the study were to gather data about drinking practices and attitudes of college students, to disseminate information about alcohol use and abuse, and to encourage the institutions to focus on programming in this area. Funded by the National Institute of Alcohol Abuse and Alcoholism (NIAAA), this study involved fifty colleges and universities nationwide, and twelve private colleges. The resulting work, The Whole College Catalogue about Drinking-A Guide to Alcohol Abuse Prevention, published in 1977, was a guide book for those administrators who recognized the problem and wanted to know how other colleges were handling alcohol abuse on their campuses. The Catalogue listed the programs that colleges had in place. The first student organization for alcohol education was formed in 1976. BACCHUS (Boost Alcohol Consciousness Concerning the Health of University Students), began at the University of Florida and has over 200 chapters on the nation's campuses. Another entity that addressed itself to the problem, the Inter-Association Task Force on Alcohol Issues was formed in 1982. This task force had as it's goals, the development and implementation of

alcohol education programs on campuses and the coordination of efforts that focus attention on the problem of student alcohol abuse. Many influential college organizations became members of the task force.

Direct federal efforts to focus attention on the problem of substance abuse on campus were launched by the Secretary of Education William J. Bennet in 1986. The Secretary suggested withholding federal funding from institutions that did not demonstrate viable efforts to address the problem. The Drug Free Schools and Campuses Act was enacted in 1986 to provide funding to institute substance abuse programming in colleges and universities. In 1987 The Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse was created by a group of educators across the country. This Network, directed by the Department of Education, was to develop standards for institutions in creating substance abuse programs. By 1990, there were 1,300 schools that were members of the Network. In 1989 the Drug-Free Schools and Campuses Act was amended to comply with Secretary Bennet's 1986 suggestion to require institutions of higher education to institute programs on their campuses in order to qualify for federal funds.

With regard to programs, the literature was reviewed in the five areas that the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse recommended be included in a comprehensive substance abuse program. The first area, the implementation of drug and alcohol policies, was the area most impacted by the Drug Free Schools and

Campuses Act amendment. The Act requires institutions receiving federal funds to have written policies regarding substance abuse on campus.

The second area was the enforcement of the policies. There is little literature on the enforcement of violations of campus policies. Anderson and Gadleto, (1991) in a survey of campuses, found inconsistencies in sanctions regarding substance abuse policy violations on campuses.

Drug and alcohol education and prevention programs are the third area that the Network recommends as being contained in a comprehensive substance abuse program. This area is the only one in which there is abundant research. There are various theories regarding the most effective means of alcohol education, (Berkowitz & Perkins, 1987; Brown, 1990; Cook et al., 1980; Dean, 1982; Gonzalez, 1989; Lenhardt & Wodarski, 1984). The problem with alcohol education research has been how to evaluate effectiveness. Knowledge gains can be measured, but measurement involving how these gains translate into attitudes and behavior is ambiguous.

Providing intervention and treatment is the fourth area that was examined in the literature. The literature on this revealed 72% of the colleges in Anderson and Gadleto's (1991) survey provided counseling to students affected by alcohol or drug problems.

The final area involves the assessment of student's attitudes and behaviors associated with alcohol and drug use, as well as the assessment of programs. As mentioned before, this is difficult to ascertain. Anderson reports

that 71% of the colleges responding to the survey were conducting assessments of student's drinking behaviors, and 64% on attitudes of alcohol and 55% on attitudes toward drugs. Despite the efforts that are cited, Anderson and Gadleto (1991) found that 74% of college administrators reported either the same, some, or a great increase in alcohol-related problems on campus. Regarding the frequency of drinking on campus, 82% of administrators also reported no decrease and some saw a great increase in frequency of drinking on their campus.

The research of substance abuse program effectiveness was revealed to be inconsistent. Programs have been regarded as being ineffective, and alcohol education results, "spotty" (Ingalls, 1984). Despite exposure to one of the most comprehensive substance abuse programs in the country, the founder of BACCHUS, at the University of Florida, found no significant differences in alcohol consumption among the student body on that campus over a period of five years (Gonzalez, 1991). The intent of this study, was to begin with a different approach, by describing how programs work from the inside, by those who work in the area.

The design for this study was the qualitative descriptive, multiple case study. Because there is no literature on what variables comprise an effective substance abuse program, the qualitative design was chosen (Marshall, 1985, cited in Marshal & Rossman, 1989). The case study was chosen because the boundaries of what was defined as the substance abuse program were not

known and had to be identified, and multiple cases were used to lend robustness to the design (Yin, 1989). Interviews and document analysis were used as the means of data collection. The interviews were on the average, one hour long, taped, and transcribed in entirety. Interviews were then read by the researcher for differences and similarities across as well as within cases.

Summary of Findings

Regarding the impact of the 1989 Drug-Free Schools and Campuses Act on the programs, the findings revealed that the legislation had the greatest impact in the form of the grant monies generated by the legislation. This greatest impact was the increase of staff and services made possible by the grant monies. The other impact of the legislation was felt by respondents to be an increased priority of substance abuse programs on campus and an increased credibility for the programs.

The findings of the second objective, how the programs operate within their respective organizational structures were as follows:

The study revealed three different organizational structures under which the substance abuse programs were operated. Each program had a peer program in which students gave referrals and presentations to groups and classes in exchange for credit with specific departments. Each university had a policymaking body consisting of a cross-section of staff, faculty, and students

on campus. Two of the programs had some type of mandatory educational component for students who violated the conduct code in alcohol-related incidents. Two of the universities had treatment components. One did not have a treatment component due to the nature of the university's mission. One university identified the urinalysis testing program for athletes as part of the substance abuse program. One university had a separate prevention component housed in an academic department. All respondents acknowledged the difficulty of defining effectiveness in the area of substance abuse for the program. Funding for the programs had an impact on the stability of the programs, as well as the services offered. The preferred model among treatment staff was the mental health model.

With respect to the third objective of the study, namely the impact of the federal legislation on the organizational structure, the study found that the organizational structure of the programs was affected primarily by the addition of new components as a result of the grant monies. There was also some recognition by administrators that the additional reporting and monitoring requirements were burdensome.

Conclusions

The research in the area of substance abuse among college students reflected the fact that substance abuse programs on college campuses were

not having an impact on the consumption level or consequences of substance abuse among students, especially alcohol abuse. The description of the programs and their organizational structures was intended to enable researchers and administrators in the field to develop models for effective programming on campuses. The conclusions that were derived from this study were:

With regard to the first objective of the study, the impact of the 1989 Drug Free Schools and Campuses Act amendment on the substance programs in OSSHE universities:

1. The increased funding through the FIPSIE program that allowed for additional staff and services was perceived as the most significant impact of the legislation on the programs.
2. The Act was perceived to have given the area of substance abuse a higher priority on campuses. The Act was also credited with giving the programs more credibility on campus by respondents.

In addressing the second objective of the study, which was to examine how each program operates within its organizational structure, the summary of findings regarding this objective were:

1. There were three distinct program structures, each operating under different organizational structures.
2. The physical location of the program was felt to impact both positively and negatively on the services by the respondents.

3. The funding source had an impact on the programs.
4. Among treatment providers the mental health model was preferred over the medical model.
5. The definition of effectiveness among respondents was varied and acknowledged as being difficult to define.
6. Administrative support was acknowledged to be a major factor in the operation of programs.
7. University mission/location/composition affects program referrals.
8. Among health educators there was disagreement as to the value of using the medical model in peer-education programs.

Concerning the third objective of this study, the impact of the 1989 Drug Free Schools and Campuses Act amendment on the organizational structures, the following conclusions were drawn:

1. The Act affected the organizational structures only when services were added as a result of funding through the FIPSIE program.

The impact of the legislation on the organizational structure was only recognized at one university, and then minimally.

2. There was some recognition of the increased reporting criteria which was perceived as a hindrance by administrators.

Implications and Recommendations

Implications for Administrative Change

The implications for change in practice derived from the literature and the findings of this study were:

1. Physical location of the program may be important in influencing effectiveness of the program. Two of the respondents reported that the physical location of the program might convey the idea to students that the program was more pathology oriented than the respondents desired. The two locations were the mental health clinic and the counseling center. Two other respondents reported that they felt that location in a larger entity was a detraction in the visibility of the program. There were advantages seen in location also. The location of the substance abuse program in the counseling and testing center was deemed as lowering the stigma of students entering the office since there were other functions performed there also. Administrators may want to consider these perceptions in physically locating programs on campuses.

2. Administrative support was seen as having an impact on the services and program. The attitudes of supervising administrators at various levels of the organizational structure of the program were considered as having an impact on the programs by the respondents. When constructing a rationale for

placement of programs one should examine the views of those administrators in the organizational structure who would oversee a substance abuse program. The support of the organizational structure's administrators were cited in almost every instance by respondents as having impact on the program. Three respondents involved in the policymaking body felt there was a lack of support from the university administration for the committee which resulted in a virtual shutdown of that committee for an entire academic year. Thus the support of the administration toward the components of the program were seen as important to the program.

Related to this was the perception that the implementation of the federal legislation created more work for administrators through the reporting and evaluation criteria that was required to comply with the Act. The workload of the administrative official might also be an area that administrators should consider when deciding where to situate programs administratively.

3. Type of funding for the program was seen as potentially important.

Two of the programs reported the use of student health center fees to fund the program as being a more stable source of revenue than general fees. One respondent felt that the use of health center fees gave the students greater ownership of the program. One program was structured in a de-centralized way precisely because of the lack of funding during the inception of the program. The source of funding may be significant in how the program is perceived on campus by students as well as by university administration.

4. University mission, composition, and location influences program planning. One program did not have a treatment component because of the university's urban mission. The location of this same university had an impact on the referral sources into the program. Since there was a limited residence hall program, and most students commuted, the family member would be more likely to be aware of a substance abuse problem. This was in contrast to another university which had an extensive residence hall system, and consequently the family members were not as involved with the students' life on campus.

5. The definition of effectiveness for the program may influence services and outcome. All of the respondents agreed that the effectiveness for these programs was difficult to define. There was some evidence that the individual staff members' professional training influenced the definition of effectiveness. The extent of this influence on the definition of effectiveness and its' impact on programs and services are areas that should be considered in program design. In planning programs, the program definition of effectiveness and the individual staff member's definitions should coincide.

6. The medical model and the mental health model as well as other models should be explored for the most optimal use in substance abuse programming on campuses. There was disagreement among health educators as to the usefulness of the medical model in the peer education programming. The treatment staff favored the mental health model. Research into the optimal

blending of the two models, as well as what other models are in use in campus programs is called for in order to give practitioners and administrators more information on how to best effect results.

Recommendations for Further Research

Recommendations for further research into the area of campus substance abuse programs are as follows:

1. There should be further research on the organizational structures of programs and how the programs are funded and administered in order to develop models for practitioners. This study revealed three different programs, all with different organizational structures, which the staff perceived as having both positive and negative impact on the program. Research into those variables which impact the services and outcomes of the programs should be conducted in order to ascertain how best to serve students.

2. The physical location of the program should be studied as it may have an impact on the services and outcomes of the program. Respondents felt that there was an impact on the program by the physical location of the program. One respondent felt that a peer-helper program that was located in a counseling center would lend a pathological perception of the program by students. Another respondent felt that locating a substance abuse program in a

counseling center made good use of the staff's clinical expertise. Research into the impact of location on the program components to determine the advantages and disadvantages of each should be conducted in order to devise programs that reach the greatest number of students.

3. Research into the impact of both the medical model and the mental health model in treatment and prevention of substance abuse should be undertaken. There was agreement among treatment staff in the use of the mental health model for treatment of substance abuse, but disagreement among peer-helper staff as to the appropriateness of each model. Research should be conducted into the advantages of each model on various components of substance abuse programs in order to determine the optimal use of each model as well as the use of other models.

4. More research should be focused on the definition of effectiveness of substance abuse programs. Each respondent admitted the difficulty of defining effectiveness in the area of substance abuse programming. The literature in the field confirms the difficulty of arriving at a definition of effectiveness for programs. Indeed, one of the most lauded programs in the country, at the University of Florida, was deemed as having little impact on behavior and consumption of alcohol among students. This difficulty may be the key to the inability of substance abuse programs nationwide to decrease consumption and consequences of substance abuse among college students.

5. This study should be replicated with different types of institutions.

Public universities in Oregon were used as the population in this study. There was evidence that the location and mission of one institution affected the program. The study of private colleges, community colleges and small public colleges would give insight as to how the type of institution influences programs and services. This would help develop institution-specific models. Although it is recognized that each institution is unique, there might emerge models better suited to a specific type of institution.

Recommendations for Program Models

There were several program components that were examined that appeared to be effective in addressing the subject of substance abuse on college campuses. All of the universities studied had peer-helper programs on the campuses. While there were differences in ideology in addressing the subject of substance abuse, the existence of a peer-helper program component in a substance abuse program is advantageous in disseminating knowledge to students about substance abuse on an informal basis. At the very least, the student peer helper becomes informed about the subject. The peer-helper program component is therefore recommended in any substance abuse program on a campus.

University C had a prevention program that was housed in an academic department and utilized students as interns from several different majors, such

as leisure sciences and marketing, to help organize the workshops and conferences. The prevention program component was entirely self-supporting except for the director's salary which was paid for out of the department budget. This program component was especially noteworthy in two aspects. The first advantage of this program was that it was primarily self-supporting. In the present economic climate of higher education the existence of a program that serves students needs while using a minimum of university resources is quite exceptional. The second advantage of this component was the service that it was able to render to both the community and the university. By conducting workshops and conferences in the community for professional groups, the program served an important community service by disseminating knowledge about substance abuse. Related to this is the service that the prevention program performed for the university, namely by building rapport between the university and the community through the education of community professionals and residents on the subject of substance abuse in relation to other community problems, such as street gangs and violence.

The presence of a treatment facility on a university campus was viewed by this researcher as an important component of a comprehensive substance abuse program. Treatment should be as comprehensive as possible, incorporating nutritional, medical, social, legal, and medical as well as the psychological aspects. Treatment should be as accessible and affordable as possible, with the least amount of stigma to the student who enters the

program. The presence of the stigma of substance abuse treatment was recognized by some of the administrators of treatment program components. They recognized that stigma could be attached to the program and become a barrier to students by either the name of the department, the mental health clinic, for example, or the location, for example, the counseling center for the peer-helper program.

A cross-section of individuals representing various departments is essential in the policymaking body. This sends the message that the problem is not relegated to one department, but affects the entire university. Active participation and support of university administration are also important in sending the message that the problem is being addressed. The individuals on the policy-making body should also be trained in the same manner as the peer-helpers, with the same end in mind, namely that the faculty and staff would serve to disseminate knowledge to colleagues in both an informal as well as a formal basis. These policymakers also need to be updated on current developments in the field of substance abuse on campuses, and encouraged to disseminate their knowledge to their departments in staff meetings or inservice training. Ensuring the initial training as well as subsequent availability to current information should be the joint responsibility of the substance abuse program staff and the university administration.

University B addressed the increase of steroid abuse among athletes directly with a program targeted to this population. The program resulted in a

distinct message to the athletes to perform without the aid of drugs. There was also the recognition that athletes might be fearful of losing their scholarships if they admitted use, or entered treatment. There were provisions to assure the athletes that the admission of use did not result in the loss of scholarship funds. This program was notable in recognizing the competitive climate that can lead athletes to use artificial performance enhancers.

In developing a program for college students on a college campus, the unique composition and needs of the university must be considered, which includes the consideration of the individuals involved in the administration as well as the delivery of services. There was some evidence of tensions between respondents in the process of the gathering of data for this study. Whether this affected the outcome of services to students is difficult to ascertain. A practitioner, in developing a program should be aware that there is the possibility that the attitudes of any of the individuals involved in the program might affect services and should make provisions to monitor the effect that individual differences in ideology may have on the program.

The above components and recommendations comprise a recommended model for a comprehensive substance abuse treatment program on a college campus. The ideal model would contain a treatment component with an interdisciplinary approach, to treat all of the complications that may be present in the presence of addiction or abuse. There should also be a peer-helper component that is easily accessible to students, as well as a prevention

component that serves a broad range of interests in the community as well as the university, and finally, a policymaking body that consists of a cross-section of individuals that are well informed on the subject of substance abuse and actively address the issue at the administrative level. All of these components in the ideal model would enjoy support from every level of administration, which would be evident in the consistency of policies programs, and services. These recommendations are based on the universities in this study, the researcher's experience, as well as the literature.

Summary

Substance abuse on college campuses, like that of the nation, has profound consequences for everyone, even those individuals who do not use drugs or alcohol who share the economic burden of those who do abuse substances. The college student population has been resistant to efforts to curb consumption, especially in regards to alcohol, for over forty years. The present study investigated the problem of the impact of the Drug Free Schools and Campuses Act amendment of 1989 on the substance abuse programs and their organizational structures in the public universities in Oregon. As stated in the onset of this study there is very little research into substance abuse programs on college campuses. Despite the fact that programs exist specifically for college students on substance abuse prevention, they have not

only been resistant to efforts to reduce consumption as in the case of illegal drugs, but have substantially higher alcohol consumption patterns than the overall population. This study begins to lay a foundation of research which should enable further development of effective models.

REFERENCES

- Able, E. L. & Sokol, R. J., (1986). Fetal alcohol syndrome is now the leading cause of mental retardation. Lancet, (8517), 1222.
- American Psychiatric Association. (1987). Diagnostic and statistical manual of mental disorders (3rd ed.). Washington, DC: Author.
- Anderson, D.S. & Gadleto, A.F., (1991). The college alcohol survey. George Mason University, Fairfax, Va.
- Banks, E. & Smith, M. R. (1980). Attitudes and background factors related to alcohol use among college students. Psychological Reports, 46, 571-577.
- Berkowitz, A. D. & Perkins, H. W. (1987) Current issues in effective alcohol education programming. In U. S. Sherwood (ed.) Alcohol policies and practices on college campuses. NASPA Monograph Series, 7.
- Blane, H. T. & Hewitt, L.E. (1977). Alcohol and youth: An analysis of the literature 1960-1975. Springfield, VA: National Institute on Alcohol Abuse and Alcoholism. (NTIS No. PB 268-698)
- Bresharov, D. J. (1989, Fall). The children of crack, will we protect them? Public Welfare, pp. 6-12.
- Brown, V. B. (1990). The problem of substance abuse. New Directions for Student Services, 49, 35-44.
- Bureau of Justice Statistics (1990). Drug and crime facts 1989. Rockville, MD: U.S. Department of Justice, Drugs & Crime Data Center & Clearinghouse.
- Calahan, D. (1987). Understanding America's Drinking Problem. San Francisco: Jossey-Bass.
- Controlled Substance Act of 1970. § 91-513, 21 U.S.C. § 801 (1970).
- Cook, R. (1989). Drug use among working adults: Prevalence rates and estimation methods. In Gust, S. and Walsh J. M., Drugs in the Workplace: Research and evaluation data (NIDA Research Monograph 91). Rockville, MD: National Institute on Drug Abuse.

- Cook, M. Lounsbury, J. & Fountelle, G. (1980). An application of the Fishbein and Ajzen's attitudes-subjective norms model to the study of drug use. Journal of Social Psychology, 110,193-201.
- Crowley, J. E. (1991). Educational status and drinking patterns: How representative are college students? Journal of Studies on Alcohol, 52,(1) 10-16.
- Dean, J. C., (1982). Alcohol programming for higher education. Carbondale: Southern Illinois University Press.
- Drug Free Federal Workplace Act of 1988, 5 U.S.C § 7311 (1988).
- Drug Free Schools and Communities Act Amendments of 1991, §§ 510a-1, 11841, 42 U.S.C. (1988).
- Eigen, L. D. (1991). Alcohol practices, policies, and potentials of American colleges and universities, An OSAP white paper. Office for Substance Abuse Prevention, Rockville, MD.
- Engs, R.C. (1985). Health concerns over time: The apparent stability. Health Education,16(3) 3-6.
- Engs, R. C. (1982). Drinking patterns and attitudes toward alcoholism of Australian human-service students. Journal of Studies on Alcohol, 43(5) 517-531.
- Engs, R. C. (1977). Drinking patterns and drinking problems of college students. Journal of Studies on Alcohol, 38(11), 2144-2156.
- Engs, R. C. and Hanson, D. J. (1985). The drinking patterns and problems of college students: 1983. Journal of Drug and Alcohol Education, 30(1), 65-83.
- Fenelli, M. L. (1987). Learning, libation, liability. In U. S. Sherwood (ed.), Alcohol Policies and Practices on College and University Campuses. NASPA Monograph Series, 7.
- Fischer, J. M. (1987). A historical perspective: Alcohol abuse and alcoholism in America and on our campuses. In U. S. Sherwood (ed.), Alcohol Policies and Practices on College and University Campuses. NASPA Monograph Series, 7.

- Frank, D. Zuckerman, B. Amaro, H., Aboagge, K., Bauchner, H., Cabral, H., Fried, L., Hingson, R., Kayne, H., Levenson, S., Parker, S., Reece, H., & Vince, R. (1988). Cocaine use during pregnancy: Prevalence and correlates Pediatrics, 82, 888-895.
- Glassco, K. (1975). Drink habits of seniors in a southern university. Journal of Alcohol and Drug Education, 21(1) 25-29.
- Gonzales, G. M. (1986). Trends in alcohol knowledge and drinking patterns among students: 1981-1985. Journal of College Student Personnel, Nov, 496-499.
- Gonzales, G. M. (1989). Early onset of drinking as a predictor of alcohol consumption and alcohol related problems in college. Journal of Drug Education, 19(3), 225-230.
- Gonzales, G. M. (1990). Effects of a theory-based, peer-focused drug education course. Journal of counseling and Development, 68, 446-449.
- Gonzales, G. M. (1991). Five-year changes in alcohol knowledge, consumption and problems among students exposed to a campus-wide alcohol awareness program and a rise in the legal drinking age. Journal of Alcohol and Drug Education, 37(1) 81-91.
- Goodale, T. G. (1986). What history has taught us. New Directions for Student Services, 35, 5-15.
- Goodman, R.A. & Mercy, J. A. & Loya F., (1986). Alcohol use and interpersonal violence: Alcohol detected in homicide victims. American Journal of Public Health, 76, 144-149.
- Goodstadt, M. S. & Caleekal-John, A. (1984). Alcohol education programs for university students: A review of their effectiveness. The International Journal of the Addictions, 19(7), 721-741.
- Guba, E. & Lincoln, Y. (1981). Effective evaluation. Jossey-Bass Publishers, San Francisco, CA.
- Gusfield, J. R. (1961). The structural context of college drinking. Quarterly Journal of Studies on Alcohol, 22, 428-443.
- Hanson, D. J. (1972). Norm qualities and deviant drinking behavior. Dissertation Abstracts International, 7319817.

- Hanson, D. J. (1974). Drinking attitudes and behaviors among college students. Journal of Alcohol and Drug Education, 19, 6-14.
- Hanson, D. J. (1977). Alcohol consumption among college students: 1970-1975. College Student Personnel, 11(1), 9-10.
- Hanson, D. J. & Engs, R. C. (1986) Correlates of drinking among collegians. College Student Journal, 20, 141-146.
- Harrison Narcotic Act of 1914, § 4701, 26 U.S.C § 785 (1914).
- Hewitt, K. (1976). Whole college catalog about drinking (DHHS Publication No. ADM 76-361). Rockville, MD: National Institute on Drug Abuse.
- Hingson, R. W. & Howland, J. (1987). Alcohol as a risk factor for injury or death resulting from accidental falls: A review of the literature. Journal of Studies on Alcohol, 48(3), 212-219.
- Hingson, R. W., Lederman, R. I. & Walsh, D. C. (1985). Employee drinking patterns and accidental injury: A study of four New England states. Journal of Studies on Alcohol, 46(4), 298-303.
- Hockhauser, M. (1977). Alcohol and marijuana consumption among undergraduate polydrug users. American Journal of Drug and Alcohol Abuse, 4, 65-76.
- Honkanen, R., Ertama, L., Kuosmanen, P., Linnoila, M., Alha, A., & Visuri, T. (1983). The role of alcohol in accidental falls. Journal of Studies on Alcohol, 44, 231-245.
- Howland, J. & Hingson, R. W. (1988). Alcohol as a risk factor in drownings: A review of the literature. Accidental Annual Prevention, 20, 19-25.
- Hughes, S. P. & Dodder, R. A. (1983). Alcohol consumption patterns among college populations. Journal of College Student Personnel, 24(3), 257-264.
- Ingalls, Z. (1984, May). Campus programs called ineffective in ending student alcohol abuse. Chronicle of Higher Education, p. 17.
- Jasonik S. L. & Anderson, D. L. (1989). An assessment of risk management practices on the college campus. NASPA 26(3) 193-201.
- Jones, C. & Lopez, R. (1990). Drug abuse and pregnancy. In I. R. Merkatz & J. E. Thompson (Ed.) New Perspectives on Prenatal Care (pp. 273-318).

- Johnston, L. D., O'Malley, P. M., & Bachman, J. G. (1991). Drug use among high school seniors, college students, and young adults, 1975-1990 Volume II, College students and young adults. The University of Michigan Institute for Social Research. (DHHS Publication No. ADM 91-1835). Rockville, MD.
- Kaplan, M. S. (1979). Patterns of alcoholic beverage use among college students. Journal of Alcohol and Drug Education, 24,(2), 26-40.
- Kinney, J. & Leaton, G. (1987). Loosening the grip: A handbook of alcohol information. St. Louis: Times Mirror / Mosby College Publishing.
- Klein, H. (1989). Helping the college student problem drinker. Journal of College Student Development, 30(4) 323-331.
- Klein, H. (1992). College students' attitudes toward the use of alcoholic beverages. Journal of Alcohol and Drug Education, 37(3) 35-52.
- Koppelman, J. & Miller-Jones, J. (1989, Fall). Crack: It's destroying fragile low-income families. Public Welfare pp. 13-15.
- Kraft, D. P. (1977). College students and alcohol: The 50+12 project. Alcohol Health and Research World, 26 150-153.
- Kraft, D. P. (1988). The prevention and treatment of alcohol problems on a college campus. Journal of Alcohol and Drug Education,34(1) 37-51.
- Kuder, J. M. & Madison, D. L. (1976). College student use of alcoholic beverages. Journal of College Student Personnel,17(2), 142-144.
- Lender, M. E. & Martin, J. K. (1982). Drinking in America: A history. New York: The Free Press.
- Lenhart, S.D. & Wodarski, J. S. (1984). Comprehensive program for student alcohol abuse: A group approach. Journal of Alcohol and Drug Education, 30, 36-44.
- Lowe, D. W., Fagan, N. M., Fagan, R. W. & Free, J. (1987). Alcohol and drug use of college students: The university's response. Paper presented at the annual convention of the American Psychological Association August 28-September 1 1987.

- Magner, D. K. (Nov, 1988a). Alcohol-related problems have not decreased on most college campuses, survey indicates. Chronicle of Higher Education, pp. 35, 37.
- Magner, D. K. (Nov, 1988b). Officials involved in cutting substance abuse by students search for "what works". Chronicle of Higher Education, pp. 35, 37.
- Marihuana Tax Act of 1937, §4741, 26 U.S.C. (1937).
- Marshall C. & Rossman G. R. (1989). Designing Qualitative Research. Sage Publications: Newbury Park, London, New Delhi.
- Mauil, K. (1988). Research issues in alcohol, safety and trauma: Severity and aftermath of an injury. Contemporary Drug Problems, 15, 123-131.
- Meyer, T. J. (1986). One in three college students tries cocaine, study finds; Bennet urges presidents to crack down on drugs. Chronicle of higher education; v 32(20) p1,30 Jul 16 1986.
- Miller, B. A., Downs, W. R. & Gondoli, D. M. (1989). Spousal violence among alcoholic women as compared to a random household sample of women. Journal of Studies on Alcohol, 50, 533-540.
- Milman, D. H. & Su, W. H. (1973). Patterns of drug use among university students: Very heavy use of marijuana and alcohol by undergraduates. Journal of The American Health Association, 21, 181-187.
- Morgan, H. W. (1981). Drugs in America: A social history, 1800-1980. New York: Syracuse University Press.
- Nahas, G. G. (1973). Marihuana-deceptive weed. New York: Raven Press.
- National Association for Perinatal Addiction Research and Education, A first: National hospital incidence survey. Perinatal Addiction Research and Education Update October: 4-5 1988.
- National Commission on Acquired Immune Deficiency Syndrome. (1991). The twin epidemics of substance abuse and HIV: Report. Washington D.C.: National Commission on Acquired Deficiency Syndrome.
- National Highway Traffic Safety Administration. (1991a). Alcohol fatal crash facts. Washington, D. C.: National Center for Statistics and Analysis.

National Highway Traffic Safety Administration. (1991). Traffic fatality facts Washington, D. C.: National Center for Statistics and Analysis.

National Institute on Alcohol Abuse and Alcoholism. (1990). Seventh special report to the U. S. Congress on alcohol and health (DHHS Publication No. ADM -281-88-0002). Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.

National Institute on Drug Abuse, (1989). NIDA Capsules: Cocaine Abuse. (DHHS Publication No. C-82-2(a)). Washington D.C. National Institute on Drug Abuse.

National Institute on Drug Abuse. (1991a). Annual medical examiner data 1990, data from the Drug Abuse Warning Network(DAWN) (DHHS Publication No. ADM 90-1840). Rockville, MD: National Institute on Drug Abuse.

National Institute on Drug Abuse. (1991b). Data from the Drug Abuse Warning Network(DAWN), annual emergency room data, 1990 (DHHS Publication No. ADM 90-1839). Rockville, MD: National Institute on Drug Abuse.

National Institute on Drug Abuse. (1991c) Drug use among American high school seniors and young adults, 1975-1990 (DHHS Publication No. ADM 91-335). Washington, D. C.: National Institute on Drug Abuse.

National Institute on Drug Abuse. (1991d). National household survey on drug abuse: Highlights 1990 (DHHS Publication No. ADM 91-1789). Washington, D.C.: National Institute on Drug Abuse.

National Transportation Safety Board. (1983). Safety Study: Recreational boating safety and alcohol. Washington, D.C. : National Transportation Safety Board.

National Institute of Justice, (1990). Searching for answers: research and evaluation on drugs and crime. Washington, D.C. : U.S. Department of Justice.

Normand, J., Salyards, S. D. & Mahoney, J. J. (1990). An evaluation of preemployment drug testing. Journal of Applied Psychology, 75(6), 629-639.

Office of National Drug Control Policy (1991). What America's users spend on illegal drugs, an executive summary. Technical paper, Washington, D.C.

- Parker, D. L., Schultz, J. M., Gertz, L., Berkelman, R. & Remington, R. L. (1987). The social and economic costs of alcohol abuse in Minnesota, 1983. American Journal of Public Health, 77, 982-986.
- Ponder, F. T. (1987). Alcohol and drug abuse programs in selected universities in the south and the southwest. Dissertation Abstracts International, 8713974.
- Presley, C. A. & Meilman, P. W. (1992). Alcohol and drugs on college campuses: A report to college presidents. Carbondale IL: Southern Illinois University. (ERIC Document Reproduction Service No. ED 350931).
- Rice, D. P., Kelman, S., Miller, L. S. & Dunmeyer, S. (1990). The Economic costs of alcohol and drug abuse and mental illness: 1985, San Francisco: University of California, Institute for Health and Aging.
- Roizen, J. (1982). Estimating alcohol involvement in serious events. In: National Institute on Alcohol Abuse and Alcoholism, Alcohol consumption and related problems. Alcohol and Health Monograph No. 1 (DHHS Publication no. ADM 82-1190). Washington, D.C. U.S. Government Printing Office.
- Rogers, E. M. (1970). Group influence on student drinking behavior. In Maddox, G. L. (ed.) The Domesticated Drug: Drinking Among Collegians. New Haven CT: College and University Press, pp. 307-320.
- Saltz, R. and Elandt, D. (1986). College student drinking studies 1976-1985. _ Contemporary Drug Problems, 13, 117-159.
- Sanford, N. (1968). Where colleges fail. San Fransisco: Jossey-Bass.
- Schall, M., Weede, T. J. and Maltzman, I. (1991). Predictors of alcohol consumption by university students. Journal of Alcohol and Drug Education, 37(1), 72-80.
- Sherry, P. & Stolberg, V. (1987). Factors affecting alcohol use by college students. Journal of College Student Personnel, 28(4) 350-355.
- Snodgrass, G. & Wright, L. S. (1987). Alcohol and polydrug use among undergraduates. NASPA, 21(2), 26-35.
- Straus, R. & Bacon, S. D. (1953). Drinking in college. New Haven: Yale University Press.

Uniformed Controlled Substances Act of 1970, §§ 801 21 U.S.C. 4701 et seq.

Upcraft, M.L. & Welty, J.D. (1990). A guide for college presidents and governing boards: Strategies for eliminating alcohol and other drug abuse on campuses. U.S. Department of Education, Washington D.C.

U. S. Department of Justice (1985). Drugs of Abuse. U.S. Department of Justice, Drug Enforcement Administration, Washington, D. C.

U. S. Customs Service, (1989). Briefing paper on cocaine.

Van Natta, P., Malin, H., Bertolucci D., & Kaelber, C. (1985). The hidden influence of alcohol on mortality. Epidemiologic Bulletin No. 6 Alcohol Health and Research World 9, 42-45.

Van Hasselt V. B., Morrison R. L., & Bellack, A. S. (1985). Alcohol use in wife abusers and their spouses. Addictive Behaviors, 10(2) 127-135.

Volstead-Jones Act of 1919, 473,45 U.S. stat 1446 (1920).

Wechshler, H. & Rohman, M. (1981). Patterns of drug use among New England college students. American Journal of Drug and Alcohol Abuse, 8, 27-37.

Wiggins, J. & Wiggins, B. (1987). Drinking at a southern university: It's description and correlates. Journal of Studies on Alcohol, 48, 319-324.

Wintemute, G. J., Teret, S. P., Kraus, J.F. Wright, M. (1990). Alcohol and drowning: An analysis of contributing factors and a discussion of criteria for case selection. Accident Analysis and Prevention, 22(3), 291-296.

Wyhausen, E. (1988, September). Cracked out. Ms. Magazine, pp. 70-76.

Yin, R.A. (1989). Case study research; Design and methods. Sage Publications, Newbury Park, London.

APPENDICES

Appendix A
Controlled Substances Act of 1970.

Title 21 Controlled Substances Act of 1970.

21 812. Schedules of controlled substances

Establishment

(a) There are established five schedules of controlled substances, to be known as schedules I, II, III, IV, and V. Such schedules shall initially consist of the substances listed in this section. The schedules established by this section shall be updated and republished on a semiannual basis during the two-year period beginning one year after October 27, 1970, and shall be updated and republished on an annual basis thereafter.

Placement on schedules: findings requires

(b) Except where control is required by United States obligations under an international treaty, convention, or protocol, in effect on October 27, 1970, and except in the case of an immediate precursor, a drug or other substance may not be placed in any schedule unless the findings required for such schedule are made with respect to such drug or other substance. The findings required for each of the schedules are as follows:

(1) Schedule I.-

(A) The drug or other substance has a high potential for abuse.

(B) The drug or other substance has no currently accepted medical use in treatment in the United States.

(C) There is a lack of accepted safety for use of the drug or other substance under medical supervision.

(2) Schedule II. -

(A) The drug or other substance has a high potential for abuse.

(B) The drug or other substance has a currently accepted medical use in treatment in the United States or a currently accepted medical use with severe restrictions.

(C) Abuse of the drug or other substances may lead to severe psychological or physical dependence.

(3) Schedule III. -

(A) The drug or other substance has a potential for abuse less than the drugs or substances in schedules I and II.

(B) The drug or other substance has a currently accepted medical use with severe restrictions.

(C) Abuse of the drug or other substance may lead to moderate or low physical dependence.

(4) Schedule IV.-

(A) The drug or other substance has a low potential for abuse relative to the drugs or other substances in schedule III.

(B) The drug or other substance has a currently accepted medical use in treatment in the United States.

(C) Abuse of the drug or other substance may lead to limited physical dependence or psychological dependence relative to the drugs or other substances in schedule III.

(5) Schedule V. -

(A) The drug or other substance has a low potential for abuse relative to the drugs or other substances in schedule IV.

(B) The drug or other substance has a currently accepted medical use in treatment in the United States.

(C) Abuse of the drug or other substance may lead to limited physical dependence or psychological dependence relative to the drugs or other substances in schedule IV.

Appendix B
Network of Colleges and Universities
Committed to the Elimination of Drug and Alcohol Abuse
Membership Guidelines

Network of Colleges and Universities
Committed to the Elimination of Drug and Alcohol Abuse

Membership Guidelines

American society is harmed in many ways by alcohol abuse and other drug use-- decreased productivity, serious health problems, breakdown of the family structure, and strained societal resources. Problems of abuse have a pervasive impact upon many segments of society-- all socioeconomic groups, all age levels, and even the unborn. Education and learning are especially impaired by alcohol abuse and other drug use. Use and abuse among college students inhibits their educational development and is a growing concern among our nation's institution of higher education. Recent national and campus surveys indicate that alcohol abuse is more prevalent than other drug use and that institutions increasingly are requesting community support and mounting cooperative efforts to enforce their policies.

As higher education entered the 1980's, there was clear recognition that alcohol and other drug abuse were major problems. Institutions responded by increasing disciplinary sanctions and educational programs. The higher education community, through various professional associations, also took action. In 1981, the inter-association Task Force on Alcohol and Other Substance Issues was created. That Task Force, made up of representatives of various higher education associations, developed college marketing guidelines targeted at the sale and distribution of alcohol products on U.S. campuses. With the cooperation of colleges and universities in 1984, the Task Force created National Collegiate Alcohol Awareness Week and established a model campus alcohol policy.

In 1986, Congress responded to the national problem by passing the Drug Free Schools and Communities Act "to establish, implement and expand programs of drug abuse education and prevention (including rehabilitation referral) for students enrolled in colleges and universities..." Unfortunately, colleges that attempt to institute model programs of effective strategies for coping with problems of alcohol abuse and other drug use will find sparse information available in the national data bases and no formal mechanisms for sharing information.

In 1987, the U. S. Department of Education's Office of Educational Research and Improvement responded to the higher education community's need for assistance by calling for a network of institutions willing to commit time, energy, and resources to eradicate substance abuse on their campuses. The stated goals of the Network are 1) to collect and disseminate research and practice-

based knowledge about successful programs; 2) to provide a forum and mechanism for continuing communication and collaboration among institutions of higher education; and 3) to identify areas and problems for further research and development.

With this purpose in mind, a group of 15 higher education administrators met to develop a set of minimum standards required to become members in the Network. This group represented a cross section of individuals concerned with campus substance abuse, and included chief student affairs officer, health educators, and legal specialists. The standards formulated at the meeting were reviewed, modified, and affirmed. In 1987, William J. Bennett, former Secretary of Education, convened a select group of college presidents representing liberal arts institutions, large universities, military schools, and 2-year colleges. These Standards have been reviewed by professional higher education associations for their endorsement.

The Network seeks the participation of colleges and universities who have made a solid commitment throughout their institutions to:

Establish and enforce clear policies that promote an educational environment free from the abuse of alcohol and other drugs.

Educate members of the campus community for the purpose of preventing alcohol abuse and other drug use, as well as educate them about the use of legal drugs in ways that are not harmful to themselves or to others.

Create an environment that provides and reinforces healthy, responsible living; respect for community and campus standards and regulations; the individuals responsibility within the community ; and the intellectual, social, emotional, spiritual, or ethical, and physical well-being of its community members.

Provide for a reasonable level of care for alcohol abusers and other drug users through counseling, treatment, and referral.

Appendix C
Network of Colleges and Universities
Committed to the Elimination of Drug and Alcohol Abuse
Standards

Network of Colleges and Universities
Committed to the Elimination of
Drug and Alcohol Abuse

Standards

The Standards of the Network of Colleges and Universities Committed to the Elimination of Drug and Alcohol Abuse define criteria for institutional membership within the four areas of policy, education, enforcement, and assessment.

A. Policy

Network members shall...

1. Annually promulgate policy, consistent with applicable Federal, State, and local laws, using such means as the student and faculty handbooks, orientation programs, letters to students and parents, residence hall meetings, and faculty and employee meetings.
2. Develop policy which addresses both individual behavior and group activities.
3. Define the jurisdiction of the policy carefully to guarantee the inclusion of all campus property. Apply campus-based standards to other events controlled by the institution.
4. Stipulate guidelines on marketing and hosting for events involving student, faculty, staff, and alumni at which alcoholic beverages are present.
5. State institutional commitment to the education and development of students, faculty, and staff regarding alcohol and other drug use.

B. Educational Programs

Network members shall...

1. Provide a system of accurate, current information exchange on the health risks and symptoms of alcohol and other drug use for students, faculty, and staff.
2. Promote and support alcohol-free institutional activity programming.

3. Provide, with peer involvement, a system of intervention and referral services for students, faculty, and staff.
4. Establish collaborative relationships between community groups and agencies and the institution for alcohol and other drug related education, treatment, and referral.
5. Provide training programs for students, faculty, and staff to enable them to detect problems of alcohol abuse and other drug use and to refer persons with these problems to appropriate assistance.
6. Include alcohol and other drug information for students and their family members in student orientation programs. The misuse and abuse of prescription and over-the-counter drugs should also be addressed.
7. Support and encourage faculty in incorporating alcohol and other drug education into the curriculum, where appropriate.
8. Develop a coordinated effort across campus for alcohol and other drug related education, treatment, and referral.

C. Enforcement

Network members shall...

1. Publicize all alcohol and other drug policies.
2. Consistently enforce alcohol and other drug policies.
3. Exercise appropriate sanctions for the illegal sale or distribution of drugs; minimum sanctions normally would include separation from the institution and referral for prosecution.

D. Assessment

Network members shall...

1. Assess the institutional environment as an underlying cause of alcohol abuse and other drug use.
2. Assess campus awareness, attitudes, and behaviors regarding the abuse of alcohol and use of other drugs and employ results in program development.

3. Collect and use alcohol-and other drug-related information from police or security reports to guide program development.
4. Collect and use summary data regarding health and counseling client information to guide program development.
5. Collect summary data regarding alcohol-and other drug-related disciplinary actions and use it to guide program development.

Appendix D
Interview Guide

Interview guide

Objective-How does each program operate within the organizational structure?

Services

1. What does the program consist of?

Probe;

- services does the program provide
- assistance does the organization provide to the program
- who is involved in program & how

2. How is interviewee involved in the program?

Probe;

- types of activities associated with program
- view their role
- how does professional background help/hinder work

3. What options do you offer students?

Probe;

- referral options
- prevention options
- treatment options

4. How does organizational structure affect these options?

Probe;

- advantages
- disadvantages

Philosophy

1. What is the criteria for determining if there is a substance abuse problem?

Probe;

- professional/personal criteria

Resources

1. How do you view your level of resources?

Probe;

- financial
- space
- personnel
- other

Mission

1. What are the program goals?

Probe;

- how do they fit in with organizational goals?

- how do they fit in with university goals?

Outcomes

1. What is the referral process?

Probe;

- how referred in/out

- where

- why referred there

- who gets referred

- how many

- who decides

2. How does the interviewee define effectiveness?

Probe;

- program

- organizational structure

Objective-legislative impact on program

1. How has the 1989 Drug Free Schools and Campuses Act affected the program?

Probe;

- personnel

- funding

- financial

- philosophy

Objective- How has the Act influenced the organizational structure

1. How does interviewee view impact of the 1989 legislation on the organizational structure of that program?

Probe;

- resources

- philosophy

- goals

Appendix E
Drug-Free Schools and Communities Act Amendments of 1989

Drug-Free Schools and Communities Act Amendments of 1989 (P.L. 101-226)
December 12, 1989

Sec 11 DRUG-FREE SCHOOLS AND CAMPUSES.

(a) In General-

(1) Certification of DRUG AND ALCOHOL ABUSE PREVENTION PROGRAM- Title XII of the Higher Education Act of 1965 (20 U.S.C. 1001 et seq.) is amended by adding at the end a new section 123 to read as follows:

"DRUG AND ALCOHOL ABUSE PREVENTION"

"Sec. 1213. (a) Notwithstanding any other provision of law, no institution shall be eligible to receive funds or any other form of financial assistance under any guaranteed student loan program, unless it certifies to the Secretary that it has adopted and has implemented a program to prevent the use of illicit drugs and the abuse of alcohol by students and employees that, at a minimum, includes-

"(1) the annual distribution to each student and employee of-

"(A) standards of conduct that clearly prohibit, at a minimum, the unlawful possession, use, or distribution of illicit drugs and alcohol by students and employees on its property or as part of any of its activities:

"(B) a description of the application legal sanctions under local, State, or Federal law for the unlawful possession or distribution of illicit drugs and alcohol:

"(C) a description of the health risks associated with the use of illicit drugs and the abuse of alcohol:

"(D) a description of any drug or alcohol counseling, treatment, or rehabilitation or re-entry programs that are available to employees or students: and

"(E) a clear statement that the institution will impose clear sanctions on students and employees (consistent with local, State and Federal law), and a description of those sanctions, up to and including expulsion or termination of employment and referral for prosecution, for violation of the standards of conduct required by paragraph (1) (A), and

"(2) a biennial review by the institution of its program to-

"determine it's effectiveness and implement changes to the program if they are needed; and

"(B) ensure that the sanctions required by paragraph (1) (E) are consistently enforced.

"(b) Each institution of higher education that provides the certification required by subsection (a) shall, upon request, make available to the Secretary and to the public a copy of each item required by subsection (a)(1) as well as the results of the biennial review required by subsection (a) (2).

"(c)(1) The Secretary shall publish regulations to implement and enforce the provisions of this section, including regulations that provide for-

"(A) the periodic review of a representative sample of programs required by subsection (a), and

"(B) a range of responses and sanctions for institutions of higher education that fail to implement their programs or that consistently enforce their sanctions, including information and technical assistance, The Development of a compliance agreement, and the termination of any form of Federal financial assistance.

"(2) The sanctions required by subsection (a) (1) (E) may include the completion of a rehabilitation program.

"(d) Upon determination by the Secretary to terminate financial assistance to any institution of higher education under this section, the institution may file an appeal with an administrative law judge before the expiration of the 30-day period beginning on the date such institution is notified of the decision to terminate financial assistance under this section. Such judge shall hold a hearing with respect to such termination of assistance before the expiration of the 45-day period upon a motion by the institution concerned. Such judge may extend such 45-day period upon a motion by the institution concerned. This decision of the judge with respect to such termination shall be considered to be a final agency action."

(2)EFFECTIVE DATE- (a) except as provided in subparagraph (B), the amendment made by paragraph (1) shall take effect on October 1, 1990.

(C) The Secretary of Education may allow any institution of higher education until not later than April 1, 1991, to comply by paragraph (1) if such institution demonstrates-

(i) that it is in the process of developing and implementing it's plan under such section; and

(ii) it has a legitimate need for more time to develop and implement such plan.

Appendix F
Consent Form

INFORMED CONSENT FORM

The title of this study is " A Descriptive Study of Substance Abuse Programs in Oregon's Public Universities". This study, as the title implies, is research which will provide a complete description of substance abuse programs through interview of individuals who are pertinent to the operation and structure of the programs in Oregon's public universities.

As a subject in this research, your participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled. The duration of the interview will be one hour. You may discontinue participation at any time without penalty or loss of benefits to which one is entitled. The interview will be tape recorded and tapes will be transcribed in entirety. Interviewees will be identified by title and relationship to program only. Name of institution will be held in confidentiality. Universities will be referred to as A,B, or C in the results.

"I understand and agree to the provisions outlined in the above sections".

Questions about the research, subjects rights, or research-related injuries should be directed to Dr. Charles Carpenter at 737-5961.

Name_____ Date_____

Signature_____

Researcher Signature_____