Personality and Life Crisis Factors in Nurse Drug Users

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PERSONALITY AND LIFE CRISIS FACTORS IN NURSE DRUG USERS

BY

DONNA ANNE ROBERTS
B.A., University of Central Florida, 1980

THESIS
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# Table of Contents

**CHAPTER 1: INTRODUCTION** ........................................ 1

**CHAPTER 2: REVIEW OF THE LITERATURE** .......................... 8

- General Drug Use ................................................. 8
- Health Professionals ........................................... 10
- Doctors .......................................................... 15
- Nurses ............................................................ 20
- Role of Nurses .................................................. 30
- Personality Instruments ......................................... 31
- California Psychological Inventory ......................... 35
- Nurse Research Using CPI ..................................... 40
- Purpose of the Study ........................................... 42

**CHAPTER 3: METHOD** ............................................... 44

- Subjects .......................................................... 44
- Materials ......................................................... 46
- Procedures ....................................................... 47

**CHAPTER 4: RESULTS** .............................................. 49

- Research Question 1 ........................................... 49
- Research Question 2 ........................................... 51
- Research Question 3 ........................................... 51
- Research Question 4 ........................................... 51
- Hypothesis ....................................................... 52
- Comparison with CPI Norms .................................. 52
- Additional Finding ............................................. 57

**CHAPTER 5: DISCUSSION** .......................................... 58

**APPENDICES** ...................................................... 69

- Appendix A: Consent Form ..................................... 69
- Appendix B: Flyer Requesting Volunteers .................... 70
- Appendix C: Questionnaire .................................... 71
- Appendix D: Explanatory Letter .............................. 81
- Appendix E: Questionnaire Results ......................... 82

**REFERENCES** ...................................................... 89
CHAPTER 1: INTRODUCTION

Contemporary drug problems are varied and complex. Since shortly after the turn of the century drug abuse in the United States has been defined and treated as a public health issue requiring intervention by the federal government. The National Institute on Drug Abuse was established in 1973. As described in the Guide to the Drug Research Literature (Austin et al., 1979), a wealth of research has been done since the early 1960s to analyze the "problem" and suggest "solutions." The research has focused on such varied aspects of drug abuse as the psychosocial, legal, medical, and pharmacological facets of the problem.

There is much confusion and ambiguity concerning the definition of terms related to the use and abuse of drugs. A functional definition of drugs has been given:

In a purely biological, scientific sense . . . any substance, natural or artificial, that by its chemical nature alters structure or function in the living organism (Modell, 1967, p. 346).

There are many popular and conflicting perceptions of what constitutes a drug. Many people equate "drugs" with illicit substances used recreationally. These tend to be viewed as different and more harmful than licit substances such as tea, alcohol, and so-called medical drugs.
The National Commission on Marijuana and Drug Abuse in 1973 used the term "psychoactive substances" to refer to all drugs in the hope that use of this term would help to promote a greater recognition of the similarities among all chemical agents that have mood-altering effects and thus dispel the misconception concerning the differences between alcohol, coffee, and tobacco, on the one hand, and street drugs, on the other. There has been much confusion over the term "drug abuse" because it is so value-laden and implies that drug use is dangerous and undesirable to the individual and community. Drug abuse has been defined this way:

Behavior as designated by professional and other community representatives describing the use of particular drugs in particular ways that are contrary to the agreed upon rituals in a given community at a given point in time (Einstein and Garitano, 1972).

Similarly, Wickler (1958) defined abuse as "the use of chemical agents for purposes considered undesirable by an observer."

The notion of "drug use" is generally thought to be less pejorative and more descriptive than "drug abuse" since it draws attention to how a drug is used and the specific problems which may result. The primary diagnostic tool of the American Psychiatric Association, the Diagnostic and Statistical Manual of Mental Disorders (3rd Edition, 1980), or DSM-III, classifies the use of
substances according to behavioral changes associated with more or less regular use of these substances on the central nervous system. The DSM-III category of "substance use disorder" uses specific criteria to distinguish "substance abuse" from "substance dependence." Criteria for substance abuse are (a) pattern of pathological use, (b) impairment in social or occupational functioning due to substance use, and (c) duration of the abuse. Criteria for substance dependence are more severe forms of the substance abuse requiring physiological dependence evidenced by either tolerance or withdrawal. Other features of substance use disorder include classes of the substance, age of onset, complication of the abuse or dependence, predisposing factors, prevalence, and repeated episodes of substance-induced intoxication.

During most of the period from 1960 to 1980 the primary focus of drug research, treatment, and prevention programs was directed toward adolescent and ghetto or illicit drug users. In 1983 both US News and World Report (Brecher et al., 1983) and Newsweek (Sanoff & Hogue, 1983) featured cover stories which brought to national attention the increased drug use among adults in the nation. This new and frightening problem affects the national economy as well as the health of the population. Government figures show that in 1962 only 4 percent of adults between
the ages of 18 and 25 had ever smoked marijuana, whereas by 1982 this figure had risen to 64 percent. Furthermore, 31.3 percent of young people 12 years of age or older had tried pot by 1982. Two decades ago only a small fraction of the population had used cocaine, but by 1982 some 22 million had tried it.

As never before, drug use has reached into every region, age group, and class of American society. Attention has only recently been drawn to the increased use of drugs by those in the helping and health professions. The current study looked specifically at drug use among nurses.

The framework for the study was based on a research model developed by Dembo and LaGrand (1978) who stressed (1) the importance of the recognition that drug use needs to be considered in the context of the social and cultural experiences of the people using them, and (2) appreciation that a comprehensive understanding of substance use requires that the use of legal and illicit drugs be studied.

The purpose of the current study was to determine what differences, if any, existed between a group of nurses receiving treatment for drug problems and a group of nondrug-using nurses. The variables of interest were the demographics, prevalence of drug use, life crises,
professional problems, and personality characteristics. A knowledge of these variables is important in identifying nurses who may become drug users in order to develop effective prevention strategies. Such knowledge is also important in the development of treatment programs designed to meet the unique needs of drug-using nurses. The significance of this study lies in the contribution it makes to a better understanding of these variables.

This paper will report the results obtained from the administration of a psychological instrument to determine some of the personality characteristics of drug-using nurses. These findings will be compared with those obtained from a selected group of nondrug-using nurses in the same community. The two groups will be identified throughout this paper as "drug group" and "nondrug group."

At the time of the study, the researcher had been employed in the drug treatment program for three years as a counselor. She also facilitated a nurse support group which was comprised of most of the subjects in the drug group of the study. Previously the researcher had worked for more than 15 years as a registered nurse. Consequently, the study was conducted in the context of a high level of personal interest and direct observation of the treatment subjects. This personal involvement served to supplement the research component of the study.
Chapter 2 reviews the literature directly relevant to the current study. It deals briefly with drug abuse in the general population and focuses on drug abuse among health professionals, particularly nurses. It also reviews some of the pertinent correlational studies regarding drug abuse that have been conducted using standard personality instruments. Finally, it deals with the literature pertaining to the role definition of nurses and some of the related conflicts which commonly manifest themselves. Although the literature on general drug abuse is extensive, only selected works which relate directly to the current study are reviewed here. A very limited amount of research has been conducted regarding drug abuse among health professionals and most of the significant research is reviewed.

Chapter 3 describes the methods used in the study, including description of subjects, instruments used, and procedures employed for collecting and analyzing data. Demographic data and information regarding drug use, professional experience, and personal health were gathered through a questionnaire developed by the researcher. Data regarding personality characteristics were obtained through the use of the California Psychological Inventory (Gough, 1975). All data were obtained from both the drug and nondrug groups.
Chapter 4 presents the results of the study. The information from the questionnaire and the results of the CPI are discussed and summarized in tables and figures. Those results which have significance for the study are identified.

Chapter 5 interprets the results of the data and their significance for the nursing profession as it attempts to address the issue of drug use among nurses. Included are references to case studies, similarities and relationship to other studies of nurses and the general population, and the significance for future studies. Recommendations are made regarding the inclusion of drug education in the formal nursing curriculum as well as continuing education, and the establishment of specialized treatment programs for drug-using nurses.
CHAPTER 2: REVIEW OF THE LITERATURE

General Drug Use

Dembo and LaGrand (1978) reviewed research in the drug field and suggested a model for gaining a better understanding of drug usage. They considered drug use in the context of the social and cultural experience of the user. Their review of the literature revealed the increased recognition that drug use is most appropriately considered in the context of the attitudes, beliefs, and social-cultural experience of the user. Attention was given to the type of drugs used, e.g., legal prescriptions, over-the-counter drugs, alcohol, tobacco, illicit drugs. They demonstrated that insight can be gained by looking at a given population and identifying characteristics unique to that group. This includes looking at the values, beliefs, and social and cultural characteristics of the group, as well as at the specific drug behavior.

The Second Report of the National Commission on Marijuana and Drug Abuse (1973) emphasized that the impact of drug use on the personal and social life of the user is as important as the chemical composition of the drug and its physiological effects. The Commission sent out a
A typology of users which included categories other than stereotypical illicit drug use. The typology described users ranging from experimental to recreational, circumstantial, intensified, and compulsive users (cited in Dembo & LaGrand, 1978).

Most studies by social scientists have looked at ghetto and illicit drug use (Blumer et al., 1967; Sutter, 1966). Many studies have focused on the street addict as a generic type (Stephens & McBride, 1976). However, Balter (1974) proposed a typology based on the function served by the drug in the group under study.

Balter found that the most obvious reason for drug use is the relief from emotional stress that is obtained. As a form of self-medication, drugs were used to relieve anxiety, cope with insecurity, or produce positive feelings. These substances worked whether they were psychotherapeutic drugs obtained from the medical system, over-the-counter preparations, or illicit substances such as heroin. Society values self-assurance and control of one's life. When fears, impulses, or desires to escape from responsibilities become stressful, drug use can help the individual act out a role or behavior pattern that would normally not be a part of his or her lifestyle. In some socio-cultural groups, drug use has numerous values, meanings, and status features. The use of drugs can be an
expression of feelings as well as a way to search for meaning in life or independence. Some individuals use drugs to look for new excitement and the risk of purchasing illicit drugs as well as the use becomes an important behavior. Balter suggested that the term "drug abuse" be changed to drug use and research examine the ways in which drug-taking is incorporated into people's lives.

Guidelines developed by Dembo and LaGrand were used in planning this study of a particular drug-using population. These authors suggest looking at the following experiences and factors in understanding drug use: (a) documentation of the prevalence and type of drugs used, (b) insight surrounding the use, (c) examination of relevant demographics, (d) medical history and use of medical resources, (e) determination of reasons for the drug use and attitudes and values associated with the specific substances, (f) examination of ability to cope and problems in living, (g) assessment of psychic distress and life crises, (h) determination of the extent to which various substances helped in dealing with specific conditions, needs, and problems.

Health Professionals

Canfield (1976) was aware of the problem of drug abuse within the health care professions. Through a
careful review of the literature, he found that very little had been written about the subject and few research projects had been conducted on the professional health care population. Denial that problems of drug abuse existed among these professions had resulted in considerable inaccuracy in the small amount of data that had been gathered. Some of Canfield's findings are described in the following paragraphs to suggest both the extent of the problem and the need for further investigation.

A report appearing in *Anesthesia and Current Researches* in 1969 indicated a drug abuse rate of 49 per 100,000 registered physicians. About 300 became addicted to meperidine alone each year (cited in Canfield, 1976). Monnerot Dumaine reported in the *New Medical Press* (Nouvelle Presse Medicale) that physicians use sedatives, alcohol, and narcotics 30 to 100 times more frequently than the general public (cited in Canfield, 1976). Rasor and Crecraft noted in an article in the *Journal of the American Medical Association* that 50 percent of meperidine addicts admitted to the United States Health Service facility in Lexington, Kentucky, over a three-year period were physicians, nurses, or others involved in health care (cited in Canfield, 1976).
Few references were found concerning nurses, and these few were generally in general professional studies. The Council on Mental Health of the American Medical Association reported in 1973 on a study of drug abuse among physicians in the United States, England, Germany, Holland, and France. The report indicated that approximately 15 percent of known drug addicts are physicians and another 15 percent are nurses and pharmacy professionals (AMA, 1973).

Canfield has had experience as a director of a forensic science laboratory and as a medicolegal consultant in numerous court cases involving health care professionals. Based on both his study and experience, he estimates the yearly incidence of drug abuse among medical professionals to be 0.5 percent and the lifetime risk 15 to 20 percent.

Sherlock (1967) explored the relationship between career problems and the use of narcotics in health professionals. His sample was 24 cases from the United States Public Health Service Hospital at Lexington. Eleven male physicians and 13 female registered nurses were interviewed regarding four major areas: (a) family background, (b) occupational training, (c) career problems, and (d) drug use. The purpose of the interviews
was to obtain information to make a content analysis of the problem preceding the addiction.

Information was also gathered by Sherlock through participant observation, group therapy, and hospital records. Cases were classified as involving either role strain or role deprivation. Role strain was defined as the difficulty in fulfilling role obligations. A symptom of role strain is the use of drugs in times of excessive work, long hours, frequent home calls, and weekend duties. Subjective reports of stress such as tension, fatigue, anxiety, insomnia, and excessive use of alcohol or barbiturates was also considered symptomatic of role strain.

Role deprivation was defined as the loss of a significant relationship. This loss may be by the estrangement or death of a spouse, fiance, child, or close relative. Career changes such as dismissal, retirement, or physical incapacitation have also led to the use of drugs to cope with the change.

Analysis of data gathered by use of the Kolmogrov-Smirnov Test revealed a significant distinction. Nurses more frequently experienced role deprivation, while physicians more frequently experienced role strain. This may be explained by the fact that physicians generally work alone and have little opportunity to share their work
load with others. There are also many times when demands exceed the physician's capacities. Nurses in the study were found to be more dependent on marital or kinship ties and more vulnerable to stress in these nonwork relationships. Both groups experienced stress related to conflict between the altruistic motives of the health professional and the unrealistic service expectations of the community. The demands of hypochondriacal and chronically ill patients, understaffed hospitals, double shifts, and lack of professional recognition and status were all factors in the use of narcotics to handle the related stress. Narcotics were generally preferred over alcohol because they could be more easily hidden.

Sherlock concluded that career-related problems were important factors in the addiction of health professionals. He also concluded that career problems were much more significant factors than either personality maladjustment or access to narcotics in understanding the causes of addiction in health professionals.

One of earliest articles dealing with narcotic addiction among nurses and doctors was written by Dr. Solomon Garb in 1965. He attempted to determine the extent of the problem by distributing informal questionnaires throughout the 50 states, but with poor response. However, his article was significant for its
warning of the addictive properties of Demerol and its particular dangers for medical professionals. He estimated that the removal of Demerol from the market would lower the rate of new addiction among nurses and doctors by two-thirds and save the cost equivalent of eight new nursing schools and two new medical schools. Twenty years ago Garb was asking that the investigation and reporting of addicted professionals be made the official function of the professional associations rather than the criminal system. He advocated treatment of addicted professionals as "sick" persons and improvement in efforts toward their rehabilitation.

**Doctors**

The California State Board of Medical Examiners dealt with the discipline and rehabilitation of doctors found guilty of narcotics violations during the years 1948-57. Of 130 physicians placed on probation during this period, 41 had completed their probation and 62 were still on probation in 1958. At the conclusion of the study, 92 percent had been successful in their return to work. The three principal causes found for the initial use of narcotics were: (a) overwork and fatigue; (b) a painful disease, usually chronic, or for pain relief after an operation; and (c) domestic difficulties or unsolved personal problems (Jones, 1958).
A 20-year study examined the use of alcohol, tobacco, and mood-altering drugs by 45 physicians and 90 matched controls during the years 1949 to 1967 (Vaillant, 1970). Both groups were chosen as college sophomores on the basis of their above average physical and psychological health. The data from questionnaires through the years revealed that the physicians used more drugs than the controls. They used more tranquilizers, sedatives, and stimulants. Five had suffered hospitalization and/or socioeconomic damage as a result of drug and alcohol abuse. Only one of the control group reported similar problems. The author hypothesized two reasons for addicted physicians' use of drugs: (a) highly developed altruism which resulted in "overwork," and (b) an inability to realize the possibility of addiction.

Lipp and Benson (1972) used a questionnaire in a cross-sectional study of the personal use and attitudes of physicians concerning marijuana. Thirty-seven percent of the sample of 1,314 physicians had been exposed to marijuana and 25 percent had used it, while 7 percent were currently using it. Marijuana use generally correlated with the age and geographic location of the physicians. The younger age group was more likely to have used and still use marijuana. The San Francisco Bay and New York City samples showed a higher incidence of use than the
Nebraska and upstate New York samples ($p < .001$). Only 8 percent of the total subjects did not use alcohol, while 21 percent smoked cigarettes regularly.

Hill, Haertzen, and Yamahiro (1968) used the Minnesota Multiphasic Personality Inventory (MMPI) (Hathaway & McKinley, 1967) to measure the personality traits of addicted physicians and compared the scales with those of nonaddicted physicians and a sample of hospitalized Caucasian addicts. The profiles obtained were very different. The addict physician, mean age 42.8 years, showed significant elevations, the nonaddicted physicians normal scores, and the general addicts the greatest degree of deviation. The addict physicians' scores were heterogeneous in traits and suggested that the degree of sexual instability and psychopathology was significantly different from the mean of the nonaddict physicians as indicated by the higher psychopathic deviate scale. The hospitalized addict scales differed significantly from both of the other groups. The hospitalized addicts were comprised of a group of 81 white males, mean age 37.4 years, who were believed to be typical of the addicts at this hospital. Psychopathic deviation seemed to be a common characteristic of delinquent groups and this group of addicts scored higher on this scale.
Another MMPI based study compared the profiles of 36 male physicians hospitalized in a psychiatric setting with those of hospitalized physicians in a drug treatment center and to the profiles of healthy physicians (Dorr, 1981). Comparison was also made to the study by Hill et al. discussed above. The composite scores of the hospitalized physicians demonstrated a marked elevation (greater than two standard deviations above the mean) on the Depression Scale. The other scales were also elevated at least one standard deviation (except Hypochondriasis and Social Introversion) and this was interpreted as indicating considerable emotional distress. This reflection of emotional distress was greater than that found in the sample of Hill et al. Hill's addicted group was much more defensive than Dorr's. However, the difference in the group scores may have been a function of the type of treatment focus. Hill's group was in the U.S. Health Service Drug Treatment Center in Lexington, Kentucky. Dorr's group was in Highland Hospital, a psychiatric center where the emotional problems of the subjects received primary attention.

Hall, Stickney, and Popkin (1978) surveyed all of the Board of Medical Examiners in the United States regarding actions taken against physicians for drug abuse. During the year 1976, with a 72 percent response rate to the
questionnaire, and 18 percent actual figures, 37 actions were taken against American physicians. The authors believe that abuse among health professionals is underreported. This study also emphasized the need for impaired physician programs, the effect abuse has on the practice of medicine and family stress, and the important issues in treatment. Some of the factors predisposing physicians to drug abuse found in this study and others (cited in Hall et al., 1978) include parental deprivation, prolonged or serious childhood illness, insecurity compensated for by academic overachievement, sexual inhibition, and emotional hypersensitivity. Stress, passivity, role uncertainty, role deprivation, and emotional and physical stress have also been suggested as contributing factors. These authors concluded that few physicians voluntarily seek treatment and that substance abuse is frequently mixed in type, with abuse of alcohol and tranquilizers preceding narcotics abuse. Therapists dealing with these professionals must be aware of the high possibility of countertransference and denial of illness.

Hall et al. also compared the "typical" abuser with the physician abuser and found some interesting differences. The typical abuser begins to use drugs as an adolescent, uses drugs with his contemporaries, uses marijuana first, adopts heroin as his drug of choice,
supports habit by multiple crimes, is arrested for possession or buying, socializes within the drug culture, and abuses as an end in itself. The physician abuser typically begins abuse in his mid-30s to early 40s, begins to use drugs privately, uses drug of choice (primarily meperidine), money is not an issue, is detected by DEA audits taking drugs or writing prescriptions illegally, uses drugs alone and socialization is with nonabusers, and abuses as a means of coping.

Nurses

One of the few studies done on nurse addicts, and referred to frequently in the literature, was conducted in 1969 by Jimmie F. Poplar. She was a supervisor in the women's withdrawal service at the National Institute of Mental Health Clinical Research Center, in Lexington, Kentucky. She studied 90 registered nurses who had been hospitalized from 1962 to 1967. Through the use of observations, interviews, and questionnaires, she gained a better understanding of the behavior of these drug-using nurses. Her contention was that these nurses were different from the general population of addicts at the hospital and that they faced unique problems related to their profession and return to work.

The average age of the nurses was 41.7, compared to 30 for the other addicts. Thirty-seven were married, 25
divorced, 16 single, nine widowed, and three separated. The majority were graduates of three-year diploma programs. The principal reasons for their use of drugs were physical illness, emotional disturbance, and work pressure. They obtained their drugs from doctors and hospitals and the most widely used drug was Demerol. Psychometric tests were administered to the nurses and the results were analyzed separately from those of the general hospital population to determine if the clinical impressions of the staff could be validated with test data.

From 1960 to 1962 tests were given to nurses using the Psychometric Index of Character Structure developed by Dr. Jack J. Monroe, Chief of Psychological Services at the center. The 68 nurses tested were compared with a control group of 200 female patients. On the 400-item test, the nurses differed on 184 items from the general population of women and thereby came to be seen as a distinctive group with significant differences from typical substance abusers.

Several characteristics of the nurse drug users were identified. Typically their addiction began in adulthood rather than in adolescence. They used drugs for pain or escape, not for kicks. They used drugs alone, seldom "mainlined," and used alcohol more than the general
population of drug abusers. More than the other addicts, these nurses believed they were "mentally ill" and therefore voluntarily entered treatment. Most of them came from stable homes and were still close to their families, unlike most other addicts who came from disturbed or deprived backgrounds. As a group, they believed they were "not as good" as other people. Their interests were narrow and they tended to dislike novelty. They tended to be ultra-conventional and seemed to have difficulty developing normal, flexible relationships. They measured high on impulse control, whereas typical addicts scored very low. They had a great tendency to deny depression, boredom, restlessness, and unhappiness, and gave denying responses on 255 of the 400 test items.

The conclusions reached by Poplar provide important insights regarding problems related to return to work by impaired health professionals. She recommended that when nurses who were treated for drug addiction did work again, it should be in low stress jobs where there is no access to narcotics. She advocated that nurse addicts be given a second chance by colleagues and employers within such constraints.

Another study done at the NIMH Clinical Research Center explored the history of 12 nurses who abused drugs (Levine, Preston, & Lipscomb, 1973). The purpose of the
study was to examine the antecedents of the drug use including relevant social and psychological forces. The subjects ranged in age from 27 to 56 years with a mean age of 40. They had been misusing drugs for 1 to 24 years with a mean of 5 years. Job turnover had been high. Analyzed data revealed that the two areas of health and drug history interest were most significant. Medical histories were filled with lifelong use of medical services. The majority of the subjects had surgery in childhood or adolescence, some more than once. The average medical procedures per subject was 6.1 with a high of 25. These women had a total of more than 200 hospital admissions for medical, surgical, obstetrical, and psychiatric reasons. Only one-third had been treated for drug abuse previously.

The patterns of drug use in the group were significant. Half of the nurses reported alcoholism several years prior to the use of illicit drugs. Three-fourths of the subjects were cigarette smokers. The drugs used were prescription drugs with very few subjects even experimenting with "street drugs." Eight subjects used opiates primarily, but had never used heroin. Four had used amphetamines, six had used pentazocine, and nine had used sedatives-hypnotics. Demerol was the most used opiate. The conclusions of the study demonstrated the
acceptability of these medical professionals using "medicines" to deal with the problems encountered in their lives. These women had difficulty understanding self-medicating and drug abuse as the same phenomenon. Their medical histories led to a "medical dependence" expressing itself in career choice, chronic medical difficulties, alcoholism, and drug abuse. The nurses had serious problems dealing with self-reliance and the addiction was a result of the dependency issues in their lives.

Bissell and Jones reported a study conducted during the early and mid 1970s which focused on alcoholism among nurses and other medical professionals. The study was based on interviews with 100 recovering alcoholic nurses. The nurses ranged in age from 26 to 69, with a mean age of 44.6 years. They had abstained from alcohol for 1 to 20 years, with a mean of 4.8 years. Sixty-seven were employed full-time in nursing. All subjects were members of Alcoholics Anonymous and, like other professional members of AA groups studied, were high-achievers in school. Of the 87 nurses reporting this information, 66.7 percent were in the upper third of their nursing school graduating class.

Sixty-five percent of these nurses were addicted to alcohol only, 21 percent to both alcohol and non-narcotic drugs, and 13 percent to alcohol, narcotics, and non-
narcotic drugs. Thirty-one percent had attempted suicide, many while drinking. Although many had sought professional help, a failure to diagnose alcoholism was common. The study also found a high rate of denial among alcoholic nurses. The nurses commonly reported that friends, family, and colleagues frequently joined them in denying or concealing the problem rather than dealing with it.

Lipp, Benson, and Allen conducted a survey using 2500 questionnaires to gather information concerning the use of marijuana by nurses (1971). Their data were collected in 1970 in Miami at the conventions of the American Nurses' Association and the National Student Nurses' Association (962 ANA and 1,171 NSNA completed questionnaires). Conclusions of the study indicated significant numbers of nursing personnel in the sample had had personal exposure to marijuana use (i.e., being in a room or at an event where it was being used). Of this group a portion had used and continue to use marijuana. Students were more experienced in both use and exposure. Some geographical areas had a higher incidence of use (e.g., New York). Forty five percent of the NSNA respondents had past exposure and 4 percent currently used marijuana. Fifteen percent of the ANA respondents had exposure and one percent currently used.
The importance of the study was the fact that these medical personnel used marijuana in spite of the legal hazards involved. The question these researchers asked was "Are these healthy professionals fools or creatures of the times, as more and more of the general population uses the drug?"

It was found in the preceding study that 29 percent of the NSNA group and 30 percent of the ANA group were regular cigarette smokers. A more recent study investigating smoking in professional nurses in North Carolina found that 31.9 percent of the nurses surveyed continue to smoke regardless of their knowledge concerning the health hazards involved (Dalton & Swenson, 1983). This study was based on 601 responses to questionnaires regarding smoking habits of the respondents and their families. Current or former smokers comprised 46.6 percent (208) of the sample. Eighty-eight had successfully stopped smoking for at least one year. This study concluded that these nurses smoked primarily because it was an enjoyable habit. Smoking was generally perceived to be either a social activity, a ritual following a meal, a means of relaxation, or a response to stress on the job. Nurses comprise one of the professional groups in which there has been little
decrease in the incidence of cigarette smoking in recent years.

Bloomquist and Blanchard presented a very negative view of nurse addicts (1966). The fact of a nurse resorting to stealing drugs and placing patients in hazardous situations was distressing to these doctors. In the years since, articles have appeared in the nursing journals which present quite different viewpoints and understanding the addictive disease process has come to be seen as a special need of "people helpers" (Zahourek, 1981). Other articles have contained discussions of the signs and symptoms of drug abuse, prevention strategies, detection techniques, treatment methods, and personal accounts (Sandroff, 1982; Stepter, 1982; Darity, 1979; Elaine B., Clare M., June S., Janet A., 1974; Bracelin, 1982; Peirce, 1976; Finley, 1982; Buxton, 1982; DeLotto, 1982; Mereness, 1981). Similar concern for the problem has been registered in other countries as well, e.g. England, Wales, and Canada (Nursing Times, 1983; Kolesar, 1980).

In 1980 the National Council of State Boards of Nursing began to gather data concerning disciplinary actions involving nurses. From September 1980 through August 1981, 649 such actions (67%) were related to chemical abuse. Of the more than 1.6 million R.N.s who
were licensed in the United States at that time, less than 0.04 percent had their licenses in jeopardy because of drug abuse. However, it has become a concern of the profession. In 1981, the American Nurses' Association created a Nursing Task Force on Addiction and Psychological Disturbance. The goal of this group is to formulate guidelines for state nurses' associations by which to develop programs to help nurses impaired by alcoholism, drug abuse, or psychological dysfunction (American Journal of Nursing, 1982).

A group of articles on the theme "Help for the Helper" provided an update on the problem and the way in which it was being addressed by the nursing profession (American Journal of Nursing, April 1982). At that time, three state nurses' associations (California, Illinois, New York) had committees actively working on developing programs for impaired nurses. Georgia, Maryland, Ohio, and Tennessee already had established programs. Some health care facilities were developing employee assistance programs. Other articles in the group included "Confronting a Chemically-Impaired Colleague" (Jefferson & Ensor, 1982), "First-Hand Views of Recovery" (Jaffe, 1982), and a description of established impaired nurse programs by state. By August 1985, some 33 state nurses' associations had developed or were in the process of
developing programs for nurses who are impaired by alcohol, drugs, or psychiatric illnesses (Kirkwood, 1985).

In a paper presented at a Scientific Meeting of the Committee on Problems of Drug Dependence, McAuliffe used case studies to report a new form of opiate abuse among medical professionals (1981). Reasons for opiate addiction in the past can be classified as (a) therapeutic, e.g., originating from treatment with opiate medications for pain; (b) quasi-therapeutic, e.g., stemming from opiate self-medication for depression, anxiety, fatigue, stress, or hangover; or (c) non-therapeutic, e.g., resulting from recreational or euphoria-seeking drug use. Whereas non-therapeutic reasons were least cited in the past, the study indicated that there has been a dramatic increase in the recreational use of drugs by medical professionals and that non-therapeutic reasons for addiction have also increased.

McAuliffe was concerned with the treatment of these non-therapeutically addicted health professionals and particularly the methods of treatment required to help them overcome their drug dependence. Differing lifestyles and patterns of drug use indicated the need for more long-term treatment.
Role of Nurses

Nursing has many definitions. Role definition is important because the belief system of the nurse determines to a large extent her behavior in work situations. Travelbee's (1971) definition of nursing is suggestive of the complex nature of the profession:

Nursing is an interpersonal process whereby the professional nurse practitioner assists an individual, family, or community to prevent or cope with the experience of illness and suffering and, if necessary, to find meaning in these experiences. (p. 7)

This definition describes the nursing process as an agent of change and care-giving and also indicates the effect these activities have on the nurse herself. It implies that the nurse must accept her own humanity before she is able to transcend personal feelings and be responsive to the humanity of the ill, suffering, or dying patient. The vulnerability experienced by the nurse through a recognition of her own weakness can lead to feelings of guilt, doubt, and fear concerning her professional and personal adequacy. Cunningham (1981) captured this theme in an article titled "The Trouble With Nurses--They're Human."

Research has shown that the reason many nurses have left the field in recent years stems from the conflict between the self-image of a respected member of an honored profession pursuing a noble mission and the harsh facts of
life in the culture of a modern hospital. The problem has been analyzed in a variety of ways and the causes are numerous and complex. Low pay, unmanageable hours, demanding responsibilities without compensating recognition, low status in the hospital hierarchy, and an ambivalent authority structure are frequently mentioned factors. One of the more significant reasons is the disparity between the values articulated in nursing education and those which operate in nursing service (McDonald, 1981). This reality shock has led to "burnout," frequent job changes, and other escapes from situations in which the disparity is experienced. Drug use is a maladaptive method which many nurses use to deal with professional stress.

**Personality Instruments**

Sines (1976) discussed a particular actuarial approach to the prediction of personality characteristics related to the use and abuse of drugs. His approach was based on the assumption that there are several distinguishing patterns of psychological test data among drug users and some of these patterns will define groups (taxonomic classes) whose membership is relatively homogeneous in terms of etiology, pattern of drug use, and response to treatment. He suggested that the following data be collected to give more homogeneous information to
develop and validate an actuarial system in drug research:

1. Ratings of observable behavior and personality characteristics.
2. Demographic characteristics.
3. Environmental characteristics (predrug and current).
4. Predrug behavior patterns.
5. Pattern of drug use.
7. Psychometric data.

Sines indicated further that psychometric data can be collected by using any of several well-known instruments, e.g., the MMPI (Hathaway & McKinley, 1967), the CPI (Gough, 1957), the 16PF (Cattell, 1970), or the PRF (Jackson, 1967). He suggested that the relationship between test-defined groups and interest criteria is important and capable of empirical investigation.

As research has accumulated it has become increasingly obvious that an exceedingly complex set of factors are related to drug use. In view of this fact, the appropriate question for us to ask is, "Can any specific pattern of scores on a relatively inexpensive instrument, such as our psychological tests, identify a subgroup of persons whose drug-related behavior can be predicted or understood with a clinically and socially significant degree of precision?" If some pattern of scores on one of our inexpensive predictors can identify even 5% of drug abusers for us, we have a good test, a valid test, and a useful test. It is not necessary that such a predictor account for all drug abuse. If we find that none of our sets of predictor data can only identify 5% of our patients, but does so in a manner that allows us to make clinically effective decisions about those patients, let us
continue to use that predictor in order to identify that important group of patients. Our clinical and scientific task is then to identify additional sub-types among the remaining 95% of our patients using other predictors. (Sines, 1976, p. 98)

Many studies since the early 1960s have been conducted using psychological tests to demonstrate personality configurations of drug addicts and users. For the purpose of this paper, only selected studies are reviewed.

Most of the early research was concerned with male addicts. One such study was conducted with 200 male addicts (Hill, Haertzen, & Glaser, 1960). Using MMPI scores, Hill et al. found that drug addicts exhibited deviant personality characteristics associated with psychopathy. An elevated score on the psychopathic deviance scale (Pd) was the most pronounced common deviation.

Olson (1964) attempted to clarify and evaluate sex differences in adult narcotic addicts using MMPI personality patterns. He compared scale differences and composite profiles of the 60 males and 60 females who made up his sample. The higher K scores (correction scale) of the male group demonstrated a more guarded, defensive pattern of social interaction. Scores of the female group indicated greater openness. However, higher female scores on the depression and paranoia scales indicated low self-
confidence, poor morale, worry and dissatisfaction with their immediate situation, and a tendency to use paranoid defense mechanisms. Olson's findings corroborated those of Hill et al. and supported the conclusion that addicts demonstrate abnormal personality profiles with elevation of the Pd (psychopathic deviate) and Ma (hypomania) scales.

Berzins and Ross (1974) studied 395 female narcotic addicts at the NIMH Chemical Research Center in Lexington, Kentucky. Their sample was comprised of four groups: civil committed patients (N=52, M age=27.8), prisoners (N=66, M=27.4), probationers (N=60, M=30.2), and volunteers (N=217, M=35.3). All subjects were given the Lexington Personality Inventory which included clinical and validity scales of the MMPI.

Results showed a relatively consistent pattern of mean profiles of all four groups. The predominant feature of all the profiles was the elevation of the Pd (psychopathic deviate) scale. Overall configurations among the groups were similar with differences in the degree of elevation of the Pd scale. The study resulted in a mean MMPI profile of 4'4689317-05/FK. This profile is described as indicative of an active, aggressive, and immature personality type and is generally associated with heavy drinking or drug-abusing behavior. Data from this
study support the hypothesis that female narcotic addicts are psychologically troubled individuals.

Another study used the Adjective Check List to compare the personality characteristics of 84 institutionalized narcotic addicts with 176 normal females (Kilmann, 1974). Results indicated that the addict engaged in significantly more immature social interactions. The Adjective Check List (Gough & Heilbrun, 1965) consists of 300 commonly used adjectives. By their selection of adjectives the addicts described themselves as being ambitious, energetic, emotionally dependent, temperamental, anxious, apprehensive, impulsive, impatient, and generally intolerant of prolonged effort or attention. They also reported competitiveness, aggressiveness, indifference to the concern of others, no control of hostile impulses, and self-centeredness.

California Psychological Inventory

The CPI was developed primarily for use with normal people. Therefore, it has been most useful in profiling the personalities of people in conflict with society rather than themselves. For example, low scores on the socialization scale (So) have been demonstrated in research studies to be characteristic of delinquents, criminals, unwed mothers, marijuana and cigarette smokers, bright underachievers, alcoholics, cheaters, and
psychologists (Magargee, 1972). Several studies which apply the CPI to substance abuse are reviewed here.

Hogan, Mankin, Conway, and Fox (1970) compared the CPI scores of four groups of undergraduate students. The groups were established according to the level of use of marijuana and other drugs, i.e., frequent users, occasional users, nonusers, and principled nonusers. The groups differed significantly on 10 of 19 CPI scales. The frequent users were contrasted with the principled nonusers in the discussion of the study. Occasional users and nonusers fell between these two groups on most measures.

Frequent users were characterized by high scores on capacity for status (Cs), social presence (Sp), and flexibility (Fx). Individuals with these elevated scales tend to be self-confident, socially poised, skilled in interpersonal relations, and have wide ranges of interests. They also exhibit tendencies toward narcissism, self-aggrandizement, and overconcern for personal pleasure and diversion. Frequent users had low scores on socialization (So), responsibility (Re), communality (Cm), and achievement via conformance (Ac). These scores suggest hostility toward rules and convention, impulsivity, irresponsibility, and nonconformity. The resulting profile for frequent users
was complex in that social poise was offset by assertive nonconformity, empathy by narcissism, and broad interests and achievement by impulsiveness and irresponsibility.

The pattern for principled nonusers was also complex but in sharp contrast to that of frequent users. They recorded high scores on socialization, responsibility, communality, and achievement via conformance, along with low scores on capacity for status, social presence, flexibility, empathy, and achievement via independence (Ai). This pattern suggests responsibility and maturity balanced by authoritarian compliance, devotion to duty, and a narrow interest span.

Hogan et al. emphasized the complexity of these patterns as their most striking feature and argued that the character structure of nonusers is not necessarily superior to that of users. Scores of both groups were shown to be quite similar when compared with delinquents on an index of social maturity. The authors concluded that marijuana use is a self-regarding and amoral activity which a disapproving society has given moral significance.

Powell (1973) conducted a pilot study to learn more about heroin use among middle-class young adults. The study was motivated by the spread of heroin use to social groups other than lower socio-economic classes which had been the focus of most previous studies. Twelve subjects
were selected from intact families with no history of addiction. Data were gathered through extensive interviewing and testing. Personality data were collected using both objective tests, i.e. CPI and State-Trait Anxiety Indicator (STAI), and projective tests, i.e., Thematic Apperception Test (TAT) and Rorschach Inkblot Test. Intelligence test scores indicated above-average intelligence. Subjects were described as occasional heroin users who used for such reasons as self-medication, facilitation of emotional expression, and enhancement of a sense of competence.

An elevated anxiety state in the subjects was indicated by both objective and projective tests. The CPI scales of the occasional heroin users were compared with those of other college students. The heroin users scored below the college student mean on socialization, maturity, responsibility, achievement via conformance, and sense of well-being (Wb). They scored above the mean on achievement via independence and flexibility. Although these findings could not be generalized because of the small sample, the study served to reinforce the need for further study of occasional heroin users.

McGuire and Megargee (1974) compared four groups of marijuana-using youth offenders in a prison setting on the MMPI, CPI, STAI, and Beta Test. The 96 subjects were
divided into heavy users, regular users, occasional users, and nonusers. Their study demonstrated a reliable association between heavy use of marijuana in conjunction with other drugs and personality test scores indicative of maladjustment. Heavy users scored significantly higher than the other three groups of prisoners on the MMPI scales for psychopathic deviance ($T=76$) and hypomania ($T=69$). CPI scores for heavy users included self-control (Sc) scores significantly lower than those of occasional or regular users, as well as socialization scores that were well into the delinquent range.

Kurtines, Hogan, and Weiss (1975) administered the CPI to 372 subjects in a study of the personality dynamics of male heroin addicts. The five groups in the study were comprised of 59 white heroin addicts enrolled in treatment, 37 white undergraduate marijuana users, 26 psychiatric patients, 142 delinquents, and 108 police officers. Comparisons among the all-male groups were made on the 18 scales of the CPI and a separate scale developed by Hogan (1969).

Results of the study indicated that the addicts were not "sick" but were under-socialized and probably psychopathic. They scored significantly below the other groups on responsibility and socialization scales. Both heroin addicts and marijuana users scored high on
flexibility. The CPI pattern of the addicts generally suggests impulsivity, self-centeredness, irresponsibility, and little regard for rules and conventions. The marijuana-using college students differed from the addicts in terms of social status. They were also significantly more socially skilled and self-assured than the addicts. However, the addicts were more poised and self-assured than the hospitalized psychiatric sample.

Although both students and addicts scored low on the socialization scale, the antisocial tendencies of the students were offset by their high scores for empathy. The authors concluded that the drug use of the addicts stemmed more from hostile backgrounds marked by antisocial activity than from any profound sense of interpersonal inadequacy.

Nurse Research Using CPI

Gough (1975) used nurses to study the validity of the CPI scales. Several other researchers have used the CPI in studies of nurses (Miller, 1965; Highriter, 1969; Loy, 1969).

Dyer, Monson, and Van Drimmelen (1971) examined the relationships among administrative position, age, educational preparation, and scores on the CPI of 1,018 randomly selected registered nurses from 31 VA hospitals. Comparison of CPI scale means for nurses with Gough's
female norms revealed a similar profile. The largest positive differences occurred on the achievement via independence and psychological-mindedness (Py) scales where the nurse group scored approximately one-half of a standard deviation higher. The largest negative differences occurred on the socialization scale, where the nurse group was approximately one-third of a standard deviation lower. Fourteen of the 18 scales had significantly different means between the two groups. Sociability (Sy), social presence (Sp), good impression (Gi), and flexibility were not significantly different.

Dyer et al. also found that supervisory nurses generally had higher profiles than head nurses and staff nurses. Differences were found to exist between nurses who had ascended the administrative ladder by reason of seniority and those who had ascended by virtue of their educational preparation. Supervisory nurses with masters degrees, for example, were more dominant, verbal, and ascendant in social situations. They were also more achievement-oriented, tolerant, sensitive to the needs of others, and open to their own feelings and needs.

CPI scales of 8 nurses were negatively related to age at significant levels, indicating a lower profile in older nurses. Younger nurses were found to be more verbal, socially ascendant, satisfied with themselves, and
achievement-oriented. Older nurses were more self-controlled and desirous of making a good impression. The authors concluded that somewhat different profiles on the CPI scales are to be expected when testing nurses with different administrative assignments, age, and educational preparation.

In a follow-up study, using much of the same data discussed above, Dyer, Cope, Monson, and Van Drimmelen (1972), examined the question "Can job performance be predicted from biographical, personality, and administrative climate inventories?" They concluded that data drawn from these sources were predictive of success in the world of work. For example, nurses with higher level CPI profiles were demonstrated to be the best performers on the job. A significant relationship was found to exist between good performance and high scores on the the social presence, sense of well-being, responsibility, tolerance, achievement via conformance, and intellectual efficiency (Ie) scales. Nurses who rated high on a variety of performance dimensions were intelligent, educated, and motivated individuals who valued professional achievement.

**Purpose of the Study**

One purpose of the current study was to use information gathered from the questionnaire to answer the
following research questions:

1. What are the differences, if any, in the prevalence of drug use between the drug and nondrug groups?

2. What are the differences, if any, in major life crises between the drug and nondrug groups?

3. What are the differences, if any, in the health of nurses in the drug and nondrug groups?

4. What are the differences, if any, in professional problems between the drug and nondrug groups?

A second purpose of the study was to use the results of the California Psychological Inventory to test the following hypothesis:

There will be significant differences between the drug and nondrug groups on the Responsibility (Re), Socialization (So), and Self-control (Sc) scales of the California Psychological Inventory.

These scales measure socialization, responsibility, interpersonal values and intrapersonal controls.

Finally, the CPI profiles of both drug and nondrug groups were descriptively compared with male and female norms established by Gough. This comparison demonstrated the overall relationship between the groups studied and the norm scores for all 18 CPI scales.
CHAPTER 3: METHOD

Subjects

Each of the 27 volunteer subjects in the study signed a consent form (Appendix A) prior to their participation. Members of the drug group (n=14) were in a drug treatment program for nurses in Orlando, Florida. At the time of the study these nurses were participating in both individual and group therapy with the researcher. This group consisted of 10 females and 4 males. There were 11 registered nurses and three licensed practical nurses. The range of ages was 24 to 47 years with a mean of 33.7. There were four divorced subjects, four remarried, three first married, and three who had never married. The number of years in nursing careers were as follows: 3 to 5 years (5ss), 5 to 10 years (4ss), 10 to 15 years (4ss), and more than 15 years (1s). Categories of primary nursing service included seven staff nurses, six critical-care nurses, and one psychiatric nurse.

This group of drug-using nurses came to the drug treatment center for help after they had been confronted at their place of work for taking drugs. Only 1 of the 14 subjects came for help with a drug problem which had not been detected at work. They had been fired from their
jobs and reported to the State Department of Regulation for investigation of their drug-related cases. Action had been taken by the Florida Board of Nursing after the individual cases were heard. The nurses were either placed on probation for a prescribed period of time, or their licenses suspended for a certain time until they were judged safe to resume the practice of nursing. Of the subjects in the drug group, nine were on probation, one had a suspended license, two were awaiting settlement of their cases, one was in a state-sponsored Impaired Nurses Program, and one was a voluntary admission.

The nondrug group (n=13) was comprised of nurses employed in two hospitals in the same city. Eleven worked in the same hospital. This group contained 11 RNs and 2 LPNs. The range of ages was 24 to 47 with a mean of 33.0 years. There were 3 divorced subjects and 10 first marriages. The number of years in nursing were 3 to 5 years (3ss), 5 to 10 years (9ss), and 10 to 15 (1s). Five subjects worked as staff nurses and eight were in critical-care areas. These volunteer subjects were solicited through contact with head nurses at one hospital and through researcher contacts in the other. Effort was made to match the drug and nondrug groups as closely as possible according to age, sex, area of nursing, and years in nursing.
In order to solicit subjects, a flyer (Appendix B) was distributed in the hospital after presenting the research proposal and securing permission of the hospital's research committee. Because of a poor initial response to the flyers, the researcher contacted individual head nurses to solicit their support in encouraging participation in the project. This effort yielded 12 volunteers.

Difficulty was encountered in finding male subjects to participate in the study. It was necessary to go outside the original hospital to locate nondrug-using male nurses. Three of the 5 male nurse volunteers were eliminated; one had an invalid CPI, another completed only the questionnaire, and a third decided not to participate after examining the materials. One male subject revealed on the questionnaire a history of alcohol problems four years earlier. However, he had never received any treatment. It was decided to leave him in the study. No further search was made for male subjects in the community.

Materials

A questionnaire (Appendix C) was developed which collected 13 items (nos. 1-13) of biographical information including age, sex, marital status, educational background, and nursing history. Fourteen additional
items (nos. 14-23, 26-27, 32-33) were derived from the Drug Abuse Instrument Handbook: Selected Items for Psychological Drug Research (Nehemkis et al., 1976). Another 13 items (nos. 24-25, 28-31, 34-40) were developed by the researcher to gather data on previous illnesses and opinions regarding drug abuse among nurses in general.

The California Psychological Inventory (CPI) was administered to all 27 subjects in the study. All 18 standard scales were included. The CPI was selected for personality assessment because it had been used previously in nursing studies (Miller, 1965; Highriter, 1969; Loy, 1969; Dyer, Monson, and Van Drimmelen, 1971) and because it was originally designed for use in nonclinical populations as a measure of characteristics important in everyday social interaction. It had also been normed for both male and female subjects (Gough, 1975).

**Procedures**

Each subject was given the questionnaire and CPI and allowed to complete them either at home or in the researcher's office. The materials were accompanied by a short letter of explanation from the researcher (Appendix D). Subjects were instructed not to discuss the materials with anyone until after the completed instruments were returned to the researcher. Gough indicates in his instructions on CPI that neither time, place, nor
directions for completion interfere with the results (Gough, 1975, p. 6).
CHAPTER 4: RESULTS

Questionnaire results from drug (n=14) and nondrug (n=13) groups were calculated in percentages (see Appendix E). Frequency rates of drug use, major life crises, hospitalizations, and job problems are displayed in Table 1.

Research Question 1

What are the differences, if any, in the prevalence of drug use between the drug and nondrug groups?

The drug group reported use of all 12 drugs listed on the questionnaire (see Table 1). Alcohol, marijuana, and Demerol had the highest levels of reported use. The nondrug group reported use of 8 of the 12 drugs with alcohol having the highest level of use. The frequency of taking drugs from the workplace for personal use was four times higher in the drug group than in the nondrug group. A chi-square test was used to determine whether the frequency of drug use differed between the drug and nondrug groups. The results of the test were not significant ($\chi^2=3.01, df=1, p<.05$).
### TABLE 1

<table>
<thead>
<tr>
<th>Drugs used (currently or in the past):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol (current use)</td>
</tr>
<tr>
<td>Tobacco (current use)</td>
</tr>
<tr>
<td>Marijuana</td>
</tr>
<tr>
<td>Amphetamines</td>
</tr>
<tr>
<td>Tranquilizers</td>
</tr>
<tr>
<td>Barbiturates</td>
</tr>
<tr>
<td>Darvocet</td>
</tr>
<tr>
<td>Morphine</td>
</tr>
<tr>
<td>Codeine</td>
</tr>
<tr>
<td>Demerol</td>
</tr>
<tr>
<td>Hallucinogenics</td>
</tr>
<tr>
<td>Cocaine</td>
</tr>
</tbody>
</table>

| Have taken drugs from workplace for personal use | 2  | 1  | 9  | 4  |

<table>
<thead>
<tr>
<th>Frequent major crises related to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
</tr>
<tr>
<td>Friends</td>
</tr>
<tr>
<td>Lover</td>
</tr>
<tr>
<td>Self</td>
</tr>
<tr>
<td>Meaning of life</td>
</tr>
<tr>
<td>Health</td>
</tr>
</tbody>
</table>

| Illness which required hospitalization during past three years | 3  | 0  | 5  | 1  |

<table>
<thead>
<tr>
<th>Professional problems:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fired from job</td>
</tr>
<tr>
<td>License suspended</td>
</tr>
<tr>
<td>Board probation</td>
</tr>
</tbody>
</table>
Research Question 2
What are the differences, if any, in major life crises between the drug and nondrug groups?

The frequency of major life crises was nearly five times higher in the drug group than in the nondrug group (see Table 1). A chi-square test was used to determine if there were significant differences in major life crises between the two groups. No significant difference was found ($X^2 = .40, df=1, p < .05$).

Research Question 3
What are the differences, if any, in the health of nurses in the drug and nondrug groups?

Excellent health was reported by 76.9% of the nondrug group and only 28.6% of the drug group. Good health was reported by 23.1% of the nondrug group and 64.3% of the drug group. Fair health was reported by 7.1% of the drug group and none of the nongroup group. The drug group reported twice as many illnesses requiring hospitalization than the nondrug group (see Table 1).

Research Question 4
What are the differences, if any, in professional problems between the drug and nondrug groups?

The drug group reported a high incidence of professional problems with 78.6% having been fired from a nursing position, 21.4% having had their license
suspended, and 71.4% having been placed on probation by a
state board of nursing. None of these professional
problems were reported by the nondrug group (see Table 1).

Hypothesis

There will be significant differences between
drug and nondrug groups on the responsibility (Re),
socialization (So), and self-control (Sc) scales
of the California Psychological Inventory.

The raw scores of all subjects \((N=27)\) on all 18
scales of the CPI were analyzed. Means and standard
deviations were computed and \(t\) tests calculated on the
scores of both the drug \((n=14)\) and nondrug \((n=13)\) groups.

The drug group contained ten females and four males;
the nondrug group, ten females and three males.
Significantly lower scores in the drug group were found on
2 of the 3 scales: socialization \((t=2.23, df=25, p<.05)\)
and self-control \((t=2.26, df=25, p<.05)\). No significant
differences were found on the responsibility scale
\((t=1.36, df=25, p<.05)\).

Comparison with CPI Norms

The means of the drug \((n=14)\) and nondrug \((n=13)\)
groups were compared with Gough's standard scores \((M=50,\)
\(SD=10)\). Figure 1 shows the comparison with Gough's female
norms. The drug group showed a .8 \(SD\) higher than the
female norming group on the social presence (Sp) scale and
.5 \(SD\) higher on the flexibility (Fx) scale.
The drug group scored below the mean on the responsibility (Re), socialization (So), and self-control (Sc) scales. Differences in standard deviations were 1.0 on the Re scale, 1.2 on the So scale, and .6 on the Sc scale. The drug group scores on all other scales were less than +.4 SD of the norm group means.

The nondrug group scored .6 SD below the norm on the good impression (Gi) scale. All other scores were less than +.5 SD of the norm group means.

Figure 1. Comparison of drug and nondrug groups with CPI female norms.
Figure 2 compares the mean scores of the nondrug (n=13) and drug (n=14) groups with Gough's male norms. The patterns demonstrated in this comparison are similar to those in Figure 1. The noticeable differences are the high femininity (Fe) scores of both groups and the low scores for the drug group on the Re, So, and Sc scales. The highest drug group score was on the Sp scale.
Figure 3 shows the comparison of female subjects in the drug \((n=10)\) and nondrug \((n=10)\) groups with Gough’s female norms. The Sp scores for the drug group were \(0.9\) SD above the norming females. The Re and So scores were \(1.0\) SD below the norm for the drug group. All other scores for the drug group were less than \(+0.5\) SD of the norm. The nondrug scores were less than \(+0.5\) SD of the norming range with Gi the lowest and achievement via independence (Ai) the highest.

![Figure 3. Comparison of female drug and nondrug groups with CPI female norms.](image.png)
Drug males ——— Nondrug males———

Figure 4. Comparison of male drug and nondrug groups with CPI male norms.

Figure 4 compares the male drug (n=4) and male nondrug (n=3) groups with Gough's male norms. Uneven patterns are revealed for both groups. The highest scores by the drug group were Sp, Ai, Fe, and self-acceptance (Sa). The lowest scores were on well-being (Wb), Re, So, Sc, and Gi. The highest nondrug score was Sc; the lowest were Re, Gi, and tolerance (To).
Additional Finding

The discovery of low So and Sc scores as well as a high frequency of life crises in the drug group led the researcher to formulate the following hypothesis:

There will be significant differences in So and Sc scores on the CPI scale between subjects who had experienced major life crises and those who had not.

A multivariate analysis of variance was used to determine significant differences on So and Sc scores between subjects who had experienced major life crises and those who had not. So and Sc scores were found by the Wilks' Lambda to be significantly lower among those who had experienced major life crises ($F=7.087$, $df=1/23$, $p<.05$) than among those who had not.
CHAPTER 5: DISCUSSION

Information gathered from the questionnaires provided answers to the four research questions posed by the study. Relevant information is summarized in Table 1.

In regard to the first research question, questionnaire results strongly suggest differences in the prevalence of drug use between nurses in the drug and nondrug groups. Demerol was found to be the most used drug other than alcohol and marijuana. This drug, used primarily for relief of pain in medical and surgical illnesses, was taken from the workplace for the personal use of these nurses to deal with physical and emotional pain. One of the most frequently given reasons for the use of drugs is the relief of emotional pain (Balter, 1974). Nurses in group and individual therapy often reported the use of drugs to self-medicate. Drugs were reportedly taken to relieve anxiety, feelings of insecurity, and depression, as well as to escape from responsibility and the actual pain of illness. Other studies had also found Demerol to be the most used drug (Levine, 1973; Poplar, 1979; Garb, 1965). Demerol is readily accessible to nurses. Although it is physically addictive, Demerol did not seem to result in serious
symptoms of withdrawal when used by the nurses and they were able to do without the drug on the days of inaccessibility (i.e., days off). The cycle of abuse gradually took control, however, and the desire for the drug and the relief it brought soon destroyed the judgment of these nurses.

Although many of the nurses realized they would eventually be confronted, they were unable to give up their drug use on their own. At the time of the study most of the drug group had been confronted through their work by the discrepancies in the count of controlled drugs such as Demerol. A crisis generally developed after the drug abuse was discovered resulting in the loss of job, as well as legal and licensing problems. Then the drug-taking behavior was terminated and the nurse began treatment for the abuse problem.

Most of the subjects came from stable homes, had no previous drug histories, and placed high value on their profession, their families, and themselves. This type of drug-using nurse has been observed and reported in other studies and by treatment professionals (Poplar, 1969; Balter, 1974; Levine, 1974; Hall et al., 1978).

McAuliffe (1981) has indicated that a change to more so-called street drugs, e.g., cocaine and marijuana, as drugs of choice among medical professionals will alter
treatment needs in the future. Most of the drug group nurses in this study fit into McAuliffe's description of the quasi-therapeutic abuse of opiates for the relief of depression, stress, anxiety, and fatigue. However, changes seem to be occurring as more recreational drugs are used in the general population. Two of the nurses in the study had been admitted to the treatment center because of cocaine abuse. Two other nurses in treatment, but not included in the study, had long histories of abuse of marijuana, cocaine, and other drugs which they considered recreational.

Information regarding major life crises and health problems, the second and third research questions, was also gathered from the questionnaire. Results suggested significant differences between the drug and nondrug groups in the frequency of both life crises and health problems. Levine (1974) indicated that nurses in his study had a high number of health-related hospitalizations prior to their drug abuse. The drug group subjects in the current study also had more health and hospitalizations than those of the nondrug group.

Bell (1977) examined the relationship between stressful life events, mental illness, and wellness behaviors. She also looked at the coping methods used by individuals in dealing with stress in their lives. Data
were collected using the Holmes and Rahe Social Readjustment Rating Scale, an 18-item coping scale (Holmes & Rahe, 1967). The experimental group consisted of 30 psychiatric inpatients and the control group of randomly selected subjects with no history of psychiatric illnesses who were functioning in socially accepted roles. The experimental group reported that more stressful life events had occurred in the previous six months and that they had used more short-term than long-term coping methods when compared with the control group. A significant association was found between high stress scores and short-term coping methods for subjects in both groups. Findings in the Bell study support the hypothesis that inadequate coping in adapting to life changes increases the probability of disease occurrence in times of stress. One of the short-term coping methods in the study was the use of drugs.

The drug group in the current study, with its significantly higher numbers of life crises and health problems, used drugs as a short-term coping method to deal with stress. The Bell study is important to this study in its conclusion that the concept of change, as it relates to stress, needs to be emphasized in all fields of health care. Bell challenges nursing practitioners, theorists, and educators to consider the relationship of
stressful life events to the health maintenance and illness prevention of individuals. She advocates changing nursing education to provide future practitioners opportunities to identify stress and to learn ways to cope more effectively with the stresses they will inevitably encounter in their professional roles. Nurses need to learn stress reduction strategies and techniques to use with patients and also for the prevention of their own illness behaviors.

Another research question addressed by this study pertains to differences in professional problems between drug and nondrug groups. As was expected, the higher incidences of professional problems occurred in the drug group. There were also differences in how the two groups believed a substance-abusing nurse should be treated by the profession. The majority (61.5%) of the nondrug group believed the nurse should be punished by loss of license. The issue of the rehabilitated nurse is presently being addressed in at least 33 states across the nation by development of programs for colleagues who are impaired by alcohol, drugs, or psychiatric illness (Kirkwood, 1985). The purpose of these programs is to help the nurse and also to educate the profession regarding the illness of drug addiction.
The CPI instrument has been scaled for the purpose of surveying the social interaction of individuals and can be used to describe and even predict social behavior under some conditions. The three particular scales which cluster and refer to interpersonal values and intrapersonal controls are responsibility (Re), socialization (So), and self-control (Sc). The Re scale emphasizes the degree to which values and controls are conceptualized and understood; the So scale emphasizes the degree to which they are internalized and made operational in the life of the individual; and the Sc scale stresses the degree to which the individual approves of and espouses such regulatory dispositions (Gough, 1965). In testing the hypothesis of this study it was predicted that there would be significant differences between the drug and nondrug groups on the Re, So, and Sc scales of the CPI. Significantly lower scores were found on the So and Sc scales but not the Re scale. However, in four different comparisons of all 18 CPI scales (figures 1-4), the lowest scores in the drug group patterns were on the Re, So, and Sc scales.

The social presence (Sp) scale represented the highest score by the drug group in the comparisons (figures 1, 3, 4). This scale assesses such factors as sense of personal worth, self-acceptance, and capacity for
independent thinking and action. Hogan et al. (1970) interpreted elevated Sp, combined with low So and Re, as social poise offset by impulsiveness and irresponsibility in a group of frequent marijuana smokers in their study. Kurtines et al. (1975) also indicated that the addicts in their study scored low on the Re and So scales. The CPI pattern most often associated with drug users (low Re, So, and Sc) suggests impulsivity, self-centeredness, irresponsibility, and little regard for rules and convention. It was found that the personality patterns of the drug-using nurses in the current study were very similar to those of drug users in these previous studies.

The high femininity (Fe) scale in both male groups (Figure 4) was similar to that found by Dyer et al. (1971) in which 26 male nurses were compared with Gough's male norms and with a group of female nurses. They found significant differences on 14 of the 18 scales with the male norms and 9 of 18 when compared with the female nurses. The Fe scale was the highest scale score of the male nurses in the Dyer study. High scorers on these scales are patient, helpful, gentle, and behave in a conscientious and sympathetic manner. These are qualities that can be attributed to male and female nurses as acceptable traits needed in the profession. The male
nurses in the Dyer study had a higher level profile than men in general except on flexibility (Fx).

In the Dyer study the total group means were approximately similar in profile to Gough's female norms. The largest negative difference was the lower mean on the So scale (.33 SD). The group means of nurses in the present study showed a similar pattern, with the exception of those scales previously discussed.

Gough (1965) has described the development of the So scale. It is his theory that the less-socialized person has a lower level of skills in sensing and interpreting subtle and covert cues in social interactions and is therefore less likely to develop dependable and internalized systems of control. Such role-taking disability frequently results in rule breaking and rule violating behavior.

The group of drug-using nurses, with their low So scores and the high number of crises in their lives, seem to have interpreted poorly their social interactions and problems in their lives. They did not appear to have developed effective controls to prevent their impulsiveness in taking drugs to cope with stressors. After finding the high number of crises and the low So and Sc scores a new hypothesis was tested to see if a significant relationship existed between these two
variables. A statistically significant and important relationship was found to exist between frequency of major life crises and low So and Sc scores. This relationship suggests the possibility of using the CPI to identify individuals who have not developed strong internal controls and who have a low degree of social maturity. Such indicators also suggest a higher than normal probability of using short-term coping methods, such as taking drugs, to deal with stress. This finding is particularly pertinent to nurses who find themselves working in stressful situations with easy access to drugs.

Further research with larger samples of nurses would help validate the findings in this study. However, the significant information from this study should be useful in several areas of concern to nurses. Three specific recommendations emerge from the study.

First, greater recognition of the problem of drug use in the nursing profession is needed. The profession as a whole has begun to address the issue. The American Nurses' Association, for example, has established a task force on addiction and psychological dysfunctions in nursing. However, there are still many nurses who need to be educated about the illness of drug addiction.

Second, there needs to be more thorough screening of nursing students prior to entry into the profession. The
CPI has been used to forecast academic and vocational achievement (Megargee, 1972) and has been used to predict success in the nursing profession in particular (Dyer et al., 1972). Sines (1976) held that any instrument, such as a psychological test, that can accurately predict even 5 percent of a subgroup, such as drug users, is a valid and useful tool. It has been demonstrated in this study that drug users consistently score lower than the norm on the So and Sc scales of the CPI. Therefore this test could be used successfully to identify persons who have lower profiles on the CPI and the potential to become drug users. Students with these profiles would need further evaluation concerning their drug histories. For nurses currently working in the field, continuing education workshops on the symptoms of stress and the dangers of drug use should be presented regularly in communities and workplaces.

Finally, treatment programs for drug-using nurses need to be individualized based on a careful examination of the pattern and history of the individual nurse's drug use. Specific plans and contracts between nurse and employer should be written before the nurse returns to work. Long-term followup is needed to ensure successful recovery for the drug-using nurse. In a recent statement issued by the American Nurses' Association, the mutual
needs of rehabilitated nurses and their employers are described:

When it is determined that the nurse is able to practice safely and competently, the needs of the nurse and those of the employing institution must be negotiated. The employer needs to be assured of patient safety, and so monitoring is usually incorporated into a contract or agreement between nurse and employer. The recovering nurse needs to be allowed trust and the resumption of full responsibility for nursing actions. Less stressful work settings that do not allow access to drugs may be appropriate. Attendant to the nurse's responsibility to practice safely is the employer's responsibility to support the nurse during rehabilitation by creating a climate of awareness and assistance. (American Nurses' Association, 1984, p. 6)

Society's helpers often need help themselves. Nurses are coming to realize that to be effective caretakers they must take care of their own needs as well. They too are human. It is hoped that this study contributes to a better understanding and knowledge of drug-using nurses.
I, __________________________________________ (please print name),

agree to participate in a study of personality characteristics and drug abuse among nurses being conducted by Donna Roberts, a clinical psychology student at the University of Central Florida, Orlando, Florida.

I understand that my responses will be held in strictest confidence and will be used only as data collected for this study.

I further consent to the use of such data in any publication of the results of the study, under the assurance that my participation will be both anonymous and confidential.

__________________________  __________________________
Date                          Signature
My name is Donna Roberts. I am a graduate student in clinical psychology at the University of Central Florida here in Orlando. I am conducting research as part of the requirements for my Masters degree. The research concerns nurses and drug abuse. Participation in the study is voluntary and all information gathered from a questionnaire and testing material will be held in strictest confidence.

I will need 20 nurses (R.N.'s and L.P.N.'s, male and female) who are willing to spend approximately 1½ hours completing the questionnaire and the California Personality Inventory. Volunteers should be between the ages of 22 and 45 and have had between one and 18 years nursing experience in either critical care or general floor duty. They must have no history of drug or alcohol abuse or of mental illness.

If you meet these requirements and would be willing to participate please call me at home (628-4295) or at work (423-6611). I will be happy to answer any questions you have regarding the project. The testing may be conducted either at the hospital or in my office, whichever is better for you. We will need to set a time that is convenient for both of us.

I would like to thank you in advance for participating in this project. Your participation contributes to a better understanding of drug problems among nurses.

Donna Roberts
APPENDIX C

QUESTIONNAIRE

1. Age: _____

2. Sex: _____Male    _____Female

3. Present Marital Status:
   _____Never married
   _____First marriage
   _____Re-married
   _____Separated
   _____Divorced
   _____Widowed
   _____Other(specify)__________________________

4. Race: _____Black    _____White    _____Other

5. What type of nursing school did you attend?
   _____Diploma
   _____Associate degree
   _____Bachelor degree
   _____Other(specify)__________________________

6. What was your overall grade average in nursing school?
   _____A
   _____B
   _____C
   _____D or lower

7. Are you presently attending a school or college?
   _____Yes    _____No
8. How many years have you worked as a nurse?
   ______ 1-2
   ______ 3-5
   ______ 5-10
   ______ 10-15
   ______ 15 or more

9. What has been your primary area in nursing?
   ______ Staff nurse/general floor
   ______ Critical care
   ______ Clinic/doctor's office
   ______ Teaching
   ______ Other (specify) ______________________________

10. Have you ever been fired from a nursing position?
    ______ Yes   ______ No   If yes, give reason: ______________________________

11. Has your nursing license ever been suspended?
    ______ Yes   ______ No   If yes, give details: ______________________________

12. Have you ever been placed on probation by a state board or nursing?
    ______ Yes   ______ No   If yes, for how many years? _____

13. Are you planning to continue in nursing as a career?
    ______ Yes   ______ No   If no, give your reason: ______________________________
14. In which of the following clubs or activities did you participate in high school, college or nursing school?

- [ ] Did not participate in any
- [ ] Band, orchestra, glee club, drama, debate
- [ ] Athletics
- [ ] Student government
- [ ] School newspaper, magazine, yearbook
- [ ] Hobby or subject matter clubs (such as stamp, chess, French, science, etc.)
- [ ] Honor societies
- [ ] Service clubs
- [ ] Other (specify) ____________________________

15. Number of elected offices you held in the organizations indicated above:

- [ ] 0
- [ ] 1
- [ ] 2
- [ ] 3
- [ ] 4
- [ ] 5 or more

16. With which of the following groups, if any, do you feel a sense of solidarity and identification?
(check any and all that apply)

- [ ] Your family
- [ ] People who use drugs
- [ ] Other nurses
- [ ] People of your religion
- [ ] Other (specify) ____________________________

If you checked more than one group, is there one with which you feel most strongly identified? Which? ____________________________
17. Which of the following best describes the way you feel in a social situation?

- Always uneasy
- Usually uneasy
- Sometimes uneasy
- Rarely uneasy
- Never uneasy

18. How important is it to you to be well liked?

- Very important
- Fairly important
- Not too important
- Not important at all

19. How often do you find yourself either annoyed or angry at other people?

- Never
- Seldom
- Occasionally
- Fairly often
- Very often

20. How often have major crises occurred in your life related to the following?

<table>
<thead>
<tr>
<th>Crises</th>
<th>Frequently</th>
<th>Infrequently</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your relationship to your family</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Your relationship to your friends</td>
<td></td>
<td></td>
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<tr>
<td>Your relationship to a lover</td>
<td></td>
<td></td>
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<tr>
<td>Inner problems (Self-image or self-development)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>The meaning of life</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Your health</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
21. Check the category which comes closest to your feeling about yourself (check only one):

- I don't like myself the way I am; I'd like to change myself completely
- There are many things I'd like to change, but not completely
- I'd like to stay very much the same; there is very little I would change

22. How often, if ever, do you have the feeling that you are not living up to your own beliefs and values?

- Often
- Occasionally
- Once in a while
- Never

23. I accept my mistakes or poor performance

- Very well
- Moderately well
- Not very well
- Not at all

24. How is your health most of the time?

- Excellent
- Good
- Fair
- Poor

25. Have you had an illness in the past three (3) years which required medical treatment?

- Yes
- No

If yes, describe the illness and treatment:

________________________

________________________

________________________
26. For each of the following drugs, indicate the order in which you have used it from first to last (i.e., if first drug was marijuana then assign it the number 1, if the second drug tried was heroin then assign it the number 2, etc.). On the same line indicate the age when you first tried it and the age when you last used it.

<table>
<thead>
<tr>
<th>Drug</th>
<th>Order when first used</th>
<th>Age when first used</th>
<th>Age when last used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Whiskey</td>
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<td></td>
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<tr>
<td>Wine</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Amphetamines</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benzedrine</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Methedrine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dexedrine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tranquilizers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Librium</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Thorazine</td>
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<td></td>
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<tr>
<td>Compuzine</td>
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<tr>
<td>Miltown</td>
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<td></td>
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<tr>
<td>Equanil</td>
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<td></td>
<td></td>
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<tr>
<td>Other(specify)</td>
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<td></td>
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<tr>
<td>Barbituates</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Nembutal</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Seconal</td>
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<tr>
<td>Phenobarbital</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Other(specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narcotics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opium</td>
<td></td>
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<td></td>
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<tr>
<td>Heroin</td>
<td></td>
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<td></td>
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<tr>
<td>Morphine</td>
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<tr>
<td>Codeine</td>
<td></td>
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</tr>
<tr>
<td>Demerol</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Other(specify)</td>
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<td></td>
<td></td>
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<tr>
<td>Hallucinogenics</td>
<td></td>
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<tr>
<td>LSD</td>
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<tr>
<td>Psilocybin</td>
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<tr>
<td>Mescaline</td>
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<td></td>
<td></td>
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<tr>
<td>Other(specify)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caffeine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cocaine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marijuana</td>
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<td></td>
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<tr>
<td>Glue</td>
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<td></td>
<td></td>
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<tr>
<td>Other(specify)</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
27. Which of the drugs listed above caused you emotional or physical problems? Describe.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

28. Have you ever been treated for a drug problem?
   _____Yes       _____No

29. If yes, what type of treatment program?
   _____Inpatient(hospital)
   _____Therapeutic community or other residential center
   _____Outpatient
   _____Methadone
   _____Other(specify)________________________________________________________________

30. Have you stopped drug use on your own?
   _____Yes       _____No

31. Are you presently using drugs or alcohol?
   _____Yes       _____No
32. If you have already tried drugs, what were your main reason(s) for trying them the first time? (Check as many as apply)

- I have never tried drugs
- I first used drugs because:
  - I was curious and wanted to see for myself what it was like
  - I wanted to try everything once
  - I didn't see anything wrong with taking them
  - To challenge the values of society
  - To prove I wasn't afraid
  - My friends encouraged me to take them
  - To gain insight and expand my mind
  - To become freer and more creative
  - To help make me a better person
  - To improve my performance or study habits
  - For excitement and kicks
  - To heighten sexual experience
  - To get away from things
  - To relieve tensions
  - To help me solve some of my personal problems

33. If you presently use drugs, for what purpose(s) do you use them now? (Check as many as apply)

- I do not use drugs
- To challenge the values of society
- To gain insight and expand my mind
- To become freer and more creative
- To help make me a better person
- For excitement and kicks
- To heighten sexual experience
____ To get away from things
____ To relieve tension
____ To help me solve some of my personal problems
____ To improve my performance or study habits

34. Are you aware of a nurse who has a drug or alcohol problem?
   ____ Yes   ____ No

35. Do you believe the nursing profession has a significant number of persons using drugs illegally?
   ____ Yes   ____ No

36. Have you taken drugs from your workplace as a nurse for personal use?
   ____ Yes   ____ No
   For use by someone you know?
   ____ Yes   ____ No

37. If you answered yes above, which of the following drugs have you taken from your workplace?
   ____ Demerol   ____ Morphine   ____ Codeine
   ____ Darocet   ____ Tranquilizers
   ____ Aspirin   ____ Other (specify)

38. Do you believe a nurse who uses drugs illegally should be punished by loss of his or her job?
   ____ Yes   ____ No
   By loss of his or her license?
   ____ Yes   ____ No
39. Do you believe a rehabilitated nurse should be permitted to give drugs again?

_______Yes  _______No

40. Would you confront a nurse whom you know has a drug or alcohol problem?

_______Yes  _______No
APPENDIX D
EXPLANATORY LETTER

5106 N. Lamar # 125
Austin, Texas 78751
November 4, 1984

Dear Volunteer:

My name is Donna Roberts. I am a graduate student in clinical psychology at the University of Central Florida in Orlando. I am conducting research as part of the requirements for my Masters degree. The research concerns nurses and drug abuse. I appreciate your willingness to participate in the study. All information gathered from the questionnaire and testing material will be held in strictest confidence.

I ask you not to discuss the materials with anyone until after you have mailed them to me. I would like to have the materials returned to me by November 30. You will find a questionnaire, test booklet, answer sheet, and a consent form in your package. Please return all materials in the envelope provided.

Thanks again for your help.

Sincerely,

Donna Roberts
(512)452-5337
**APPENDIX E**

**QUESTIONNAIRE RESULTS**

(Percentages in parentheses)

<table>
<thead>
<tr>
<th></th>
<th>Nondrug [n=13]</th>
<th>Drug [n=14]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Median age</td>
<td>33.0</td>
<td>33.7</td>
</tr>
<tr>
<td>2. Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Female</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>3. Present marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never married</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>First marriage</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Remarried</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Divorced</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>5. &quot;What type of nursing school did you attend?&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Associate degree</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Licensed practical nurse</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. &quot;What was your overall grade average in nursing school?&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>(15.4)</td>
<td>(35.7)</td>
</tr>
<tr>
<td>B</td>
<td>(69.2)</td>
<td>(64.3)</td>
</tr>
<tr>
<td>C</td>
<td>(15.4)</td>
<td>---</td>
</tr>
<tr>
<td>7. &quot;Are you presently attending a school or college?&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>(38.5)</td>
<td>(7.1)</td>
</tr>
<tr>
<td>No</td>
<td>(61.5)</td>
<td>(92.9)</td>
</tr>
</tbody>
</table>
8. "How many years have you worked as a nurse?"

- 1-2: 0
- 3-5: 3
- 5-10: 9
- 10-15: 1
- 15 or more: 0

9. "What has been your primary area in nursing?"

- Staff nurse/general floor: 5
- Critical care: 8
- Psychiatric: 0

10. "Have you ever been fired from a nursing position?"

- Yes: (0) (78.6)

11. "Has your nursing license ever been suspended?"

- Yes: (0) (21.4)

12. "Have you ever been placed on probation by a state board of nursing?"

- Yes: (0) (71.4)

13. "Are you planning to continue in nursing as a career?"

- Yes: (92.3) (78.6)

14. "In which of the following clubs or activities did you participate in high school, college or nursing school?"

- None: 3
- Band, drama, etc.: 6
- Athletics: 6
- Student government: 2
- School newspaper, etc.: 5
- Hobby/subject matter clubs: 3
- Honor societies: 5
- Service clubs: 3
- Other: 1
15. "Number of elected offices you held in the organizations indicated above:

<table>
<thead>
<tr>
<th>Number of Offices</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

16. "With which of the following groups, if any, do you feel a sense of solidarity and identification?"

<table>
<thead>
<tr>
<th>Group</th>
<th>Family</th>
<th>People who use drugs</th>
<th>Other nurses</th>
<th>People of same religion</th>
<th>Other--friends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feel a sense of solidarity</td>
<td>(92.3)</td>
<td>(0)</td>
<td>(69.2)</td>
<td>(23.1)</td>
<td>(7.7)</td>
</tr>
<tr>
<td>And identification?</td>
<td>(78.6)</td>
<td>(28.6)</td>
<td>(85.7)</td>
<td>(35.7)</td>
<td>(0)</td>
</tr>
</tbody>
</table>

Group with which most strongly identified:

<table>
<thead>
<tr>
<th>Group</th>
<th>Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feel a sense of solidarity</td>
<td>(61.5)</td>
</tr>
<tr>
<td>And identification?</td>
<td>(50.0)</td>
</tr>
</tbody>
</table>

17. "Which of the following best describes the way you feel in a social situation?"

<table>
<thead>
<tr>
<th>Feeling</th>
<th>Always uneasy</th>
<th>Usually uneasy</th>
<th>Sometimes uneasy</th>
<th>Rarely uneasy</th>
<th>Never uneasy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feel a sense of solidarity</td>
<td>(0)</td>
<td>(0)</td>
<td>(46.2)</td>
<td>(53.8)</td>
<td>(0)</td>
</tr>
<tr>
<td>And identification?</td>
<td>(0)</td>
<td>(7.1)</td>
<td>(50.0)</td>
<td>(42.9)</td>
<td>(0)</td>
</tr>
</tbody>
</table>

18. "How important is it to you to be well liked?"

<table>
<thead>
<tr>
<th>Importance</th>
<th>Very important</th>
<th>Fairly important</th>
<th>Not too important</th>
<th>Not important at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feel a sense of solidarity</td>
<td>(0)</td>
<td>(69.2)</td>
<td>(30.8)</td>
<td>(0)</td>
</tr>
<tr>
<td>And identification?</td>
<td>(35.7)</td>
<td>(57.2)</td>
<td>(7.1)</td>
<td>(0)</td>
</tr>
</tbody>
</table>

19. "How often do you find yourself either annoyed or angry at other people?"

<table>
<thead>
<tr>
<th>Length</th>
<th>Never</th>
<th>Seldom</th>
<th>Occasionally</th>
<th>Fairly often</th>
<th>Very often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feel a sense of solidarity</td>
<td>(7.7)</td>
<td>(15.4)</td>
<td>(61.5)</td>
<td>(15.4)</td>
<td>(0)</td>
</tr>
<tr>
<td>And identification?</td>
<td>(0)</td>
<td>(35.7)</td>
<td>(57.2)</td>
<td>(7.1)</td>
<td>(0)</td>
</tr>
</tbody>
</table>

20. [See Table 1 in text (p. 47) for results.]
21. "Check the category which comes closest to your feeling about yourself (check only one):"

"I don't like myself the way I am; I'd like to change myself completely" (0) (0)
"There are many things I'd like to change, but not completely" (53.8) (57.2)
"I'd like to stay very much the same; there is very little I would change" (46.2) (42.8)

22. "How often, if ever, do you have the feeling that you are not living up to your own beliefs and values?"

Often (7.7) (7.1)
Occasionally (23.1) (50.0)
Once in a while (53.8) (35.7)
Never (15.4) (7.1)

23. "I accept my mistakes or poor performance"

Very well (15.4) (21.4)
Moderately well (53.8) (50.0)
Not very well (30.8) (28.6)
Not at all (0) (0)

24. "How is your health most of the time?"

Excellent (76.9) (28.6)
Good (23.1) (64.3)
Fair (0) (7.1)
Poor (0) (0)

25. "Have you had an illness in the past three (3) years which required medical treatment?"

Yes (69.2) (71.4)
[See Table 1 in text for treatment information.]

26. [See Table 1 in text for summary of drug use.]
27. "Which of the drugs listed above caused you emotional or physical problems? Describe."

Drugs described:
- Demerol (50.0)
- Darvocet (28.5)

Other drugs mentioned:
- Alcohol
- Cocaine
- Codeine
- Marijuana
- Morphine
- Valium and other tranquilizers

28. "Have you ever been treated for a drug problem?"

Yes (0) (100.0)

29. "If yes, what type of treatment program?"

- Inpatient (hospital) 1
- Outpatient 13

30. [Discarded question.]

31. "Are you presently using drugs or alcohol?"

Yes (30.8) (42.8)

32. "If you have already tried drugs, what were your main reasons for trying them the first time? (Check as many as apply)"

Have not tried (61.5) (0)
- Curiosity 4 9
- Wanted to try everything once -- 1
- Saw nothing wrong -- 3
- Challenge values of society -- 1
- Friends encouraged me 1 4
- Greater freedom and creativity -- 2
- Excitement and kicks 1 5
- Heightened sexual experience -- 4
- Get away from things 1 6
- Relieve tensions 1 9
- Solve personal problems 2 6
33. "If you presently use drugs, for what purpose(s) do you use them now? (Check as many as apply)"

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get away from things</td>
<td>21.4%</td>
</tr>
<tr>
<td>Relieve tension</td>
<td>21.4%</td>
</tr>
<tr>
<td>Excitement and kicks</td>
<td>7.1%</td>
</tr>
<tr>
<td>Heightened sexual experience</td>
<td>7.1%</td>
</tr>
<tr>
<td>Solve personal problems</td>
<td>7.1%</td>
</tr>
<tr>
<td>Improved performance/study</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

34. "Are you aware of a nurse who has a drug or alcohol problem?"

Yes (69.2%) (71.4%)  

35. "Do you believe the nursing profession has a significant number of persons using drugs illegally?"

Yes (69.2%) (85.7%)  

36. "Have you taken drugs from your workplace as a nurse for personal use?"

Yes (23.1%) (92.9%)  

37. "If you answered yes above, which of the following drugs have you taken from your workplace?"

<table>
<thead>
<tr>
<th>Drug</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demerol</td>
<td>11</td>
</tr>
<tr>
<td>Darvocet</td>
<td>7</td>
</tr>
<tr>
<td>Morphine</td>
<td>4</td>
</tr>
<tr>
<td>Codeine</td>
<td>4</td>
</tr>
<tr>
<td>Tranquilizers</td>
<td>3</td>
</tr>
<tr>
<td>Aspirin</td>
<td>7</td>
</tr>
</tbody>
</table>

38. "Do you believe a nurse who uses drugs illegally should be punished by loss of his or her job?"

Yes (61.5%) (14.3%)  

"By loss of his or her license?"

Yes (61.5%) (14.3%)  

39. "Do you believe a rehabilitated nurse should be permitted to give drugs again?"

Yes (53.8%) (100.0%)
40. "Would you confront a nurse whom you know has a drug or alcohol problem?"

Yes (84.6) (85.7)
REFERENCES


