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FACTORS ASSOCIATED WITH A HIGH LEVEL
OF FUNCTIONING IN COCAINE USERS

by

Charles Robert Reid

A Dissertation Submitted to the Faculty of the
DEPARTMENT OF SPECIAL EDUCATION AND REHABILITATION
In Partial Fulfillment of the Requirements
For the Degree of
DOCTOR OF PHILOSOPHY
In the Graduate College
THE UNIVERSITY OF ARIZONA

1997
The University of Arizona
Graduate College

As members of the Final Examination Committee, we certify that we have read the dissertation prepared by Charles Robert Reid entitled "Factors Associated with a High Level of Functioning in Cocaine Users" and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy.

Shirin D. Antia, Ph.D.
Date 12/16/97
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Amos P. Sales, Ed.D.
Date

Final approval and acceptance of this dissertation is contingent upon the candidate's submission of the final copy of the dissertation to the Graduate College.

I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

Dissertation Director, Amos P. Sales, Ed.D.
Date 12/16/97
STATEMENT BY THE AUTHOR

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SIGNED: [Signature]

[Name]
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This study used qualitative methods to investigate factors associated with a high level of functioning in people who use cocaine. Ten subjects, seven women and three men, were interviewed. Each subject was referred to the study by a person who thought the subject functioned at a high level. The subjects also completed the Addiction Severity Index (ASI) (McLellan et al., 1992) screening instrument.

The factors identified by the subjects were similar to those found by Ditton et al. (1991); that is, people who use cocaine can be middle class, with all the social and economic problems of the general population and also share the same values as the general population. However this study expanded on the findings of Ditton et al. and added the area of awareness the drawbacks of cocaine use. Factors that the subjects associated with a high level of functioning were identified. The use of non-captive populations to study cocaine use was explored. Implications of the study and recommendations for future research in this field are presented.
CHAPTER 1

INTRODUCTION

Chapter 1 states the background and rationale for this study. This chapter provides a description of the problem and addresses the purpose and importance of this study. The research question is outlined, and limitations of the study under qualitative research are addressed. Terms, concepts, and definitions are clarified.

Background of the Problem

Substance abuse of alcohol and illegal drugs has been identified as a major issue in American society (Gfroerer & Brodsky, 1993). Recent reports from the National Household Survey (National Clearinghouse for Alcohol and Drug information--Cocaine Use, 1995) indicated that substance use in the 12-17 year age group has grown dramatically since the survey was initially conducted in 1990. The increase in cocaine use in this population has been particularly problematic because although the overall number of cocaine users has decreased, this is not true for the younger age group (Gfroerer & Brodsky, 1993; National Clearinghouse for Alcohol and Drug information--Cocaine Use, 1995).

Over the years, substance abuse treatment and intervention have undergone a number of changes (Botvin, 1986), at times emphasizing prevention, education, and/or rehabilitation; however, the success of these approaches has been difficult to assess. As
more drugs have become available and as the drug-using population ages and diversifies, the problems of treatment and assessment of treatment have increased. These problems, along with the changing forms of drugs, which have new and different routes of administration, are manifested in cocaine use. Cocaine use has also been associated with crime (Harrison & Gfroerer, 1992). Cocaine use is multifaceted in nature as are the issues that arise from the use of this substance.

Researchers, practitioners, and educators have approached the issue of cocaine use in a number of different ways including the effects of polydrug use (Spalt, 1991), what determines cocaine use (Hansell & White, 1991), what motivates cocaine use (Schilit & Gomberg, 1991), how cocaine users view themselves (Morningstar & Chitwood, 1984), and expectations for cocaine use (Belcastro, 1992). These studies and others attempt to understand what causes cocaine use and the effects of cocaine on individuals, families, and communities. Understanding the causes of cocaine use and how cocaine use effects the user can help predict how people will behave when using the substance. Knowing what to expect from cocaine users who have problems when using the drug, as well as what to expect from cocaine users who maintain a high level of functioning, can assist practitioners and researchers in developing individualized interventions. According to Morningstar and Chitwood (1984), the treatment community and the public need information to identify the facts regarding cocaine use and how to interpret those facts to improve treatment, to address the legal position regarding cocaine, and to broaden the debate regarding the issue of cocaine.
Researchers (e.g., Harrison & Gfroerer, 1992) have amassed volumes of information regarding drug users, including cocaine users, who are in treatment or incarcerated; however, this research is adequate. Information on cocaine users who are not in treatment or who are not incarcerated is more difficult to ascertain. A major issue with cocaine users who are not in treatment or incarcerated is the lack of knowledge regarding how their cocaine use affects them, their families, their socialization, or other lifestyle areas. Assessing the level of functioning of this population is difficult because there are few incentives and potential risks for people not incarcerated or in treatment to report their status. According to Aquilino and LoSciuto (1990), questions about drug use are threatening to respondents. Because cocaine use is a socially unacceptable behavior, use tends to be underreported. Even in clinics, the accuracy of self-reported cocaine use is unknown (McNagny & Parker, 1992). Cocaine users are also reluctant to allow their status to be known due to fear of the criminal justice system, fear of being robbed, or fear of being reported to the police, employers, or family members (Waldorf & Murphy, 1995). More research with people who use cocaine but who are not involved with the criminal justice system or a substance abuse treatment process can provide valuable information to the field of substance abuse treatment. To restate the background of the issue of cocaine use, the field of substance abuse treatment has minimally investigated cocaine users not involved in the treatment and criminal justice systems. Current research information is based on a limited pool of subjects. There is an untapped source
of information, and that source of information is cocaine users with a high level of functioning.

Statement of the Problem

An examination of the literature and current research regarding people who use cocaine indicates that few studies have focused on factors associated with cocaine users with a high level of functioning. The focus of research has been on problem issues such as cocaine-use patterns and overdose (Pottieger, Tressell, Inciardi, & Rosales, 1992), medical and psychiatric complications of cocaine abuse (Estroff & Gold, 1986), drug use and criminal behavior (Harrison & Gfroerer, 1992), drugs and gangs (Hagedorn, 1994), women and cocaine abuse (Murphy & Rosenbaum, 1992), and cocaine-related deaths (Wong & Alexander, 1991). The literature on cocaine-related issues is extensive and covers topics beyond those mentioned above. A major concern for researchers of cocaine issues is the limited information available from people not exhibiting problems with cocaine. Those who are receiving treatment or emergency room services or who are incarcerated do not provide a clear picture of the scope, range, or severity of cocaine use. Even national surveys soliciting information on the use of cocaine and other drugs have problems with underreporting (Fendrich & Vaughn, 1994). Current methods of obtaining information have deficits in assessing the cocaine-use patterns of the largest group of users, those not involved in any of the public systems.

To assess the cost to society of cocaine use accurately, cocaine users who function at a high level need to be factored into the information pool. Without input from
this group, decisions will be made without adequate information. Also, treatment and intervention modalities could benefit from information about cocaine users who function at a high level by using the factors associated with a high level of functioning to become more targeted in individualizing treatment, thus improving the cost-effectiveness of services.

Much of the research to date has focused on the problems and risks associated with cocaine use. This focus on problems may be a product of the population used to obtain information about cocaine users, that is, those users with the most severe problems associated with cocaine use. Factors associated with cocaine users who function at a high level have been rarely investigated. This is problematic because valuable information is dismissed, making it difficult to define the parameters of cocaine use and abuse in America.

The problem is the lack of empirical evidence regarding factors associated with cocaine users with a high level of functioning and how that lack of knowledge affects the ability to develop adequate intervention models. Addressing the issues of factors associated with cocaine users with a high level of functioning and ways to use those factors to develop intervention models will provide researchers with a more complete picture of the cocaine issue. Investigation of the group of people who use cocaine and maintain a high level of functioning can add to the knowledge base needed to improve treatment. Treatment models based on the experiences and perceptions of people who
have the most serve problems may not be well suited to serve the population as a whole (Toneatto, Sobell, Sobell, & Leo, 1993).

Purpose of the Study

The purpose of this study is to identify factors associated with cocaine users maintaining a high level of functioning. Identification of these factors may improve prevention, intervention, and treatment efforts. Presently, prevention, intervention, and treatment programs are based on the premise that once a person is addicted to a drug, that person is always addicted and cannot use substances again without becoming re-addicted or without experiencing dire consequences (Toneatto et al., 1993). Researchers who adhere to this premise limit the direction of research to fit the constructs of the premise. Therefore, the potential for research in different directions is narrowed. For example, research that may suggest that people can use cocaine responsibly or to discover how people use cocaine responsibly and function at a high level, may not be pursued.

This study attempts to identify factors associated with maintaining a high level of functioning in people who use cocaine. Identifying these factors is important because information about what works for people can be as helpful as knowing what does not work. The absence of knowledge regarding people who use cocaine and function at a high level impedes the already difficult task of developing workable and sustainable treatment models. Results of this study will help to generate one or more hypotheses related to the relationship between identified factors and a high level of functioning by
cocaine users. The experiences and perceptions of the subjects may provide insights for cocaine users who are struggling to understand their behavior.

Significance of the Study

People use cocaine for a number of reasons, to escape reality, to avoid issues, to cope with life, to get high, and to socialize with friends. Cocaine users are categorized in a number of ways: occasional users, weekend users, moderate users, and daily users (Morningstar & Chitwood, 1984). When a person is faced with the prospect of a problem associated with cocaine use, he/she must address a number of issues. First is the issue of assessment. The person needs to decide who will assess and how reliable the assessment will be. If treatment is chosen, a determination must be made regarding what type is appropriate—residential, inpatient, or outpatient. The dollar cost of treatment must be considered as well as aftercare issues. Most state-of-the-art alcohol and drug abuse treatment programs are based on the abstinence model of assessment, treatment, and aftercare (Gold, Dackis, Pottash, Extein, & Washton, 1986).

This abstinence model is based on the work of Jellinek (1960), who developed the concepts of "loss of control" and progressitivity while researching alcohol issues. Jellinek's disease model has been applied to many psychoactive drugs, including marijuana, heroin, and cocaine. Alternative models have been slow to develop. This may be a hindrance in addressing the myriad issues associated with the use of cocaine in the 1990s and the years to come.
This study focuses on high-level-functioning cocaine users and the factors associated with their ability to maintain a high level of functioning while using cocaine. Understanding factors associated with a high level of functioning will help to develop alternative treatment models, in an indirect way, by increasing the knowledge base regarding resiliency factors of cocaine users. Exploring alternative directions in treatment is a worthwhile endeavor because it could lead to more individualized and cost-effective services.

As stated above, this study is significant because it identifies factors associated with a high level of functioning in cocaine users, thus increasing the knowledge base regarding that population. The results of the study provided significant information to the knowledge base concerning the behavior of cocaine users.

Research Question

This study was designed to identify factors related to a high level of functioning among cocaine users. Thus, the major research question for this study asks what factors are associated with maintaining a high level of functioning in cocaine users.

Assumptions

Assumptions for this study were generated from rehabilitation and substance abuse literature and from personal observations and experience. The nature of a qualitative interview process is subjective and inductive; thus, this study attempted to
utilize both forms of inquiry. The following assumptions were made by the researcher in conducting this study:

1. Interviewing cocaine users with a high level of functioning, while focusing on the factors associated with that level of functioning, will identify values, attitudes, characteristics, and coping mechanisms that facilitate these people's maintenance of a high level of functioning.

2. Conducting research with people who use cocaine and function well in life areas such as employment, social relationships, family relationships, mental health, financial stability, and medical stability can help to develop new definitions of cocaine abuse and use, and these definitions will have behavioral and social components.

3. Administering the Addiction Severity Index (ASI) (McLellan et al., 1992) (see Appendix A) will help to screen and identify subjects who profess a high level of functioning and confirm information obtained from personal interviews.

4. Interviewing people who use cocaine and who are not involved in the treatment system, criminal justice system, or any other public system can broaden the knowledge and information base pertaining to people who use cocaine.

Limitations of the Study Under Qualitative Research

This study has a number of limitations. The study did not involve the full range of cocaine users. Only people who used powdered cocaine were interviewed; no crack cocaine or intravenous cocaine users were interviewed.
There was an amount of subjectivity involved in the referral process because it was indirect. People were asked to refer a person who they thought was a "successful" cocaine user or who they thought functioned well.

A third limitation of the study involved heterogeneous demographic representation. Efforts made to obtain heterogeneous demographic representation included interviewing people with different economic stations, cultures, genders, and educational attainments. Because only 10 people were available for the study, wide demographic representation was not possible.

The study depended on the self-reports of the participants. Although efforts were made to obtain accurate information, there was no guarantee that all participants would always be completely truthful. Cocaine use is illegal and is not a socially accepted behavior; therefore, incentives exist to put the behavior in the best light. Due to the sensitive nature of the research, it was not possible to confirm the information provided by the subjects by interviewing family, friends, employers (collateral interviews).

Finally, the sample was geographically limited. This may have affected personal expectations, lifestyles, and values. The study was conducted in a southwestern border city, which may have influenced the participants' views. Their views may not be reflective of the country as a whole because the city is a conduit for the drug trade from Mexico, thus influencing the perceptions of the town's residents.
Definition of Terms

The following terms help to explain the concepts discussed in this study. The definitions used in this study, unless otherwise indicated as presented by Ray and Ksir (1993) are

**Abstinence.** “Refraining from the use of a drug or alcohol. Complete abstinence from alcohol means no drinking at all” (p. g-1);

**Alcoholics Anonymous.** “A worldwide, loosely organized groups of alcoholics who try to help each other abstain from the use of alcohol. Cocaine Anonymous and Narcotics Anonymous are based on the same principle” (p. g-1);

**Coca.** “The plant, Erythroxlon coca, from which cocaine is derived. Also refers to the leaves of this plant” (p. g-4);

**Cocaine Hydrochloride.** “The most common form of pure cocaine; it is stable and water soluble” (p. g-4);

**Controlled Substance.** “A term coined for the 1970 federal law that revised previous laws regulating narcotics and dangerous drugs. Heroin and cocaine are examples of controlled substances” (p. g-4);

**Crack.** “Street term for a smokable form of cocaine. Also called rock” (p. g-4);

**Drug.** “Any substance, natural or artificial, other than food, that by its chemical nature alters structure or function in the living organism” (p. g-5);
Drug Abuse. “Use of a substance in such a manner or in such amounts that the
drug use causes problems or greatly increases the chances of problems occurring” (p. g-5);

Free base. “In general, when a chemical salt is separated into its basic and acidic
components, the basic component is referred to as free base. Most psychoactive drugs are
bases that normally exist in a salt form. Specifically, the salt, cocaine hydrochloride, can
be chemically extracted to form the cocaine free base, which is volatile and may therefore
be smoked” (p. g-6);

Level of Functioning. In this study, level of functioning is indicated by an
average score of three on all seven Addiction Severity Index categories (McLellan et al.,
1992). *A practical definition will be that the population of cocaine users in the current
study choose to use cocaine and have been able to incorporate the use of cocaine into
their lifestyles with minimal disruptions.

Narcotic. “One of a group of drugs similar to morphine, also referred to as
 opiates, and used medically primarily for their analgesic effects. The Greek root for this
word meant numbness, and in early pharmacology writings the term was used for many
psychoactive drugs that were thought to reduce pain or dull the senses. Also, by
extrapolation from the Bureau of Narcotics, the term "narcotic" came in popular use to
refer to any illegal drug (now replaced by the term "controlled substance" in legal
writings)” (p. g-8);

Physical Dependence. “Defined by the presence of a consistent set of symptoms
when use of a drug is stopped. These withdrawal symptoms imply that homeostatic
mechanisms of the body had made adjustments to counteract the drugs effects and without the drug the system is thrown out of balance” (p. g-9);

**Tolerance.** “The reduced effectiveness of a drug following repeated administration” (p. g-10) and

**Withdrawal Syndrome.** “The set of symptoms that occur reliably when someone stops taking a drug, also called abstinence syndrome” (p. g-10).

**Summary**

Chapter 1 introduced the study by providing the background of the problem and a clear statement of the problem researched in this study. The purpose and significance of the study were discussed, and the research question was stated. Chapter 1 addressed limitations that apply to this study and provided a list of pertinent terms with definitions of those terms. The chapter also included the assumptions of the study.
CHAPTER 2
REVIEW OF THE LITERATURE

Chapter 2 provides a review of the literature pertinent to this study. A general review is given to relevant literature concerning cocaine use, including an historical perspective, the people who use cocaine, and the impact on society. The second section focuses on research addressing the functioning of cocaine users, with views of cocaine users and cocaine-use behavior as the major themes examined. The third section reviews the data collection and the reporting of information by cocaine users. This includes the problems of self-reports, surveys, personal interviews, telephone interviews, and the populations used to obtain information. Finally, the chapter examines issues involved in the interviewing process.

Historical Perspective

Coca leaves were first introduced to the Western world in the 1500s when the Spanish came in contact with the Inca civilization of Peru. The Incas had traditionally used coca leaves in religious ceremonies and as a stimulus to work (Forno, Young, & Levitt, 1981). Attempts by the Spanish to eradicate the use of coca leaves in Peru failed, and today the people of Peru routinely chew coca leaves. In the Peruvian culture, cocaine is rarely abused. According to Forno et al., cocaine use has changed a great deal since the Incas first started chewing coca leaves.
Cocaine was found to be the main active ingredient in coca by Nieman in 1858. By the 1860s, articles about the benefits of cocaine had induced the makers of wines and other beverages to add the substance to their products, the most famous of these being an early formulation of Coca Cola (Siegel, 1985). Sigmund Freud advanced the therapeutic use of cocaine in an article published in 1884. A cocaine user himself, Freud recommended the drug for a number of conditions including digestive disorders, nervous disorders, hysteria, and syphilis. He also suggested that the drug could increase mental stimulation, serve as an aphrodisiac, and be of use in the treatment of asthma (Fuller, 1992). Freud advocated the use of cocaine to relieve the withdrawal symptoms of alcohol and morphine addiction. By the late 1800s, cocaine had reached a high point of acceptance in America and around the world, but the new century brought a change in attitude concerning cocaine.

The 1914 Harrison Narcotic Act banned the use of cocaine in patent medicines and restricted its manufacture and distribution. Cocaine was erroneously classified as a narcotic (Petersen, 1977). Cocaine use moved underground, restricted to the fringes of society such as ghetto areas and the Bohemian jazz culture. By the 1960s, according to Fuller (1992), the drug culture rediscovered cocaine. By the 1970s, cocaine use had reached the upper and middle classes in America (Van Dyke & Byck, 1983). Admonishments of the past forgotten, the new perception of users was that cocaine was safe and nonaddictive. Some of the literature of the day did little to dispel those perceptions. Grinspoon and Bakalar (1977) claimed that nervousness, irritability, and
restlessness from overstimulation were the main undesirable effects from cocaine use and stated that cocaine may make physical performance better, cure stage fright, and fortify the body and mind. Grinspoon and Bakalar (1980) did not report a withdrawal syndrome due to cocaine use. "Used no more than two or three times a week, cocaine creates no serious problems. In daily and fairly large amounts it can produce minor psychological disturbances. Chronic cocaine abuse usually does not appear as a medical problem" (p. 1621).

The above evaluation pertained primarily to powered cocaine and to people who used cocaine intranasally. During the 1980s, a new route of cocaine administration became more commonplace, the smoking of free base or crack cocaine. Crack is different from cocaine hydrochloride, powdered cocaine, in a number of ways. Crack is smoked and the effects are felt in less than 10 seconds. The crack high is short, 5 to 15 minutes. The crack high seems to be more intense than the high created by powdered cocaine because, when smoked, it is absorbed rapidly from the lungs to the heart and then to the brain (Gold, 1987).

From the coca leaves of the Incas to the free base of the Americas, cocaine has evolved into a substance that its original users would find difficult to recognize. The later incarnations of cocaine and crack are the focus of research today and for the near future. For current users of cocaine, the current research may affect their future.
People Who Use Cocaine

It is difficult to estimate the number of cocaine users in America; however, the National Household Survey (National Clearinghouse for Alcohol and Drug Information--Cocaine Use, 1995) attempted to obtain data that were as accurate as possible given the data-collection methods available. The 1995 National Household Survey estimated 1.5 million current cocaine users in America, 0.7% of the population over 12 years old. Current use was defined as having used cocaine within the past month. These numbers have remained fairly consistent since 1992. Approximately 582,000 people were frequent cocaine users in 1995. These people (0.3% of the population) used cocaine more than 51 days during the past year. Occasional cocaine users, those using cocaine fewer than 12 days in the past year, were estimated to number 2.5 million in 1995. This number was greatly reduced from the 7.1 million occasional users in 1985. The number of crack users in America has remained consistent between 1988 and 1995 at approximately 400,000 users.

According to the National Household Survey (National Clearinghouse for Alcohol and Drug Information--Cocaine Use, 1995), 18-25 year olds comprised the highest number of current cocaine users at 1.3%, followed by 26-34 year olds at 1.2%. Adults 35 and older accounted for 0.4% of current users. In 1995, 1.1% of cocaine users were black, 0.7% Hispanic, and 0.6% were white. Men were twice as likely as women to be current cocaine users. The South had the largest percentage of current users. Of current cocaine users, 1.2% did not complete high school, and 0.2% were college graduates.
Almost 70% of current cocaine users were employed full or part time. The above data suggest that the majority of people who use cocaine are occasional users; are employed; and are represented by the full spectrum of age, gender, race, and region. This spectrum can be seen in cocaine-related emergency room episodes.

The Drug Abuse Warning Network (DAWN) (National Clearinghouse for Alcohol and Drug Information—Annual Trends in Cocaine-Related Episodes, 1995) provides information concerning drug related emergency room episodes. Data related to cocaine episodes may be informative in evaluating the extent of cocaine abuse in America. In 1995, 27% of all drug-related emergency room episodes involved cocaine, at times in combination with other drugs. The actual number of episodes was 142,500. Forty-three percent occurred in people 35 and older, and 41% occurred among people aged 26-34. Blacks were involved in 54% of cocaine-related episodes, whites comprised 29%, and Hispanics 8%. The most commonly reported reason for a cocaine emergency room visit was "dependence" at 91,300; 35,700 people visited the emergency room to "detox," and 33,500 people visited the emergency room to deal with "chronic effects."

Medical and psychiatric complications of cocaine abuse were reviewed by Estroff and Gold (1986). Complications such as sudden death from cocaine use and severe cocaine toxicity were noted. Other acute complications include the possibility of stroke and myocardial infarctions. Accidents due to impaired judgment and the dangers of using and dealing, e.g., beatings, stabbings, and shootings, were also noted. Estroff and Gold noted that people with pre-existing medical conditions may be at risk because cocaine use
can exacerbate conditions such as seizures, coronary artery disease, and liver disease. Impurities in cocaine can cause medical problems as can routes of administration. For example, people who use cocaine intranasally may develop perforated septums, and those who smoke cocaine may develop pulmonary complications. Tooth decay, malnutrition, and decreased sexual desire have also been associated with severe cocaine abuse.

Fatal injuries and accidents related to cocaine use have been investigated by a number of researchers. Marzuk et al. (1995) studied fatal injuries after cocaine use among young adults in New York City. The findings suggested that the most direct link was to overdoses. In addition, cocaine use was detected in many other types of fatal injury cases such as suicide, homicide, vehicular accidents, and falls. The implication here is that cocaine, like alcohol, induces a state of intoxication that increases the risk of injury. Polydrug use, the personality styles of cocaine users, and the lifestyles of cocaine users (e.g., crime and prostitution) may also be linked to the fatal injury rate of cocaine users. The association between cocaine use and reckless driving was the subject of research by Brookoff, Cook, Williams, and Mann (1994). Here, the premise was that reckless driving increased the risk of fatal traffic accidents. This study reported that 13% of people stopped for reckless driving tested positive for cocaine, and 12% tested positive for cocaine and another drug. These findings seem to support other research linking cocaine use to fatal injuries and other social issues such as violence, prostitution, and crime.
Cocaine use and the criminal justice system are also addressed. Waldorf and Murphy (1995) studied the perceived risks and criminal justice pressures on middle-class cocaine sellers. The findings indicated no great fear of the law. The possibilities of arrests could be minimized by limiting their activities and not dealing with strangers. Cocaine users were more concerned with heavy abuse of the drug because of increased paranoia and unanticipated physical and psychological problems. The arrest of people in the cocaine user's circle increased fear of criminal justice involvement. In researching gang members who dealt drugs, Hagedorn (1994) found that cocaine was a regular part of the economy of the gang members in his study. The majority of gang members (75%) feared incarceration, used cocaine sales to augment their incomes, and had conventional values centered on finding a secure place in American society. Fewer than 25% of the participants in Hagedorn's study fit the stereotype of gang members: rejecting conventional morality, being from families with hustling or gang traditions, and having little hope of a conventional future. According to Blumstein (1993), prisons are filled with minor drug offenders. Mandatory prison terms for the use and sale of cocaine do not distinguish between those who sell drugs to survive and those who are truly invested in the drug economy. Hagedorn (1994), suggested that "Jobs, more accessible drug treatment, alternative sentences, or even decriminalization of nonviolent drug offenses would be better approaches than the iron fist of the war on drugs" (p. 216). Hagedorn seemed to be indicating that a reevaluation of drug policy is in order. Perhaps the social ramifications of drug policy are worse than using illicit drugs.
Smart and Adlaf (1992) concluded that although cocaine use has been decreasing, convictions for cocaine offenses continue to increase. With this in mind, policy makers might consider more use of dismissals, fines, or community service for those people convicted of cocaine possession only. Smart and Adlaf also concluded that little is known about the use and abuse patterns of cocaine users or the changes that take place during the life of the user. They noted that it is not clear how many light cocaine users progress to become problem users, heavy users, or become addicted. How cocaine users function in society may depend on the individual user and the user's situation.

Functioning of Cocaine Users

Research has continued to answer questions concerning cocaine users, their behaviors, functioning, and the changes that affect them. Wong and Alexander (1991), who investigated cocaine-related deaths, stated that in spite of the attention given to the hazards associated with cocaine use in the literature, no substantial evidence has yet been found that moderate use of cocaine is more dangerous to healthy people than other vigorous activities. Examination of the data concerning cocaine-related deaths in this study did not support the suggestion that any of the deaths involved healthy people who were recreational cocaine users. Instead, the majority of deaths involved alcoholics, long-term intravenous users, or people with deviant lifestyles. The issues of lifestyles and social condition in relation to cocaine use and functioning were highlighted by Murphy and Rosenbaum (1992) in research on women who used cocaine. In the case studies examined, social class was found to be an important factor in drug-use patterns. Being
middle class meant having job skills, education, family support, and financial resources which provided life options that gave users a certain amount of control over their lives and, thus, control over their cocaine use. By contrast, the underclass have few resources, job skills, or prospects for the future and, therefore, little investment in a conventional lifestyle. These conditions, as well as gender and race bias, illustrate how a person's socioeconomic conditions have consequences for the cocaine user, and these social conditions are more significant in predicting drug-use behavior than the drug used (Murphy & Rosenbaum, 1992).

Additional research focusing on cocaine use and socioeconomic status was done by Ditton et al. (1991), who studied middle-class cocaine users. For the subjects in Ditton et al.'s study, cocaine use did not lead to chronic dependence, and when the users did exhibit problems, they were able to recognize them and reduce their cocaine use without intervention. The cocaine users were described as respectable, employed, having some money, using some other drugs, and having some problems. According to Ditton et al., these were moderate people.

Some research has indicated that cocaine users often classify themselves as moderate or extreme depending on behavior. Morningstar and Chitwood (1984) developed typologies of cocaine users based on the behaviors of the users. Two extreme patterns emerged, the cocaine junkie and the social-recreational user, and with these types came assumptions about functional and dysfunctional use. Morningstar and Chitwood reported that cocaine users believe that functional use can be maintained if small amounts
of cocaine are snorted. The subjects of this study believed that dysfunctional behavior was related to heavy use which made the user untrustworthy, anti-social, and undesirable.

Cocaine users are concerned with the behavior of other cocaine users because the behaviors are relevant in making judgments that have meaning in the cocaine-using subculture. This judgment process was exhibited in the work of Sterk-Elifson and Elifson (1992), when exploring friendship relations of homeless male drug users. The study showed that cocaine use could facilitate or hinder friendship relations. Either cocaine brought people together and worked as a social glue or the cocaine cravings caused them to betray each other. The homeless men in the study learned to trust cocaine users based on their drug-use patterns. People who controlled their cocaine use were viewed as more trustworthy than those who could not.

It appears evident that the issue of cocaine use is quite complex and that conflicting information exists. Recent research perspectives are more open to exploring different aspects of cocaine use. Although extreme use of the drug continues to be discouraged by society, researchers are finding evidence that moderate users of cocaine can maintain a high level of functioning and that socioeconomic status is an important predictor of cocaine-use behavior.

Collection of Data

The methods used to obtain information about cocaine use are easily compromised. The resources used to collect data may actually distort knowledge because the majority of sources of information are people who have problems with cocaine use.
When questioning people about drug use, there is often a high rate of underreporting of behavior. Denial of symptoms or a lack of willingness to report socially undesirable or sensitive information has been a consistent finding by researchers (Fendrich & Vaughn, 1994; Harrison, 1995; McNagny & Parker, 1992; Rubio-Stipec et al., 1992). The National Household Survey (National Clearinghouse for Alcohol and Drug Information—Cocaine Use, 1995) reported a large sampling error in the data collected and took measures to adjust for that sampling error. Researchers continue to address the issue of underreporting by respondents.

Harrison (1995) reported concern about the validity of survey data on drug use because respondents are not honest. The use of drug testing, such as urine tests, has helped, but drug tests have a narrow window of detectability which reduces their usefulness. Data based on record checks (hospital records, court records, etc.) may be biased because people who have records do not always reflect the general population. An example is data collected from criminal justice populations. Harrison suggested that "The best strategy to measure overall levels of drug use and related characteristics in the general population is to design surveys that encourage respondents to accurately report their drug use and related behaviors and attitudes" (p. 105).

Fendrich and Vaughn (1994) also investigated underreporting by substance users, comparing telephone surveys, face-to-face interviews and self-administered questionnaires. They found that the largest differences in interview mode effects were for telephone interviews. Compared to cocaine users who completed self-reports, those
interviewed by telephone had twice the denial rate. People interviewed by telephone were significantly more likely to report less cocaine use or to deny use than those interviewed face to face. Fendrich and Vaughn concluded that underreporting may be more contingent on motivation than memory.

The high prevalence of recent cocaine use and the unreliability of patient self-reports were studied by McNagny and Parker (1992). The findings added support to the premise that patient self-report is not a reliable measure of recent cocaine use in inner-city walk-in clinics. Using urinalysis tests to verify self-reports made cocaine users more likely to admit drug use but not cocaine use specifically. The indication here is that asking general questions about drug use provides more accurate answers than specific questions about cocaine. McNagny and Parker cautioned that when seeking information on illicit drug use, one should realize that self-reports may provide severe underestimates of actual use.

The fact that cocaine is an illegal substance with severe legal penalties for possession poses a problem when interviewing people who are not involved in any social or criminal justice system. The design of a study involving general cocaine users must take the legal aspects into consideration. Other issues such as confidentiality, motivation, fear of losing employment, and family reactions must also be considered by the participants.
Populations Used to Collect Data

A sampling of the literature revealed little research on people who use cocaine and function at a high level. Also, there is little information regarding factors associated with a high level of functioning in cocaine users. Regardless of the populations used to collect data, the focus tends to be on problems associated with cocaine use.

Kilbey, Breslau, and Andreski (1992) studied cocaine use and dependence and associated psychiatric disorders and personality traits in young adults. These researchers found that exposure to cocaine by people with high levels of psychoticism and neuroticism may lead to cocaine dependence. The implication here seems to be that cocaine abusers are mentally ill. Subjects for this study were drawn from a large Health Maintenance Organization in the Detroit metropolitan area.

Sensation-seeking, substance abuse, and psychopathology in treatment-seeking and community cocaine abusers were researched by Ball, Carroll, and Rounsaville (1994). Sensation seeking occurred at an early age, and antisocial behavior, greater symptom severity of cocaine use, and greater impairment were found in these subjects. High incidences of attention deficit disorder and conduct disorder were also reported in sensation-seeking cocaine abusers. The findings in this study were consistent with the findings on cocaine abusers reported by Ball, Carroll Babor, and Rounsaville (1995).

The issues of stress, mood, and coping as related to cocaine use have also been investigated (Hall, Havassy, & Wasserman, 1991; McCormack, Laybold, Dickerman-Nelson, & Budd, 1993). Hall et al. (1991) examined cocaine users after treatment and
suggested that well-being (positive mood) was important for maintaining abstinence in ex-cocaine users. Negative moods were poor predictors of abstinence in that the failure of life events, life hassles, physical symptoms, and other stresses did not show a strong influence on relapse to cocaine use. The study conducted by McCormick et al. (1993), explored college students' attitudes toward substance abuse, including cocaine. The findings suggested that female students were as likely as males to use alcohol and marijuana at parties or on dates but not as likely to use these substances in their places of residence or when under stress. The findings indicated that male students with low self-esteem were more likely to use substances when under stress. Furthermore, 12% of the seniors in the study indicated that it was acceptable to use cocaine when under stress.

White and Bates (1993) used a nonclinical sample of 1,270 adults to examine self-attributed consequences of cocaine use. The data presented in this study indicated that reasons for use were important in explaining individual differences in cocaine use, including problem use as measured by negative consequences. For example, the use of cocaine as a coping mechanism for an extended period of time was associated with an increase in the likelihood of negative physical, interpersonal, and legal outcomes. The findings of this study also suggested that the frequent and/or high quantity use of cocaine to deal with life problems, such as loss of employment or problems with the police, was associated with increased negative experiences in one's relationships with self and with others.
The perceived danger of recreational drugs was explored by Luce and Merrell (1995). They sampled 230 college students and 103 degreeed nurses to estimate the abuse potential and lethality of five licit and illicit recreational drugs, including cocaine. The students and the nurses greatly overestimated the abuse potential and the death rates associated with cocaine use and identified cocaine as a major killer. Luce and Merrell stated,

As a society we appear loath to admit that the vast majority of people who experiment with drugs generally use--but do not abuse--these chemical substances. . . . Certainly the general public can be made aware that, at least for health considerations, a critical distinction between drugs is not necessarily legal vs. illegal. (p. 305)

In summary, recent research has used a variety of populations to collect data on cocaine users. Various data collection methods have been used, and a number of areas have been investigated. To date, factors associated with a high level of functioning in cocaine users have been minimally investigated. This study explores factors associated with a high level of functioning in cocaine users, adding another source of information to the research data regarding cocaine use.

Qualitative Method

Whether using the term case study, naturalistic, ethnographic, ecological, interview, or qualitative, there is no general agreement about the conduct of any type of qualitative inquiry (Eisner & Peshkin, 1990). "In quantitative research, the good may be
found in fidelity to design, whereas in qualitative research, relatively lacking in canons and conventions, the good is more elusive because its procedures are more idiosyncratic” (pp. 1-2).

Strauss and Corbin (1990) defined qualitative research as

Any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification. It can refer to research about people's lives, stories, behaviors, but also about organizational functioning, social movements, or interaction relationships. (p. 17)

The expression *qualitative research* can be confusing because it can mean different things to different people. Many researchers use traditional methods such as interview and observation to obtain information, but along with traditional methods, researchers also use nonmathematical methods including documents, books, audio tapes, videotapes, computer data, and data that have been quantified for other purposes such as the National Household Survey (National Clearinghouse for Alcohol and Drug Information—Cocaine Use, 1995) data.

Strauss and Corbin (1990) described three basic components of qualitative research—data, analytic or interpretive procedures, and written and verbal reports. Sources of data were discussed above. The second component, analytic or interpretive procedures, is used to arrive at findings or theories, including techniques for conceptualizing data such as coding, writing of memos, nonstatistical sampling, and diagramming of conceptual relationships. The third component of qualitative research
consists of written and verbal reports which may be presented in journals or at conferences. Depending on the audience and the aspect of the finding or theory being presented, written and verbal reports take different forms. For example, findings may be reported fully or one part of a study may be reported in-depth.

An alternative view of qualitative research, naturalistic inquiry, has been put forth by Lincoln and Guba (1985). People who practice this naturalistic paradigm have different views about what it means, and it is hard to provide a simple definition. Lincoln and Guba stated,

What is salient to us is that, first, no manipulation on the part of the inquirer is implied, and, second, the inquirer imposes no a priori units on the outcome. Naturalistic investigation is what the naturalistic investigator does, and these two tenants are the prime directives. (p. 8)

Lincoln and Guba (1985) made the case that there is greater acceptance of naturalism; that naturalism is as disciplined as conventional methods of inquiry such as experimental and quasi-experimental models; and that naturalistic inquiry is a useful form of study, whether it is labeled case study, ethnographic, interview, or field study. The naturalistic paradigm provides a good fit with other valid methods of inquiry in the areas of social/behavioral research. For social/behavior research, naturalistic inquiry may be the paradigm of choice.

Another qualitative method of interest is ethnography. There is much variation in prescription and practice among the different fields that use ethnography (Hammersley &
Atkinson, 1990). The elicitation of cultural knowledge, the detailed investigation of patterns of social interaction, and holistic analyses of societies have been identified as distinctive features of ethnographic inquiry. Ethnography has been viewed as basically descriptive, a form of storytelling, and as a method for developing and testing theory.

According to Hammersley and Atkinson (1990), ethnography is a social research method that uses a wide range of sources of information. To obtain this information, the ethnographer participates, overtly or covertly, in people's daily lives for an extended period of time, watching what happens, listening to what is said, asking questions; in fact collecting whatever data are available to throw light on the issues with which he or she is concerned. (p. 2)

Hammersley and Atkinson regarded ethnography as one of many viable research methods and maintained that the complexities of research are well served by having different models. Ethnography, as other qualitative methods, can contribute to theory development and theory testing because design problems can be minimized, research direction and strategy can be changed fairly easily and new ideas can be tried and added to the design.

The flexibility of design, interview technique, the ability of the researcher to participate in varying degrees in the study, and the influence on theory development are benefits of qualitative research methods. Of course, one must realize that qualitative research also presents some concerns. Hammersley and Atkinson (1990) pointed out that findings may or may not be generalizable, there may be too much emphasis placed on the
differences between natural and artificial settings, and some researchers may be so
invested in the concept of relativism that the ability to acquire knowledge is
compromised.

The qualitative method used in this study is similar to the method proposed by
Strauss and Corbin (1990). This method, called grounded theory, is inductively derived
by studying the phenomenon it represents. "One does not begin with a theory, then
prove it. Rather, one begins with an area of study and what is relevant to that area is
allowed to emerge" (p. 23). This theory is scientific in that its procedures are designed to
meet the criteria for scientific research—significance, generalizability, theory-observation,
compatibility, rigor, reproducibility, precision, and verification. The grounded theory
method allows the researcher to pursue creativity because the procedure encourages the
researcher to break from the old order and create new assumptions that can lead to new
discoveries. The process of creativity is one additive aspect of the total research process.

To study factors associated with maintaining a high level of functioning in
cocaine users as part of grounded theory, case studies/interviews of the participants were
developed. Hammersley and Atkinson (1990) noted that "a case may not be contained
within the boundaries of a setting, it may be necessary to go outside of the setting to
collect information on important aspects of it" (p. 43). This observation is particularly
potent when obtaining life histories of cocaine users who are not involved in the public
system because the quality of the data obtained is important, but the setting needed to
obtain that information must provide security for the participants.
Observation is often a key element in qualitative research, but, as noted, observation in a totally natural setting is not always possible. In these instances, the interview process and other means of collecting data take on additional importance. Access to subjects and the information they can provide can be a major problem in any qualitative study, and it becomes even more difficult when studying a population such as cocaine users. Hammersley and Atkinson (1990) described access as the ability to draw on the interpersonal resources and strategies that people develop in managing daily life, uncovering barriers to access, and finding ways to overcome those barriers. Access is more an issue of gaining or failing to gain permission to conduct research than a matter of physical absence or presence. Bogdan and Biklen (1992) suggested that the researcher let the participants know about the area of interest and seek the cooperation of those to be studied. If possible, be open and avoid lying. Truthfulness is particularly important when studying cocaine users whose activities are not well known in the community or by the system.

Data analysis is another significant component of the qualitative method. Bogdan and Biklen (1992) stated that "Data analysis is the process of systematically searching and arranging the interview transcripts, field notes, and other materials that you accumulate to increase your understanding of them and to enable you to present what you have discovered to others" (p. 153). This analysis takes you from disorganized descriptive data to a coherent product.
Seidman (1991) advocated a separation of data collection and data analysis. In-depth analysis of the data should not begin until all the interviews have been completed. This separation of data gathering and data analysis helps to reduce the possibility of one person's interview information influencing the information obtained from others.

According to Lincoln and Guba (1985), the inductive process rather than the deductive process is recommended because the inductive process starts with the data to arrive at theoretical categories and relational propositions. The data analysis process, thus, is basically a process of synthesis where the constructions that have been brought out by inquirer-source interactions are reconstructed into meaningful wholes.

**Summary**

This chapter reviewed literature related to a basic overview of cocaine use and cocaine users. Sections included an historical perspective of cocaine and cocaine use, a description of people who use cocaine, the functioning of cocaine users, data collection on cocaine users, and populations used to collect data. The literature suggests that there is inconsistency in perspectives on the research on cocaine users. Early research (Grinspoon & Bakalar, 1977; Morningstar & Chitwood, 1984) tended to have a more favorable view of cocaine use while some later studies (Marzuk et al., 1995; Brookoff et al., 1994) tended to be less favorable, although the less favorable view had been more tempered in some of the later studies (Hagedom, 1994; Smart & Adlaf, 1992). Part of the inconsistency is related to the dose of the drug, the form of the drug used, the route of administration, and the population studied. Researchers (Estroff & Gold, 1986) found that
some people who used cocaine manifested many of the negative aspects associated with use of drug, while others (Ditton et al., 1991; Murphy, Reinaman, & Waldorf, 1989) used the drug and function well. Those who are highly functional have only their cocaine use to distinguish them from the general population (Luce & Merrell, 1995). The issue of data collection has been problematic in this area of research and has been addressed in the literature. Some researchers have noted that the populations used to obtain information have not been representative of the general population of the cocaine-using subgroup. Qualitative analysis was also reviewed. This method places a strong emphasis on the subject and the information the subject provides with interviewing as a major source of investigation. Access to the subject's life is a crucial component of the study. This access should be negotiated and can be achieved in a number of ways. Data analysis starts with the collection of data; the collection of data and its analysis should be separate processes.
CHAPTER 3

DESIGN AND METHOD

This chapter describes the design and procedures used in the collection and analysis of the data. Sections include the qualitative design of the study, procedures, gaining access, the Addiction Severity Index (McLellan et al., 1992), subjects, interviews with the subjects, data management, and a summary.

Qualitative Design of the Study

A qualitative design was chosen because of its flexibility and the inductive reasoning process which allows the researcher to start with the data and build theory from that data. The qualitative method, as described by Bogdan and Biklen (1992), is amenable to data collection in a variety of ways. Interviewing is the primary means of collecting data. Interviewing can be augmented with other methods including objective assessment tools, observations, document analysis, and surveys. The qualitative method is flexible, not restricted to a particular setting for interviews. People can be interviewed in a setting that is the most comfortable for them. Providing a safe, comfortable, and neutral setting is critical with certain population groups such as covert cocaine users. The inductive method is used in qualitative research. According to Lincoln and Guba (1985), the inductive method allows the researcher to formulate theories from the data obtained from the subjects rather than the information obtained from the subjects having to fit the
theory. This inductive process, referred to as grounded theory, flows from the data and allows for multiple realities and, thus, for divergent, innovative answers to questions. This study's methodology focused on conducting interviews in a neutral but private setting where the subjects could feel safe and comfortable. Seidman (1991) noted that the heart of interviewing is understanding other people's experiences and what those experience mean to them. These experiences have value, and the researcher must use the best means available to allow the subject to express the experiences.

Qualitative research allows the investigator to establish a relationship with subjects. The investigator can become a part of the process to the degree deemed appropriate. The researcher brings his/her values, personality, education, and experiences to the process (Bogdan & Biklen, 1992).

The primary investigator has a background of more than 15 years as a therapist working with adults who have mental health and substance abuse problems and with adolescents who face emotional and substance abuse issues. As a student of rehabilitation, the primary investigator has had the opportunity to work with people with other disabilities and has also been personally involved with the criminal justice system and the substance abuse treatment system. The primary investigator and his friends, associates, and family members have personally dealt with drug-use issues. He has a number of years of experience providing educational classes to adolescents with substance abuse issues and has researched the fields of substance use and mental health for many years. This is the background that the investigator brings to the present study.
With this background comes a desire to reevaluate and redefine the ways in which substance use and abuse are viewed and addressed in American society. Out of this personal focus comes a major motivation for the present research.

Procedures

This study was designed to investigate the factors associated with a high level of functioning in individuals who used cocaine. The study examined factors, past and present, in the context of cocaine use. The sequence of events for this data collection was as follows:

1. Referral.
2. Administration of the Addiction Severity Index (McLellan et al., 1992) to the subject pool as a screening instrument.
3. Screening interview with people who completed the ASI.
4. Interviews with subjects chosen for the study.
5. Follow-up interviews, as needed.

Two forms of inquiry were used in this study; the objective screening (The Addiction Severity Index, McLellan et al., 1992) for screening and the interview. These two forms of inquiry were meant to complement each other because the screening instrument can be used to cross-check the information obtained through the interview process. The objective screening tool obtains more formal information that may not be addressed during the interview, which is less structured and directed by the responses of the person being interviewed.
The participants were interviewed a maximum of three times. All of the participants were involved in the first two interviews. The first interview was held after the participant had taken the Addiction Severity Index (McLellan et al., 1992) and was given the opportunity to participate in the study. The study was explained to him/her during the first interview. The first interview took about 45 minutes. The second interview allowed the participants to express their thoughts, actions, and feelings concerning cocaine use and factors associated with a high level of functioning. The second interview took about one and one-half to two hours. The third interview was for clarification when needed. It addressed incongruence between information from the ASI data and the second interview and added new information or led to new areas of exploration. Two subjects required a third interview and the third interview took about 20 minutes. The findings in this study were based of two interviews for all of the subjects except for the two subjects who required three interviews.

Gaining Access

Gaining access to the subjects posed an initial difficulty for this study. Due to the illegality of cocaine use, it was necessary to use an indirect referral process (snowballing). Subjects learned about the study from others. The subjects had to trust the person who provided the information, or they would have concerns about the repercussions of volunteering for the study. Once the subject had made the decision to participate in the study, a critical objective of the researcher was to develop a trusting relationship with the subject. To develop a trusting relationship, confidentiality was
stressed, and the researcher listened to the concerns of the subject and was accommodating to those concerns. The subject was encouraged to express his/her thoughts, actions, and feelings at a level that was comfortable.

To enhance security for the subjects, the interviews and testing were done in a neutral location, i.e., a place generally accessible to a heterogeneous population. The testing and interviews were done in private, and the location was not associated with drug use or drug users. The researcher disclosed some personal history when it was appropriate or necessary to help the subject understand the researcher's interest in the subject and the study area. Explanation and negotiation were ongoing processes which assisted the subject to feel that he/she was an integral part of the study. Efforts were made to let the subject know that the researcher believed that the study and the input of the subject were important.

A major component of confidentiality was the acquisition of a Certificate of Confidentiality from the federal government (see Appendix C). This certificate protected the subjects, the faculty, the university, and the researcher from prosecution and protected the information provided by the subjects involved in the study. A letter requesting the certificate, a copy of the human subjects form (see Appendix D) and a statement concerning commutable diseases were submitted to the Department of Health and Human Services. In return, the researcher was granted a certificate which included an identification number, the name of the researcher, the title of the study and the limitations of the certificate. The certificate was helpful in assuring the subjects that their
information was confidential and that their statements would not be used against them at a later date.

**Addiction Severity Index**

All subjects were asked to complete the Addiction Severity Index (ASI) (McLellan et al., 1992). The ASI is widely accepted by substance abuse treatment programs and researchers as a means of studying new methods of addressing substance use issues. In this study, the ASI was used as a screening instrument to help identify people who used cocaine and functioned well. The ASI provides a standard method to measure the extent of substance use, the severity of that use, and the subject's level of functioning. The severity rating is obtained by using both the objective data from the ASI and the subject's own assessment of the severity or seriousness of each problem. The instrument is easily administered, and the entire process can take a little more than an hour. Using the objective data from the screening instrument and the subject's information provided in the screening process, the researcher arrives at a severity rating for each area of assessment. The areas of assessment are medical condition, employment status, current drug and alcohol use, legal and criminal situation, family history, social status, and psychiatric status. The ASI measures the subjects current situation as well the subject’s lifetime history in the seven areas. Scores from the ASI indicate the subject's level of functioning. The calculation of the severity scores from ASI data is as follows. Two severity ratings are used in the ASI interview: subject ratings and interviewer ratings.
For subject ratings, at the end of each section of the interview, the subject is asked to respond to two questions on a five point scale: (1) how bothered have you been in the past 30 days by the problems identified during the interview and (2) how important do you think it is to undergo treatment for those problems. The five point scale for each of the two questions range from 0 to 4, as follows: 0 not at all; 1 slightly; 2 moderately; 3 considerably; and 4 extremely. If the subject reports that he/she is bothered slightly on some days (a rating of 1), but considerably on other days (a rating of 3), the subject is asked to give an overall rating. If the subject cannot provide an overall rating, the average or midpoint is used (i.e., in this case, 2). If the subject denies any problems during the interview but then indicates that he/she needs treatment, the interviewer will probe for more information about the problem(s). If the subject consistently denies having any problems, the subject ratings for being bothered and needing treatment should both be 0.

For interviewer severity ratings, the interviewer enters a severity rating at the end of each of the seven areas covered by the ASI. (Exception: note that no rating is given for the family history section and two ratings are given for the drug/alcohol section). The ratings, which emphasize a subject's unmet need for treatment, are based on a scale ranging from 0 to 9, where 0 is "no treatment need" and 9 is "in extreme need of treatment." The first step in the interviewer rating process is for the interviewer to select a three point range from the nine point scale (e.g., 0-2, 5-7, or 6-8), inorder to determine if the subject's severity rating is low, medium or high. To aid in this selection, specific
questions in a problem area have been highlighted as critical objective items. The interviewer then takes into account the subject’s rating of the problem’s severity to select a single number from the interviewer’s three point range. A low subject rating (0 or 1) guides the interviewer to select a low score in the three point range. A high subject rating (3 or 4) guides the interviewer to select the high score from the three point range. An intermediate score (2) leads the interviewer to select the middle score from the three point range. The final score is the overall severity rating which indicates if treatment is needed for each problem area. In this study, subjects whose average score for the seven problem areas was three or less were deemed as functioning at a high level and acceptable for interviews. Subjects who were interviewed received a score of three or less on the current/lifetime drug/alcohol section of the ASI. This study explored the factors associated with a high level of functioning in cocaine users by using the referer’s opinion, the subjective interviews and the ASI screening data.

*Level of functioning* is a subjective term meaning different things to different people. To address the issue of subjectivity, the study added more objectivity to the concept of level of functioning with the use of the Addiction Severity Index (McLellan et al., 1992). Mathias (1994) stated that “the instrument was a simple, reliable interview that could be used to assess the current severity of substance abuse problems and identify the most important addiction-related problems in the lives of patients entering treatment” (p. 8).
Subjects

This research involved 10 subjects who were current and occasional cocaine users. They were not involved in any treatment for substance abuse, nor were they involved in the criminal justice system. The subjects considered themselves to have a high level of functioning in society and were also considered by others to function well. All of the subjects received an average score of three or less on the ASI and all subjects received a score of three or less on the drug/alcohol section of the ASI. Level of functioning was assessed in seven life areas: medical condition, employment and financial status, drug and alcohol use, legal situation, family history and relationships, social relationships, psychiatric status, as measured by the Addiction Severity Index (McLellan et al., 1992). The subjects in this study lived in a medium-sized border city in a Southwestern state. All subjects were over 21 years old.

Prior to the study, the researcher was acquainted with a number of people who used cocaine. As a practitioner in the field of substance use, he was aware of family members of clients who used cocaine. The researcher also personally knew artists, musicians, craft persons, teachers, doctors, lawyers, and others in many vocations who used the drug. As the researcher began discussing his ideas with a variety of people in the community, he found that many of these people were using cocaine and appeared to be functioning at a high level with no apparent adverse effects due to cocaine use. Many of the people with whom the researcher spoke agreed that scientific inquiry concerning factors associated with a high level of functioning in cocaine users would add to the
understanding of cocaine users, but none were willing to participate in the study. The problem of identifying subjects for the study led to the development of an indirect referral process.

In this indirect referral process, probation officers, lawyers, and therapists were asked to provide a list of names and telephone numbers to the investigator. The question to their clients would be, "Do you know anyone who you think uses cocaine and maintains a high level of functioning?" Referral sources were identified, contacted, and agreed to participate in the referral process. The referral sources were a state Superior Court judge, the clinical director of a major treatment program in the city, a state parole officer, and two local lawyers. No feedback was provided to the people who submitted names, and people referred for the study did not know who else was referred.

To clarify, the referral sources did not refer subjects to the study. Rather, they served as the primary contact people who introduced the study to their clients. The clients were to present the study information to people they thought maintained a high level of functioning during cocaine use. The referral sources were not to know who actually participated in the study, who contacted the researcher, or who asked the subject to contact the researcher. Numerous legal problems were associated with the proposed referral process, so a snowball process was substituted as a means of identifying subjects.

The snowball process allowed subjects to refer others to the study. One potential subject was identified by a person who used cocaine but declined to participate in the study. The potential subject was given a copy of the study proposal by the person who
identified her. She was also given the researcher's telephone number. The potential subject called the researcher, and after two face-to-face meetings, the person agreed to take the Addiction Severity Index (McLellan et al., 1992), which was used to assess her level of functioning. She scored appropriately on the ASI and agreed to be interviewed. She then referred two of her friends. From these referrals, the snowball process preceded with subjects referring new potential subjects to the study.

A list of potential subjects was compiled by the researcher from among the people who responded through the snowball referral process. From that list, 20 people were asked to take the Addiction Severity Index (McLellan et al., 1992). Invitations to participate in the study were made via telephone calls. Subjects were selected or rejected based on an appropriate score (average, three) on the Addiction Severity Index (McLellan et al., 1992). Subjects who were selected to participate in this study were informed that no judgments would be made about their substance use and that the purpose of the study was to obtain information about factors associated with a high level of functioning in people who use cocaine.

Interviews with the Subjects

Ten subjects from a pool of 20 people were interviewed for this study. Three people from the pool of 20 were screened out after not scoring an average of three on the Addiction Severity Index (McLellan et al., 1992). The screening interview was designed to define the purpose of the study clearly, to explain the subject's role, to alleviate any fears or doubts the subject may have about the study, and to obtain the subject's consent
A prime function of the screening interview was to begin the process of forming a trusting relationship between the participant and the researcher. The amount of time for the screening interview varied, taking from 30 to 45 minutes. This interview took place after the subject completed the ASI (McLellan et al., 1992).

The second interview, lasting from about one and one-half to about two hours, was intended to obtain a life history from the person, to establish how and when cocaine use started, to explore his/her perceptions of cocaine use, to ascertain how the subject defined and assessed his/her level of functioning, and to elicit the factors that he/she associated with that level of functioning. Following is an overview of the items covered in the order that they were stated to the subjects:

1. Discuss your early life history.
2. Discuss your high school years.
3. Describe your introduction to drug use.
4. Discuss your introduction to cocaine use.
5. Describe the course of your cocaine use.
6. Discuss any problems resulting from your cocaine use.
7. How do you view your current cocaine use?
8. How would you assess your current level of functioning?
9. What factors do you associate with your level of functioning as a cocaine user?
10. What values are important to you?

11. How do you view yourself in the community?

12. What measures do you take to conceal your cocaine use from others?

13. What do you consider your strengths and weaknesses in maintaining a high level of functioning while using cocaine?

As stated, the second interview attempted to explore the subject's world view, view of him/herself, place in the community, and view of his/her cocaine use. The interview items are researcher designed, addressed issues needed to obtain pertinent information to answer the research question and obtain background information about the subjects. They also addressed issues identified as important in assessment by Wright (1980), and the questions allowed the subjects to expound on cocaine-use issues. A third interview was conducted with two of the subjects to clarify information provided by the two subjects in previous interviews.

Data Management

To facilitate the collection and management of data in this study, the techniques of triangulation, peer debriefing, and coding or memoing were used.

Triangulation, according to Hammersley and Atkinson (1990), is using varied sources to confirm or find differences in the data collected. It should be noted that differences can provide valuable information because people may view situations differently and the different views may help the researcher to determine what is valid. In this study, triangulation was used first by exploring the perspectives of the subjects. An
additional perspective was gained from the data provided by the Addiction Severity Index (McLellan et al., 1992). These sources of data were compared to help develop an understanding of the data. Triangulation is a step in establishing credibility.

Another way to establish credibility is peer debriefing. Lincoln and Guba (1985) noted that peer debriefing allows the researcher to analyze the data with a disinterested peer to explore aspects of the study that may seem clear to the researcher but may not be so clear to others. This technique assists in exploring biases, clarifying meanings, and interpretations, and probing ideas not considered by the researcher. In this study, the researcher asked a professor of education who specialized in qualitative research to serve as the peer debriefer. The peer debriefing took about four hours.

An additional data management technique used was memoing. “Memoing can provide a time to reflect on issues raised in the setting and how they relate to larger theoretical, methodological, and substantive issues” (Bogdan & Biklen, 1992, p. 159). Memoing provides the researcher with a way to record thoughts and ideas during the interview and can assist in understanding the subject and the subject matter. Reviewing memos gave the researcher the opportunity to think about and reflect on the data. The following process was used to analyze the data:

1. Data from the Addiction Severity Index (McLellan et al., 1992) were analyzed. Addiction Severity Index categories were:
   a. Medical condition
   b. Employment situation
c. Drug/alcohol use
d. Legal and criminal status
e. Family history
f. Family/social relationships
g. Psychiatric status

2. Each interview was taped and transcribed.

3. From the transcribed data, the researcher designed categories were:
   a. Early life history
   b. High school experiences
   c. Introduction to drug use
d. Introduction to cocaine use
e. Course of cocaine use
f. Problems due to cocaine use
g. Personal view of cocaine use
h. Current level of functioning
I. Factors associated with cocaine use
j. Subject's values
k. Subject's perception of his place in the community
l. Concealment of cocaine use
m. Perceived strengths and weaknesses of subject
4. Statements made by the participants during interviews as well as their responses to the Addiction Severity Index were compared.

5. After each interview and ASI assessment, the investigator wrote memos relating to his observations, reservations, insights, ideas, and feelings. Problems concerning data collection, category development, and the direction of the study were reviewed.

6. The data from completed interviews and screening instrument (ASI) were discussed with the peer debriefer who helped the researcher refocus on issues that may have been missed. Areas of concern were discussed with the subjects and clarified if possible.

7. The responses of the subjects, individually and as a group, were compared at the end of the study, and discrepancies or incongruencies were noted and discussed with the peer debriefer.

Rigorous data analysis began after the researcher had left the interview environment and the data had been collected. Interview data, screening results, memos, and peer debriefing created a large volume of material, and the coded categories helped to organize this information. In addition, Ethnograph v4.0 (Seidal, Friese, & Leonard, 1995), a computer program, was used to help categorize the data and assist in its analysis.

Summary

This chapter described the qualitative design for the study of factors associated with a high level of functioning in cocaine users. The design used a formal screening
instrument and interviews to obtain data. Interviews were conducted with the study
subjects. All subjects completed the Addiction Severity Index (McLellan et al., 1992)
(screening and data collection) which added an objective aspect to the subjective data
obtained from the subjects. The multiple sources of data assisted in their triangulation.

Peer debriefing, the third part of triangulation, provided the researcher with the
advantage of a fresh point of view and added a different perspective to the process of data
analysis.
CHAPTER 4

FINDINGS

Chapter 4 reviews the findings of this study. Sections include a description of the subjects, findings related to the research question, and information provided by the 13 research categories of the interviews, and conclusions. The chapter closes with a summary.

Addiction Severity Index Data

The study examined the lifestyles of 10 subjects—seven women and three men. They ranged in age from 21 to 46 years, and their net incomes ranged from $9,000 to $26,000 a year. The subjects included one West Indian male, one African American female, one Yaqui Indian female, two white males, and five white females. Four of the subjects reported that they were Protestants, two were Jewish, and one was Catholic. Two were of other religions (one Indian and one Eastern), and one subject had no religious affiliation. All of the subjects were identified as having a high level of functioning (average score of three) from the screening data provided by the ASI (McLellan at al., 1992). Following is a description of the subjects as a group from the ASI data.
Medical Status

Half of the subjects reported medical problems, and of those, two had current problems. One man sustained back and knee injuries at work. Although he had pain daily, the pain did not restrict his activities, and he was not receiving treatment for his condition. One of the women in the study was taking thyroid and estrogen replacement medications. Neither of these subjects’ conditions was severe enough to exclude them from the study. One other subject reported a deviated septum from intranasal cocaine use. No other subjects had current medical problems.

Employment/Support Status

All of the subjects in the study were employed, attending school, or both. All subjects had graduated from high school. The subjects included one attorney, one masters-level social worker, two school teachers, a race track manager, a cosmetologist, an associate-level social worker, an entertainer, and two college students. The subjects’ length of time on the job ranged from 1.5 years to 19 years. All of the subjects were self-supporting, and three of the females had children living with them. None of the subjects had current employment problems.

Alcohol Use

All of the subjects had used alcohol during the 30 days prior to the time of the ASI (McLellan et al., 1992) assessment. Five of the subjects drank between 15 to 30 days in the month prior to the time of assessment, and five subjects drank on fewer than
15 days during the month prior to the assessment. Alcohol use ranged from four days during a month to 30 days in a month. Six of the subjects had been using alcohol for over 10 years, and one subject began drinking only three months prior to the study. The subject who stated that alcohol could be a problem drank the least alcohol of all subjects. None of the subjects were ever treated for alcohol abuse. Eight of the 10 subjects reported using more than one substance a day during the last 30 days. None of the subjects had current alcohol problems.

**Drug Use**

All subjects had used cocaine at least once during the past 12 months, and all used the drug intranasally. One subject first injected cocaine and later used the drug intranasally, never returning to injection. All of the subjects used cocaine in combination with other drugs, usually alcohol or marijuana, but also with narcotics and sedative/hypnotics. For all subjects except two, marijuana was the first illegal substance used. The two exceptions used cocaine first. The longest period of continuous cocaine use was 20 years, and the shortest period of continuous use was one year. Four of the subjects used cocaine more than five times in the 30 days prior to the ASI (McLellan et al., 1992) screening. Two subjects stated that cocaine use caused a financial problem. One subject had been treated for drug use. That treatment was over 10 years ago. Except for the one person who had been treated in the past, none of the other subjects had been in drug or alcohol treatment, had overdosed on drugs, or had been in detox programs.

Seven of the subjects spent $100 or more a month on drugs.
Legal Status

In the past three of the subjects in this study had been arrested on drug charges. Two were charged with possession of marijuana as minors, and one had a major conviction (heroin) as an adult. None of the subjects was currently on probation or parole. Nine of the 10 subjects had minor offenses such as traffic violations, disorderly conduct offenses, or speeding tickets. Three subjects had DUI convictions. One had felony convictions for forgery and probation violations, but those convictions took place over 10 years ago. None of the subjects had current legal problems, within the past year.

Family/Social Relationships

Four of the subjects reported that members of their families had significant drinking, drug use, or psychiatric problems. One subject related that her father had significant problems with drugs and alcohol and that her only sibling had alcohol, drug, and psychiatric problems. Another subject reported that her uncle had alcohol problems and her brother and sister had drug problems. A third subject noted that his brother had psychiatric problems, and a fourth subject reported that her grandfather and aunt had psychiatric problems and an uncle had alcohol problems.

Seven of the subjects who participated in this study were separated or divorced. Three had never been married. Most of the subjects were content with their marital status, but two subjects were not. One woman was indifferent about her marital status, but she wanted to be in a relationship and was not at the time the ASI (McLellan et al.,
1992) was administered. One man had recently broken up with his partner, and he was dealing with his emotional loss. Seven of the subjects had been physically, emotionally, or sexually abused in their lifetimes, and two had experienced abuse in the past 30 days. In spite of some current social difficulties, the subjects were functioning well as indicated by the ASI screening for this section.

**Psychiatric Status**

Three of the subjects had experienced psychiatric problems during the 30 days prior to the time of the ASI (McLellan et al., 1992) screening. One man experienced anxiety and depression resulting from relationship issues. He had other periods of anxiety and depression during his lifetime and at one time, in the distant past, had serious thoughts of suicide. One woman was taking medication for anxiety, and she had experienced other episodes of anxiety and depression during her lifetime. A second woman had experienced some anxiety during the previous 30 days, as well as anxiety and depression in the past. None of the subjects had been hospitalized for psychiatric problems, and no one appeared depressed, anxious, hostile or suicidal or seemed to have a thought or mood disorder at the time of the ASI screening. None of the subjects who were having current emotional issues were experiencing these issues to the extent that they would be excluded from the study. The subjects are described individually in the remainder of this section. The names of the subjects have been changed to protect confidentiality.
Lucy, age 46, had been divorced for six years and had one adult child. She graduated from high school, trained as a cosmetologist for one year, and was working in that field. She also designed and sold her own line of clothing. Paula had been using illicit drugs since she was 18 and using cocaine on a regular basis for the past two years. She spent 18 months in an inpatient treatment program in 1985-1986 and spent nine months in jail on drug and forgery charges during that time period.

Mandy, age 22, had never been married. She graduated from high school and was in her third year of college. She had also been training to be a chef for nine months. She had been using illicit drugs for five years and had been using cocaine on a regular basis for a little over a year. At age 19, she received a misdemeanor conviction for possession of marijuana.

Pearl was 34 years old and had been separated from her husband for nine years. She had one child. She completed high school and two years of junior college and was prepared to begin employment as an administrative assistant. Priscilla had been using illicit drugs, including cocaine, for 15 years. She had no arrests or convictions.

Matt, age 41, had been divorced for eight years. He had two adult children and recently ended a three-year relationship. Ed graduated from high school and worked as a stuntman and actor. He had used illicit drugs for 25 years and had been using cocaine on a regular basis for two years. He had no major arrests or convictions but did receive one speeding ticket.
Linda was 21 years old and had never been married. She had no children. Pauline graduated from high school and was scheduled to complete her last semester of college in December 1997. She worked part time as a bookkeeper. She had been using illicit drugs for three years and using cocaine on a regular basis for two years. She had received four speeding tickets but had no major arrests or convictions.

Jane, age 44, had been divorced for 14 years and had one child. She graduated from high school, spent a year receiving extra training from a business school, and earned a masters degree from a major university. She was employed as a recreational specialist and augmented her income by working as a caterer. Nancy had been using illicit drugs for 30 years and used cocaine on a regular basis for 20 years. Besides a speeding ticket, she had no arrests or convictions.

Roy was 26 years old, had never been married, and had no children. He graduated from high school and earned two bachelor's degrees. He had recently begun a job as a race track manager. Ray had used illicit drugs for eight years and used cocaine on a regular basis for six years. He had no arrests or convictions.

Sue, age 41, had been divorced for 15 years. She had no children. She graduated from high school and earned a law degree. After giving up a private law practice, she was employed as a public defender. Natalie had used cocaine for 12 years, and she also used other illicit drugs during that time. She had two DUI convictions but no other arrests or convictions.
Donna was 46 years old and had been divorced for eight years. She had two children. She graduated from high school and college. She was employed as an elementary school teacher. Debbie had been using illicit drugs for 25 years and used cocaine on a regular basis for three years. She had one arrest for possession of marijuana and spent seven weeks in jail for disorderly conduct. Both of these arrests occurred over 20 years ago.

Carlos, age 43, had been divorced for four years. He had no children. He graduated from high school, received two years of technical training, and graduated from college. Jose was employed as a middle school teacher and augmented his income as an accountant during tax season. Jose had been using illicit drugs for 28 years and using cocaine on a regular basis for 10 years. He had one conviction for theft, one DUI, and three speeding tickets.

All of the subjects who took the Addiction Severity Index (McLellan et al. 1992) received a score of three or lower in each category on that screening instrument. For the ASI, a score of average three indicates a high level of functioning. The ASI data indicated that all of the subjects were in good health. Although some subjects did have some physical complaints, the complaints were not so great as to exclude them from the study. There was a wide range employment with the subjects. All were high school graduates with some of the subjects possessing advanced degrees. The subjects were representative of the general population in that the subjects maintained their employment and did not depend on illegal activities to support themselves. All of the subjects used
alcohol without exhibiting problems due to alcohol use. The same is true for the
subjects' drug use. A number of the subjects have had legal problems in the past, but
none of the subjects had current legal problems. This population seems to reflect the
general population in that their interactions with the legal system tended to decrease with
age and maturity. This finding is consistent with the findings of Sampson and Laub
(1992). The subjects presented with similar social relationships as the general American
public in that the subjects got along well with most people most of the time, occasionally
had conflicts with others, had family members who, at times, had social problems and the
subjects were not always satisfied with their social relationships. Some of the subjects
have had emotional problems but no more so than the general population. None of the
subjects had ever been hospitalized for emotional problems none were suicidal or
homicidal, and none manifested thought or mood disorders at the time of the screening.
Data from the ASI indicated that this sample of cocaine users presented as healthy,
employed and/or in school, moderate regarding drug and alcohol use, with no recent legal
issues, with good family/social relationships and emotionally well adjusted. There
appeared to be very little to distinguish this population of cocaine users from the general
population.

Interview Data

The research question asked what factors were associated with a high level of
functioning in cocaine users. The 10 subjects described above identified factors
associated with their level of functioning by responding to 13 interview items (see
Appendix E for factors). The responses to those interview items were explored using computer analysis (Ethnograph v4.0) (Seidal et al., 1995) and researcher analysis of the data. The identified factors for each item are presented below.

1. Discuss your early life history. This item generated a number of responses with no consistent pattern across the subjects from computer analysis (Ethnograph v4.0) (Seidal et al., 1995) or researcher analysis of the data. No family dynamic or structure dominated the responses. The subjects’ early lives were diverse.

Roy was raised by a single mother. Although his mother was married three times, he stated that his early life was spent with just his mother. He has a half brother who was raised by the brother's father. The most constant aspect of his early years was sports.

"Basically all I did was sports."

Pearl was also raised in a single-parent family. There were seven children, and she stated that they were poor. Her early years were characterized by hard work. Pearl stated,

I realized from a young age that in order to get anywhere, even though we were as poor as we were, and the fact that I would never be rich, rich, that . . . it's possible to obtain things in life and acquire a certain status in life if you really work hard at it.

She attributed her strong work ethic to the examples provided by her brothers and her mother who worked hard all of their lives.
Lucy was raised by her mother and father and later by her father and stepmother. She had one brother and two sisters. Her household was middle class, and she viewed her life as good until her parents became ill. This was a significant point in her life. Her agreement with the new realities of the late '60s caused conflicts with her father, and she became more rebellious. Lucy's stepmother was a stabilizing person in her life during this period of time.

Linda grew up in an upper-middle-class, two-parent family. Her parents were immigrants from the Middle East, and she had one sister. She had a strong Catholic upbringing and went to church regularly. Most of her activities as a child revolved around her family, family friends, and the church. Her father died when she was 15, and she began to get into trouble. "I didn't do anything wrong; I never got into any kind of legal trouble, or I wasn't doing any drugs or alcohol at that time, trouble just because I wasn't doing exactly what they wanted me to be doing." Linda stated that her father was a strict disciplinarian, and she was hit and verbally abused often. Her father's death gave her the opportunity to go out with friends, and she became more rebellious.

Carlos, with his mother, father, and one sibling, moved from Barbados to New York. The family lived a fairly poor existence until Jose's parents established themselves. Carlos saw moving to America as a chance for new opportunities and a chance to compete with "the best." Opportunity and competition earned him a spot in a prestigious prep school, and his family moved to a middle class neighborhood in New Hampshire.
Taking advantage of opportunities provided direction in his early life. "I followed the example set by my parents."

Sue grew up with her mother, father, and brother in an upper-middle-class family. Her early years were dominated by ballet dancing which provided her with opportunities and helped to discipline her mind and body. Summers were spent traveling. She had good relationships with her friends, mother, and brother but was fearful of her father. Some domestic violence between her mother and father was the only negative incidence she remembered.

Jane, Matt, Mandy and Donna all stated that they grew up in normal middle-class and upper-middle-class homes. They had two parents in the home, got along well with parents and siblings, and could not think of anything out of the ordinary during their early life.

2. Discuss your high school years. This item was designed to focus on the changes that take place during high school, the influence of peers, broadening spheres of human interaction and worldly knowledge, and the lessening of parental influences. The item also examines the mental, physical and emotional changes that take place, sometimes leading to the introduction of drug use. No consistent theme or pattern was seen from computer analysis (Ethnograph v4.0) (Seidal et al., 1995) or researcher analysis of the data. Each subject had unique experiences during this period of time.

Roy characterized his high school years as a time when he intensified his participation in sports and became interested in girls. He was on three varsity sports
teams, and his friendship group was comprised of athletes. During his junior year, he began a relationship that lasted nine years. Roy played sports all year, including summer sports camps, and he looked forward to a college baseball or football scholarship. Early in his senior year, he experienced a career-ending knee injury.

Pearl stated that high school opened a whole new world for her as she went from the restrictions of reservation life to a large urban high school. She was popular in high school and met many people of varied backgrounds and economic status. Pearl noted that she was very friendly and had the ability to make lots of friends. She was introduced to a lot of different things. "Really, my whole time in high school was partying."

Lucy went to a high school for the wealthy during the 1960s and labeled herself a hippie. She began establishing her independence and ran away from home a number of times. "I was rebellious." She would skip school, have problems with her father, and embrace an alternative lifestyle. This lifestyle led Lucy to reject her family's values and bond with a new group of friends. She rejected alcohol and embarked on a drug-taking lifestyle.

Linda's high school years were punctuated by conflicts with her parents, mostly her father. She continued to be physically and emotionally abused by her father, and she was angry a good deal of the time during those years. When her father developed a chronic illness, she began spending more time with her friends, and they replaced her family in closeness. "They [parents] were just not feeling people. They just didn't
understand feelings. They didn't understand how to discuss or that I was actually having feelings." Going out with friends accelerated her break with her family.

Carlos described his high school years as "a great time, good time, learning experience." His family had moved from the Brooklyn ghetto to the suburbs and he was enthusiastic about being able to compete in America. As a result of pressure from the federal government, he received a scholarship to a prestigious prep school. From there he was accepted into Princeton University.

Sue continued her ballet dancing during high school. She was so busy dancing that she did not have a peer group in school; her peers were fellow ballet dancers. She said that she danced after school and on Saturdays, not having time to socialize a lot at school. She felt that she blossomed as a woman and as a person during that time. She maintained good relations with her family.

Donna described her high school years as being turbulent. By her report, she had many low points during these years. She had continual conflict with her parents over her behavior and her lifestyle. She said that although she was never suspended from school, received good grades and graduated on time, there was constant conflict. Donna attributed this conflict to her choice of friends and her desire to date outside of her race. She was even caught using drugs by her parents.

Matt saw high school as a fun time. He was not interested in learning or studying. "I kinda was into it for social reasons." He liked to be around people, and school was where the people his age were. Matt put effort in the areas that he liked (PE, drama), and
he did not put much effort into the rest. He noted that he never got into any real trouble in high school but made a point of enjoying himself. He remained close to his family.

Jane stated that her high school years were very positive and enjoyable. She was a cheerleader and homecoming queen; she also stated that she was athletic and stayed very active. Mandy, on the other hand, spent her first three years of high school at a very small school where she knew everyone. She spent her last year in a large urban school and had difficulty meeting people. Once she did meet some people, she was not so lonely and had a "great time." Mandy maintained a good relationship with her family.

3. Introduction to drugs. This item was posed to explore the emotional and cognitive changes that facilitated the subjects' first illicit drug experience. Also noted here is the first drug used. Conflict with parents was a major theme for the subjects during this time. The influence of peers was strong for all subjects except one, and marijuana was the drug most often first used.

Roy did not start using drugs until his third year of college. His athletic career had ended, and he was putting most of his efforts into his college courses. The first illicit drug he took was LSD, which was introduced to him by a college roommate. He was 20 at the time, and his peer group had changed from athletes to younger college students just out of high school. Roy had learned something about drugs during his studies.

I was pretty noviced about it. But, you know. I got to the point where I assured myself, that you know, this little, what I'm going to take is not going to hurt me.

It's not going to hurt me to the effect that it, you know, causes permanent damage,
you know, if I did it, the effects of having a good time on it, it's not going to do anything where I get dependent on it or it will hurt me physically or what not, so I gave myself confidence by looking onto it before I just popped it into my mouth and said just go for it.

Roy continued to use LSD as well as marijuana, various pills, alcohol, and inhalants before using cocaine.

Pearl began smoking marijuana at age 14; she was introduced to the drug by high school friends. Soon after starting, she was smoking on a regular basis and meeting more people who did the same. "Those were the people that seemed cool and, you know, they were the ones having more fun." Smoking marijuana, for her, was a form of peer identification. She enjoyed spending time with the people who smoked, and she felt she got along with them. She began skipping school more and spending time on the streets which lead her to be introduced to people who did other substances.

Lucy smoked cigarettes from age 12; she started smoking marijuana at age 16 and also started taking LSD at that time. She decided never to drink alcohol, just to do drugs. She wanted to be like other hippies and expressed contempt for her father's authority. By age 17, she was running away from home, skipping school, sneaking out of the house at night, and she was threatened with juvenile detention. Lucy experienced increased conflicts with her parent because they were opposed to her behavior and her peer associations.
Linda was 15 when she started smoking marijuana and drinking alcohol. She began going out with her friends more because her father was in the hospital a great deal of the time, and her mother was spending more time with him. She stated that she was ready for more freedom, and she did not feel that she was pressured by peers to use drugs; she wanted to do it. Linda said, "I was ready for the scene."

Carlos knew about drugs from his days in the Brooklyn ghetto, but he did not use at that time. His real exposure and use started at prep school with marijuana being the first substance used; peer pressure was a main motivator. "Just by peer pressure basically ... you know, you're in an environment that is pristine, and the white folks have got the money, and you, they can expose you to things that you probably wouldn't be exposed to previously." By the time he started college, he was drinking alcohol, doing uppers and downers, LSD, and other psychedelics. Carlos did maintain good relations with his family, but he was influenced less by the family.

Sue's friends in ballet were instrumental in her introduction to drugs. At age 18, she went to New York with two men for ballet auditions. She smoked hashish with them. When asked why, she stated,

Well, I had been around drug use all my life. I mean since I think my first day of my freshman year of high school, I watched a guy go through heroin withdrawals in the lunch room while I was eating, and I was around it all the time, and I made a decision that I was not going to have sex, do drugs, or anything until I was 18 years old because I didn't think, I didn’t want to make adult decisions and have to
live with adult decisions because ballet was the most important thing to me. By the time I was 18 years old and I figured I could do it and at least I was an adult, I was out of my family's house, I was living in New York and I could make more decisions.

Donna said that she was first introduced to prescription drugs by her father, who was a pharmacist, and then by peers, to marijuana. She started smoking at age 16, and by age 21 she was smoking every day.

Matt's first drug was marijuana which was introduced to him by his older brother. At age 15 he spent lots of time with his brother and his brother's friends, and when they suggested he try marijuana, he did.

Jane started smoking marijuana in high school while experimenting with peers. By the time she finished high school, she was also doing LSD and methamphetamines.

Mandy started smoking marijuana with friends at age 17. She said that a group of her friends was attending a rock concert, and people just started smoking.

I didn't feel anything. I don't know, I mean, they all were more into it than me. I didn't want to smoke it again and just kind of held back, whatever. I'd smoke out of a pipe every once in a while, and then someone brought in a bong and everyone started smoking bong, and I was always too afraid to try it. I couldn't ever do it so I didn't try it until like my freshman year in college, and then I don't know; I guess we all went on the same routes because I went back to visit them, and they were all doing the same exact drugs.
By the end of her freshman year in college, at age 18, she was taking LSD and other psychedelics as well as smoking marijuana.

4. Discuss your introduction to cocaine. This item allowed the subjects to express their initiation to the use of a highly controlled substance. The negative social connotations of using this substance were reflected in some of the responses. The main themes here were curiosity and peer pressure.

Roy rose to the rank of president of his college fraternity. At that time, he ceased all drug use. He did not believe that drug use was compatible with his position. After two years, he stepped down as president. "Once I left the office, I stayed in the fraternity for two more years. I kind of started going over toward where the drug users in the fraternity were." Roy stated that he wanted to experiment with drugs again and maybe do something different. He returned to the use of marijuana, inhalants, and LSD, and he was offered cocaine. "I mean, that was my first introduction to cocaine was with my fraternity brothers, like in the back room of the house." Roy stated that he knew quite a bit about the substance because he had continued to learn about drugs during his studies. He knew about the adverse effects of the drug, and he decided that he would do such a small amount that it would not harm him. Still, he got sick the first time he used cocaine.

At age 18, Pearl started using cocaine, and by age 19, she was frequenting bars on a regular basis and socializing with an older group of people. Her earlier drug use (marijuana) was spurred by peer identification, but she denied that peer pressure was involved in her decision to try cocaine.
I've always been very comfortable with myself. I've never really lost myself in any one group, or, you know, I've never been pressured by peers. I know that my mother used to think that it was the kids that I was hanging around with that got me in trouble, as she would put it. But I made those choices, and I chose to try cocaine, and I did it because I'd seen some of my other friends do it, and they seemed to be having a fun time, and they didn't do it all the time; it wasn't a daily thing, you know. It was whenever we went out or whenever we went to a party and that sort of stuff.

Lucy was 27 by the time she was introduced to cocaine. She had been married and separated from her husband, and she was doing a lot of marijuana, LSD, and alcohol. She stated that she did not really care for those drugs, but doing drugs fitted into her lifestyle. "I had gotten a career as a hair stylist, and I was working in a pretty racy place, and that's where I got introduced to cocaine, through my co-workers."

When Linda started using cocaine during her second year in college, she was 19 years old. She said that she had heard a lot of people talking about cocaine, and she wanted to try it. "I went to the people who I knew did it, and I tried it." She stated that she asked the people, and they offered the drug to her.

Carlos was 22 when he discovered cocaine. He had used a number of drugs by that time, and some of his friends were using cocaine. Jose said it was not peer pressure that led him to try cocaine. "I was inquisitive. I wanted to see what it was, you know, what was the attraction for this particular form of inbibment." He said that in the
beginning, cocaine use was a function of money and as a college student he did not have any money. He said that at that time, he had no mental or emotional connection with the drug.

Sue was 20 years old when she was at a party with some friends. Her friends were doing lines of cocaine. She said that some of the drug was offered to her and she accepted. The drug was something she wanted to try.

Donna was first introduced to cocaine in her late 30s and became a "recreational" user.

Matt was 26 before he first used cocaine, which he began using with the brother who had also introduced him to marijuana.

Jane's ex-husband was the first person with whom she used cocaine. She was 24 years old. She tried the drug to please him. "He got into it wheeling and dealing drugs; everybody else was doing it, that type of thing; through the week and on weekends, they always had these big parties. Cocaine was like very abundant for everybody."

Mandy, at age 19, stated that all of her friends did cocaine but she hated it. She did not like to be around her friends when they were doing cocaine. "I didn't want to hear about it; I didn't want anything to do with it." She was finally influenced to do cocaine by peers. She said that she promised herself that she would never snort anything; what made her different was that she would never put anything up her nose. But she changed her mind.
I was hanging out with this girl; she was older than me and she did quite a bit, almost everyday. She’d always do it in front of me, and I’d just, I don’t know. I have no idea why we became such good friends when I was so opposed to what she was doing. She was a lot of fun to hang out with and stuff. . . . She just always joked about it [cocaine], you know. Do you want a line, do you want a line, and I’m like no, no, no. And one day, she just put a little in front of me, and she’s like, it’s there, if you want to do, it do it; if you don’t want to do it, don’t do it. And it was just sitting in front of me, and it was like really small and when she turned her back, I just did it.

Mandy said that after the first time, it was easy to continue’ it was not a problem for her anymore.

5. Describe the course of your cocaine use. This item obtained information concerning the different directions cocaine use can take. Some directions of the course of cocaine use are familiar to cocaine users, and others are unique. All of the subjects used cocaine sporadically in the beginning and increased their use gradually, except two people who became very involved with the drug from the start.

Roy felt secure enough to try cocaine because he had read about the effects of the drug. After he started, he continued to use the drug two to four times a year. He stated that he did not have much money, so friends always supplied it for him at parties or other social gatherings. "I would go in the back and take a ‘bump’ or whatever, but it probably, maybe two or three times a year for a couple of years, and then after that it really paled
off, the use of it." Cocaine was not Roy's drug of choice; he liked LSD and marijuana better. His last cocaine use was three months ago, and he now uses the drug an average of two to four times a year. He has been using cocaine for six years.

Pearl saw cocaine use as a party thing. She described herself as a recreational user. By her early 20s, she was working, she owned her own house, and she was responsible for paying all of her own bills. "I knew that I enjoyed it [cocaine] and so if I had, you know, this spare money, then I would, if I chose to, would spend it on that [cocaine]." Pearl noted that she did not remember ever seeing any of her friends becoming really addicted. She thought it was healthy for her to see that people using cocaine were not addicted. They were working, going to school, and keeping up with everything. At the time of the study, Pearl used cocaine about four times a month, and she had maintained that pattern for 14 years.

With Lucy, cocaine use led to other forms of experimentation. She began by snorting cocaine and progressed to shooting cocaine and then shooting heroin. She said that among her friends, shooting drugs was acceptable behavior.

So that is probably what introduced me to my first introduction to intravenous use. And then, shortly after that I had a boyfriend who was using heroin, and so after a while of being with him, I decided to indulge in that too, and occasionally we would get some cocaine and do cocaine. But again, it was not something that I really liked, but there was a period of time when I was highly abusive with it and destructive in my own self with it.
Lucy's drug abuse, abusive behaviors, and self-destructiveness got her arrested twice and sent to jail and to a drug and alcohol treatment program. After she was released from the treatment program, she remained clean and sober for five years. Lucy slowly resumed her cocaine use. "I guess I was with a boyfriend at the time, and every once in a while we'd get around some people that had some cocaine, and I would snort a little cocaine." She used cocaine about 10 times a month, and she had maintained this level of use for two years.

Linda said that when she first started, her use was quite limited. She stated that she did the drug "here and there." When she first started use, she wasn't into it. She noted that the drug did not do for her at the beginning what it did for her now. Over time and with increased exposure, she started doing more cocaine. Linda believed that as she increased the quantity and quality of cocaine used, the drug had a stronger effect on her, and she liked it more. She had been using cocaine about 15 times a month for two years.

When Carlos first started using cocaine, it was very infrequently. This was partially due to a lack of money and partially to the lack of accessibility. He suggested that cocaine use at that time was something special. It was used as a reward for a job well done or, in academics, to help him stay up through the night to accomplish a task or assignment. Carlos quit school for a year and a half and went to work. Working gave him money and changed his cocaine-use pattern.

Working allowed me to buy cocaine rather than get it from friends or as part of some sort of turn-on-type situation as opposed to actually going out there and
buying it for my own personal use. It [cocaine use] became more regular; it was just that the ability to acquire it was enhanced and then knowing where to go to get it was gained. So those two factors, to one degree or another, created a certain freedom, if you will, to increase my cocaine use.

Carlos had been using cocaine on a regular basis for 10 years. At the time of the assessment, he used the substance about once a week.

When Sue was 20 years old, she got married and met a woman who was a cocaine dealer. The woman convinced her to start dealing cocaine. She dealt cocaine for two years, and she used on a daily basis until she was 23 years old. Sue said that people in her circle of friends started getting busted so she moved to Los Angeles. She used cocaine “a few times” during her first months in Los Angeles, and then she quit using all together. After four years of abstinence, she started law school.

When I was 27, I worked full time and went to law school at night, and there was no way that I could do it and study until 2:00 and get up at 6:00 without help. So I actually started using methamphetamine for studying, and about my second year of law school or the beginning of my third, because it was a four-year program, we go at night, my methamphetamine connection got busted so I started using cocaine to study.

Sue quit using cocaine and quit her job to concentrate on passing the California bar exam. She resumed occasional cocaine use after becoming a lawyer. "It was very chic in those days, I did it with attorneys that I knew, every attorney in Los Angeles seemed to have a
vial in their pocket." Natalie worked for a law firm she hated, and she said the
unhappiness of the job led to increased cocaine use. She again started using cocaine daily.

Finally, I realized that this could potentially be really unhealthy, so I quit my job
and then I stopped using so much. So every time there has been some real major
problem in my work I have, my use has escalated, for some reason I find it easier
to go through the motions and get the job done when I really hate it if I'm high on
cocaine.

Sue had used cocaine once in the month prior to the study. She noted that she used three
to four times a year, and this had been her pattern for the past 10 years.

Matt started using cocaine with his brother, and then he started using it with his
wife. He and his wife used twice a month or more, depending on the amount of money
he had. He continued this use pattern for the next four years. Matt and his wife divorced,
and he did not do cocaine again for five years. In the interim, he remarried and divorced
again. After his divorce, he renewed old associations, and he used cocaine about once
every two or three months for the next three years. He did not like using cocaine with
friends; he liked using with his lovers. Matt soon met another woman, and after a period
of time getting aquatinted, they did cocaine together. Soon they were using every
weekend.

Yeah, like every Friday night, that would be, that would be, instead of dancing or
going out for dinner, or any thing like that, it was, what do you want to do; do you
want to go out for dinner, go dancing, or do you want to do coke? And well, let's
just stay home and do coke. . . . That's our night out; we can go spend 60 bucks.

We can go dancing or we can go to dinner, or we can, you know, get drugs.

Matt and his girlfriend decided that the cocaine was interfering with their relationship. He felt that cocaine was putting a strain on the relationship. They stopped using cocaine, but the relationship failed anyway. Over the past two years, Matt had used cocaine 10 to 12 times.

Donna stated that her cocaine use had stayed about the same as when she first started. She used cocaine to party and as a special treat. Donna said that she rarely purchased the drug although she had on occasion. Donna used when the drug was offered to her. "I might use it once every three months, one or two weekends (in a row), and then not use it for three to six months. So it is very erratic." Donna had been using cocaine regularly for the past three years, and she has used the drug twice during the previous month.

Jane started out using cocaine two or three times a week, and by her middle 20s, she was using daily. At the time of the study, she used the drug about six times a month, and she had maintained this pattern for almost 20 years.

Mandy said that after she started, she found herself doing it more and more. She did not have to look for the drug because "it was always there." Mandy spent more and more time around people who used. She had been using cocaine about twice a month for a year.
6. Discuss any problems that you have had due to your cocaine use. The subjects noted some problems resulting from using cocaine. Most of the subjects saw the problems as minimal. Physical problems, interpersonal problems, and monetary problems were mentioned most often.

Roy did not think that cocaine had caused any problems in his life besides getting sick a few times after using cocaine and drinking. He attributed the sickness, upset stomach, sweats, and diarrhea to the cocaine use, but he admitted that it could have been a combination of cocaine, drinking, and just partying.

Pearl did not see any problems due to cocaine use. Jane did not feel that cocaine had caused problems for her because the use did not stop her from taking care of her responsibilities. Lucy, despite her trials and tribulations, did not attribute any of her bad times to cocaine use; she said it was more the use of heroin, the people with whom she was involved, and flaws in her character.

When asked about problems from cocaine use, Carlos said that he did not have any problems. Then he thought about it.

Sometimes it's physical, a problem of not having mucus in your nostrils, in your passages, when you wake up the next day. It's physical; that can be disconcerting if you are blowing blood out of your nose. So there is a physical danger that I . . . perceive. And the big thing for me is the issue of money because it has repercussions; if you spend it unwittingly, or if you spend it with the notion that, well, I'm just going to do this for now, you know, this moment, and it's not going
to affect my financial position, that's a pipe dream; so that is the big thing, the one, the money, the lack of it, the spending of it to accomplish, to meet other responsibilities that you might have in a week or a month or whatever and not having the money. And the other side, too, which I call the long-range, down-range goal, is that you don't save any money. You don't have any money saved necessarily at, you know, to do other things.

Sue addressed physical as well as social issues. She said that she had a deviated septum from using cocaine. Her condition did not cause her any medical difficulties. "It's really not a problem, except it's not supposed to be that way." She put more emphasis on social issues.

I went through a period when I was really using heavy, everything had fallen apart work wise, and so my use was again escalated, and I was ridiculous. I was just using all the time, I would just stay in my house, and I didn't want to see anybody, and that social withdrawal was a problem for me at that time.

Mandy noted problems with cocaine use related to the amounts she was doing and continuing the use when she knew she should stop. "There have been times that I've not, that I've been partying with it, and like I know I should stop, and yet I won't stop." Mandy also said there were times when she just wanted cocaine or needed cocaine.

When asked to clarify the want and need issue, she replied,

Like if I knew I had to be up late studying or something like that, and I had a paper to write or something like that, I'd want a couple of "bombs" here and there.
Lately though, if I find myself doing too much of it, I'll wake up the next morning, and I'll just be sick. Like I won't throw up alcohol; I'll throw up this gnarly, and I'll know it's from the coke. So like I know I'll do too much, and then but you know, you don't really stop doing it. But that's just like rare occasions like those times that I've said I've been so sick, so hung over. Like that one time.

Matt was very clear about the problems that using cocaine caused for him. He was singular in his answer and very personal.

Well, kind of personal, but when you use cocaine for recreational use at home, it was always a sexual thing. So you stayed home on Friday night; you stayed up all night snorting cocaine and drinking and having sex all night. Then the rest of the week you don't; you lose the intimacy of the relationship because you know Friday night is coming. We'll have sex for 12 hours or whatever so you forget about, you know, the normal things and the intimacy of the relationship. That's how I feel about it.

For Donna, who was a single mother of two teenagers, the main problem was money. She felt that she should never buy it because it cut into her budget and took away money that could be used for more important things. "I always feel guilty about spending the money on cocaine and feel that it wasn't appropriately spent. The money should have been spent on other things."

Pearl did not see any major problems stemming from her cocaine use. The only thing that she identified was staying up late and having difficulty getting up in the
morning "a few times." "It's really annoying, and that's about it, you know. I can't wake up in the morning; but anything else, it's totally helped me get through a lot of school work."

7. How do you view your current cocaine use? This item provided a snapshot of how the subjects currently saw cocaine use as opposed to past experiences. All of the subjects viewed their current cocaine use as moderate. They all perceived that the cocaine use was controlled in that the use caused no major problems in their lives.

Roy stated that his current use was very recreational. If he happened upon it, or if it was a special occasion, or if it were free, he would do it. He said that he did not buy cocaine. Pearl categorized her current use as moderate. She was older, more stable, and when she did cocaine, it was when she chose to do so. Jane did not see her current cocaine use as a problem. She said that she did not do it like she did years ago; it was occasionally, like on weekends. Carlos said that his current cocaine use was sporadic but continued. He stated that it was more disciplined, not willy nilly, always planned. Carlos noted that his use was controlled and in a safe environment. He now just wanted to enjoy the high. Lucy said that she was satisfied with her current use because she was more stable and used much less than before. She related her cocaine use to her use of alcohol. Mandy said that she never thought much about her current cocaine use; however she believed it was adaptive. "It makes me more awake, helps me do things; it motivates me." Linda said that her cocaine use was more relaxed; she did not crave it anymore and saw her current use as a tool. Matt viewed his current cocaine use as his choice. "I can
do it and not, you know, not have to do it again tomorrow, so I could never use it again, and it wouldn't bother me, or I might use it again, and that wouldn't bother me either."

Donna's current cocaine use was strictly recreational. She said that she really loved it, enjoyed it, but she would not let cocaine use interfere with her life. Sue noted that her current cocaine use was for entertainment and special occasions.

8. How would you assess your current level of functioning? This item was designed to have the subjects confirm that the subjects actually believed that they functioned at a high level. The question was designed to help the subjects make a definitive statement concerning their functioning. All of the subjects felt that they functioned at a high level.

Roy stated that his current level of functioning was pretty high. After eight years in college and earning two bachelors degrees, he was now starting his income-earning career. He said that he worked very hard in school, took full course loads, worked full- and part-time jobs, and kept busy.

Pearl said that she thought she functioned rather well. She said that she accomplished her daily tasks, met her responsibilities and obligations, and provided for her family. "I never put my cocaine use above any of those things."

When Jane discussed her current level of functioning, she said it was pretty good. She noted that she was very responsible. She got up every morning, five or six days a week, and went to work. She said that she took care of her child and tried to be a good mother and a good partner.
Carlos asserted that his level of functioning was pretty high. He said that he had confidence in his abilities to do what he needed to do. He did not allow his drug use to interfere with his professional work responsibilities or anything else he had to do.

If I have to be up on Monday morning at 8:00 to go to school and work, then dammit I need to know that I can't be up all night Sunday doing cocaine. That's just ridiculous. So, you do it Saturday, you rest on Sunday, and you are ready to go to work on Monday. So what I am saying is that you don't allow it to take over those types of responsibilities that you have that make you the important person that you are. You can't let the drug replace your important characteristics.

Lucy attributed her “pretty good” level of functioning to discipline in her cocaine use. She stated that at one time she was not so disciplined. In the past, she would be hung over from drug use and have problems at work; sometimes she would miss work. Lucy decided that if she was to use cocaine, she had to stop at a certain time at night in order to get enough sleep. She did not like being and feeling hung over.

Mandy said that she thought she functioned very well because she went to school full time, worked full time, and always got “stuff done.” She reported that she was often tired, but she worked through the tired times and slept at night. She did not take naps.

Linda said that when it came to her level of functioning, she was functioning well enough. She had a job, she was doing better in school, and she was more interested in succeeding. When she first started using cocaine, she really did not care what happened.
But she said she could be going much harder. She wanted to do more, and she was not satisfied with her current level of functioning.

Matt simply stated that he functioned extremely well. Donna said that her level of functioning was very good, above average. She would not say that her level of functioning was excellent, and she thought she could do better. She said that she did not feel that cocaine use had interfered with her level of functioning.

Sue stated that she viewed herself as functioning very well. She noted that she loved her career and she thought she was good at what she did. She was not in a relationship, but she had good relations with her family and friends. She said that money was tight, but it was always that way.

9. What factors do you associate with your current level of functioning as a cocaine user? Subjects thought that they were functioning as well as any one else in society, but they had not had the opportunity to identify or conceptualize the factors that they associated with their level of functioning. After some thought, the subjects identified factors they thought were important in maintaining a high level of functioning. A strong work ethic was the most-noted factor. The variety of responses to the question was noteworthy.

Roy identified low cocaine use, recreational use, as a factor associated with level of functioning. He did not let the drug interfere with his outside life; he said he had a strong work ethic, and he thought that personal integrity was an important factor. He
chose the times he did cocaine and did not let it interfere with his ability to earn an income. Love of sports was also noted.

Pearl identified her child, her desire to maintain her property and other possessions, and her work ethic. She also noted strong family support, especially from her mother. Pearl had a strong drive to be successful.

Carlos identified the ability to be successful in his profession and his seasonal employment as factors that he associated with helping him maintain a high level of functioning. He enjoyed volunteering, and he was involved in his community. Jose emphasized having a positive self-image, confidence, and a desire to have people see him as a positive person. Finally, he noted his feelings for and desire to help other people.

Lucy identified maturing emotionally as well as age maturity as factors. She stated that physical well-being, mental well-being, self-esteem, self-respect, and creativity were important. Lucy stated that her job and her small business were also factors that contributed to her level of functioning.

Mandy attributed her level of functioning as a cocaine user to her ability to do minimal amounts of the drug and still function. She could not think of any other factors.

Linda actually attributed her high level of functioning to cocaine use. She said that it helped her stay up to study; the drug helped her get things done, and it helped her stay focused.
Matt identified using only on the weekends as contributing to his level of functioning. He also said that he stayed home while using. Staying home helped him to avoid getting into trouble.

Donna identified factors that she associated with a high level of functioning by emphasizing what she did not do. She said that cocaine was not a daily addiction for her. She did not use the drug to feel better or to improve her attitude, nor did she use it to get through the day. She reiterated that for her it was recreational, just for fun.

Sue identified a number of factors that contributed to her level of functioning. First was her intelligence. The next factor that she noted was her faith; she is a Christian. Her family values and work ethic were also notable. Finally, she attributed the discipline she acquired when she was a ballet dancer as a major factor.

Jane refused to answer the question and gave no reason for not wanting to answer.

10. What values are important to you? Some of the answers to this question were similar to the responses concerning factors associated with a high level of functioning. Values of cocaine users who function at a high level can be similar to the values of any person who functions at a high level. Hard work was mentioned by the majority of subjects, as were values relating to interpersonal relationships.

When asked what values were important to him, Roy said integrity, honesty, and doing things 110%. He finished what he started; he said he was not a quitter. Roy believed in hard work. He also valued giving to society.
Pearl valued family above all. She also valued her own self-gratification and education. She valued money and the pleasures and luxuries that money brought. Pearl also valued work and the self-satisfaction resulting from hard work.

Jane had a difficult time formulating her values, but after some thought, she said she would like to be a good provider for her child, get a good job, and be able to relocate. She said that she was a hard-working woman and always had been. She said that she had no idea about religious values because she had not been to church for a long time.

Carlos emphasized hard work, integrity, and honesty as important values for him. He did not stop there, adding his faith in God and compassion for others. Carlos also valued facing what he was confronted with and being able to think in different ways.

Lucy valued honesty, self-esteem, and holding others in high esteem. She said she valued work, which she saw as a positive thing. Lucy valued personal growth and her interpersonal relationships. She said that in spite of her history, she was never cut out to be a drug addict. Lucy valued truthfulness and her parents. She also valued getting high but added that it does not necessarily have to be with drugs, "I value creativity, and that is a form of high."

Mandy said that she was the type of person who just went with the flow, but she suggested that hard work and school were important values for her. She valued material goods and independence.

Concerning values, Linda was pensive. "When I was younger, I had a lot of values forced on me. I mean, I can remember my mom always saying, 'Linda, don't
forget your values.' But I don't think that I ever knew what my values really were. They were kind of just listed out for me.” Linda has since identified her own values such as close friendships, trust, goodness, and honesty. She later added, “never fool around with your friend's boyfriend.”

Matt identified closeness with family and closeness in relationships as important values for him. He also valued his friendships, with truth in all relationships. Donna pointed to family, home, community, self-sufficiency, and independence as her most important values. For Sue, honesty, loyalty, and integrity were the most important values. She also gave importance to humility and forgiveness.

11. How do you view yourself in the community? It is often thought that users of controlled substances are out of the mainstream and not a viable part of the community. This item solicited the subjects’ perceptions of their place in the community. Most of the subjects stated that they were well integrated into the community. The subjects defined community in different ways. Two of the younger subjects had not found their places in a community but expressed a desire to do so.

Roy felt that he was a part of the community at large. He said he gave to the community with his social efforts, and the effort he puts out came back to him. His reward was the pleasure he got from helping others.

Pearl said that she did not get involved with her neighbors, but she was involved with the larger community. She was a member of her tribal council and was very active in tribal matters. She also volunteered for the tribe and worked with children.
Jane's community involvement included work in her child's school district and volunteer work at her local recreation center. She fostered continuing education for youth.

Carlos believed he was a positive member of the community. He pointed to the positive effects he had on his friends, at his place of employment, and in his volunteer associations. He was not as radical or "counter-culturish" as in the past. Jose still believed in some of the same social issues such as civil rights, human rights, and environmental concerns but tried to bring his views to fruition from the inside rather than from the outside.

Lucy definitely viewed herself as being counter-culture in the past, but she now said that she was a participant in the community. She said that she participated in the community in a way that maintained her individuality and self-identify. In the past, she felt "insignificant," but she now feels that she belongs.

Mandy, who grew up in a middle-class family, considered herself to be middle class. Beyond that, her views on community were not very developed. She said that at this time in her life, she did not give much back to the community.

Linda said that she had not found her niche in the community. She said that she was trying to find her place in the community, but right now she is just kind of "going."

Matt saw himself as a good member of the community. He said that he did not do any social work, but he felt that his work as an actor brought pleasure and enjoyment to others. Donna simply stated that she was a viable part of the community.
Sue lived in a somewhat divided town. She said she could function within both factions of the town, but she was a part of neither. She just did her job and tried to get along with everyone.

12. What measures do you take to conceal your cocaine use from others? The subjects who participated in this study were in the work force, in school, and a number had children. It was important for some of them to conceal their cocaine use, and concealment was not an issue for others.

Roy was very selective about the people he did cocaine with. He did not advertise his cocaine use, and in public he did not show interest in the drug or using it. He said that the only difference between legal and illegal drugs was the way society viewed the drugs. Roy did not see himself as a criminal but felt that certain people would look down on him if they knew what he did. Also, he did not want his drug use to have a negative effect on his career. His parents knew nothing of his drug use.

Pearl said that she kept her cocaine use very private. She used the drug away from her community and with people who were not a part of her community. She kept her public and her private lives separate. “People in my community respect me, and I want to keep that respect.”

Jane said that she was a very private person and kept her cocaine use very private. She kept her use away from her son by using the drug only when he was out of the house. She said that she used at home or in the homes of close friends, and she used only with close friends. Although she had used in public in the past, she never used in public now.
Carlos stated that he never used cocaine in public. He said it was not the '70s anymore; it was not a free-wheeling thing. He always used the drug at home, alone or with close friends, and never in the car. "My cocaine use is private, not for public consumption."

Lucy said that she did not even talk about her cocaine use. She had friends who did not use or like the drug. She said she could be friends with those people on other levels. She kept her use as private as possible. She did not use at work. She said there were people at work who knew that she did cocaine, and she knew they did it, but it was never mentioned.

Mandy said she rarely did cocaine alone but, rather, with friends who used the drug. If she was around people who did not use the drug, she and her friends would go into a different room to have some privacy. "We try to hide it from the rest of 'em, but they're not stupid, so they basically know what's going on."

Linda said that a majority of the time, she did not try to conceal her cocaine use. She said that the people around her also did the drug. She did not use the drug in the bathrooms of establishments anymore because she now felt she needed her own "personal space."

When Matt was asked what he did to conceal his cocaine use, he said, "Basically, don't do interviews." He said that he stayed at home, kept the use away from his children, and usually did cocaine only with his partner. Matt did not want other people to know that he used, and he did not like to be around other people when he was high. In large
groups, he turned the drug down because he wanted to maintain his privacy and did not want to be associated with cocaine use.

Donna used several methods to conceal her cocaine use. She never used the drug around her children or around people who did not approve of cocaine use. She said that she did not keep the drug in her home, did not drive around with it, and did not carry it on her person.

Sue said that she would not usually use the drug around people who did not do it. If she did, she would do it in the bathroom and lock the door. She would not do the drug where anyone could see her, and she did not talk about cocaine use. She kept her use private from her parents and most of her friends.

13. What do you consider your strengths and weaknesses in maintaining a high level of functioning while using cocaine? This item explored how the subjects assessed the benefits and liabilities of cocaine use. They emphasized as strengths the ability to balance drug use with the rest of their lives, the ability to put what has been learned to use, the ability to stay motivated, and the ability to stop using cocaine when it appeared problematic. Some weaknesses noted included cocaine-using friends, the money spent on the drug, not dealing with feelings while using cocaine, and the inability to work when high on cocaine.

Roy said that he did not see any difference between using cocaine and drinking a beer. He saw all drug use as recreational, just a way to pass time. Any drug, alcohol, cocaine, tobacco, marijuana, or caffeine, can be dangerous or problematic. He said that
there is nothing inherently wrong in using drugs if you are not having problems; drugs just add to the whole atmosphere, the whole experience of life.

Pearl said that her cocaine use was not a strength or weakness in her life. Cocaine was neutral to her. She said the weakness was her friends who used cocaine. Her friends had more money than she, they traveled, and had a lot of fun. At times, she wished she could end her responsibilities and just have fun like them.

Jane refused to address this question, stating that it was not pertinent to her.

Carlos said that being able to do cocaine was a strength and that just doing the drug was a weakness. He said, "It's a balancing act, and, you know, sometimes you really get down on yourself, and you say, man, you really shouldn't be doing this." At times, Carlos felt that doing cocaine was not doing him any good; it was a waste of time, a waste of money, and it caused him to have mood swings, which he did not like. He said another weakness was always having to do it in private, thereby leaving his friends out of the socializing. He wondered whether his friends thought he was weak because he used the drug. He said that he has to deal with his own guilt and the negative impact that society puts on cocaine use.

Lucy said that one strength was being where she was with drugs and being able to come out of the depths of addiction. She said that she had learned from the past; she had learned discipline. Lucy said that a weakness was the money that she spent, money that could be used for other things, but she liked living "on the edge." She felt that she had found a balance, and in that balance, drug use was secondary.
Mandy said that her main strength was that she was a very motivated person and had a lot of will power. She said a weakness was the fact that she really should not be doing cocaine, but she knew that some day she would stop doing it, so every thing would even out.

Linda said that her strengths included her drive, her motivation, and her focus. She feared that she was not doing enough. She said that she was impulsive and that could be a problem for her. Another weakness was that she didn't deal with her feelings, and the cocaine use may have contributed to this.

Matt focused more on the weaknesses of cocaine use. He said that he could not work on cocaine. He used it when he did not have to function and was fine. A weakness concerned what people would think of him, and sometimes he felt embarrassed or ashamed. He thought drugs were not natural to the human system. The problem with cocaine, Matt said, was the more you do, the more you want, and that was a weakness.

Donna said that her strength was not doing cocaine on a regular basis. She said she thought cocaine was a dangerous drug. "A lot of people have lost a lot of their lives in many shapes and forms. While I love it, I respect it; cocaine is not a drug to be used in an irresponsible way." She said she always gave the drug the respect it deserved.

For Sue, a strength was the ability to stop using cocaine when she felt that it was becoming a problem. She could start or stop whenever she wanted, for as long as she
wanted. For Sue, the weakness was that when she was having problems in her life, for whatever reason, her use accelerated.

Findings from the Interview Data

All of the subjects in this study shared information concerning their level of functioning. This inquiry yielded the information to address the research question: What are the factors associated with a high level of functioning in this sample of cocaine users?

Through the quantitative method of inquiry, these factors were identified. The Ethnograph v4.0 (Seidal et al., 1995) computer program, personal analysis, triangulation and the help of a peer debriefer were used to categorize the data and identify factors. The Ethnograph v4.0 computer program allowed information from disparate sources and places to be brought together in an organized fashion. The program also categorized key words and phrases, making data analysis more coordinated. The program also assisted in identifying other data of interest. The factors associated with a high level of functioning in this sample of cocaine users fell into two broad categories: behaviors/attitudes and values. Behaviors/attitudes and values are closely related in this sample of cocaine users. The behaviors and values that the subjects associated with their ability to maintain a high level of functioning were expressed by the subjects as they addressed the thirteen interview items.
Behaviors/Attitudes

The subjects in this study identified a number of behaviors that they associated with their ability to maintain a high level of functioning while using cocaine. The most-noted factor was work. All of the subjects were employed or in school, and some worked and attended school. The subjects noted a number of other factors that were related to a strong work ethic such as work at a profession or job that was liked and respected, the drive to be successful, not letting cocaine use interfere with the ability to earn an income, the ability to be successful in one's profession, and the ability to maintain property and possessions.

The subjects also identified personal behaviors/attitudes that assisted them in maintaining their level of functioning. These behaviors/attitudes included having personal integrity, having a positive self-image, being physically and mentally healthy, having creativity, having self-respect, having age maturity, being emotional mature, possessing discipline, having faith in God, having confidence in self, and exhibiting intelligence. Not all of these behaviors were mentioned by all of the subjects; different behaviors were noted by different subjects with some overlap.

In addition to economic and personal behaviors/attitudes associated with a high level of functioning in the subject cocaine users, there were also social factors. Subjects reported the social obligations of maintaining a high level of functioning. They indicated that they were involved in a number of socially oriented activities such as volunteering,
community involvement, being seen as a positive person by others, and the desire to help others.

Family issues were strongly represented by the responses given by the cocaine-using subjects in this study. The family-oriented responses included being a parent, having strong family support, and having family values.

Some of the responses provided by the subjects in this study related to the use of cocaine. These responses included keeping cocaine use low, which was reported a number of times; choosing the times to use rather than serendipitous use; not using the drug daily; not using the drug to feel better; not using the drug to improve one's attitude; not using the drug to get through the day; and using only on weekends. One subject stated that cocaine use itself was associated with a high level of functioning. Staying at home while under the influence of the drug was also mentioned because that reduced the chances of getting in collateral trouble.

Values

The subjects who participated in this study came from different socioeconomic backgrounds and spanned two generations. The subjects were ethnically and culturally diverse. Both genders were represented, but the values espoused by the subjects had similarities. Economic, personal, social, and family values dominated the responses. There was a strong relationship between associated values and associated behaviors, indicating some congruence between the thoughts and actions of this group of cocaine users.
Strong work ethic was the value expressed most by the subjects in this study. The subjects saw hard work as essential to maintaining other values. Those values included obtaining an education, having money, the ability to enjoy some of the pleasures of life, and having the luxuries of life.

Personal values were identified as important in maintaining a high level of functioning for these subjects who used cocaine. Honesty was the value most noted, along with integrity. Other personal values included self-gratification, self-satisfaction, self-esteem, personal growth, truthfulness, creativity, goodness, trust, independence, loyalty, humility, forgiveness, and the ability to think in different ways.

Social and family values exerted a strong influence on the subjects in this study. Social and family values identified by the subjects included having compassion for others, having faith in God, being a good provider for one's children, good/close interpersonal relationships, holding others in high esteem, being a good parent, having close friendships, positive home and family life, and community involvement. One response in this category was never to fool around with your friend's boyfriend, and another subject stated that getting high was an important value.

Other Findings of Interest

This study produced some findings that went beyond its original intent. The vast majority of research data in the area of substance abuse has been conducted using captive populations—people who were incarcerated, in treatment, or in emergency rooms. This study investigated a non-captive population of cocaine users, and in that sense, it is
somewhat unusual. Findings in the current study indicate that there are themes of interest provided by the non-captive population of cocaine users. The population of cocaine users in this study all worked, attended school, or both. The subjects who worked emphasized the importance of having a job that they liked. Also of interest with this population was the range of employment and the level of education of the population. All of the subjects had at least a high school diploma, and some had advanced degrees. The net incomes of the subjects were not exceptionally high, but all made enough money to support their lifestyles. Some of the subjects complained about the amount of money they spent on cocaine, but none augmented their incomes by any appreciable amount by selling the drug.

Another finding indicated that the younger subjects and the older subjects used cocaine differently. The younger subjects, those under 25, exhibited a more laissez faire attitude about cocaine use. The younger subjects used in public more, used larger amounts, and had fewer concerns about the long-term effects of using the drug. The older subjects, those over 25, were more private in their use of the drug. They used the drug less frequently, used smaller amounts, and they were more aware of the drawbacks of cocaine use. All of the subjects were aware of the drawbacks of cocaine use, and for the older subjects, the awareness of the drawbacks was seen as part of the set of factors associated with a high level of functioning.

Another interesting finding concerned gender issues. The women in this study, especially the older women, were more conservative in their use of cocaine than the men.
This held across generations, with older women being more conservative than older men and younger women being more conservative than younger men. The three subjects who were screened out of the study because they were not considered to be functioning well were men, and two of those men were under 25 years old. Three of the women in this study had children in the home, and all three stated that having children mitigated their cocaine use. These women kept the use of the drug concealed from their children. Only one of the men in the study had children, not living with him, and he also concealed his cocaine use from his children by not using when his children were visiting. Seven of the 10 subjects involved in this study were separated or divorced.

The role of culture with the subjects in this study is of some interest. Regardless of gender, the subjects who were not members of the dominant culture were more prone to reject the idea that abstinence had to be maintained to avoid problems with cocaine. Although the subjects who belonged to minority cultures were aware of the political, social, and legal ramifications of cocaine use; they expressed less concern about those ramifications than the subjects who belonged to the dominant culture. The culturally different subjects rejected the negative view of cocaine use that they perceived was held by the dominant culture.

The “snowball” referral process used in this study produced an interesting finding. The subjects were initially reluctant to participate in the study because they had little to gain and much to lose if information were to be disclosed. After the first subject had been screened using the Addiction Severity Index (McLellan et al. 1992) and the score on
that instrument indicated that the subject was functioning well, the subject became more interested in the study and more willing to refer others to the study. One referral led to another, with potential subjects wanting to take the ASI to evaluate their own level of functioning.

A final finding of interest was the ability of a number of the older subject to use cocaine for long periods of time with minimal life disruptions. Some of the subject in this study had used cocaine, on and off, for over 15 years and had used continuously for over 10 years. One of the subjects had difficulties with cocaine, heroin, and marijuana over 10 years ago. This subject was treated for substance abuse and remained abstinent for five years. After the five years of abstinence, the subject resumed the use of cocaine and alcohol without any apparent lifestyle disruptions in the five years since she resumed substance use.

Summary

This chapter examined the findings of the study. The subjects were described, and related samples of their responses to the interview questions were provided. Factors that the subjects identified as being associated with a high level of functioning were presented and the broad categories of behaviors and values were identified, as well as findings of interest in this particular population of cocaine users.
CHAPTER 5

CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

In this study, the Addiction Severity Index (McLellan et al., 1992) was used to screen for subjects who functioned at a high level while using cocaine. Ten subjects who received a score of composite three or better were interviewed for the study. The subjects identified factors (behaviors and values) that they associated with maintaining a high level of functioning while using cocaine. This chapter presents a discussion of the findings of the study. Implications for researchers, practitioners, educators, and individuals are addressed, and recommendations for future research are explored.

Conclusions

The behaviors and values identified by the subjects in this study were similar to findings in other studies addressing cocaine use (Ditton et al., 1991; Murphy et al., 1989). Both Ditton et al. and Murphy et al. found, as did this study, that people can use cocaine over long periods of time without abusing the substance. As in this study, similar factors (behaviors and values) associated with the subject’s ability to maintain their level of functioning were identified. Murphy et al. (1989) stated,

Rather than cocaine overpowering user concerns with family, health, and career, we found that the high value most of our users placed upon family, health, and
career achievement—and paradoxically, even the value they placed on the ability to continue to “get high”—mitigated against abuse and addiction. (p. 435)

As in the current study, the cocaine users in the study conducted by Murphy et al. (1989) utilized control strategies such as not using the drug at work, not using when pregnant, and using only at night to help them subordinate their cocaine use to the demands of daily life rather than having their life subordinated to cocaine use. The utilized control strategies used by the Murphy et al. subjects were similar to the behaviors presented in the present study (e.g., only using on the weekend, not using at work) and suggested that there may be a set of learned behaviors that could reduce the abuse of cocaine.

Ditton et al. (1991) interviewed cocaine users in Scotland and found that even the heavy cocaine users were able to reduce their cocaine use without intervention when that use began to affect them adversely. All of the subjects in this study were also able to mitigate their cocaine use when it appeared that the cocaine use was becoming problematic. One subject in the present study learned to control the cocaine use after spending time in a substance abuse treatment program. Most of the subjects in the study by Ditton et al. were employed but not rich; they fit into the Scottish middle class. The subjects identified positive aspects of cocaine use such as increased creativity, improved work quality, and increased self-confidence. Conversely, where the subjects in the study conducted by Ditton et al. attributed the above “positives” to cocaine use itself, the subjects who were involved in the current study identified similar factors but they felt
that the factors were related to their ability to function at a high level and were not a quality of the drug (creativity, hard work, etc.).

The subjects in the Ditton et al. (1991) study also identified the expense of the drug, reduced sexual performance, medical problems, and harmed relationships as negatives regarding cocaine use while the subjects in the present study saw these as factors associated with a high level of functioning. Individual subject responses in the current study in this area (see Appendix E) included mood swings, guilt, wasting time and money, the inability to work when under the influence of cocaine, getting sick due to cocaine use, and embarrassment. Just using the drug was reported as a drawback, as were the sense of being a weak person, not dealing with feelings when on cocaine, and feelings of shame. Other noted concerns of subjects in the current study were the need to be aware of possible acceleration of cocaine use or an increase in impulsive behavior when one had problems in life. Other aspects of cocaine use that called for awareness included the fact that cocaine is a dangerous drug; drug-taking behavior is not natural; and the more cocaine you do, the more cocaine you want.

The social distinction between legal and illegal substances was identified by the subjects in the current study as an influence on behavior. Friends who used cocaine were seen as a drawback because friends would promote cocaine use at times when the subject did not want to use. For some subjects, cocaine use needed to be secret; therefore, non-using friends were left out of the socializing process. Other socially perceived aspects of cocaine use included the negative implications society puts on cocaine use, what people
would think of the cocaine user, and the idea that one should not be doing cocaine because its use is socially unacceptable. The subjects in the current study and the Ditton et al. study were aware of drawbacks of cocaine use but the subjects in the current study saw this awareness as beneficial in maintaining a high level of functioning. The subjects in this study also fit the Ditton et al. (1991) description of being on the fringes of middle-class respectability, having some employment and some money. In spite of their cocaine use, they were moderate people. The subjects in both studies were not socially delinquent on one extreme and they were not at the high end of social or financial success, another extreme.

This research indicates that the high functioning cocaine users in the current study are occasional users; are employed; and are represented by the full spectrum of age, gender, race, region, and religion. The factors (behaviors/attitudes and values) associated with a high level of functioning identified by the subjects involved in the present study were similar to the behaviors/attitudes and values used by the general population to function well. For example, factors such as critical thinking and independence that have been identified as helpful in fostering resiliency in students (Jessor, 1993; Reid, 1995) are similar to the factors identified in the present study in maintaining a high level of functioning.

The behaviors/attitudes and values identified by this group of cocaine users appear to be in sharp contrast to those found in cocaine users who are incarcerated or in treatment for cocaine abuse (Koch & Rubin, 1997). The subjects in the current study
were in good health, employed, had no current problems resulting from the use of cocaine, had no current involvement with the criminal justice system, had good family and social relationships, and had no serious psychiatric problems. The ability of the subjects in the current study to use cocaine for long periods of time and continue to function well does not fit well with Jellinik’s (1960) disease concept of addiction nor does it fit with many current treatment models based on Jellinik’s concept of addiction.

Discussion

The results of this study suggest that several factors related to behaviors and values may be associated with a high level of functioning in cocaine users. The subjects in the present study were not in need of treatment despite their cocaine use. They represent the need for the treatment community to distinguish between different types of cocaine users and to develop more effective means of addressing the issue of cocaine use.

Success in the evaluation, education, and treatment of people who use cocaine may call for expanded definitions, perhaps with different parameters for individuals in different situations. Economic, personal, and social/familial aspects of one's life can be important in determining the severity or lack of severity of one's cocaine use. The issue of treating individuals differently has been discussed in the literature (Mendelson & Mello, 1996; Sung-Yeon et al., 1991). The use of a variety of treatment models (e.g., psychotherapy, behavior therapy) and medications to address the different needs of people continues with captive populations (e.g., people in treatment) but little has been done with non-captive populations. This study suggests that a multi-dimensional approach may be useful when
defining success in evaluation, education, and treatment interventions regarding cocaine users because a person is multi-dimensional, and more issues than drug use may need to be addressed.

The multi-dimensional approach will allow researchers, practitioners, and educators to address some of the gender and cultural aspects of substance use that have been discussed here. Seven of the 10 subjects involved in the current study were divorced or separated. At first glance, this number seems high, but according to Baugh (1991), about 50% of American marriages end in divorce, and in some age groups the divorce rate approaches 60% (Glenn, 1992). Considering these statistics for the general population, the subjects in this study do not have an unduly high divorce rate. In the current study, the women presented as more conservative in their cocaine use than the men, and the women who had children attributed part of the reason for the conservative cocaine use to the need to care for and set a good example for their children. To date, there is little literature that addresses gender concerns of non-captive cocaine-using women. There is some research on cocaine-using women in treatment. According to Kosten, Gawin, Kosten, and Rounsaville (1993), women who were in treatment had more severe problems than men when entering treatment, but the women did better than the men after completing treatment. The scant information in the literature concerning gender issues in cocaine users underscores the need for more research in this area.

Cultural issues were discussed by Husch (1992). He stated that culture is an important issue in American drug policy. The cultural issues presented in the current
paper underscore this and point out the need for more research concerning cocaine use and culture. As has been shown in the findings here, people with different cultural orientations view drug use differently. This, again, points to the need for researchers and others to incorporate a myriad of lifestyle components when developing education, intervention, and treatment models.

The study also indicates that the subjects tended to relegate cocaine to a minor position in their lives and had a healthy respect for the power of the drug. This is especially poignant for the older subjects, and there is some support in the literature that drug use and deviant behavior decrease with age and maturity, as they have in this population of cocaine users. Similar results of a decrease in drug use and deviant and criminal behavior as people mature were found by Sampson and Laub (1990, 1992).

Values tend to change over time and values can be different for different groups of people, but it has been suggested that there are some values that are common to all Americans (Baugh, 1991) and that those values can be learned. According to Baugh, common American values are based in history, and some values have remained constant throughout American history. For Baugh, some of the values that have survived through time include religious values, honesty, integrity, respect for property, the rights of the individual, the right to succeed, and a sense of community. Fowler (1990) surveyed people between the ages of 15 to 24 to ascertain what they valued. Some of the responses included career success, a happy family life, personal enjoyment, and being involved in the community. Ray (1997) saw American values as being represented by three distinct
subgroups: the heartlanders, the modernists, and the cultural creatives. Some of the values espoused by the three groups include acquiring knowledge, volunteering, physical health, mental health, spiritual health, concern for nature, and education. The values espoused by the subjects in the current study were very similar to the values held by many Americans across the social and economic spectrum (see Appendix E). The major difference seemed to be that the subjects involved the current study used cocaine.

The findings of the study suggest that there are some differences in the ways that older and younger users in this study approached cocaine use. Older users expressed more awareness of the drawbacks of cocaine use. They also were more precise in articulating their values and behaviors and expressed more respect for the power of the cocaine high. Younger users tended to believe that cocaine was a major benefit to their level of functioning and used the drug more liberally, more often, and in larger amounts. Here again, the process of maturing and generational differences may be taking place as presented by Sampson and Laub (1992).

The results of this study suggest that no family pattern is specific to cocaine use, be it birth family or current family. Whether from single-parent families, two-parent families, or families with large extended networks, the subjects expressed similar values. Economic status had little bearing on the factors (values and behaviors) to which the subjects attributed a high level of functioning. According to Ray (1997), American family values transcend economic, cultural, social, and gender distinctions. Again, only cocaine use seemed to distinguish this group of cocaine users from the general population.
The population of non-captive cocaine users who functioned well in the current study differed in a number of ways from captive cocaine users, although there were also some similarities with captive cocaine-using populations. Marijuana is often seen as a "gateway" drug that leads users to try more dangerous drugs like cocaine. According to Morgan and Zimmer (1995), almost all people who use cocaine have used marijuana. Captive populations and the non-captive population in this study follow this trend. However, two of the subjects in the current study did not use marijuana before using cocaine; they used cocaine first. The subjects in this study who did not use marijuana before using cocaine indicated that there can be exceptions to the conventional wisdom assumed by the gateway drug notion. The need for more individualized screening and treatment of cocaine users is shown by the exceptions in the current study. Here, the non-captive cocaine users who functioned well were similar to the captive population of cocaine users in that the majority of people in both populations used marijuana before using cocaine, but the two exceptions are noteworthy.

Peer pressure has been thought to influence drug use. There are conflicting views in the literature concerning peer pressure and drug use. Bauman and Ennett (1994) have suggested that peer pressure has a strong influence on drug use, whereas others (Donaldson, 1995; Gorman, 1996) have suggested that peer influence may not be as strong as once thought. Gorman, in particular, reported that drug use is quite complex and that too much emphasis has been placed on peer pressure in treatment and prevention programs. Gorman suggested that the emphasis on peer pressure has caused stagnation in
the area of program development to a point where other reasons for starting drug use have not been fully explored. For the subjects in the present study, peer pressure exerted some influence on the decision to use cocaine but other influences such as curiosity, the desire to try the drug, and the desire to express independence were also factors in the decision to try cocaine. Other drug users differ from the non-captive population in the current study in that they place a greater emphasis on the role of peer pressure in the decision to use drugs.

Cocaine users in treatment present a stark difference from the high-functioning cocaine users in the current study. Cocaine users in treatment exhibit a number of social, psychological, and medical problems. According to Miller, Gold, and Millman (1989), social problems of cocaine users in treatment include work performance problems, marital problems, legal problems, financial problems, and violence. Psychological problems of cocaine users in treatment include irritability, depression, loss of sex drive, lack of motivation, memory impairment, paranoia, and anxiety. The cocaine users in treatment also experience medical problems such as blackouts, respiratory difficulties, fatigue, insomnia, headaches, nasal problems, and cardiovascular difficulties. The above-mentioned problems seen in cocaine users in treatment result from chronic, persistent, and regular use of the drug whether it be binge use or use over a long period of time.

The high-functioning cocaine users involved in the current study were able to avoid or only minimally encounter the problems exhibited by the cocaine users in treatment. The cocaine users in this study were not chronic, persistent users at the time
the study took place. It appears clear that the manner that the people in the current study used cocaine was a major factor in their ability to function well. These subjects were able to maintain low the use of cocaine over time, and for the most, part did not adopt a chronic pattern of cocaine use. One of the subjects did use the drug chronically in the past but learned to moderate use when cocaine use resumed. The ability to use cocaine, have difficulties, and then return to moderate use may provide some insight that would be helpful in developing treatment and prevention models for cocaine users.

A model for researching non-captive cocaine users was developed for the current study. It involved developing a trusting relationship with the subjects, using a screening instrument that provides valuable information to the subjects about their cocaine use, having the subjects invest in the research by knowing what they are doing can help themselves and others, providing the subjects with the opportunity to promote the trusting relationship by referring others to the research, providing the subjects with the opportunity to explore and express their values and behaviors concerning cocaine use, providing the security needed to allow the subjects to speak freely about a subject that is not often publicly discussed, and providing the subjects with the opportunity to participate in future research. The non-captive cocaine user who functions well can provide valuable information concerning cocaine-use behavior. That information can be incorporated into the substance abuse treatment knowledge base and perhaps have some impact on education, prevention, and treatment. The results of the study suggest that all of the subjects could benefit from periodic evaluations of their cocaine use and level of
functioning. These periodic evaluations could assist the subjects in more objectively monitoring their cocaine use and identifying problems as they arose rather than when they have become more difficult to address. The Addiction Severity Index (McLellan et al., 1992) could be a useful tool in this process because it could be used to screen cocaine users to identify problems and the severity of the problems. Those cocaine users who manifested problems could be treated while those who did not manifest problems need not be treated, thus saving valuable resources.

The subjects involved in the current study were able to use cocaine and function well. They may be more typical of cocaine users than the cocaine users who are incarcerated, in treatment, or in emergency rooms. The population of cocaine users in the current study chose to use cocaine and were able to incorporate the cocaine use into their lifestyles with minimal disruptions. They chose to forego other activities in order to use cocaine just as many people may choose to forego other life pleasures to go on vacation or to sky dive. This population chose to pay a social, legal and financial price for the use of cocaine, but this seemed to be a willing choice and one with which the subjects could live. None of the subjects stated that they wanted to stop using the drug, as users in treatment have. The subjects were aware of the drawbacks of cocaine use, and they were willing to deal with and compensate for the drawbacks. They seemed to be average people, living average lives with cocaine. They appeared to accept their place in society, and they wanted cocaine to be a part of their lives. They were willing to share
information about their lifestyles as cocaine users, and they were unapologetic about the use of cocaine.

Recommendations for Future Research

Recommendations for future research include the following:

1. Research on people who use cocaine and have a high level of functioning should be increased and include larger numbers of subjects. Replication studies should be implemented.

2. Exploration of gender, cultural, and generational differences in people who use cocaine and function well appears to warrant further study. This could help prevention, education, and treatment efforts to become more sensitive to individual needs.

3. Research on integrating factors associated with a high level of functioning in individuals who use cocaine into resiliency and prevention literature can be undertaken. Such factors (behaviors and values) and an awareness of the drawbacks of cocaine might prove to be valuable in preventing and reducing drug abuse.

4. Research into how the information provided in this study could affect American drug policy could be undertaken.
5. A review of current drug and alcohol education programs could be undertaken to ascertain if the results of this study could be beneficial in improving or updating the information provided in education programs.

6. Research into ways to incorporate the factors identified in this study into the practice of substance treatment could be explored.

Summary

This chapter discussed the conclusions of the study, addressed the findings of the study, examined the implications of the findings, and explored possible areas for continued research.
APPENDIX A

ADDITION SEVERITY INDEX (McLellan et al., 1992)
Assessing Client Needs Using the ASI:

*Looseleaf Forms*
| PATIENT ID | INSTITUTION | ADDRESS | PHONE | EMAIL | DOB | SEX | RACE | ETHNICITY | DIABETES | HYPERTENSION | CHOLESTEROL | SMOKING | ALCOHOL | HISTORY | MEDICATION | VACINATION | OTHER |
|------------|-------------|---------|-------|-------|-----|-----|------|-----------|----------|-------------|------------|----------|--------|--------|----------|------------|-----------|-------|
| 123456    | Hospital A  | 123 Main St | 555-1234 | info@hospitalA.com | 01/01/1980 | M | White | Black | Yes | Yes | No | No | No |

**ADDITIONAL INFORMATION**

1. History of previous illnesses and treatments.
2. Family history of diabetes, hypertension, and other chronic conditions.
3. Medication list and adherence.
5. Any other significant health concerns or conditions.

**PATIENT AVAILABILITY SCALE**

- [ ] Normal
- [ ] Tolerable
- [ ] Unavailable

**DEMOGRAPHIC INFORMATION**

- Name:
- Age:
- Gender:
- Race:
- Ethnicity:

**CONTACT INFORMATION**

- Telephone:
- Email:
- Address:

**MEDICATION HISTORY**

- Prescribed medications:
- Over-the-counter medications:
- Dietary supplements:

**VACCINATION HISTORY**

- Hepatitis A:
- Hepatitis B:
- Mumps:
- Measles:
- Varicella

**OTHER**

- Allergies:
- Known drug interactions:
- Other significant medical conditions:

**CONTACT INFORMATION**

- Home phone:
- Cell phone:
- Work phone:

**PATIENT AVAILABILITY**

- Available:
- Unavailable:
- Tolerable:

**DIABETES MANAGEMENT**

- Type of diabetes:
- Current A1C level:
- Blood glucose monitoring:

**HYPERTENSION MANAGEMENT**

- Blood pressure:
- Medication for hypertension:
- Sodium restriction:

**CHOLESTEROL MANAGEMENT**

- Total cholesterol:
- LDL cholesterol:
- HDL cholesterol:
- Triglycerides:

**SMOKING HISTORY**

- Current smoking status:
- Age started smoking:
- Age stopped smoking:
- Number of cigarettes/day:

**ALCOHOL HISTORY**

- Current alcohol consumption:
- Age started drinking:
- Age stopped drinking:
- Amount consumed daily:

**MEDICATION HISTORY**

- Current medications:
- Previous medications:
- Medication changes:

**VACCINATION HISTORY**

- Immunization status:
- Booster doses:
- Future vaccinations recommended:
MEDICAL STATUS

1. How many times in your life have you been hospitalized for medical problems? (Include o.d.'s, dr.s', exclude deatns.)
   [ ] 1 - No
   [ ] 2 - Yes

2. How long ago was your last hospitalization for a physical problem?
   [ ] 1 - No
   [ ] 2 - Yes

3. Do you have any chronic medical problems which continue to interfere with your life?
   [ ] 1 - No
   [ ] 2 - Yes

4. How many days have you experienced medical problems in the past 30?

5. How troubled or bothered have you been by these medical problems in the past 30 days?

INTERVIEWER SEVERITY RATING

6. How would you rate the patient's need for medical treatment?

CONFIDENCE RATINGS

7. Is the above information significantly distorted by:
   [ ] 1 - No
   [ ] 2 - Yes

8. Patient's underrepresentation?
   [ ] 1 - No
   [ ] 2 - Yes

9. Patient's inability to understand?
   [ ] 1 - No
   [ ] 2 - Yes

EMPLOYMENT/SUPPORT STATUS

10. Usual employment status of patient, past 3 yrs.
    [ ] 1 - Full time (40 hrs/wk)
    [ ] 2 - Part time (reg, hrs)
    [ ] 3 - Part time (reg., day/week)
    [ ] 4 - Student
    [ ] 5 - Service
    [ ] 6 - Patient/Handicap
    [ ] 7 - Unemployed
    [ ] 8 - In controlled environment

11. How many days were you paid for working in the past 30?

12. How many days have you experienced employment problems in the past 30?

INTERVIEWER SEVERITY RATING

13. How important to you now is unemployment?

CONFIDENCE RATINGS

14. Is the above information significantly distorted by:
    [ ] 1 - No
    [ ] 2 - Yes

15. Patient's underrepresentation?
    [ ] 1 - No
    [ ] 2 - Yes

16. Patient's inability to understand?
    [ ] 1 - No
    [ ] 2 - Yes
<table>
<thead>
<tr>
<th></th>
<th>PAST 30</th>
<th>LIFETIME USE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Days</td>
<td>Yes</td>
</tr>
<tr>
<td>1</td>
<td>Alcohol - Any use at all</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Alcohol - To intoxication</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Benzos</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Methadone</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Other opiate/overprescribed narcotics</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Other self administered narcotics</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Cocaine</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Amphetamines</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Cannabis</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Hallucinogens</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Inhalants</td>
<td></td>
</tr>
</tbody>
</table>

More than one substance per day (carb., barbit.).

Note: See example for representative examples for each drug class.

- Routes of Administration: 1 = Oral, 2 = Nasal, 3 = Smoking, 4 = Non IV inj., 5 = IV inj.

- How many days have you been treated in an outpatient setting for alcohol or drugs in the past 30 days (Include NA, AA).

- How many days in the past 30 have you experienced: Alcohol Problems | Drug Problems

- FOR QUESTIONS 21 & 24 PLEASE ASK PATIENT TO USE THE PATIENT'S RATING SCALE

- How many times have you: Alcohol Abuse | Drug Abuse
- How many times were doses only: Alcohol | Drug

- How many in your lifetime have you been treated for: Alcohol Abuse | Drug Abuse

- How important is this issue to you now in treatment for: Alcohol Abuse | Drug Abuse

- How much would you rate the patient's need for treatment for: Alcohol Abuse | Drug Abuse

- How much the patient's need for treatment for: Alcohol Abuse | Drug Abuse

- How much the patient's need for treatment for: Alcohol Abuse | Drug Abuse

- Patient's treatment in awareness: 0 = No, 1 - Yes

- Patient's ability to understand: 0 = No, 1 - Yes

- Comments
### Legal Status

1. **Was this admission prompted or suggested by the criminal justice system (judge, probation/parole officer, etc.)?**
   - 0 - No
   - 1 - Yes

2. **Are you on probation or parole?**
   - 0 - No
   - 1 - Yes

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. How many of these charges resulted in convictions?</td>
<td></td>
</tr>
<tr>
<td>14. How many times in your life have you been charged with the following:</td>
<td></td>
</tr>
<tr>
<td>15. Discretely conducts, pregnancy, public incitement</td>
<td></td>
</tr>
<tr>
<td>16. Major driving violations (unlicensed driving, speeding, no license, etc.)</td>
<td></td>
</tr>
<tr>
<td>17. How many months were you incarcerated in your life?</td>
<td></td>
</tr>
<tr>
<td>18. How long was your last incarceration?</td>
<td></td>
</tr>
<tr>
<td>19. What was it for? (Use code 3-13, 16-18. If multiple charges, code must sum)</td>
<td></td>
</tr>
<tr>
<td>20. Are you presently avoiding charges, trial or summonses?</td>
<td></td>
</tr>
<tr>
<td>21. What for (If multiple charges, must sum now)</td>
<td></td>
</tr>
<tr>
<td>22. How many days in the past 30 were you detained or incarcerated?</td>
<td></td>
</tr>
</tbody>
</table>

### Family History

How any of your relatives had what you would call a significant drinking, drug use or psych problem—once that did or should have led to treatment?

<table>
<thead>
<tr>
<th>Relative Type</th>
<th>Male</th>
<th>Drug</th>
<th>Psych</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother's Side</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father's Side</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siblings</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Direction:** Place "X" in relative category where the answer is clearly yes for all relatives in the category. "1" where the answer is clearly yes for any relative within the category. "X" where the answer is uncertain or "I don't know" and "N" where there was no relative of that category. Code most problematic relative in cases of multiple members per category.
1. How many times have you been treated for any psychological or emotional problems?
   - In a hospital
   - As an Out. or Priv. patient

2. Do you receive a pension for a psychiatric disability?
   - 0 - No
   - 1 - Yes

3. Have you had a significant period, that was not a direct result of drug/alcohol use, in which you have:
   - 0 - No
   - 1 - Yes

4. Exp. recent serious depression
5. Exp. recent serious anxiety or tension
6. Exp. hallucinations
7. Exp. trouble understanding, communicating or remembering
8. Exp. trouble controlling violent behavior
9. Exp. recent serious thoughts of suicide
10. Attempted suicide
11. Been prescribed medication for any psychological/emotional problem

12. How many days in the past 30 have you experienced these psychological or emotional problems?

13. How much have you been troubled or bothered by these psychological or emotional problems in the past 30 days?

14. How important is your use in treatment for these psychological problems?

15. At the time of the interview, is patient:
   - 0 - No
   - 1 - Yes

16. Obviously depressed/withdrawn
17. Obviously anxious
18. Obviously confused
19. Having trouble with reality testing
20. Having trouble with thought disorder, paranoid thinking
21. Having trouble understanding, concentrating, remembering
22. Having suicidal thoughts
23. Comment
APPENDIX B

SUBJECT'S CONSENT FORM
SUBJECT'S CONSENT FORM

I AM BEING ASKED TO READ THE FOLLOWING MATERIAL TO ENSURE THAT I AM INFORMED OF THE NATURE OF THE RESEARCH STUDY AND OF HOW I WILL PARTICIPATE IN IT, IF I CONSENT TO DO SO. SIGNING THIS FORM WILL INDICATE THAT I HAVE BEEN SO INFORMED AND THAT I GIVE MY CONSENT. FEDERAL REGULATIONS REQUIRE WRITTEN INFORMED CONSENT PRIOR TO PARTICIPATION IN THIS RESEARCH STUDY SO THAT I CAN KNOW THE NATURE AND RISKS OF MY PARTICIPATION AND CAN DECIDE TO PARTICIPATE OR NOT PARTICIPATE IN A FREE AND INFORMED MANNER.

Purpose

I am being invited to participate voluntarily because I am a person who uses cocaine and functions at a high level. Approximately six subjects will be enrolled in this study.

Selection Criteria

Six subjects who score appropriately (Composite-3) on the Addiction Severity Index will be selected for this study. If I choose not to participate in this study and I wish to seek other options to obtain information, I may inquire at Narcotics Anonymous, may speak to a medical doctor, or may obtain information at local community health centers.

Procedures

If I agree to participate, I will be asked to consent to the following. All potential participants will be administered the Addiction Severity Index. This instrument can be completed in one to two hours. There will be two to three interviews of approximately one hour each. The interviews will take place on three alternative days (Monday, Wednesday, Friday) for one to three weeks. A one-hour follow-up interview will be requested, as will collateral interviews when possible. Interviews will be tape recorded.

Risks

There will be minimal risks to the participants. The study will be done with the protection of a Certificate of Confidentiality from the Department of Health and Human Services. If issues arise, I will be referred to appropriate services in the community.
Benefits

The benefit of this study is that I can gain insight concerning my cocaine use and more readily realize when problems arise related to that use.

Confidentiality

The names of participants will be used only on the consent form. No information about the participants will be provided to referral sources or other participants. The principal investigator, the doctoral committee, the data analysis specialist, and the research assistant will be the only people who will have access to the data. The Certificate of Confidentiality will provide additional safeguards for the participants, committee, and researchers involved in the study. Participants are under no obligation to disclose their participation in this study. Efforts will be made to develop an open, honest, trusting relationship with the participants.

Participation Costs and Subject Compensation

The participants in this study will accrue no costs. Each participant who completes the Addiction Severity Index will be paid twenty dollars in cash.

Liability

I understand that side effects or harm are possible in any research despite the use of high standards of care and could occur through no fault of mine or the investigator involved. Known side effects have been described in this consent form. However, unforeseeable harm also may occur and require care. I understand that money for research-related side effects or harm or for lost wages or time is not available. I do not give up any of my legal rights by signing this form. Necessary emergency medical care will be provided without cost. I can obtain further information from Charles R. Reid, MS, at (520) 621-5552. If I have questions concerning my rights as a research participant, I may call the Human Subjects Committee office at (520) 621-6721. Additional information/questions concerning liability (other than covered above) must be discussed with the principal investigator, sponsor, or the institution.

BEFORE GIVING MY CONSENT BY SIGNING THIS FORM, THE METHODS, INCONVENIENCES, RISKS, AND BENEFITS HAVE BEEN EXPLAINED TO ME, AND MY QUESTIONS HAVE BEEN ANSWERED. I UNDERSTAND THAT I MAY ASK QUESTIONS AT ANY TIME AND THAT I AM FREE TO WITHDRAW FROM THE PROJECT WITHOUT CAUSING BAD FEELINGS. MY PARTICIPATION IN THIS PROJECT MAY BE ENDED BY THE INVESTIGATOR OR BY THE SPONSOR FOR REASONS THAT WOULD BE EXPLAINED. NEW
INFORMATION DEVELOPED DURING THE COURSE OF THIS STUDY WHICH MAY AFFECT MY WILLINGNESS TO CONTINUE IN THIS RESEARCH PROJECT WILL BE GIVEN TO ME AS IT BECOMES AVAILABLE. I UNDERSTAND THAT THIS CONSENT FORM WILL BE FILED IN AN AREA DESIGNATED BY THE HUMAN SUBJECTS COMMITTEE WITH ACCESS RESTRICTED TO THE PRINCIPAL INVESTIGATOR, CHARLES R. REID, MS, OR AN AUTHORIZED REPRESENTATIVE OF THE SPECIAL EDUCATION AND REHABILITATION DEPARTMENT. I UNDERSTAND THAT I DO NOT GIVE UP ANY OF MY LEGAL RIGHTS BY SIGNING THIS FORM. A COPY OF THIS SIGNED CONSENT FORM WILL BE GIVEN TO ME.

______________________________  __________________________
Subject’s Signature              Date

______________________________  __________________________
Parent/Legal Guardian (if necessary)  Date

______________________________  __________________________
Witness (if necessary)              Date

Investigator’s Affidavit

I have carefully explained to the subject the nature of the above project. I hereby certify that to the best of my knowledge the person who is signing this consent form understands clearly the nature, demands, benefits, and risks involved in his/her participation, and his/her signature is legally valid. A medical problem or language or educational barrier has not precluded this understanding.

______________________________  __________________________
Signature of Investigator              Date
APPENDIX C

CERTIFICATE OF CONFIDENTIALITY
CONFIDENTIALITY CERTIFICATE NO. DA-97-69

Dear Researcher:

Enclosed is the original Confidentiality Certificate issued to your organization. Please keep the original certificate in a safe place. Any correspondence sent to NIDA regarding the certificate must reference the certificate number.

This Certificate affords the Principal Investigator the privilege to protect the privacy of research subjects by withholding the names and other identifying characteristics of those subjects from all persons not directly connected with the conduct of this research. This Certificate is effective upon the date of the commencement of the research project and will expire at the end of the month stated in the certificate.

A policy was implemented in August 1991 by the Public Health Service (PHS) with respect to communicable disease reporting to State and local public health agencies by research projects holding certificates of confidentiality. The PHS policy is intended to protect the research benefits of confidentiality protection without harming the public health benefits of communicable disease reporting. The PHS intends to issue certificates in a manner that to the fullest extent possible both protects research subjects' identities and assures that the purposes of disease reporting are fulfilled. The PHS will seek assurance that cases of reportable illness are reported by referring physicians, or will seek evidence that research projects with certificates will cooperate voluntarily with health departments to the fullest extent possible consistent with the confidentiality requirements of the research. In the absence of such cooperation, PHS will issue certificates only if there are specific reasons, related to confidentiality requirements of the research, that preclude such cooperation.

If any questions or problems arise during the period this Certificate is in effect, please do not hesitate to write or call (301) 443-2755. If any changes as delineated in
implementing regulations occur, the Principal Investigator must inform this office. Until the new regulations are implemented for section 301(d) of the Public Health Act, 42 CFR Part 2a (42 U.S.C. 2a.6) should be used.

Sincerely yours,

Jacqueline R. Porter
Special Assistant to the Director
Office of Extramural Program Review

Enclosure
CONFIDENTIALITY CERTIFICATE
No. DA-97-69

EMPLOYEES OF THE UNIVERSITY OF ARIZONA
AND OTHER PARTICIPANTS

conducting research known as

“FACTORS ASSOCIATED WITH A HIGH LEVEL OF FUNCTIONING IN COCAINE USERS”

In accordance with the provisions of section 301(d) of the Public Health Service Act (42 U.S.C. § 241 (d)) this Certificate is issues in response to the request of the Principal Investigator, Charles R. Reid, M.A., University of Arizona, Department of Special Education and Rehabilitation, P.O. Box 210069, Tucson, Arizona 85721-0069, to protect the privacy of research subjects by withholding their identities from all persons not connected with the research. Mr. Reid is primarily responsible for the conduct of this research.

Under authority vested in the Secretary of Health and Human Services by that section, all persons who -

1. are employed by the University of Arizona and its contractors and cooperating agencies; and

2. have, in the course of that employment, access to the information which would identify individuals who are the subjects of a research project entitled “Factors Associated With a High Level of Functioning in Cocaine Users,”

are hereby authorized to protect the privacy of the individuals who are the subjects of that research by withholding their names and other identifying characteristics from all persons not connected with the conduct of that research.
The purpose of this study is to attempt to identify factors associated with maintaining a high level of functioning in people who use cocaine. Identifying these factors may improve prevention, intervention and treatment efforts because information will be provided about what helps people who use cocaine in society. This information can lead to more individualized, cost effective services. Presently, prevention, intervention, and treatment programs work on the premise that once a person is addicted to a drug, that person is always addicted and cannot use substances again, without becoming readdicted or experiencing dire consequences. Studies that examine how people use substances, but continue to function in life at a high level are rare. The objective of this study is to add information to the knowledge base of the substance treatment field by identifying and evaluating factors associated with a high level of functioning in people who use cocaine. Results of this study will help generate one or more hypotheses regarding the relationship between identified factors and a high level of functioning of cocaine users.

As provided in section 301(d) of the Public Health Service Act (42 U.S.C. sec. 241 (d)):

“Persons so authorized to protect the privacy of such individuals may not be compelled in any Federal, State, or local civil, criminal, administrative, legislative, or other proceeding to identify such individuals.”

This authorization is applicable to all information obtained pursuant to the research project entitled, “Factors Associated With a High Level of Functioning in Cocaine Users,” which could identify the individuals who are the respondents in the research conducted under that research project.

The following conditions apply to the protection provided under this certificate:

(1) This certificate does not authorize the University of Arizona, to refuse to reveal identifying information concerning research subject if the following condition exists:

(a) The subject (or, if he or she is legally incompetent, his or her guardian) consents in writing to disclosure of identifying information.

(2) This certificate requires that there be no disclosures of identifying characteristics of research subjects in any Federal, State, or local civil, criminal, administrative, legislative or other proceedings to compel disclosure of the identifying characteristics of research subjects, except as provided for in paragraph (1), above.

(3) This certificate does not otherwise govern the voluntary disclosure of identifying characteristics of research subjects.
(4) All research subjects in the project will be given a fair, clear explanation of the protection this certificate affords, and of the limitations and exceptions to the protection.

(5) This research project will not involve any testing for communicable diseases.

(6) This research project may also be subject to special rules for confidentiality of alcohol and drug abuse patient records, under sections 544 and 548 of the Public Health Service Act (42 U.S.C. sec. 290 dd-3 and sec. 290 ee-3), and implementing regulations at 42 C.F.R. Part 2, which restrict voluntary disclosures of information from covered patient records.

(7) This Certificate does not constitute an endorsement of the research.

(8) The Certificate is effective upon the date of the commencement of the research project and will expire at the end of May 1998, or sooner if the holder is notified of cancellation in accordance with the procedures set out in 42 CFR § 2a.8. The protection afforded by this certificate of confidentiality is permanent for persons who participate as subjects in the research during any time the certificate is in effect.

Date: 5/14/97

Alan I. Leshner, Ph.D.
Director
APPENDIX D

HUMAN SUBJECTS APPROVAL
The University of
Arizona
Health Sciences Center

Human Subjects Committee
1622 E. Mabel St.
P.O. Box 245137
Tucson, Arizona 85724-5137
(520) 626-6721

11 March 1997

Charles R. Reid, M.A.
c/o Amos Sales, Ph.D.
Department of Special Education/Rehabilitation
PO BOX 210069

RE: HSC #97-30 FACTORS ASSOCIATED WITH A HIGH LEVEL OF FUNCTIONING IN COCAINE USERS 2nd review

Dear Mr. Reid:

The Human Subjects Committee again reviewed your above referenced project. all of the conditions as set out in our 11 February 1997 letter to you have been addressed adequately in your 20 February 1997 response and the consent form has been revised appropriately. Therefore, full Committee approval for this subjects-at-risk project is granted effective 11 March 1997 for a period of one year.

The Human Subjects Committee (Institutional Review Board) of the University of Arizona has a current assurance compliance, number M-1233, which is on file with the Department of Health and Human Services and covers this activity.

Approval is granted with the understanding that no further changes or additions will be made either to the procedures followed or to the consent form(s) used (copies of which we have on file) without the knowledge and approval of the Human Subjects Committee and your College or Departmental Review Committee. Any research related physical or psychological harm to any subject must also be reported to each committee.

A university policy requires that all signed subject consent forms be kept in a permanent file in an area designated for that purpose by the Department Head or comparable
authority. This will assure their accessibility in the event that university officials require
the information and the principal investigator is unavailable for some reason.

Sincerely yours,

William F Denny, M.D.
Chairman
Human Subjects Committee

WFD:rs

cc: Departmental/College Review Committee
APPENDIX E

LEVEL OF FUNCTIONING:

BEHAVIORS, VALUES, AND AWARENESS OF DRAWBACKS
<table>
<thead>
<tr>
<th>Behaviors/Attitudes</th>
<th>Values</th>
<th>Awareness of Drawbacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low cocaine use (2)</td>
<td>Integrity (3)</td>
<td>No difference between legal and illegal substances</td>
</tr>
<tr>
<td>Not let drug interfere with outside life</td>
<td>Honesty (4)</td>
<td>Friends who use cocaine</td>
</tr>
<tr>
<td>Strong work ethic (4)</td>
<td>Hard work (8)</td>
<td>Just doing the drug</td>
</tr>
<tr>
<td>Personal integrity</td>
<td>Self-gratification</td>
<td>Waste of time</td>
</tr>
<tr>
<td>Subject chooses time of use</td>
<td>Education (2)</td>
<td>Waste of money (2)</td>
</tr>
<tr>
<td>Not let cocaine use interfere with earning income</td>
<td>Money</td>
<td>Mood swings</td>
</tr>
<tr>
<td>Sports</td>
<td>Pleasures and luxuries</td>
<td>Leaves friends out of socializing</td>
</tr>
<tr>
<td>Parenthood</td>
<td>Self-satisfaction</td>
<td>Subject feels weak</td>
</tr>
<tr>
<td>Desire to maintain property and possessions</td>
<td>Good provider for children</td>
<td>Guilt</td>
</tr>
<tr>
<td>Strong family support</td>
<td>Faith in God</td>
<td>Negative implication that society puts on cocaine use</td>
</tr>
<tr>
<td>Drive to be successful</td>
<td>Compassion</td>
<td>Should not be doing cocaine</td>
</tr>
<tr>
<td>Ability to be successful in profession</td>
<td>Think in different ways</td>
<td>Impulsive behaviors</td>
</tr>
<tr>
<td>Behaviors/Attitudes</td>
<td>Values</td>
<td>Awareness of Drawbacks</td>
</tr>
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<tr>
<td>Volunteering</td>
<td>Self-esteem</td>
<td>Impulsive behavior</td>
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<tr>
<td>Community involvement</td>
<td>Holding others in high esteem (2)</td>
<td>Not dealing with feelings</td>
</tr>
<tr>
<td>Positive self-image (2)</td>
<td>Personal growth</td>
<td>Unable to work</td>
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<tr>
<td>Confidence</td>
<td>interpersonal relationships (3)</td>
<td>Embarrassment</td>
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<tr>
<td>Being seen as a positive person by others</td>
<td>Truthfulness (2)</td>
<td>Feelings of shame</td>
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<tr>
<td>Desire to help others</td>
<td>Parents (2)</td>
<td>Drugs are not natural</td>
</tr>
<tr>
<td>Emotional maturity</td>
<td>Getting high</td>
<td>The more you do, the more you want</td>
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<tr>
<td>Age maturity</td>
<td>Creativity</td>
<td>It's a dangerous drug</td>
</tr>
<tr>
<td>Physical well-being</td>
<td>Goodness</td>
<td>Life problems accelerate use</td>
</tr>
<tr>
<td>Mental well-being</td>
<td>Material goods</td>
<td>Illness due to cocaine use</td>
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<tr>
<td>Self-respect</td>
<td>Independence (2)</td>
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<tr>
<td>Creativity</td>
<td>Trust</td>
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<td>Cocaine use</td>
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<td>No daily use</td>
<td>Friendships</td>
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<tr>
<td>Not using the drug to feel better</td>
<td>Family</td>
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<tr>
<td>Behaviors/Attitudes</td>
<td>Values</td>
<td>Awareness of</td>
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<tr>
<td>Not using the drug to improve attitude</td>
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<tr>
<td>Not using the drug to get through the day</td>
<td>Community</td>
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<tr>
<td>Intelligence</td>
<td>Self-sufficiency</td>
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<tr>
<td>Faith</td>
<td>Honesty</td>
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<tr>
<td>Family values</td>
<td>Loyalty</td>
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<tr>
<td>Discipline</td>
<td>Humility/forgiveness</td>
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<tr>
<td>Weekend use only</td>
<td>Never fool around with your friend’s boyfriend</td>
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<tr>
<td>Staying at home</td>
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</tbody>
</table>
REFERENCES


