

LIFESTYLE CRIMINALITY, TRAIT ANXIETY, TRAIT ANGER,
AND DEPRESSION RATINGS AS PREDICTORS OF
INMATES INTEREST IN SEEKING
DRUG ABUSE TREATMENT

By

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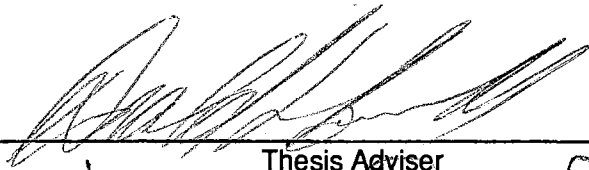
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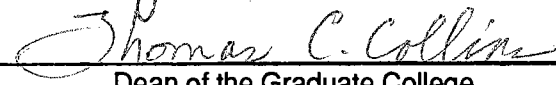
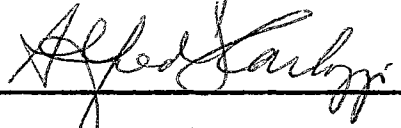
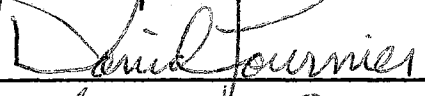
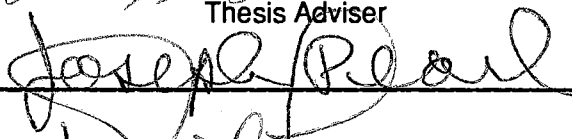
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CHAPTER I INTRODUCTION

At the present time additional federal correctional institutions are scheduled to be built to accommodate the ever pressing demand to incarcerate those who break the law. The inmate population for the Bureau of Prisons (BOP) has risen steadily. The number of inmates reported in 1989 was above 50,000 and it is projected that this figure will rise to 100,000 by 1995 (Green & Roberts, 1990). Understanding the relationship that exists between criminality, substance abuse, and treatment is important if there is to be any reduction in the increasing number of people who are incarcerated each year. As Suedfeld and Landon (1978) affirm:

Even a quick review of the literature suggests that a chapter on effective treatment should be the shortest in any book concerned with psychopathy. In fact, it has been suggested that one sentence would suffice: "No demonstrably effective treatment has been found". (p. 347)

Stewart and Richard (1992) expressed a viewpoint that effective treatment of offenders is multifaceted. "The problem of 'rehabilitative treatment' has put criminal thinkers into the care of 'professionals' who are often educated to see criminal thinkers as merely 'victims' of their parents, schools, social environment, or drug and alcohol abuse, rather than see them as victimizers" (p. 11). The assumption that these authors are making is that rehabilitation as a viable solution rests on the primary assertion that offenders were once habituated to social norms and values. Stewart and Richard (1992) stated:

Consequently, when criminal thinkers are treated as "victims" of social circumstance or as "powerless" as the result of drug abuse, molestation or trauma, they are only given more excuses with which to disregard their responsibility and

reject the most basic of ethical principles: that it is wrong to seize a liberty for yourself that you would refuse to grant your fellow human beings. (p. 11)

Today penologists, administrators, politicians, and concerned citizens are still questioning what factors are significant with reference to recidivism and drug/alcohol abuse. They are equally concerned with what treatment will reduce those rates. There are 4,054,000 persons under correctional supervision in the United States; 2.2% of the adult U.S. population (Bureau of Justice Statistics, 1991). There is no readily apparent solution to this very complex issue. Understanding variables that are related to these issues, however, may aid in curbing the problems of crime and drug/alcohol abuse.

Background

Prison reform is a concept that brings questions to mind for many individuals. Should prisoners be kept locked in their cells or should society work toward getting them prepared to return to their communities with new legitimate skills.

Useem (1985) reviewed the data of the 1980 New Mexico riot to determine what, if any, factors may have contributed to the uprising. From the period of 1970 to 1975 the state penitentiary administration was cognizant of a need to provide inmates with recreational and vocational opportunities. After 1975 those opportunities were greatly diminished. An increase in feelings of deprivation, agitation and inter-inmate violence followed which Useem believes culminated in the eventual riot and destruction of the prison.

During the late 1960's and 1970's an effort toward prison reform was actively being pursued. However, empirical data suggested that the assumption that increased educational, recreational, vocational and therapeutic programming resulted in decreased rates of recidivism was speculative at best. During the 1980's efforts at prison reform were still in place and functioning, yet public outcry insisted that not enough was being

done to address the problems of crime. The response was longer sentences, particularly for those crimes involving the use, manufacturing, transportation, possession, or distribution of drugs. Society in general appeared to be calling for something to be done about the problems of violence and crime that are evident in the streets of America.

Samenow and Yochelson (1977) noted that training inmates vocationally and providing them with additional education has merely resulted in criminals who are better educated and who have vocational skills once they leave prison. A more salient issue for prison officials is the provision of treatment programs that provide inmates with opportunities to gain insight into drug abuse and lifestyle criminality.

Martinson (1974) undertook the task, under direction of the New York State Governor's Special Committee on Criminal Offenders, to survey the literature on rehabilitation. The premise was that New York State prisons were not making a concerted effort at rehabilitation and that they "should" change from the existing custodial emphasis to a new rehabilitative one. The treatment studies that he reviewed utilized various measures to determine offender improvement: recidivism rates, adjustment to prison life, vocational success, educational achievement, personality and attitude change, and general adjustment to the outside community. Some of the difficulties found by his review were that groups are disparate and what works with one type of inmate is not necessarily appropriate for another. Methodological findings of the treatment studies were also problematic in that they were often unclear and unreplicable. The summary of Martinson's results were that, with few exceptions, the reported rehabilitative efforts had little effect upon recidivism.

Jeffrey and Woolpert (1974) pointed out that the central purpose of the criminal justice system is sentencing. They noted two problems with sentencing practices. First, a dual function exists with a criminal justice system that insists on performing punishment and rehabilitation. Punishment is thought of as achieving societal goals of

deterrence, retribution and protection. This is facilitated by depriving inmates access to the opportunities and resources that are readily available to nonincarcerated individuals. Rehabilitation, however, is intended to reform inmates so they are ready to assume responsible roles in the community. This is accomplished by providing the supervision, programming, and training that is not readily available to persons who are not incarcerated.

A second problem with sentencing practices, as indicated by Jeffrey and Woolpert (1974), is that they attempt to "predict" how an offender will behave under given circumstances. A particular length of sentence, or referral, may prove successful for some offenders and not for others. This often leads to haphazard sentencing practices that are inconsistent even within the same jurisdiction. Research that identifies inmates who are likely to be successful in treatment (living within the confines of societies law) would be beneficial to the judicial system whose job it is to make appropriate referrals and sentencing.

Purpose of the Study

The intent of this study is to determine the characteristics of inmates who opt for treatment in a 500 hour drug abuse program, individual therapy, or attend alcoholics anonymous meetings following their participation in a 40 hour drug education group. It is hoped that this research will aid in making appropriate treatment recommendations for inmates with substance abuse problems. Additionally, this study may generate discussion of ways to encourage inmates to enter treatment, possibly through providing alternatives to a conventional prison based drug abuse program. The institution where this study took place was in a medium security Federal Correctional Institution in the south central region of the Bureau of Prisons. The predictor variables used in this study were trait anxiety, trait anger, depression, and lifestyle criminality ratings.

The number of defendants convicted of drug possession offenses increased 340.4% from 1980 to 1987 (Bureau of Justice Statistics, 1990). The federal government is faced with having to expand institutions to accommodate the need for additional cell space. State correctional facilities continually deal with over crowded conditions which necessitate increased tax dollars appropriated for corrections. Building more prisons is merely one way to deal with the increase in crime. Aiding felons in their understanding of self, their abuse of drugs, and their criminal behavior may in fact result in a reduction of antisocial behaviors which could serve to benefit all facets of society.

Research Problem

This study seeks to evaluate criminal offenders on the basis of their ratings on trait anxiety; trait anger; depression; and lifestyle criminality. As a matter of Bureau of Prison (BOP) policy selected inmates have been identified by their caseworkers, upon review of their presentence investigations, as being candidates for drug education based upon the following questions: (a) Was the inmate sentenced after September 20, 1990? (If sentenced before that date, drug education may be offered, but not mandated.); (b) Did the sentencing judge recommend drug treatment to the Bureau of Prisons?; (c) Was continued use of prohibited drugs (including alcohol if prohibited) listed as a reason for violating probation or parole?; (d) Did the Pre-Sentence Investigation state that the current crime was drug related? (for example, stealing to support a drug habit, selling drugs to pay for his own habit rather than simply for monetary profit, committing a violent crime while intoxicated); and (e) Has the inmate expressed a willingness to enroll in the drug education program? As a matter of policy inmates are mandated to attend a 40 hour "Drug Abuse Education" group if they can answer yes to question 1 in addition to answering yes to any or all of questions 2 - 4. Once these inmates have completed the 40 hour group they will be asked if they would like to volunteer for a 500 hour comprehensive drug abuse program, individual therapy, or attend alcoholics anonymous groups.

The intent of this study is to determine the characteristics of those inmates who opt to volunteer for treatment at the conclusion of the initial 40 hour group based upon their scores on three instruments that measure affect (anxiety, anger, depression) and upon their scores on the lifestyle criminality screening form.

Definition of Terms

Anxiety states: Characterized by subjective feelings of tension, apprehension, nervousness, and worry and by activation or arousal of the autonomic nervous system as measured by the State-Trait Anxiety Inventory (Spielberger, 1983).

Trait anxiety (T-Anxiety): Refers to relatively stable individual differences in anxiety-proneness, that is, to differences between people in the tendency to perceive stressful situations as dangerous or threatening and to respond to such situations with elevations in the intensity of their state anxiety as measured by the State-Trait Anxiety Inventory (Spielberger, 1983).

Trait anger (T-Anger): The disposition to perceive a wide range of situations as annoying or frustrating and the tendency to respond to such situations with more frequent elevations in state anger as measured by the State-Trait Anger Expression Inventory (Spielberger, 1988).

Depression: Negative evaluations of the self, the environment, and the future; acquired by past experience and activated by stresses as measured by the Beck Depression Inventory (Beck, 1970).

Lifestyle Criminality: A lifestyle pattern of criminality grounded in negative thought and behavior over which the criminal has control; as measured by the Lifestyle Criminality Screening Form (LCSF) (Walters et al., in press).

Hypotheses

This study explored the variables of trait anxiety, trait anger, depression and lifestyle criminality as predictors for inmate's interest in entering drug abuse

treatment. It was hypothesized that inmates who score high on trait anger, low on trait anxiety, high on probability for lifestyle criminality, and low on depression will not be interested in entering treatment after completing the mandated 40 hour psychoeducational "Drug Abuse Education" group. This hypothesis is based upon Walters' (1990) theory of Life Style Criminality which suggests that the criminal has learned through the process of the emotional *cutoff* to suppress feelings of anxiety and/or depression which may impact a decision to refrain from executing a criminal behavior. Yochelson and Samenow (1986) identify anger as a central emotion of those individuals whom they categorize as having a criminal personality. It is also hypothesized that those inmates who score high on trait anxiety, high on depression, low on trait anger, and low on the probability of lifestyle criminality will be interested in entering treatment after completing the same 40 hour "drug abuse education" group. This hypothesis is based upon the belief that people who are in psychogenic pain will seek avenues to alleviate that pain. Walters' (1990) description of the emotional *cutoff* would suggest that those individuals are experiencing less psychogenic pain and subsequently are less likely to seek psychological assistance.

Significance of the Study

This study measured ratings of trait anxiety, trait anger, depression, and lifestyle criminality of those inmates with an identified drug abuse problem or drug related crime. Bureau of Justice Statistics (1990) indicate that 75% of jail inmates, 79.6% of state prisoners, and 82.7% of youth in long-term public juvenile facilities have used drugs at some point in their lives. In 1986 54% of state prison inmates reported that they were under the influence of drugs and or alcohol at the time they committed the crime for which they were currently serving time (Bureau of Justice Statistics, 1990).

The importance of doing research in the area of drug abuse and criminality is evident by the numbers of people who are incarcerated for such offenses. It is hoped that additional research will aid prison educators, psychologists and counselors to better identify the characteristics of those inmates who volunteer for drug treatment. Longitudinal studies will need to be conducted to determine the efficacy of the new federal drug abuse program. This study, however, analyzed which individuals with which combination of psychological constructs (anger, anxiety, depression, lifestyle criminality) are likely to seek professional help for their drug problem.

Assumptions

Assumption one: The statistical data generated from this study will be of interval quality.

Assumption two: The counterbalancing in the administration of the predictor variables will control for any influences that those variables may have if they were all given in the same order.

Assumption three: It is assumed that individuals who express interest in treatment will choose to enter treatment.

Limitations

1. Inmates who are interested in drug treatment may have motives other than learning to cope with their addiction, or gaining insights into their behavior and thinking.

2. Some inmates in psychogenic pain may not be interested in treatment, following the mandatory 40 hour "Drug Abuse Education" group, because they believe they may be perceived as "weak" by other inmates.

3. Data were collected from prisoners in one medium security prison and may not be representative of all prisoners.

4. Only male prisoners were used in the study.

5. All data were self report data.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter is a review of theories and studies that have been done in the area of criminal personality and prison based drug treatment programs. The first section describes the primary theoretical models that attempt to explain criminality. The second section looks at the characteristics of the criminal personality. The final section examines prison based treatment programs. It is hoped that this project will enable correctional mental health workers, and administrators to better prepare inmates for reentering a free society armed with the necessary skills that will reduce the likelihood of their participating in future criminal activity and substance abuse.

Theories of Criminality

The quest for an empirical rationale to describe and understand criminal behavior and substance abuse continues. Walters (1990) and Doren (1987) have summarized the literature and identified several models of criminality based on their theoretical soundness. The following section briefly outlines each of these theories.

Constitutional Psychology Theory

Sheldon (1949) conducted an eight year study wherein he evaluated approximately 400 delinquent young men on the basis of the Somatotype Performance Test and assigned each of them a somatotype classification. Additional information regarding delinquent behavior, family background, education, and medical/psychiatric history was gathered. The psychological biographies that Sheldon compiled on these subjects resulted in findings that suggested a characteristic delinquent physique is primarily endomorphic/mesomorphic in classification. These biological correlates were not only characteristic of the delinquents, but also characteristic of their parents.

Further investigations by Glueck and Glueck (1950, 1956) confirmed Sheldon's findings that a positive relationship exists between physique and delinquency. These researchers compared 500 delinquents with 500 nondelinquents and found that approximately 60 percent of the delinquent group were classified as mesomorphic as compared to 30 percent of the nondelinquent group. The data additionally showed that 40 percent of the nondelinquent subjects were classified as ectomorphic as compared to fewer than 15 percent for delinquent subjects.

Differential Association Theory

Sutherland (1939) based his theory of criminality on the premise that criminal behavior results when one associates with those whose behavior is contrary to societal norms. His theory purports that (a) criminal behavior is learned as is all behavior, (b) criminal behavior results out of associations with those who commit criminal acts, (c) the degree of one's criminality is determined by how often, how long, the intensity, and the priority that one gives these associations, (d) cultural conflict is an underlying premise of the differential association theory, and lastly, (e) individual differences are important only to the degree that they effect the differential association.

Cohen, Lindesmith, and Schuessler (1956) note that, according to the theory of differential association, delinquency is learned in much the same way that others learn various roles or occupations (e.g., through modeling and association with others). Cohen et al. (1956) state that delinquency occurs when there is an "excess of definitions favorable to violations of the law over definitions unfavorable to violations of the law" (p. 9). Voss (1954) supports this idea with his research which found that individuals who regularly associate with delinquents will themselves manifest significantly more delinquent behaviors than those individuals who have nominal contact with a delinquent population.

Orcutt (1987) evaluated marijuana use of college students as it relates to the

differential association theory. He asked college students with positive, neutral and negative views of marijuana use to make an estimation of how many of their four closest friends had used marijuana in the last month. Findings indicated that those individuals who had a negative view of marijuana use tended not to smoke in spite of the number of friends that they had who did use marijuana. Those persons with neutral positions on marijuana use, virtually did not smoke if none of their four closest friends did not smoke. If one friend of the neutral person smoked, then the likelihood of their smoking went to one in four. If two or more friends of the neutral person smoked, then the likelihood of their using marijuana went to one in two.

Walters (1990) indicates that the differential association theory appears to be a sound theory, yet there are questions that have not been answered. For instance, Wilson and Hernstein (1985) do not believe that the theory adequately explains why criminals and delinquents model behavior of criminal peers rather than the behavior of significant others who are non-criminals.

Strain Theory

Merton (1957) developed the strain theory of criminal behavior based upon Emile Durkheim's (1938) premise that societal norms and rules lose their authority over one's actions in the presence of certain social conditions. The term that Durkheim uses for this condition is "anomie" which is what Goldenson (1984) defines as "a sense of alienation and despair arising from a disorganization of personal and social values during a period of catastrophe, such as war or depression" (p. 48). Merton (1957) postulated that a society acts as a catalyst to instill certain goals into its members and then condones acceptable means by which those goals may be met. Individuals of lower socioeconomic status who are unable to attain their goals by legitimate means become frustrated and attempt to attain socially sanctioned goals and rewards by illegal means. The inequity of legitimate opportunities throughout society results in anomie and strain

which contributes to increases in crime.

Reiss and Rhodes (1961) found that there were more persons from lower than higher economic backgrounds engaging in criminal behavior. Tittle, Villemez, and Smith, (1978), however, used a self-report method and found only a slight correlation between crime and social class. Shavit and Rattner (1988) supported strain theory in that they found that students who dropped out of school were at greater risk for antisocial behavior. Walters (1990) noted that much of the research regarding strain theory is inconsistent. Elliot and Voss (1974) criticized the theory in that it failed to account for those individuals who grow up in middle class homes and commit crimes. Hirschi (1969) also questioned this theory in that it does not address why most working class youth never resort to criminal activity and why most delinquents do not continue criminal activity as adults.

Social Control Theory

Hirschi's (1969) social control theory posited that an individual must "learn" not to engage in criminal behavior. He postulated that the criminal's social structure (family, school or positive peer group) has broken down and that they have not bonded to these particular social groups. Since appropriate bonding has not occurred the individual does not adopt the conventional rules of society. The four primary elements of Hirschi's theory are (a) *attachment*, which refers to the strength of the bond that an individual has with positive agents of socialization (e. g. parents, teachers, or other role models); (b) *commitment*, an allegiance to socially acceptable norms and away from delinquent activity; (c) *involvement*, an engagement in socially acceptable norms which are incongruous with criminal activity; and lastly (d) *belief*, an acceptance that societal norms are morally valid.

Hirschi (1969) tested the validity of his theory by administering a questionnaire to 4,000 high school students. As predicted, he found a connection between self-reported

delinquency and a lack of bonding to parents. He additionally found support for the validity of his four primary elements: attachment, commitment, involvement and belief. Hindelang (1973) did a cross validation study on Hirschi's findings and found that a negative correlation existed between each of the primary elements and delinquency. Hindelang subsequently discovered that a positive correlation existed in the case of peer attachment and delinquency. For this reason Hindelang called for Hirschi to elaborate on the primary element *attachment* as it relates to both conventional and unconventional peer groups. Poole and Rigoli (1979) also found support for social control theory as it relates to the effects of peer influence and crime. Their study showed that adolescents who had little parental support were at risk for being negatively effected by peers while those with strong parental support tended to be protected from the influence of a negative peer group.

Walters (1990) pointed out that Hirschi's work had been done with delinquent populations and that his theory may not have utility for adult offenders. Lindquist, Smusz, and Doerner (1985) applied the principles of control theory to adult misdemeanor probationers with the objective of testing whether or not Hirschi's four primary elements could be used as a means of predicting success while on probation. Their findings were that commitment had a strong correlation, involvement had a moderate correlation, and belief and attachment were uncorrelated with success on probation. The authors acknowledge, however, that the reason that they found a lack of correlation between attachment and success, on probation, may have been more of a problem of measurement rather than with the theory itself.

Labeling Theory

Plummer (1979) purports that the core problem of crime is in the labels that society places on individuals. The only difference that exists between those who break the law and those who do not are the labels that are placed on them. The criminal is a

victim of environment and of society which places a deviant label on that individual. The negative process involved in labeling will merely result in continued increases in rates of crime. Rutter and Giller (1984) note that once an individual enters the criminal justice system a label is typically placed on him or her which results in a limitation of legitimate opportunities. The individual then fails to bond with conventional society and begins an association with labeled deviants who possess norms that are contrary to pro-social behavior. Schrag (1974) stated:

The treatment of law violators accordingly serves as a self-fulfilling prophecy. It forecloses noncriminal options and coerces offenders into a criminal role. Hence, criminal justice may be seen as a system for defining, detecting, identifying, labeling, segregating, and emphasizing the things officially regarded as evil, finding a scapegoat, and making people sensitive to crime and the consequences thereof. It tends to produce criminals by the very kinds of activities it is allegedly designed to alleviate. (p. 709)

Walters (1990) viewed this theory as parsimonious, yet it is limited in that it lacks precision and operationality. Bahr (1974) identified a glaring problem in that it does not account for patterns of deviant behavior that had been established prior to the individual being labeled as deviant or criminal.

Self Theories

Wells (1978) hypothesized that the behavior that one exhibits is an attempt to formulate a self, validate self, experiment with self, and express self. Psychological distress and behavioral acting out are but extensions of incongruity that the individual experiences between self-image and self-demands. During periods of incongruity the individual participates in negative self-judgements which increases the likelihood of expressing deviant behaviors. Subsequently, the individual formulates a self-concept that is defined by deviant behaviors.

Cohen (1983) postulated that behavior is an extension of self-concept. Low self-esteem, therefore, may result in the expression of a myriad of deviant or negative behaviors including criminality, depression, or substance abuse. Research conducted by Reckless, Dinitz, and Murray, (1957, 1956) emphasized what they called a containment model of criminality. The containment model focused on the internal and external processes that exist which result in an individual's demonstrating certain behaviors. The authors suggested that a youngster who grows up in a highly delinquent environment could learn not to participate in criminal activity if internal constraints were strong and contrary to such behavior (e.g., self-esteem, self-control, and ego strength). Follow-up studies by Dinitz, Scarpitti, and Reckless (1962) supported the premise that positive self-esteem acts as a protection from future deviancy.

Sykes and Matza (1970) analyzed thinking patterns of juveniles and noted that they tended to justify their delinquency in order to maintain a positive view of self. The process of minimizing the delinquent behavior, blaming the victim, and pointing to environmental circumstances to justify their involvement in crime is how criminals protect their fragile self-concept and refrain from taking responsibility for their actions. Walters (1990) pointed out that although this analysis of criminality is novel there does not appear to be any empirical evidence supporting it. He additionally purports that self theories of criminality lack precision and are difficult to operationalize.

Psychoanalytic Theory

Freud (1957) postulated that the attitudes that one holds toward criminals is in fact a reflection of the attitude that one holds toward the criminal in one's self. Alexander and Staub (1931) contend that criminality is a component of one's nature. The quintessential difference between the criminal and noncriminal, therefore, is that the

noncriminal has learned to sublimate deviant drives and emotions.

Aichhorn (1935) was an early pioneer in formulating a psychoanalytic theory of how delinquency develops. He posited that a child is born asocial with primary needs that necessitate immediate gratification. If the libidinal organization of the child is disrupted, possibly through early oedipal conflicts, then the likelihood of remaining egocentric and asocial increases. This latent delinquency may eventually manifest itself through authority conflicts and legal difficulties when the individual is exposed to certain conditions. The recommended treatment of such conflict is analysis which centers on the individual's bringing into awareness those factors which are responsible for deviant and asocial behaviors.

Glover (1960) indicated that he believes that one commits crime due to a projection of guilt that manifests itself in a subconscious desire for punishment. Walters (1990) contended that the psychoanalytic approach to criminality views crime as symptomatic of an intrapsychic conflict. Attempting to modify one's behavior, therefore, without addressing the personality structure will be futile. Menninger (1968) noted that socially sanctioned punishments merely serve to reinforce tendencies for further antisocial behavior by giving the punishments that are subconsciously desired.

Dixon (1986) attempted to conceptualize Freud's ideas on criminality and formulated two hypotheses as to its origins. The most probable is an unresolved oedipal conflict. A demanding and overly harsh father is believed to be a causal factor in a type of ego dysfunction wherein the individual seeks to be punished. Secondly, a criminal is a narcissistic individual who has minimal feelings of guilt or remorse for asocial behaviors. A poorly formed superego, therefore, results in the individual's not feeling psychogenic pain for participating in antisocial activity.

Hofer (1988) utilized a clinical case study approach to discuss the findings that resulted from his work with a group of penitentiary inmates. Hofer's approach appeared

to support Dixon (1986). He found that these offenders tended to idealize their relationships with their mothers and had great animosity toward their fathers. The goal of psychotherapy, therefore, was to bring into conscious awareness those factors (authority conflicts) which resulted in the individual's engaging in antisocial behaviors.

Walters (1990) commented that the psychoanalytic theory lacks parsimony, precision, and testable hypotheses. As a result the utility of this theory for studying criminality is greatly limited.

Pathological Stimulation Seeking

Quay's (1965) basic hypothesis was that "psychopathic behavior represents an extreme of stimulation-seeking behavior and that the psychopath's primary abnormality lies in the realm of basal reactivity and/or adaptation to sensory inputs of all types" (p. 180). He views the criminal nervous system as hyporeactive which results in a need to seek higher than average rates of sensory input. Quay (1965) described the psychopathic personality behaviorally as follows:

The psychopath is almost universally characterized as highly impulsive, relatively refractory to the effects of experience in modifying his socially troublesome behavior, and lacking in the ability to delay gratification. His penchant for creating excitement for the moment without regard for later consequences seems almost unlimited. He is unable to tolerate boredom. While he may engage in antisocial, even vicious, behavior his outbursts frequently appear to be motivated by little more than a need for thrills and excitement. His deficits in learning, in terms of both avoidance and approach responses, are clinically obvious. (p. 180)

Quay (1977) revised his theory of pathological stimulation seeking to include environmental determinants. He hypothesizes that although a future criminal is born with a low rate of cortical arousal it is the interaction between the individual and the home environment which accounts for the development of asocial behaviors. The

stimulation seeking actions of the child create animosity and frustration in the parents who then reject the child or develop a pattern of inconsistent discipline. The child learns to habituate to aversive stimuli and punishment which serves to entrench the family into more negative parent-child interactions. The result is an adolescent or adult who is unhappy, undersocialized, angry, resentful, and who still seeks increased levels of sensory stimulation.

Lykken's (1957) study with psychopaths and avoidance conditioning resulted in evidence showing that these individuals were less sensitive to electric shock. Their galvanic skin responses were also found to return to basal levels faster after being exposed to the shock. The supposition was that an increased rate of habituation, as well as a lowered level of basal reactivity, are indicative of criminal behavior. Levinson (1990) continued this thought when he stated:

By engaging in risky behavior, risk takers seek to increase their unusually low arousal to an optimum level. Presumably, their low baseline arousal levels cause them to be relatively fearless. To reach an optimal, pleasurable arousal level, such persons seek stimulation that would seem sufficiently novel or dangerous to the ordinary person to produce unpleasant anxiety. Because it minimizes the aversiveness of anticipated punishment (passive avoidance), this predisposition is thought to be associated with low socialization and nonconformity, which some appear to assume to be equivalent to an antisocial posture. (p. 1073)

Blackburn's (1978) results in testing the arousal hypothesis showed that psychopaths had greater cortical arousal when presented with a noxious stimulus. He believed this to mean that psychopaths may seek out increases in stimulation sensation not to increase arousal but to maintain a high rate of information flow.

Walters (1990) noted that although Quay's theory has generated considerable research, it is still unknown why risk takers and psychopaths generally view high rates

of stimulation as optimal. If this theory is to be an integral part of research on the criminal personality then it will need to be made more precise and verifiable.

Rational Choice Theory

Becker (1968) is an adherent of rational choice theory and of the idea that an individual consciously weighs the costs and benefits of breaking the law or not breaking the law. The individual will act upon thoughts to engage in unlawful actions only if the expected benefit is greater than the cost to do so.

Several researchers speculated whether or not this theory has any utility for the field of criminal science. Carroll (1978) looked at the rational processes of criminals in an effort to understand why they committed a crime. He noted that their decision making processes were often irrational and unmotivated by economic considerations. Witte (1980) found that a small, yet significant, negative relationship exists between an individual's knowledge, and certainty of punishment, with that of future criminal acts.

Walters (1990) viewed rational theory as useful in that it is precise and operational. The theory's weakness, however, is that it is incomplete in its explanation of criminal behavior.

The Psychopath as a Genetically-Predisposed Deficient Learner

Doren (1987) identified Eysenck's model of psychopathy as being genetically based. Eysenck and Eysenck (1978) formulated a theory of psychopathy based upon a three dimensional model of personality which included these postulates:

That there are certain major personality variables, independent of each other; that these are in great measure genetically determined; and that in conjunction they can be used to allocate a given person (whether psychiatrically well or ill) to particular point in this multidimensional space. (p. 198)

The first variable that Eysenck (1977) describes is that of *extroversion-*

introversion (E) which is indicative of one's excitability or degree of introspection, reservation, reliability, and distrusting of emotional impulses. The second factor is that of neuroticism-stability (N). Those persons scoring high on the (N) scale tend to be overreactive to stimuli in either a passive or overt manner. Eysenck and Eysenck (1978) stated:

The place of neuroticism in the general theory of . . . psychopathy is essentially one of a drive variable acting as an amplifier . . . This is a simple extension of the Hullian principle according to which habit multiplies with drive to produce excitatory potential; the drives of introverts and extroverts determine their habitual activities as laid down in terms of their arousal level; these are then multiplied manifold in persons high on N, while in persons low on N there is no such multiplication, leaving such persons much better able to adjust integratively to reality. (p. 214)

The last factor identified by Eysenck (1977) is psychoticism (P). He notes that persons who score high on this scale will tend to be characterized as follows:

(a) solitary, not caring for other people; (b) troublesome, not fitting in; (c) cruel, inhumane; (d) lacking feeling, insensitive; (e) lacking in empathy; (f) sensation-seeking, avid for strong sensory stimuli; (g) hostile to others, aggressive, (h) liking for odd and unusual things; (i) disregard for dangers, foolhardy; (j) liking to make fools of other people, and to upset them. (p. 57)

Eysenck and Eysenck developed the Eysenck Personality Questionnaire (EPQ) as a means of obtaining test scores in the areas of extroversion, neuroticism, and psychoticism. Their 1978 study utilized the EPQ which involved 2,070 male criminals and 2,442 male noncriminal controls. They found that the criminal population scored higher on extroversion, neuroticism, and psychoticism. They additionally noted that the additive effect of these three dimensions was related to an increased probability of

asocial behavior.

Eysenck (1977) postulated that persons who score high on the neuroticism scale possess a sympathetic nervous system and limbic system that is highly reactive to external stimuli either passively or overtly. The extroversion scale was hypothesized to be related to the cortex where the arousal state of the individual occurs (i.e., states of lethargy or arousal). Gale (1973) demonstrated that the brain possesses a characteristic "idling speed" which is capable of putting off high and low levels of brain waves, as measured by the electroencephalograph (EEG). The differences in idling speed appear to be related to extroversion-introversion in a dichotomous manner. Persons who have a low idling speed are identified as being extroverted whereas persons with high idling speeds are identified as being introverted. Eysenck (1977) stated:

The major function of the cortex is to coordinate and inhibit the activities of the lower centers; an active aroused cortex is more effective in inhibiting activity than a poorly aroused one. Consequently, high cortical arousal leads to inhibited physical activity; low cortical arousal allows the lower centers to function without constraint or restraint. (p. 87)

Eysenck (1977) viewed psychopaths as individuals who would score high on the neuroticism scale and score high on the extroversion scale. Subsequently these individuals would be unable to adequately perceive their environments adequately as a result of their low rates of cortical arousal. Burgess (1972) paraphrased Eysenck's theory as follows:

(1) Socialization is achieved through conditioning. (2) Extroverts tend to condition poorly. (3) Neuroticism acts as a drive reinforcing extroverted and introverted tendencies favouring antisocial conduct. And, (4) Therefore anti-social conduct, particularly crime, would be found more frequently in people whose personality placed them high Extroversion(E), high Neuroticism (N). (pp. 74-75)

The Psychopath as Deficient in Role-Playing Abilities

Doren (1987) identifies Gough's theory of psychopathy as originating from a criminal's difficulty in acquiring adequate role playing abilities. Gough (1948) describe psychopaths as individuals who lack the ability to accurately role-play. This deficit subsequently results in the criminal's developing problematic social relationships. Gough (1948) stated:

First of all, the basis for individual sociality is social interaction, and this interaction is effective in so far as the individual can look upon himself as an object or can assume various roles. This role-taking ability provides a technique for self-understanding and self-control. Learned prohibitions (and all social interdictions must be learned) may be observed by "telling one's self" not to behave in a certain way. Or speech may be editorially "reviewed" as it is emitted, and the inadmissible deleted. Role-playing, or putting one's self in another's position, enables a person to predict the other's behavior. Finally, role-playing ability makes one sensitive in advance to reactions of others; such prescience may then deter or modify the unexpressed action. (p. 363)

Gough (1948) noted that the psychopath's deficiency in role-playing was an inability to look upon one's self as an object or to empathize with another's perspective. Doren (1987) states that the psychopath "cannot adequately anticipate the reaction of others or comprehend the role of the generalized other, society, in their daily lives" (p. 15). Gough (1948) purports that "the psychopath can verbalize all the moral and social rules, but he does not seem to understand them in a way that others do" (p. 361).

Gough and Sandu (1964) indicated that the socialization scale from the California Psychological Inventory was based on role-taking theory. The underlying assumption is that the individual who is less socialized is "less adept at sensing and interpreting the

nuances and subtle cues of the interpersonal situation, and hence less able to evolve reliable and trustworthy residual control systems" (p. 544).

Theoretical Summary

Hall and Lindzey (1970) identify six criteria to use when considering whether or not a theory is sound. First, and foremost, a theory should "lead to the collection or observation of relevant empirical relations not yet observed" (p. 12). It should generate knowledge and ideas that are grounded in the theoretical precepts of statements, hypotheses, and predictions which can then be empirically tested. Second, a theory is accepted or rejected based upon its utility, not whether it is true or false. The authors divide utility into two components, i.e, verifiability and comprehensiveness.

"Verifiability refers to the capacity of the theory to generate predictions that are confirmed when the relevant empirical data are collected. Comprehensiveness refers to the scope or completeness of these derivations" (p. 12). A theory that confirms a limited scope of phenomena by its predictions is not as useful as one that can deal with empirical events in a more inclusive manner. Third, a theory should be heuristic in that it should generate research by stimulating ideas and questions. Fourth, a theory should organize the present empirical knowledge concerning a particular phenomena in an organized and logical manner. Fifth, parsimony is of great value but only after the issues of verifiability and comprehensiveness have been dealt with. Last, a theory should serve a function of "preventing the observer from being dazzled by the full-blown complexity of natural or concrete events" (p. 14).

In reviewing the major theories identified by Walters (1990) and Doren (1987) it would appear that none of the existing theories on criminality are sufficient in and of themselves to adequately describe the origins of such behavior based upon the rules of a sound theory. Verifiability, comprehensiveness, and parsimony are problems that

plague all of the models. Each of them, however, seem to offer some understanding as to why a person is capable of engaging in anti-social behavior.

Physiological theories such as the constitutional model, pathological stimulation seeking model, or the genetic predisposition model are interesting, and if substantiated may change the way courts and society deal with criminals; particularly with reference to responsibility and competency. The social interaction theories that were discussed: differential association, strain theory, social control theory, role playing theory, labeling theory, psychoanalytic theory, and self theory appear plausible yet need to be operationalized with more empirical evidence gathered. Rational choice theory has a number of the components related to a sound theory, yet it too lacks a complete explanation of criminal behavior (Walters, 1990).

The Criminal Personality

Hare and McPherson (1964) found that criminal psychopaths are responsible for 3.5 times more violent crimes than are those who are non-psychopathic. Psychopathic criminals additionally commit more violent and aggressive behaviors while incarcerated and are subsequently segregated from the general population more often for disciplinary infractions and treatment. Wong (1984) notes that those who are psychopathic tend to violate conditions of parole when they are released. In spite of poor institutional adjustment and high rates of recidivism the criminal psychopath is just as likely to be paroled as is the non-psychopathic criminal. Ogloff et al. (1990) state that "Criminal psychopaths, therefore, present significant clinical, legal and administrative concerns that must be addressed by those working within the criminal justice system" (p. 181).

Cleckley (1976) has presented a detailed accounting of 16 dominant characteristics of the psychopath. He believes that it is important to formulate a clear understanding of these individuals' actions and intentions if a therapist is to be effective in working with such persons. These psychopathic characteristics include:

(1) superficial charm and good "intelligence"; (2) Absence of delusions and other signs of irrational thinking; (3) Absence of "nervousness" or psychoneurotic manifestations; (4) Unreliability; (5) Untruthfulness and insincerity; (6) Lack of remorse and guilt; (7) Inadequately motivated antisocial behavior; (8) Poor judgment and failure to learn by experience; (9) Pathologic egocentricity and incapacity for love; (10) General poverty in major affective reactions; (11) Specific loss of insight. He is incapable of seeing himself as others see him; (12) Unresponsiveness in general interpersonal relations; (13) Fantastic and uninviting behavior with drink and sometimes without; (14) Suicide rarely carried out; (15) Sex life impersonal, trivial, and poorly integrated; and (16) Failure to follow any life plan. (p. 337)

Ogloff, Wong, and Greenwood (1990) commented that the three revisions of the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-II, DSM-III, and DSM-III-R) have attempted to operationalize a definition of the psychopath as indicated by the diagnosis of antisocial personality disorder. Both the DSM-III and the DSM-III-R have focused primarily on antisocial behaviors. These criteria, however, may not readily identify those individuals with antisocial personality characteristics who have avoided the legal system as a youth (Hare & Jutai, 1983). DSM-III-R (1987) indicates that one of the diagnostic criteria for antisocial personality disorder necessitates that there be evidence of a conduct disorder prior to age 15 as demonstrated by a history of three or more of the following:

(1) was often truant; (2) ran away from home overnight at least twice while living in parental or parental surrogate home (or once without returning home); (3) often initiated physical fights; (4) used a weapon in more than one fight; (5) forced someone into sexual activity with him or her; (6) was physically cruel to animals; (7) was physically cruel to other people; (8) deliberately destroyed others'

property (other than by fire-setting); (9) deliberately engaged in fire-setting; (10) often lied (other than to avoid physical or sexual abuse); (11) has stolen without confrontation of a victim on more than one occasion (including forgery); and (12) has stolen with confrontation of a victim (e.g., mugging, purse-snatching, extortion, armed robbery). (pp. 344-345)

Yochelson and Samenow (1976, 1977, and 1986) used a descriptive case study approach in their work with prisoners which resulted in the identification of 52 thinking errors that characterized the criminal personality regardless of race, socioeconomic status, family background, or education. Fear is a thinking pattern that is a "dirty word" for the criminal. Yochelson and Samenow (1976) stated:

When fear is discernible in others, he points it out, scorns it, and exploits it. In short he is both fearful of fear and contemptuous of fear. This applies also to the many states that denote degrees of fear, doubt, concern, apprehension, anxiety, and dread. (p. 386)

Another dysfunctional thinking pattern that Yochelson and Samenow (1976) identified is the emotion of *anger*:

The criminal is chronically angry, even as he walks down the street. Anger is a mental state that is sometimes expressed outwardly, but more often boils within. It is most dangerous when it is not on the surface. Anger is as basic to his personality as the iris is to the eye . . . An anger reaction in the criminal "metasizes". It begins with an isolated episode, but spreads and spreads until the criminal has lost all perspective. (p. 268)

Superoptimism, according to Samenow and Yochelson (1976), is an extreme form of optimism that the criminal uses in the commission of crime. He knows by experience that the chances of his being apprehended are low. He additionally believes that if he is arrested the court proceedings are likely to be long which may result in charges being

dropped or his being given a light sentence. When the criminal seriously considers the risks involved in committing a crime, and does not achieve the state of superoptimism, then he opts not to commit the act.

The *zero state* is described by Yochelson and Samenow (1976) as a state that the criminal fears more than most anything. It is a state of nothingness where his sense of self-worth has plummeted and he sees himself as a failure in every area of his life. The authors noted that "when the criminal is in such a state, he is not presenting the classical picture of depression. Rather than appearing flat, inert, and despairing, he is blazing with anger (often unexpressed)" (p. 266). They further noted, "When anger is futile and the criminal does not get his way, he is vulnerable to the occurrence of a zero state" (p. 270).

Corrosion is described by Yochelson and Samenow (1976) as "the mental process in which external or internal deterrents are slowly eliminated until the desire to commit an act outweighs the fears to the point where the desire is implemented" (p. 413). Corrosion occurs up to a point at which time another mental process *cutoff* is activated. The cutoff serves the purpose of immediately letting the criminal disregard any internal or external deterrents and allows the criminal the freedom to act. Samenow and Yochelson (1976) describe this process as resembling what others may call impulsiveness. The cutoff differs from either suppression or repression in that it:

permits a criminal to think about action that he wants to take without interference by thoughts opposing it. Cutoff is a rapid eradication of fears from the mind. . . a learned mental process; it is discipline to eliminate fear, and the criminal child begins to practice it early in life. . . . it is an achievement to change from a trembling man into a cool, dispassionate thief; as one man put it, "I can change from tears to ice". (p. 414)

According to Walters (1990) the primary contributions that Samenow and Yochelson

have made to the theory of lifestyle criminality are that (a) the criminal has the ability to choose a criminal or noncriminal lifestyle, (b) thinking is the venue from which choices are made, and (c) responsibility for one's actions is the means by which change occurs.

Lifestyle Criminality

Walters (1990) has conceptualized the criminal personality from a biopsychosocial perspective. The 52 errors in thinking that Samenow and Yochelson (1976) used to describe the criminal personality were the basis for the eight mental processes that Walters (1990) has identified and defined as follows:

Mollification: The lifestyle criminal seeks to minimize the seriousness of his past criminal conduct and current conflicts with others by blaming their problems on external circumstances, making excuses for their behavior, pointing out unfairness in the world, or denigrating the victims of their crimes; *Cutoff:* With practice, the lifestyle criminal becomes adept at eliminating deterrents to criminal action through a simple phrase, image, or musical theme. In some cases the offender will use drugs or alcohol to cut off fear, anxiety, guilt, or other common deterrents to criminal activity; *Entitlement:* The lifestyle criminal believes that he is entitled to violate the laws of society and the rights of others by way of an expressed attitude of ownership ("it's mine"), privilege ("I'm above the law"), or the misidentification of wants as needs ("I needed a new car, expensive clothing, a trip to Vegas, etc"); *Power Orientation:* Choosing power and external control over self-discipline and internal control, the lifestyle criminal attempts to exert power and control over others. Consequently, he feels weak and helpless (zero state) when not in control of a situation; a feeling he attempts to alleviate by manipulating, intimidating, or physically assaulting others (power thrust); *Sentimentality:* Like most people the lifestyle criminal has an interest in being viewed as a "nice

guy". This creates a serious dilemma for the lifestyle offender, however, given the level of interpersonally intrusive activity he has engaged in over the years. The lifestyle criminal consequently performs various "good deeds" with the intent of cultivating a "Hell-of-a-fella" or "Robin Hood" image;

Superoptimism: Experience has taught the lifestyle criminal that he gets away with the majority of his crimes. This leads to a growing sense of overconfidence in which the lifestyle criminal believes he is invulnerable, indomitable, and unbeatable; a belief which ironically leads to his eventual downfall; *Cognitive Indolence*: As lazy in thought as he is in behavior, the lifestyle criminal takes short-cuts even though these short-cuts inevitably lead to failure. Cognitive indolence is also reflected in the lifestyle offender's weak self-evaluation and critical reasoning skills; and *Discontinuity*: The lifestyle criminal has difficulty maintaining his focus over time because he is easily influenced by events and situations occurring around him. (pp. 131-151)

There are a number of postulates that Walters (1990) identified as being foundation principles for his theory of lifestyle criminality. They are as follows:

Postulate #1: Crime can be understood as a lifestyle characterized by a global sense of irresponsibility, self-indulgent interests, an intrusive approach to interpersonal relationships, and chronic violation of societal rules, laws, and mores;

Postulate #2: Conditions impact on the development of the criminal lifestyle principally through three domains (physical, social, psychological);

Postulate #3: Conditions may limit one's options, but they do not determine one's choices; *Postulate #4*: The behavior of the lifestyle criminal is directed toward losing in dramatic and destructive ways; *Postulate #5*: There is a distinctive thinking style that derives from the lifestyle criminal's decision to engage in

delinquent and criminal acts; *Postulate #6*: The content and process of

criminologic thought are reflected in eight primary cognitive patterns; *Postulate #7*: For a criminal event to transpire, a criminal opportunity must be present; *Postulate #8*: The motivation for specific criminal events is derived through the process of validation which is comprised of four secondary organizing motives: anger/rebellion, power/control, excitement/pleasure, and greed/laziness; *Postulate #9*: Criminal events can be understood as incorporating a complex inter-linking of thoughts, motives, and behaviors; and *Postulate #10*: Since behavior is a function of the attitude and thoughts one adopts toward a particular situation, criminal behavior will not change unless the offender first changes his thinking. (pp. 71-96)

Walters (1990) has presented a model of criminality which incorporates the social, psychological, and physical domains. His views on the criminal personality approximate those of Yochelson and Samenow (1976, 1977, and 1986). A notable difference between the researchers, however, is in Walters efforts to formulate Yochelson and Samenow's clinical observations into a theoretical model that is operational, empirically testable, and parsimonious.

Prison Based Drug Treatment

Rouse (1991) noted that drug treatment programs have been in United States' prisons for over 20 years. These programs began in 1966 with the passage of the Narcotic Addict Rehabilitation Act (NARA II). Statistical data comparing program participants with the general population indicated that recidivism rates were at least 10% lower for those individuals who were in treatment programs. Field's (1985) review of studies on incarcerated populations found that there were seven to eight times higher rates of alcohol and drug problems with inmates compared with that of the general population. Chaicken (1989) reported that jail and prison health specialists, legislators, and other citizens identified drug and alcohol abuse as the most prevalent

health problem for those who are incarcerated. In 1987, 11% (51,500) of the inmate population were enrolled in prison drug abuse treatment programs. Sixty two percent of those enrolled in the program reported regular use of drugs (once a week or more for at least a month) prior to their incarceration. Thirty five percent of the 62% used major drugs such as heroin, illicit methadone, cocaine, LSD, or PCP prior to their current arrest. This means that over 50% of the inmate population, identified as having used drugs regularly, are not receiving drug treatment (Rouse, 1991).

Wexler, Lipton, and Johnson (1988) noted that there are many daily heroin users who are not in treatment. They average over 200 non-drug charges a year in addition to hundreds of distribution charges; yet they will likely be arrested once annually and spend less than a month in jail. Criminal justice sanctions, additionally, have not been found to have a significant effect in reducing drug use and criminality for heroin and cocaine abusers. There is some evidence which suggests that two-thirds of heroin abusers return to heroin-cocaine use and criminal behavior within three months of release from detention. This may be contrasted with methadone clients who report 50% to 80% less crime during treatment than those heroin abusers who are not in treatment. The benefit of criminal sanctions may, therefore, be in providing offenders with the treatment and surveillance necessary to better cope with their addiction.

General drug education and group therapy are the most common types of prison based drug treatment programs. More than 60% of the state prison systems additionally offer alcoholics anonymous or narcotics anonymous 12 step recovery programs. Ninety percent of states also make arrangements for continuation of drug treatment after release with the most common referrals being to alcoholics anonymous or narcotics anonymous (Rouse, 1991).

Chaiken (1989) researched four prison based drug treatment programs: (a)

Cornerstone Program, Oregon; (b) Lantana Program, Florida; (c) Simon Fraser University Program, British Columbia; and (d) Stay'n Out Program, New York. He reports that these programs shared several characteristics:

- (1) They have special sources of funds, earmarked for their use and administered separately from other correctional services.
- (2) The programs exist as guests of established host institutions; thus they can focus on program activities rather than such institutional matters as housing and food preparation.
- (3) The programs use a comprehensive approach and wide range of activities that are commonly found in freestanding residential programs rather than in traditional prison drug programs.
- (4) The program providers are more likely to come from professions other than corrections, although they are sensitive to security regulations and willing to work within them.
- (5) Program participants typically were involved heavily in drug use and committed many serious crimes before incarceration.
- (6) In carrying out program activities, these participants learn a range of practical life skills.
- (7) Program staff members maintain contact with participants after release and provide followup support. (p. 2)

Wexler, Lipton, and Johnson (1988) reported that drug treatment programs that are working are based on a social learning theory model of criminal behavior. The basic premise being that criminal behavior is learned through the association with others. Prosocial behaviors must, therefore, be used to replace criminal behaviors via "therapeutic communities, self-help groups, family therapy, contingency contracting, role playing and modeling, vocational and social skills training, training in interpersonal cognitive problem-solving skills, and other programs involving ongoing peer monitoring of participants' behavior." (p. 7) They also noted:

The successful programs have several things in common: authority structures that clearly specify rules and sanctions, anti-criminal modeling and reinforcement of

pro-social behavior, pragmatic personal and social problem solving resources, and relationships between staff and clients which are empathic and characterized by open communication and trust. (p. 7)

The optimum period of time for heroin and cocaine abusers to stay in such prison based treatment appears to be between nine and twelve months followed by release into the community. Diminishing results are associated with stays longer than twelve months (Wexler, Lipton, & Johnson, 1988).

Cornerstone Program

Field (1985) evaluated the prerelease Cornerstone Program which is a jointly administered project of the Oregon state Mental Health and Corrections Divisions. It is a treatment program for alcohol and drug dependent offenders which opened in 1976 and is located at the Oregon State Hospital in Salem. The program is an intensive 32-bed residential facility which incorporates a six month follow-up aftercare plan.

Participants are minimum security inmates with no more than one year and no less than six months before their parole date. The typical resident may be described as having a history of chronic substance abuse, as well as, chronic criminal behavior. Individuals with a history of sexual offenses or psychosis are precluded from being admitted. It was found that only 22% of this population had reportedly been free from chemical dependence for one year of their adult lives. By 1984 95% of the population reported polysubstance abuse in at least three classes of drugs with 55% of the cases identifying alcohol as a primary drug of choice.

Field (1985) described the Cornerstone program as a therapeutic community consisting of:

clearly understood rules, and consequences, especially about violence and drug use; formal participation by residents in the daily operation of the community; strong community support for growth and change; individual responsibility for behavior; a

clear system for earning freedom a little at a time; and maintenance of a core of community 'culture carriers' among residents and staff as program clients come and go. (p. 51)

Within the context of this program residents receive feedback from one another, as well as, from staff members. After an initial orientation a treatment contract is developed which (a) identifies the participants' problem, (b) outlines "specific" goals, and (c) establishes time lines for meeting their goals. Daily programming consists of milieu meetings, classes, groups, and time in the community. Attendance in either alcoholics anonymous, narcotics anonymous, or some other peer based group in the community is mandatory as means to developing a community network of support. Skill Training in the area of basic education and life skills, (i.e.; work principles, nutrition, budgeting) is also offered to aid residents in being able to appropriately structure their leisure time without drugs or alcohol.

The first six months after discharge is the most crucial with regard to an individual's adjustment to the community (Gossop, Green, Phillips, & Bradley, 1987). The Cornerstone program requires that graduates agree to a six month follow up as a component of their aftercare treatment plan. Most individuals will have jobs, a place to live and a support network developed when they reenter free society. Graduates are also given the opportunity to attend weekly group sessions at Cornerstone for their own support and for the support of the present residents. At a three year follow up it was found that program participants reported that they felt better about themselves and felt more capable in their abilities to cope as a result of treatment. It was also found that program graduates had lower incarceration rates than those who had not sought treatment or who had dropped out of the program (Field, 1985).

Gossop, Green, Phillips, and Bradley (1987) followed 50 opiate addicts for six months after treatment and found that the majority of them resume their drug use with

the most critical time being the first two months after discharge. After six months, however, it was found that 47% of the subjects were not taking opiates. This study suggests that it is extremely important to address aftercare issues with those persons who are leaving treatment if they are to successfully manage their addiction. Brahen, Henderson, Capone, and Kordal (1985) concurred with the social learning model of drug treatment and additionally suggested that the opiate antagonist naltrexone be used upon the inmates' reintroduction into the community. This suggestion was based upon findings which showed that those participants who were on naltrexone treatment had significantly fewer arrests than those narcotic addicts who were not.

"Stay 'N Out" Program

Wexler, Lipton, and Johnson (1988) identified unsuccessful treatment programs as being those that were (a) based on a disease model of criminology; (b) those based on deterrence models (e.g., "Scared Straight"); (c) non-directive; (d) inmate-directed therapy groups (only); or (e) treatment that solely relies on open communication. Wexler et al. contrasted these programs with therapeutic community programs such as "Stay 'N Out" which operated within the New York State prison system. It was found that participants in the "Stay 'N out" program reported positive psychological and behavioral changes. It was additionally noted that those who remained in the program longer than nine months had an 80% positive parole discharge compared to those who remained in the program less than three months and demonstrated a 50% positive parole discharge. Positive parole discharge refers to individuals' ability to not violate the conditions of their parole.

Wexler, Lipton, and Johnson (1988) describes the "Stay 'N Out" program as being administered by a private agency, outside of the institution, that has contracted with the department of corrections. Program elements are as follows:

- (1) Isolated Unit;
- (2) Utilization of Ex-Offender/Ex-Addict Staff;
- (3)

Establishment of Psychological and Physical Safety; (4) Hierarchical Therapeutic Community; (5) Confrontation and Support Groups; (6) Individual Counseling; (7) Community and Relationship Training; (8) Program Rules with Opportunities to Learn from Misbehavior; (9) Immediate Discharge for Drug Possession, Violence and Sexual Misbehavior; (10) Developing Pro-Social Values: Honesty, Responsibility, and Accountability; and (11) Continuity-of-Care: Networking with Community Therapeutic Communities. (p. 19)

Wharton Tract Narcotics Treatment Program

The Wharton Tract Narcotics Treatment Program was an early program established for youth at a site in Wharton State Forest in New Jersey (Platt, Perry, & Metzger, 1980). More than 1600 youths were enrolled in the program over a seven year period beginning in 1970. This 45 bed facility was a component of the Youth Reception and Correction Center in Yardville, New Jersey. A therapeutic outpatient community approach emphasizing consequences for behavior, increased levels of responsibilities, and privileges for those who participated was the emphasis of the program. In evaluating this particular approach it was found that the reincarceration rate for those who "graduated" from the program was 18% compared with 30% for the control group.

Summary of the Literature Review

The literature on criminality suggests that persons who are diagnosed as having antisocial personality disorders are at high risk for abusing drugs and alcohol, as well as, engaging in criminal behavior. Those individuals are also least receptive to treatment. Research implies that persons who have substance abuse problems, and who have adopted a lifestyle of criminality, are more likely to be management problems while in prison and will return to criminality once they go back to the community. Wexler, Lipton, and Johnson (1988) identifies the "Stay 'n Out" program as one example of a successful application of the social learning model to prison based drug

treatment which appears to be addressing this problem.

Affective variables such as anger, anxiety, and depression are identified in different theorists' conceptualizations of criminality. Yochelson and Samenow (1976) have described anger and *zero state* (a sense of low self-esteem and feeling of complete failure that appears different from that of classical depression) as two critical errors in thinking which are typical of the criminal personality. Eysenck (1964) noted that individuals with high ratings of neuroticism on the Eysenck Personality Questionnaire are at increased risk for psychopathy. Walters (1990) identified the lifestyle criminal as using the mental process of *cutoff* to eliminate the anxiety, guilt, or remorse that most people experience as deterrents for committing criminal acts. Anxiety, depression, and anger, therefore, appear to be emotional constructs that are found in most of the major theories that discuss the workings of the criminal mind.

Research in the past, however, has left little hope for change in individuals diagnosed as having an antisocial personality. Cleckley (1976) noted:

I was profoundly impressed by two difficulties that stood in the way of dealing effectively with the psychopath. One of these was his apparent immunity, or relative immunity, from control by law. The other was his lack of response to psychiatric treatment of any kind. (p. 433)

Hare (1970) stated, "The traditional therapeutic procedures have not been effective in changing the behavior of psychopaths." (p. 118) Social learning treatment programs have been found to have some success with this population, yet the challenge continues to be great.

This review of literature was done on the prominent theoretical models, as identified by Walters (1990) and Doren (1987), that were used to describe persons with a criminal personality. Prison based drug treatment programs were also reviewed to determine what "appears" to be working in the way of helping prisoners with substance

abuse problems. The strong relationship between criminality and substance abuse necessitates that research continue to be done in order to provide effective treatment opportunities for those in need. It is hoped that the present study will provide more information about those inmates who seek to enter into some form of a drug abuse treatment program.

Chapter III

METHODOLOGY

Subjects

Subjects of this study were 74 adult incarcerated male felons ranging in age from 20 to 61 who completed a BOP 40 hour drug education group. All subjects were incarcerated at a medium security federal prison in the south central region of the BOP. Their sentences ranged from violent crimes against others to failure to fulfill probation and parole guidelines. The amount of time left to serve on inmate sentences ranged from one year to life. Table 1 contains the age means and standard deviations of subjects who were interested in drug abuse treatment and subjects who were not interested in treatment.

Table 1

Age Means and Standard Deviations of the Sample According to Decision to Enter, or not Enter, Drug Abuse Treatment

Variable	N	Mean Age	Age SD
Yes Treatment	43	34.14	8.48
No Treatment	31	36.26	9.38

Table 2 contains the following demographic information on subjects who were either interested or not interested in entering drug abuse treatment, i.e., race, whether or not subjects received treatment for a prior nervous or mental condition, last grade completed, and marital status.

Table 2

Demographic Characteristics of Subjects Interest or No Interest in Treatment

Variable	<u>Interest</u>		<u>No Interest</u>		<u>Bureau</u>
	Freq	%	Freq	%	%
Race					
Asian	0	0	1	3.2	.5
Black	13	30.2	9	29.0	37
Hispanic	2	4.7	6	19.4	*
Native American	8	18.6	3	9.7	.5
White	20	46.5	12	38.7	62
Prior Treatment for an Emotional or Mental Disorder					
No	39	90.7	26	83.9	
Yes	4	9.3	5	16.1	
Last Grade Completed					
5 to 8	1	2.3	4	12.9	
9 to 11	16	37.2	11	35.5	
12 to 18	26	60.5	16	51.7	
Marital Status					
Divorced	7	16.3	5	16.1	
Married	6	14.0	8	25.8	
Separated	3	7.0	1	3.2	
Single	27	62.8	17	54.8	

* Bureau of Justics Statistics (1991) designates Hispanics as either White or Black

Bureau of Justice Statistics, (1991) describes the multi-racial federal inmate population as 62 percent White (including white Hispanics), 37 percent Black (including black Hispanics), and 1 percent other (i.e., Asian and Native American). The subjects in this study reflected the following ethnic makeup, i.e., 30 percent Black, 43

percent White, 11 percent white Hispanic, 15 percent Native American, and 1 percent Asian. It is assumed that the high percentage of Native Americans in this study may have been indicative of the institution's location within the south central region of the BOP.

Federal policy states that selected inmates sentenced after September 20, 1990 will attend a 40 hour "Drug Abuse Education" group. The inmates' caseworker routinely screens the pre-sentence investigation reports for the following criteria: the inmate was under the influence of drugs at the time of their crime; probation or parole was revoked because of a drug or alcohol charge; or there is a recommendation by the court, to the Bureau of Prisons, for drug or alcohol programming. At the completion of the initial 40 hour group, inmates were given the opportunity to express interest (via demographic questionnaire) in a 500 hour drug abuse program (which takes approximately nine months to complete), individual therapy, or attend alcoholic anonymous meetings. Table 3 lists the type of drug abuse treatment that was chosen by those interested in treatment. It was estimated that, at a minimum, 60 subjects would be necessary for this study; ideally representing 30 subjects in the group that was interested in treatment and 30 subjects in the group not interested in treatment. There was in fact 43 who were interested treatment and 31 who were not interested in treatment, comprising a total of 74 subjects.

Table 3

Choice of Drug Abuse Treatment

Variable	Frequency	%
Individual Therapy		
No	21	48.8
Yes	22	51.2
500 Hour Drug Abuse Program		
No	19	44.2
Yes	24	55.8
Alcoholics Anonymous		
No	30	69.8
Yes	13	30.2

Instrumentation

Predictor variables include the State-Trait Anger Expression Inventory (Spielberg, 1983), State-Trait Anxiety Inventory (Spielberg, 1988), Beck Depression Inventory (Beck, 1961), and the Lifestyle Criminality Screening Form (Walters, 1990).

The criterion variable; will be whether or not an individual expresses further interest in treatment at the completion of the 40 hour mandated "Drug Abuse Education" group.

State-Trait Anxiety Inventory (STAI) Form Y

The State-Trait Anxiety Inventory (Spielberg, 1983) consists of 40 brief items that measure subjects' level of both state and trait anxiety. In this study only the trait items were used. Trait Anxiety is defined as "relatively stable individual differences in

anxiety proneness, that is, to differences between people in the tendency to perceive stressful situations as dangerous or threatening and to respond to such situations with elevations in the intensity of their state anxiety reactions." (p. 1) State anxiety is characterized by "subjective feelings of tension, apprehension, nervousness, and worry, and by activation or arousal of the autonomic nervous system." (p. 1) Psychoneurotic and depressed patients generally have high scores on the trait anxiety scale. It has additionally been used for evaluating the immediate and long term outcome of drug treatment programs. There is normative data available (Form X) on 212 federal prison inmates from the Federal Correctional Institution at Tallahassee, Florida. Form X and Form Y of the State-Trait Anxiety Inventory were found to correlate from .96 to .98 (Spielberger, 1983).

There is no time limit for taking this self-administered test, yet most people complete it in 10 minutes. Each scale is scored by giving individual items a weighting of 1 to 4, with a 4 indicating a higher level of anxiety. Scores for the trait scales can range from 20 to 80 points. Template keys are available for scoring (Spielberger, 1983).

The overall alpha coefficients as measures of internal consistency for Form Y in the two normative samples are .92 and .90. Test-retest correlations were done on college students who had been exposed to relaxation training, a difficult intelligence test, and a film that showed an accident with persons being injured. The time between the two administrations of the test was one hour which resulted in a range from .73 to .86. The T-Anxiety scale was found to correlate highly with the Institute for Personality and Ability Testing (IPAT) Anxiety Scale and the Taylor Manifest Anxiety Scale (TMAS) ranging from .73 to .85 suggesting that the scale has high concurrent and face validity (Spielberger, 1983).

State-Trait Anger Expression Inventory (STAXI)

Spielberg (1988) conceptualized anger as having two primary categories, i.e., state

and trait anger. The definition of state anger is "an emotional state marked by subjective feelings that vary in intensity from mild annoyance or irritation to intense fury and rage." (p. 1) The definition of trait anger is "the disposition to perceive a wide range of situations as annoying or frustrating, and the tendency to respond to such situations with more frequent elevations in state anger." (p. 1) In the present study only the trait anger scores were used.

The STAXI (Spielberg, 1988) is comprised of 44 items which are scored on six scales and two subscales. Trait Anger is a 10 item scale which consists of two subscales, i.e., Angry Temperament (T-Anger/T) and Angry Reaction (T-Anger/R). T-Anger/T is a 4 item subscale which "measures individual differences in the disposition to experience or express anger without provocation". (p. 1) T-Anger/R is a 4 item subscale which "measures individual differences in disposition to experience anger when criticized or treated unfairly by other individuals." (p. 1)

This test may be administered individually or in small groups by persons with no professional training. There is no time limit, however, adults and children can generally complete it in 10 to 12 minutes. Scores range from 0 to 72 and tests may be machine scored (Form G) or hand scored (Form HS). Strong concurrent validity was found across samples of males and females with the Buss-Durkee Hostility Inventory (males .71, females .66) and the MMPI Hostility (males .59, females .43) and Overt Hostility scales (males .32, females .27). Trait anger scale alpha coefficients were found to be .87 for both male and female (Spielberger, 1983).

Beck Depression Inventory (BDI)

The Beck Depression Inventory (BDI) was developed as a psychometric instrument used to assess the intensity of depression based on three intercorrelated dimensions: negative attitudes, performance impairment, and somatic disturbances (Beck et al., 1961). The 21 item self-report BDI (Beck, 1978) has a reported original split-half

reliability of .93. The internal consistency reliability for a group of 163 methadone maintenance participants resulted in a reliability of .85 (Reynolds and Gold, 1981). The mean internal reliability yielded a coefficient alpha of .87 and the test-retest reliability was reported to be greater than .60 (Beck, Steer & Garbin, 1988).

Beck (1970) reported that the BDI was found to correlate highly with psychiatric ratings of depressed patients, .65 and .67. Strong concurrent validity was additionally established when the BDI was compared to the Depressive Adjective Checklist (DACL) .66 and the Minnesota Multiphasic Personality Inventory (MMPI) .75.

The revised version of the Beck was completed in 1978 and is clearer, more amenable to self-administration, easier to understand, and it allows for simpler scoring (Beck, Rush, Shaw, & Emery, 1979). The revised version did away with the alternate manner with which the same questions were asked, in addition to eliminating the use of double negatives (Beck & Steer, 1984). A necessary reading level of the fifth-grade was calculated by Teri (1982).

The 21 items each consist of four statements which are ranked from 0 to 3 with regard to severity of the symptom. The total points across these items are added for a total depression score. The following are symptoms that are measured by the BDI: mood, pessimism, sense of failure, dissatisfaction, guilt, sense of punishment, self-dislike, self-accusations, suicidal ideation, crying, irritability, social withdrawal, indecisiveness, body image distortion, work inhibition, insomnia, fatigability, anorexia, weight loss, somatic preoccupation, and loss of libido (Beck et al., 1961).

Lifestyle Criminality Screening Form (LCSEF)

The Lifestyle Criminality Screening Form (Walters, White, & Denney, in press) is completed without input from the offender. It is dependent on the pre-sentence report which is typically the source of information for this form. It is composed of a 14 item scale which assesses four behavioral domains of lifestyle criminality (irresponsibility,

self-indulgence, interpersonal intrusiveness, and social rule breaking). Total scores range from 0 to 22 with higher scores being associated with lifestyle criminality patterns: (a) 10 and above (clearly lifestyle criminal), (b) 7 to 9 (probable lifestyle criminal), and (c) 6 and under (not involved in lifestyle criminality).

Walters, White, and Denney (in press) reported correlations of .82 with initial cross validation studies using the LCSF on 25 maximum security federal prisoners (with a high percentage of lifestyle criminals as assumed by security level) and 25 minimum security federal prison camp (with a low percentage of lifestyle criminals as assumed by security level). An alpha coefficient of .84 was reported for evidence of internal reliability and inter-rater reliability ranged from .93 (Walters, Revella, & Baltrusaitis, 1990) to .96 (Walters, White, & Denney, in press).

Procedures

Inmates who are categorized as having a drug abuse problem, or drug related crime, are BOP mandated to attend a 40 hour psychoeducational group "Drug Abuse Education". The group meets twice weekly for twelve weeks at the end of which the inmates will be given a standardized multiple choice test. The criterion referenced exam necessitates that they demonstrate a 70% mastery of the material which was presented in their group. If the participants pass this exam they will be eligible to receive a higher rate of pay for the job they are assigned while at the institution. Should participants score at a level of 69% or below they will have two more opportunities to pass the exam. Those who do not pass any of the three exams will be required to take the group over until which time they receive a minimum of a 70% mastery level. Inmates who refuse to participate in the group will remain at a lower pay grade at their work assignment and may be precluded from community involvement (e.g., half-way house placement or furlough).

After inmates have successfully completed the 40 hour "Drug Abuse Education" group

they will have the option to join a 500 hour drug abuse program, attend alcoholics anonymous, or request individual counseling. The drug abuse unit is a separate living unit from the rest of the general inmate population. Inmates in this unit, however, continue to participate in education classes, recreation, meals, and work assignments with the general population. The main difference for inmates in the 500 hour drug treatment program is that they attend weekly groups on various subjects (e.g., cognitive restructuring, wellness, or criminal personality).

Subjects who participated in the study were those who voluntarily signed an informed consent form prior to their participation (Appendix A). Confidentiality was maintained with regard to all instruments. Participants in the Drug Abuse Education group were assigned a code number by the researcher. This assigned number was placed on the instruments that the participants filled out. The master list with the coded numbers, and the inventories, was kept in a locked file cabinet in the Drug Treatment Coordinator's office or researcher's private office. The master list was destroyed after the Life Style Criminality Form was completed and placed with the inmates' other completed inventories. The Life Style Criminality Form was filled out by the researcher based upon a review of the inmate's central file and prior to a review of an inmate's ratings on the other instruments. At the last session of the 40 hour Drug Abuse Education group the group facilitator or researcher gave participants a packet with a Beck Depression Inventory (Appendix C), a State Trait Anger Form (Appendix D), a State Trait Anxiety Form (Appendix D), and a demographic questionnaire (Appendix F). The questionnaire additionally asked whether a participant is interested in seeking drug/alcohol treatment, what type of treatment he would like to receive, and his reasons for seeking treatment. The instruments were counterbalanced to control for any sequence effects. After receiving the packet the subject was asked to read the directions

and answer the items as honestly as possible. Participants were allowed as much time as necessary to complete the inventories, although no one took longer than one hour to finish. Once completed the coded inventories were collected (by researcher or Drug Treatment Specialist) and secured with the corresponding master list in a locked filing cabinet in the Drug Treatment Coordinator's office or researcher's private office. The Drug Treatment Coordinator, Drug Treatment Specialist, and the researcher (Robert Johnson) are the ones who handled the completed inventories and master list.

Null Hypotheses

HO1: There is no relationship between trait anxiety, as measured by the State-Trait Anxiety Expression Inventory, and an interest in drug abuse treatment.

HO2: There will be no relationship between trait anger, as measured by the State-Trait Anger Expression Inventory, and an interest in drug abuse treatment.

HO3: There will be no relationship between level of depression, as measured by the Beck Depression Inventory, and an interest in drug abuse treatment.

HO4: There will be no relationship between lifestyle criminality, as measured by the Lifestyle Criminality Screening Form, and an interest in drug abuse treatment.

HO5: There will be no relationship among the measures of trait anxiety, trait anger, level of depression, and lifestyle criminality with an interest in drug abuse treatment.

Research Design and Analysis

This was a predictive study to determine whether trait anxiety, trait anger, depression, or criminality will predict an individual's interest in drug abuse treatment (as evidenced by their indication on the demographic questionnaire) following the completion of the 40 hour drug education group. The null hypotheses 1, 2, 3, and 4 were tested by a point bi-serial correlation. Null hypothesis 5 was tested by a logistic regression analysis. The Type I error rate was set at .05.

CHAPTER IV
RESULTS OF THE STUDY
INTRODUCTION

Results of the statistical analyses used to test the null hypotheses will be presented. The purpose of this study is to investigate the relationship between the independent variables, i.e., depression, trait anxiety, trait anger, and lifestyle criminality; and the dependent variables, i.e., interest in treatment and no interest in treatment.

Data analyses were conducted, and tested at the .05 level of significance, in order to answer the following research questions:

1. Is there a significant relationship between trait anxiety and interest in, or no interest in, drug abuse treatment?
2. Is there a significant relationship between trait anger and interest in, or no interest in, drug abuse treatment?
3. Is there a significant relationship between depression and interest in, or no interest in, drug abuse treatment?
4. Is there a significant relationship between lifestyle criminality and interest in, or no interest in, drug abuse treatment?
5. Is there a significant relationship between measures of trait anxiety, trait anger, depression, lifestyle criminality and interest in, or no interest in, drug abuse treatment?

The following null hypotheses were formulated from the aforementioned research questions:

HO1: There is no relationship between trait anxiety, as measured by the State-Trait

Anxiety Expression Inventory, and an interest in drug abuse treatment.

HO2: There is no relationship between trait anger, as measured by the State-Trait Anger Expression Inventory, and an interest in drug abuse treatment.

HO3: There is no relationship between level of depression, as measured by the Beck Depression Inventory, and an interest in drug abuse treatment.

HO4: There is no relationship between lifestyle criminality, as measured by the Lifestyle Criminality Screening Form, and an interest in drug abuse treatment.

HO5: There is no relationship between the measures of trait anxiety, trait anger, depression, lifestyle criminality, and an interest in drug abuse treatment.

Point biserial correlation coefficients were computed for HO:1 through HO:4 in order to test the null hypotheses. Logistic regression analysis was selected as the statistical procedure for HO:5 because it is a dichotomous variable, i.e., interest in drug abuse treatment and no interest in drug abuse treatment.

Research Findings

The number of cases for this study were 74. Thirty one subjects were not interested in drug abuse treatment while 43 were interested in drug abuse treatment. Descriptive statistics for the variables in the regression analysis are listed as follows in Table 4.

The mean score on the BDI for those subjects interested in treatment was 11.98 as opposed to 7.68 for those not interested in treatment. Depression scores from 0 to 9 are considered to be asymptomatic, or within normal limits, while scores from 10-18 are considered to represent mild depressive symptoms (Beck & Steer, 1987).

The mean trait anxiety score for subjects interested in drug abuse treatment was 40.51; for subjects not interested in drug abuse treatment it was 35.94. For purposes of comparison, the trait anxiety mean for working male adults is 35.72; for male military recruits the mean is 44.05 (Spielberg, 1983).

Trait anger mean scores for subjects interested in drug abuse treatment was 18.35

and it was 17.03 for subjects not interested in drug abuse treatment. For purposes of comparison, the trait anger means for adult male prison inmates are 21.66; for male military recruits the mean is 19.80; and for male general medical and surgical patients the mean is 18.21 (Spielberg, 1991).

The mean score on the LCSF for those subjects interested in treatment was 10.67 (clearly lifestyle criminal) and the mean for those not interested in treatment was 9.19 (probable lifestyle criminal). Those individuals who score 10 and above on the Lifestyle Criminality Screening Form are clearly devoted to a lifestyle of criminality while scores from 7 to 9 suggest a "probable" lifestyle of criminality (Walters, 1990).

Table 4

Group Means and Pooled SD'S for Scores on BDI (Depression), STAI (Trait Anxiety), STAXI (Trait Anger), and LCSF (Criminality)

Variable	Treatment	No Treatment	Pooled Standard Dev.
(BDI) Depression	11.98	7.68	6.56
(STAI) Trait-Anxiety	40.51	35.94	10.55
(STAXI) Trait-Anger	18.35	17.03	5.60
(LCSF) Criminality	10.67	9.19	4.05

In order to assess the relationships among the independent variables, Pearson Correlations were computed. Results of these analyses are presented in Table 5. As can be seen from Table 5, significant relationships were found between trait anxiety and depression; trait anger and depression; trait anger and trait anxiety; and criminality and trait anxiety.

Table 5

Pearson Correlations Among the Independent Variables

<u>Variable</u>	<u>Depression</u>	<u>Trait Anxiety</u>	<u>Trait Anger</u>
Trait Anxiety	0.572*		
Trait Anger	0.414*	0.599*	
Criminality	0.123	0.286*	0.105

* Significant at the .01 level

Tests of Research Questions

Research questions and subsequent null hypotheses will be discussed in this section. As previously stated, point biserial correlations were used to test null hypotheses 1-4 with alpha level set at .05. Logit regression analysis was used to test null hypothesis 5.

Research Question One

Is there a significant relationship between trait anxiety and interest in, or no interest in, drug abuse treatment?

Null hypothesis one addresses this question, i.e. there is no relationship between trait anxiety, as measured by the State-Trait Anxiety Expression Inventory, and an interest in drug abuse treatment. A significant relationship between trait anxiety and an interest in drug abuse treatment was found ($r_{pbi} = .215, p < .05$); therefore, the null hypothesis was rejected.

Research Question Two

Is there a significant relationship between trait anger and interest in, or no interest in, drug abuse treatment?

Null hypothesis two addresses this question, i.e., there is no relationship between trait anger, as measured by the State-Trait Anger Expression Inventory, and an interest in drug abuse treatment. No significant relationship between trait anger and an interest in drug abuse treatment was found ($r_{pbi} = .117, p > .05$), therefore; the null hypothesis was retained.

Research Question Three

Is there a significant relationship between depression and interest in, or no interest in, drug abuse treatment?

Null hypothesis three addresses this question, i.e., there is no relationship between level of depression, as measured by the Beck Depression Inventory, and an interest in drug abuse treatment? A significant relationship between depression and an interest in drug abuse treatment found ($r_{pbi} = .325, p < .01$); therefore, the null hypothesis was rejected.

Research Question Four

Is there a significant relationship between lifestyle criminality and an interest in, or no interest in, drug abuse treatment?

Null hypothesis four addresses this question, i.e., there is no relationship between lifestyle criminality, as measured by the Lifestyle Criminality Screening Form, and an interest in drug abuse treatment. No significant relationship between criminality and an interest in drug abuse treatment was found ($r_{pbi} = .182, p > .05$); therefore, the null hypothesis was retained.

Research Question Five

Is there a significant relationship between measures of trait anxiety, trait anger, depression, lifestyle criminality and interest in, or no interest in, drug abuse treatment?

Null hypothesis five addresses this question, i.e., there will be no relationship between the measures of trait anxiety, trait anger, depression, lifestyle criminality and an interest in drug abuse treatment. Results of the logistic regression analysis are presented in Table 6. From Table 6 it can be seen that the logistic regression model as a whole is statistically significant ($\chi^2 = 10.25$, $p = .0364$). Further, it appears that it was the independent variable depression that was primarily responsible for making the overall model significant. There was some multicollinearity found between depression and trait anxiety (33% shared variance), depression and trait anger (17% shared variance), and trait anger and trait anxiety (36% shared variance), which may have accounted for this finding.

As previously reported, the independent variable anger correlates positively with the decision to enter into treatment $\beta = 0.117$. However, when taken in concert with the other independent variables it relates negatively to treatment. This would suggest that regardless of its positive relationship, when factored into the model as a multiple correlation, trait anger acts to suppress a portion of the variance not correlated with the dependent variables. Trait anger, therefore, appears to be acting as a net suppressor variable (Cohen, 1975).

Table 6

Logistic Regression Coefficients

<u>Variable</u>	<u>Coefficient</u>	<u>Std. Error</u>	<u>T-Ratio</u>	<u>Probability</u>
Constant	-1.46785	1.15977	-1.26564	
Depression	0.11537	0.05305	2.17483	0.02966
Anxiety	0.00743	0.03504	0.21205	0.83206
Anger	-0.02177	0.05821	-0.37394	0.70846
Criminality	0.07839	0.06702	1.16965	0.24212

Table 6 continued

Chi-square statistic for significance of equation = 10.24873

Degrees of freedom for chi-square statistic = 4

Significance level for chi-square statistic = 0.0364

Table 7 is a classification table which gives a frequency distribution for the observed value of the dependent variable (no treatment = 0, treatment = 1), contrasted with the predicted value of the independent variables. If the dependent variable (decision to volunteer or not volunteer for drug abuse treatment) is well explained by the independent variables (depression, trait anxiety, trait anger, and lifestyle criminality) one would expect: (a) the frequencies in the first row of the table (observed value of 0 = no treatment) to be clustered below .49; and (b) the frequencies in the last row of the table (observed value of 1 = treatment) to be clustered above .49 (Walonick, 1991). Specifically, subjects whose predicted scores were .49 or less would be categorized by the regression equation as not entering into treatment. Conversely, subjects whose predicted scores were above .49 would be categorized by the regression equation as selecting drug abuse treatment.

Table 7

Classification of Predicted Values (in intervals of 0.1) by Observed Value (0 or 1)

Observed	Predicted									
	0-.09	.1-.19	.2-.29	.3-.39	.4-.49	.5-.59	.6-.69	.7-.79	.8-.89	.9-1.0
0	0	0	3	4	12	2	5	5	0	0
1	0	0	1	2	7	9	7	8	7	2

As shown in Table 7, 19 of 31 subjects who did not express an interest in treatment

were predicted not to express interest, while 12 of the 31 subjects who did not express interest treatment were incorrectly predicted to have expressed interest in treatment. The last row demonstrates that 33 of 43 subjects who expressed interest in treatment were predicted to do so as opposed to 10 who were incorrectly predicted not to have expressed interest in treatment. Moreover, the regression equation accurately predicted 76.7% of those who expressed interest in treatment and 61.3% of those who did not express interest in treatment. This yielded an overall hit rate of 70.3%.

Additional Analyses

A component of the demographic questionnaire was designed to ask qualitative information from subjects. This included questions to help ascertain the extent that drug abuse impacted their lives, as well as, what they hoped to gain from treatment. Table 8 contains a list of major life areas that both groups of subjects have endorsed as problematic, or not problematic, for themselves. Table 9 contains a summary of the subjects' rationale for expressing interest in drug abuse treatment. The given rationales are recorded as important, unsure, or unimportant.

Table 8

Frequency & Percentage of Major Life Areas Affected by Drug or Alcohol Use for Subjects Interested in Entering Treatment or Not Entering Treatment

Variable	Interest		No Interest	
	Freq	%	Freq	%
Work				
No	13	30.2	17	54.8
Yes	30	69.8	14	45.2
School				
No	25	58.1	23	74.2
Yes	18	41.9	8	25.1
Health				
No	18	41.9	20	64.5
Yes	25	58.1	11	35.5
Family				
No	9	20.9	19	61.3
Yes	34	79.1	12	38.7
Financial				
No	16	37.2	16	51.6
Yes	27	62.8	15	48.4
Legal				
No	14	32.6	17	54.8
Yes	29	67.4	14	45.2

Table 9

Subjects' Rationale for Entering Drug Abuse Treatment Based on Perceived Importance

<u>Variable</u>	<u>Important</u>	<u>Unsure</u>	<u>Unimportant</u>
Increased Eligibility for Parole	24	1	18
Better Living Conditions	25	3	15
Modify Drug Usage	36	2	5
Stop Drug Usage	40	1	2
Increased Pay Potential	16	4	23
Better Personal Health	43	0	0
Better Family Relationships	42	0	1
Better Friend Relationships	40	2	1

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Summary

This study was designed to investigate the relationship between depression, trait anxiety, trait anger, and lifestyle criminality with the subject's interest in, or no interest in, drug abuse treatment. The two primary purposes of the study were to (a) investigate the individual relationships of depression, trait anxiety, trait anger, and lifestyle criminality with the subject's interest in treatment or no interest in drug abuse treatment; and (b) to investigate the relationship of depression, trait anxiety, trait anger, and lifestyle criminality, in concert, with the subject's interest in treatment or no interest in drug abuse treatment. Additional purposes of this study were to (a) investigate the rationale for subject's interest in treatment; and (b) to investigate the perceived degree of problems in major life areas that subjects attributed to their drug or alcohol use.

The subjects in this study were 74 adult male felons incarcerated at a federal correctional institution in the south central region of the BOP. Each subject had been identified by their caseworker, who routinely screens the pre-sentence investigations, for the following criteria: (a) the inmate was under the influence of drugs at the time of their crime; (b) probation or parole was revoked because of a drug or alcohol charge; or (c) there is a recommendation by the court, to the BOP, for drug or alcohol programming. Once identified, these inmates were mandated to complete a 40 hour drug abuse education group; at the end of which they were asked to participate in this study. All data were collected from January to May 1993. There were 43 subjects, mean age 34.14, who expressed an interest in treatment, and 31 subjects, mean age 36.26, who

did not express an interest in treatment. The test data consisted of subjects' scores on the BDI, STAXI, STAI, and LCSF. Participants also completed a demographic questionnaire. Subjects were classified into two groups: (a) subjects who expressed interest in drug abuse treatment; and (b) subjects who did not express interest in drug abuse treatment.

The following five null hypotheses were formulated and tested at the .05 level of significance. Point biserial correlations were used to test null hypotheses 1 through 4. A logistic regression analysis was used to test null hypothesis 5. Additional analysis of qualitative data, from the demographic questionnaire, are given: (a) rationale for choosing treatment; and (b) major life areas effected by drug/alcohol use. The following is a summary of the five null hypotheses and the results of the statistical analyses.

Null Hypothesis 1. There is no relationship between trait anxiety, as measured by the State-Trait Anxiety Inventory, and an interest in drug abuse treatment.

A significant relationship between trait anxiety and an interest in drug abuse treatment was found, therefore, the null hypothesis was rejected.

Null Hypothesis 2. There is no relationship between trait anger, as measured by the State-Trait Anger Expression Inventory, and an interest in drug abuse treatment.

No significant relationship between anger and an interest in drug abuse treatment was found, therefore, the null hypothesis was retained.

Null Hypothesis 3. There is no relationship between level of depression, as measured by the Beck Depression Inventory, and an interest in drug abuse treatment.

A significant relationship between depression and an interest in drug abuse treatment was found, therefore, the null hypothesis was rejected.

Null Hypothesis 4. There is no relationship between lifestyle criminality, as measured by the Lifestyle Criminality Screening Form, and an interest in drug abuse

treatment.

No significant relationship between criminality and an interest in drug abuse treatment was found, therefore, the null hypothesis was retained.

Null Hypothesis 5. There is no relationship between measures of trait anxiety, trait anger, depression, and lifestyle criminality, and an interest in drug abuse treatment.

A significant relationship between measures of trait anxiety, trait anger, depression, lifestyle criminality, and an interest in drug abuse treatment was found, therefore, the null hypothesis was rejected.

In addition to the aforementioned hypotheses, questions on the demographic questionnaire revealed that individuals interested in drug abuse treatment reported that they experienced greater difficulty than did subjects who opted not to have treatment in the following major life areas as a consequence of their drug/alcohol use: (a) Work performance was negatively affected by drug/alcohol use; seventy percent of those interested in treatment as opposed to 25% of those not interested in treatment endorsed this item. (b) School performance was negatively affected by drug/alcohol use; forty two percent of those interested in treatment as opposed to 25% of those not interested in treatment endorsed this item. (c) Personal health was negatively affected by drug/alcohol use; fifty eight percent of those interested in treatment as opposed to 36% of those not interested in treatment endorsed this item. (d) Family relationships were negatively impacted by their drug/alcohol use; seventy nine percent of those interested in treatment as opposed to 39% of those not interested in treatment endorsed this item. (e) Financial problems resulting from drug/alcohol use were more prevalent in those who were interested in treatment than those not interested; sixty three percent of those interested in treatment as opposed to 48% of those not interested in treatment endorsed this item. (f) Legal problems experienced associated with drug/alcohol problems were also more prevalent in those who were interested in treatment than those not interested;

sixty seven percent of those interested in treatment as opposed to 45% of those not interested in treatment endorsed this item.

Conclusions and Discussion

The conclusions derived from the data reported in Chapter 4 were done so within the confines of the following limitations:

1. Inmates who are interested in drug treatment may have motives other than learning to cope with their addiction, or gaining insights into their behavior and thinking.
2. Some inmates in psychogenic pain may not be interested in treatment, following the mandatory 40 hour "Drug Abuse Education" group, because they believe they may be perceived as "weak" by other inmates.
3. Data were collected from prisoners in one medium security prison and may not be representative of all prisoners.
4. Only male prisoners were used in the study.
5. All data were self report data.

It would appear that limitations one and two were, in actuality, of nominal consequence. In response to limitation one, fifty six percent of subjects interested in treatment indicated that increased eligibility for parole was important; ninety three percent of those subjects, however, indicated that they wanted to stop their drug use suggesting that eligibility for parole did not supersede the subject's desire to stop using drugs. Subjects indicated the following reasons as being important to their expressed interest in treatment: (a) increased eligibility for parole (56%), (b) better living conditions (58%), (c) modify drug use (84%), (d) stop drug use (93%), (e) increased pay potential (37%), (f) better health (100%), (g) better family relations (98%), and (h) better friend relations (93%). This data suggests that subjects were desirous of improving their lives psychosocially and physiologically without the use of

illicit drugs and alcohol. In response to limitation two, depression and trait anxiety were found to be statistically significant for subjects interested in treatment. This would suggest that they were in fact experiencing more psychogenic pain than those subjects not interested in treatment. It was further anticipated that, given the power orientation of the criminal mind set as noted by Walters (1989), subjects scoring high on the LCSF would be less likely to seek treatment so as not to be perceived as "weak" by other inmates. The mean on the LCSF for subjects interested in treatment, however, was 10.67 (clearly devoted to a lifestyle of criminality) as opposed to a mean of 9.19 (probable lifestyle of criminality) for subjects not interested in treatment.

Implications

When looked at individually, trait anxiety and depression are key indicators for determining whether or not an inmate with a drug or alcohol problem will be interested in drug abuse treatment. When looked at in concert with all of the independent variables only depression was found to be significant. This finding demonstrated that these subjects may be experiencing a degree of psychogenic pain not found in those who did not have an expressed interest in treatment. The results derived from the demographic questionnaire offered insights into why an inmate was interested in treatment. When comparing inmates who were interested in treatment with those who were not interested in treatment, it was found that higher percentages of problems were endorsed in every major life area by those who were interested in treatment, i.e., work, school, health, family, financial, and legal. Rationales for interest in treatment unequivocally revolve around wanting to stop drug/alcohol use, be physically healthier, and wanting to improve relationships with family and friends; while increased eligibility for parole, better living conditions in prison, and increased pay potential were of nominal importance.

Prison drug abuse programs may consider the implementation of specific therapeutic

approaches found to be most effective in the treatment of depression. If the depression is associated with an unmet desire for a healthier lifestyle and improved interpersonal relationships, as suggested by the demographic questionnaire, then individual treatment planning specific to these needs should be considered.

The high degree of lifestyle criminality and a history of drug/alcohol use suggests a dual diagnosis of substance abuse and antisocial personality for many of the individuals involved in this study. Rounsaville, Dolinsky, Babor, and Meyer (1987) indicated that those most in need of treatment are most likely the least amenable to it. Hopefully, this study offers additional understanding of the type of inmate seeking treatment, i.e., affective make-up, degree of criminality, perceived degree of problems associated with drug/alcohol use, and their reasons for wanting to enter treatment; which will in turn aid in the continuing development of programming that will more efficiently help participants attain their goals.

Recommendations for Further Research

As a result of this study, it is recommended that further study be made with regard to the following:

1. Investigate the type of substance abuse in which a given individual is engaged to help ascertain if a particular affective variable is associated with that drug use, e.g., narcotic abusers demonstrating higher incidents of depression, or cocaine/amphetamine abusers demonstrating higher incidents of anxiety. Gossip et al. (1987) followed 50 opiate addicts for 6 months after treatment and found that the majority had resumed their drug use. Determining the origins of the depression and anxiety, (e.g., inability to attain one's goal as eluded to in inmates reported rationale for entering treatment, and the physiological and psychological addictive components of a given drug), may better assist mental health professionals in their efforts in treating this difficult population.
2. Investigate the rationale for why inmates did not express an interest in further

treatment; particularly those who indicated that they had been previously treated for emotional problems.

3. No effort was made to assess level of prison adjustment of those who entered treatment compared to those not entering treatment. Efficacy research comparing the level of prison adjustment prior to treatment and afterwards would be appropriate.

4. Data were collected from one medium security prison and may not be representative of all prisoners. Further study with maximum and minimum security prisoners would aid in getting a more representative sample.

5. Subjects were all male prisoners necessitating research utilizing a female inmate population.

6. A long term study evaluating efficacy, (based on recidivism, continued drug/alcohol abuse, depression scores, and trait anxiety ratings), would help in determining successful treatment programs and subsequently where federal dollars will best be allocated.

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APPENDICES

APPENDIX A
INFORMED CONSENT FORM

INFORMED CONSENT

I, _____, hereby authorize Robert Johnson, or associates to perform the following:

1. The administration of the Beck Depression Inventory.
2. The administration of the State-Trait Anger Expression Inventory.
3. The administration of the State-Trait Anxiety Expression Inventory.
4. The completion of the Lifestyle Criminality Screening Form by rating based on central file material.
5. The administration of the Demographic Questionnaire.

This study is titled: Lifestyle Criminality, Trait Anxiety, Trait Anger and Depression Ratings as Predictors of Inmates Interest in Drug Abuse Treatment. This information is being collected as part of a study on characteristics which predict participation in drug abuse programming in a correctional setting. I understand that my taking the time to fill out the aforementioned forms will, hopefully, provide information that can be used to develop better services for those involved in criminality and drug abuse. I understand that the researcher does not anticipate any risk or discomfort to result from filling out the forms, however, in the event that you do feel some discomfort, there are psychological services available for my consultation. I may receive these services by contacting the psychology department at FCI ElReno.

My participation is completely voluntary and I may refuse participation at any time without penalty or prejudice. All research information will be handled in the strictest confidence and my participation will not be individually identifiable in any reports. As an inmate my participation or non-participation in this research project will not affect my release date or parole eligibility.

I may contact Robert Johnson or Chief Psychologist through the FCI El Reno Psychology Department, or the O.S.U. Institutional Review Board Office at (405)744-9991, should I wish further information about the research.

I have read and fully understand the consent form and I sign it freely and voluntarily. A copy has been given to me.

Date: _____ Time _____

Signed _____
(Signature of Participant)

I certify that I have personally explained all elements of this form to the subject before requesting the subject to sign it.

Signed _____ Date _____

APPENDIX B
DEMOGRAPHIC QUESTIONNAIRE

DEMOGRAPHIC QUESTIONNAIRE

1. Age: _____
2. Race: Black ___ White ___ American Indian ___ Asian ___
Ethnic: Other ___ Hispanic ___
3. Have you ever received treatment for a nervous or mental condition? No ___ Yes ___
If yes, when _____
4. Are you taking or have you ever taken medication for a nervous or mental condition?
No ___ Yes ___ If yes, what medication _____
5. What is the last grade you completed in school? _____
6. Have you ever received vocational training? No ___ Yes ___ If yes, what area? _____

7. During the year prior to your present incarceration, were you employed?
No ___ Yes ___ If yes, what type of work _____
8. Do you have employment awaiting you upon your completion of this sentence?
No ___ Yes ___ .
9. What is your current marital status? _____
10. Do you have any children? No ___ Yes ___ If yes, how many and what are their
ages _____
11. Will you be staying with friends or family upon your release from prison?
No ___ Yes ___ . If yes, which _____

12. Please indicate what, if any, major life areas were effected by your drug or alcohol use prior to being incarcerated:

Work	Yes ___ No ___	Family or other Rel.	Yes ___ No ___
School	Yes ___ No ___	Financial	Yes ___ No ___
Health	Yes ___ No ___	Legal Status	Yes ___ No ___

13. Are you interested in seeking treatment for your drug or alcohol problem?

No ___ Yes _____. If yes, what type of assistance would you like: Individual therapy ____
500 hour Comprehensive Drug Treatment Program ____
Alcoholics Anonymous Group ____

14. If you answered yes to question #13 what do you hope to gain by seeking treatment for your drug or alcohol problem? (For the following, please circle the degree of importance that is applicable to your situation.):

a. To increase my eligibility for early parole.

Extremely Important	Important	Unsure	Unimportant	Extremely Unimportant
1	2	3	4	5

b. To have better living accomodations while incarcerated.

Extremely Important	Important	Unsure	Unimportant	Extremely Unimportant
1	2	3	4	5

c. To modify my drug or alcohol consumption.

Extremely Important	Important	Unsure	Unimportant	Extremely Unimportant
1	2	3	4	5

d. To stop my drug or alcohol consumption.

Extremely Important	Important	Unsure	Unimportant	Extremely Unimportant
1	2	3	4	5

e. To be eligible for increased pay benefits while incarcerated.

Extremely Important	Important	Unsure	Unimportant	Extremely Unimportant
1	2	3	4	5

f. To have a physically healthier lifestyle.

Extremely Important	Important	Unsure	Unimportant	Extremely Unimportant
1	2	3	4	5

g. To have better relationships with family members.

Extremely Important	Important	Unsure	Unimportant	Extremely Unimportant
1	2	3	4	5

h. To have better relationships with friends.

Extremely Important	Important	Unsure	Unimportant	Extremely Unimportant
1	2	3	4	5

VITA

Robert E. H. Johnson

Candidate for the Degree of

Doctor of Philosophy

Thesis: LIFESTYLE CRIMINALITY, TRAIT ANXIETY, TRAIT ANGER, AND DEPRESSION RATINGS AS PREDICTORS OF INMATES INTEREST IN SEEKING DRUG ABUSE TREATMENT

Major Field: Applied Behavioral Studies

Biographical:

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Professional Experience: Senior Counselor, Shadow Mountain Institute, Tulsa, Oklahoma, January, 1981-February, 1983; Student Therapist, Student Mental Health Clinic, Stillwater, Oklahoma, January, 1986-May, 1986; Marriage and Family Therapist, University Marriage and Family Clinic, August, 1985-May, 1986 and 1990/1991 Summer Semesters; Student Therapist, Edwin Fair Community Mental Health, Stillwater, Oklahoma, July, 1989-August, 1990; Program Director, Oklahoma Lions Boys Ranch, Perkins, Oklahoma, November, 1983-February, 1984; Executive Director, Oklahoma Lions Boys Ranch, Perkins, Oklahoma, March, 1984-January, 1991; Student Therapist, Federal Bureau of Prisons, El Reno, Oklahoma, October, 1990-August, 1991; Teacher (Educational Psychology and Measurement/Evaluation) to Oklahoma State University Undergraduate

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INSTITUTIONAL REVIEW BOARD
FOR HUMAN SUBJECTS RESEARCH**

Proposal Title: LIFESTYLE CRIMINALITY, TRAIT ANXIETY, TRAIT ANGER, AND

DEPRESSION RATINGS AS PREDICTORS OF INMATES CHOICE OF ENTRY OR NON-ENTRY INTO
DRUG ABUSE TREATMENT

Principal Investigator: D. Boswell/ R. Johnson

Date: 7-22-92 IRB # ED-93-008

This application has been reviewed by the IRB and

Processed as: Exempt [] Expedite [] Full Board Review [x]

Renewal or Continuation []

Approval Status Recommended by Reviewer(s):

Approved [x]

Deferred for Revision []

Approved with Provision []

Disapproved []

Approval status subject to review by full Institutional Review Board at
next meeting, 2nd and 4th Thursday of each month.

Comments, Modifications/Conditions for Approval or Reason for Deferral or
Disapproval:

See minor corrections on attached consent form.

Signature: _____

Marcia S. Tilley
Chair of Institutional Review Board

Date: _____

11/18/92