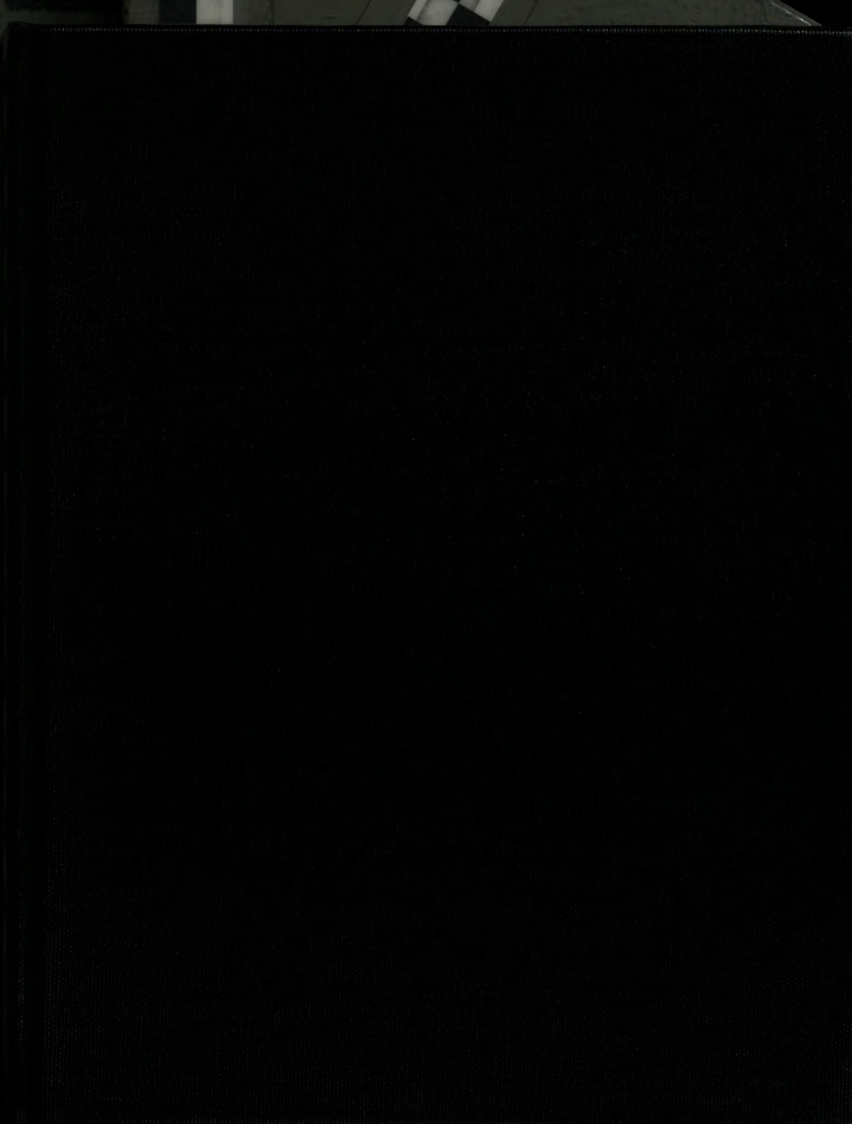




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THE PSYCOSOCIAL DEVELOPMENT OF PREFERENTIAL
ABUSERS OF HEROIN OR COCAINE
BASED ON ERIKSON'S DEVELOPMENTAL THEORY

presented by

SHAUN LaBLANCE

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Counseling Psychology

William V. Ferguson
Major professor

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THE PSYCHOSOCIAL DEVELOPMENT OF PREFERENTIAL
ABUSERS OF HEROIN OR COCAINE BASED
ON ERIKSON'S DEVELOPMENTAL THEORY

By

Shaun LaBlance

A DISSERTATION

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THE PSYCHOSOCIAL DEVELOPMENT OF PREFERENTIAL
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The study was designed to examine the psychosocial developmental differences which underlie the abuse of heroin or cocaine.

Erik Erikson's theory of psychosocial development provided the bases for the research. Erikson's theoretical assumptions were transposed into hypotheses regarding the developmental characteristics of male heroin abusers and male cocaine abusers. Heroin abusers were hypothesized to have developmental impairments associated with Erikson's first stage--Trust vs. Mistrust. Cocaine abusers were hypothesized as having unresolved developmental issues related to Erikson's second stage--Autonomy vs. Shame and Doubt. An overall hypothesis that cocaine abusers would achieve a higher mean level of development than heroin abusers was considered.

Subjects were administered a 13-item demographic questionnaire and the Assessment of Adult Adjustment Patterns (AAAP). The AAAP is an objective, self-report instrument that operationalizes Erikson's theory of psychosocial development.

A total of 76 males were recruited as research subjects, 38 were heroin abusers and 38 were cocaine abusers. The subjects were classified by their stated preference for either of the drugs and by how they met the DSM III criteria for substance abuse.

The data analysis indicated that (1) heroin abusers had developmental issues related to unsuccessful resolution of Erikson's first stage; (b) cocaine abusers had core developmental issues arising out of their lack of resolution of Erikson's second stage. However, analysis indicated that they had not resolved stage 1; and (c) the main finding was that the AAAP was unable to discriminate between heroin abusers and cocaine abusers.

An alternative explanation for the results could support a modification of Erikson's model to a "life-spiral" model. A person labors with a stage and there is a repeat, albeit in somewhat different terms of the issues of all previous stages. The AAAP was not a sophisticated enough measure to detect the differences between the initial working through of developmental tasks and the subsequent reworking.

Another alternative explanation for the results could be that the cocaine abusing sample was representative of a "low" functioning group of cocaine abusers instead of a representative sampling of cocaine abusers in general.

To those who mean the most--Mary and Pat

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Dr. Gary Stollak--Thank you for making learning an enjoyable and meaningful experience.

Dr. Gary DeRath--Gil, I cannot adequately describe my appreciation for all that you have done for me, and what you mean to me.

To Community Mental Health for the subjects and to all who shared in the struggle.

Anyone who has completed a major project like this understands that the greatest toll is extracted from those closest to the author--his family. The stress, anxiety, and immense soul searching created tensions and weariness that we all shared. This has unified, strengthened, and educated all of us. We are far, far better for this experience, and I love you dearly--Mary and Pat.

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CHAPTER I

THE PROBLEM

Although the use of drugs or substances to alter consciousness is a widespread, and in some cases an ancient, cultural practice, it has been only in relatively recent times that psychological theories and theorists have expanded their viewpoint to consider an examination of the individual using the drug, rather than the drug itself. Even with this adjustment, McKenna and Khantzian (1980) noted that

the tendency to view all drug dependent individuals as deviants has detracted from a more careful assessment of their psychological vulnerabilities and the part that drugs play in the personality organization of these individuals and their attempt to adapt to their environment.

Historically, Brill (1980) indicated that

much of the thinking about drug addicts . . . emanated from the psychoanalytic framework. In psychoanalytic thinking, drug addiction has been linked at various times with "impulse neuroses," "perversion," "compulsive neuroses," "character disorder," and at times with the manic-depressive cycle. Drug addicts were viewed uniformly as persons with oral-narcissistic fixations emanating from a very early point of their psychosexual development.

Researchers have tended to describe all drug addicts as if they have had exactly the same kind of family

constellations and the same uniform traits--such as self-defeating impulses, oral fixations, narcissism, a weak ego, poor frustration tolerance, an intolerance to pain, and a rigid archaic superego. The fathers of drug addicts were typically seen as dejected and inconsequential persons, and the mothers were described as seductive and devouring.

However, just more than a decade ago, researchers began to recognize that the drug abuse literature did not adequately account for the specificity of drug abuse. Some researchers acknowledged that with the increased proliferation of many potent pharmacological agents, with such distinct pharmacological and psychological effects from one another, that it was important to focus investigations upon the personality dynamics which underlie the preferential use of a specific drug. Milkman (1974) noted

that the origins of specific drug abuse may be in the nature of the drug induced altered ego states. These may capture a series of similar experiences, the origins of which appear to exist in specific phases of child development. A particular drug may thus facilitate a specific regressive solution to conflict and may, therefore, be preferred.

Spotts and Shontz (1982), in one of the few investigations on the developmental antecedents of drug abusers, reached similar conclusions. They noted that

once a person elects to use drugs, his ultimate choice of substances is systematically related to the core problem that he is attempting to resolve;

drugs temporarily produce something akin to a desired ego state, but without the pain, struggle, and assumption of personal responsibility that genuine individuation requires; the critical matter is not which drug a person takes but the level at which his core developmental problems occurred and the developmental status the person achieved in spite of them.

What has not been accomplished, and what Spotts and Shontz (1982) allude to, is a research investigation on drug abusers using the theory of Erik Erikson (1963).

Need for the Study

The need for this study is primarily derived from the fact that the drug abuse literature provides mainly theoretical discussions of the psychosocial development of drug abusers. There has been a paucity of research on the psychosocial development of heroin abusers and cocaine abusers. Erik Erikson's (1963) theory of psychosocial development offers an innovative format for understanding the developmental experiences of heroin abusers and cocaine abusers. Until recently, however, there has not been a standardized means to assess the psychosocial development of individuals that could demonstrate the requisite reliability and validity for all eight stages of Erikson's psychosocial developmental model. The Assessment of Adult Adjustment Patterns (AAAP) has shown promise in providing a dependable and accurate measure of Erikson's theory of development (Farquhar, Wilson, & Azar, 1982). This study attempts

to make a unique contribution to the drug abuse field, since there has not been a published study of the developmental impairments of heroin abusers and cocaine abusers using the Eriksonian developmental model.

The recent widespread use and abuse of cocaine and heroin has reached epidemic proportions. Frank and Lipton (1984) and Serban (1984) have gone to great lengths to express their concern about the increasing number of heroin abusers. Likewise, Gwyne (1982); Kozel, Crider, and Adams (1982); Grabowski and Dworkin (1985); and Spotts and Shontz (1984) have all noted the amazing growth in cocaine use. With the increased use and abuse of both heroin and cocaine, it is even more imperative that researchers direct their attention toward an understanding of the psychosocial developmental experiences of heroin abusers and cocaine abusers. The results of this study will have major implications for the psychotherapeutic interventions by professionals. This study could provide a whole new spectrum of possibilities that have heuristic value implementing innovative research on the developmental issues of heroine abusers and cocaine abusers.

Purpose of the Study

The purpose of this study is to examine the psychosocial development of male heroin abusers and male

cocaine abusers using Erik Erikson's model of psychosocial development. The major focus of this study will be placed upon clarifying the level of psychosocial developmental impairment and the core conflicts that need to be resolved by groups of heroin abusers and cocaine abusers. The use of AAAP will also provide an opportunity to substantiate further the psychometric properties of this scale on well-defined pathological populations, i.e., male cocaine abusers and male heroin abusers.

Overview of the Theory

Kagan (1971) stated that "understanding how a structure develops aids in the understanding of how the structure functions in its mature form." Imperative to this understanding is a thorough assessment of an individual's psychosocial development.

Erikson's Developmental Perspective

Crane (1980) indicated that

among the advances in the psychoanalytic theory of development, none has been more substantial than those made by Erik H. Erikson. Erikson has given us a new, enlarged picture of the child's tasks at each of Freud's stages. And beyond this . . . so that the theory encompasses the entire life cycle.

Erikson (1950, 1963) based his theory of psychosocial development not only on his many years of experience as a practicing psychoanalyst, but also on his

field studies of the personality development of individuals in two Native American societies. His observations have been systematized into a developmental theory, in which there are postulated eight stages of psychosocial development spanning the entire life cycle. The crucial characteristic of Erikson's theory is that it offers a conceptual explanation of the individual's development by tracing the unfolding of the genetically social character of the individual in the course of his/her encounters with the ever-expanding social environment at each of the eight stages of development.

Erikson (1963) acknowledges that

there are many formulations of what constitutes a "healthy" personality in an adult. But if we take up only one--in this case Marie Jahoda's definition, according to which a healthy personality actively masters his/her environment, shows a certain unity of personality, and is able to perceive the world and himself/herself correctly--it is clear that all of these criteria are relative to the child's cognitive and social development.

In concert with this definition, Erikson has formulated a theory of psychosocial development in which each of the eight stages represent a choice for the individual based on the effects of maturation, experience, and social institutions on the growing individual.

Erikson (1959) outlines the lasting contributions to the personality development of the individual which results from the interplay between parental and societal influences and demands, and the needs and capabilities of

the individual at any given stage of libidinal development and beyond, spanning the whole life cycle. The individual's capabilities at any given stage are studied in terms of the maturation of various apparatuses, from reflex response to motility. From this interplay, there derives, at the gradual conclusion of each developmental stage, certain lasting gains that basically involves the achievement of certain orientations of the individual toward the world, to other people, and toward himself/herself. These achievements, if development is optimal are: (a) in early infancy, a development of a sense of basic trust, rather than a sense of mistrust; (b) in later infancy, when anal-muscular maturation has occurred, a growing sense of autonomy, rather than a sense of shame and doubt; (c) in early childhood, the period of greatest locomotor development, a developing sense of initiative, rather than a sense of guilt; (d) in the middle years of childhood, the latency period, a sense of industry, rather than a sense of inferiority; (e) in adolescence, a sense of identity (consisting of certainty and a sense of belonging regarding career, sex role, and a system of values), rather than a sense of role confusion; (f) in early adulthood, the development of intimacy (the mutuality with a loved partner, whom Erikson notes is of the opposite sex, with whom one is able to regulate the

cycles of work, procreation, and recreation), rather than a sense of isolation; (g) in middle adulthood, the development of generativity (establishing and guiding the next generation, including procreativity, productivity, and creativity), rather than a sense of stagnation; and (h) in late adulthood, a sense of integrity--a basic acceptance of one's life as having been inevitable, appropriate, and meaningful--rather than a sense of despair--a hidden fear of death.

Erikson (1959) states that

in describing growth and its crises as a development of a series of alternative basic attitudes, we take recourse to the term "a sense of . . ." they are ways of conscious experience, accessible to introspection (where it develops); ways of behaving, observable by others; and conscious inner states determinable by test and analysis.

"A sense of . . .," also denoted Erikson's belief that it is the relatively successful or unsuccessful resolution of each crisis stage that leaves the individual with a residual attitude or orientation toward himself/herself and the world. Later psychosocial stages cannot successfully or optimally be dealt with by the individual, unless the preceding crises have been reasonably well resolved.

Erikson postulated that at each psychosocial stage, a central conflict or crisis arises as a result of new and different developmental tasks that need to be mastered. The eight stages of development with the

approximate age levels and descriptions of the central crisis are briefly described in the following section.

I. Trust vs. Mistrust (Hope) Age: 0-18 months

The degree to which children learn to trust the world, other people, and themselves depends, to a great extent, upon the reliance that they can place on the consistency, predictability, and reliability of their primary caretaker's actions. When the parents are consistent and dependable, children develop a sense of trust in their parents and the environment. A sense that they can count on others to relieve their pains of being wet, cold, or hungry. Children consider themselves trustworthy when they are able to cope with their own urges. Healthy development occurs when there is a favorable ratio between trust and mistrust; the former should outweigh the latter. This principle holds true for the other stage as well. Mistrust is the result when inconsistency is the rule, rather than the exception.

II. Autonomy vs. Shame and Doubt (Will)
Age: 18 months to 36 months.

During a time of contradictory impulses--holding on one moment and expelling the next--the child is primarily trying to exercise a choice. A child learns autonomy as holding on and letting go are practiced without destructive consequences. Erikson defines the conflict

as that of autonomy vs. shame and doubt. Autonomy comes from within: biological maturation fosters the ability to do things on one's feet, to use one's hands, and so on. Shame and doubt occur from an awareness of social expectations and pressures. Shame is the feeling that one does not look good in other's eyes. Doubt and indecision results from the child's decisions being constantly thwarted.

III. Initiative vs. Guilt (Purpose) Age: 3-5 years

On resolving the crises of autonomy and possessing a feeling that you are your own person, the crucial question becomes what can you do on your own. Initiative connotes forward movement. The child, with a sense of initiative, makes plans, sets goals, and perseveres in attaining them. Initiative is developed as children are given the freedom and encouragement to initiate motor play, and when their endless questions are answered. Initiative is learned as the child contemplates and initiates activity without experiencing feelings of guilt or fear of punishment. In the child's play, pleasure is evident in conquering and being aggressive. Coping mechanisms to deal with the environment manifest themselves through the child's controlling the environment by over-aggressiveness and/or manipulation of others or through behaviors of flight and withdrawal.

The child internalizes social prohibitions--a guilt producing superego--keeping dangerous impulses and fantasies in check. Although the superego is necessary for socialized behavior, it stifles the bold initiative of the former stage. Overrestrictive parents and superego results in children giving up their ambitions altogether.

IV. Industry vs. Inferiority (Competence)
Age: 5-12 years

In this stage, children master important cognitive and social skills. Children eagerly apply themselves to learning the useful skills and tools of the culture. Recognition is won by producing things. The traits of perseverance and diligence result in competency. Erikson (1964) described competency as the "free exercise of dexterity and intelligence in the completion of tasks, unimpaired by infantile inferiority." The positive resolution of this stage is, according to Erikson (1959), "the sense of being able to make things and make them well and even perfectly," while the negative resolution is a sense of not being able to cope with the world of inanimate things and of not being able to compete with one's peers. The danger is an excessive feeling of inadequacy and inferiority.

V. Identity vs. Role Confusion (Fidelity)
Age: 12-18 years

During this stage, the central issue comes from the question, "Who am I?" The adolescent's primary task is establishing a new sense of ego identity--a feeling for who one is, and one's place in the larger social order. The adolescent begins to focus on the roles that they play and the occupations that they imagine themselves entering. The peer group identity assumes major importance in this stage. In a rush to find some identity, a group identity and clear-cut images of good and bad in the world surfaces. Accomplishments help to develop a sense of identity. Options, alternatives, and commitments help to rework prior identifications and form a new identity for the adolescent. Role confusion results when adolescents are not certain about their dominant personality characteristics, and do not have a firm sense of the continuity between the remnants of their childhood and anticipated adulthood.

VI. Intimacy vs. Isolation (Love) Age: 18-30 years

Intimacy refers to the ability to give of oneself to another without the fear of losing one's identity in the process. Intimacy is only possible once a reasonable sense of identity has been established. The individual risks being hurt (isolated) in an attempt to establish genuine mutuality with a member of the opposite sex.

Learning intimacy results in feelings of warmth, closeness, and oneness with a chosen partner and the world. Erikson (1963) notes that "true intimacy means that two people are willing to share and mutually regulate all important aspects of their lives." The young adult, who does not have a reasonable sense of identity, is apt to isolate himself/herself from intimate interactions with parents, friends, and others due to the fear and anxiety of ego loss. The choice of a partner is the most significant positive occurrence in this stage.

VII. Generativity vs. Stagnation (Care)

Age: 30-45 years

Generativity is marked by the creation and care for children, as well as the production of things and ideas through work. Erikson emphasized more of the former than the latter. When generativity is lacking, the result is stagnation and impoverishment of the personality. Erikson (1959) felt that in such cases "pseudo-intimacy" results or people regress to "begin to indulge themselves as if they were the one and only child." Erikson noted that, especially in the United States, our values emphasize independent achievement to such an extent that people can become too exclusively involved in themselves and their successes and neglect the responsibilities of caring for others.

VIII. Ego Integrity vs. Despair (Wisdom)
 Age: 45 and up

In this stage, one must look back over one's life and wonder whether life was worthwhile. If the individual has successfully completed the seven prior stages, a sense of integration and wisdom develops. This results in a calm and reasonable acceptance of life's triumphs and disappointments. In this stage, the negative resolution means that one must confront the ultimate despair--the feeling that life was not what it should have been, but now time has run out, and there is no chance to try an alternative lifestyle. Frequently, disgust hides despair. This stage is really the inner struggle of, "Was my life, as I face death, a meaningful one?"

Erikson (1964) believed that

all of the aspects of development are in principle present all of the time, but as the person develops, he or she becomes ready to experience and to manage the critical conflicts within specific cultural contexts and to incorporate the resolution of these normal crises into his or her personality.

Erikson (1968) delineated what he meant by crises are not "connoting a threat of catastrophe but as a turning point, a crucial period of increased vulnerability and heightened potential, and therefore, the ontogenetic source of generational strengths and possible maladjustment."

Specific to this proposal, it should be noted that Erikson devoted only brief attention to the drug abuser in describing this theory of development. In an orthodox psychoanalytic manner, Erikson (1963) described the infant's oral phase of psychosexual development, and his feelings that the drug abuser had a fixation on this stage which causes the individual to seek a restoration of the pleasurable feelings of infancy. To achieve these pleasurable feelings, the drug abuser resorts to "incorporation by mouth or skin of substances that will satiate him." Even with only this meagre reference to drug abusers, Erikson's theory of psychosocial development presents viable concepts and an innovative format to understand the psychosocial developmental issues and differences of heroin abusers and cocaine abusers.

Hypotheses

Developmental Issues and Heroin Abusers

Erikson (1959) related that the first stage of his developmental model--Trust vs. Mistrust--is an "incorporative stage." This stage is one in which the infant is relatively receptive to whatever is offered. The process central to the successful resolution of this stage is the attainment of the mutuality with the

caregiver--developing a social attachment to another human being. As the infant begins to perceive the caregiver as a separate and permanent person, the development of a sense of trust or mistrust becomes the poignant issue. In "optimal" development, the caregiver needs to be perceived by the infant as a source of security, a person who will encourage further exploration and facilitate the meeting of the infant's biological needs. If such interactions are not experienced, the infant develops a sense of mistrust in others and the world. Included in the experience of these interactions are the unavoidable pain, delay in satisfaction, and the inexorable weaning which combine to make this stage prototypical for the development of a sense of abandonment and helpless rage. The sense of abandonment and helpless rage arises out of the perception of feeling that the parent or caregiver is unpredictable, unreliable, and may not be there when needed. Indeed, one cannot trust one's needs will be met.

Erikson (1959) was concerned about this lack of mutuality in the mother-infant relationship. He wrote that

one cannot be sure what (a failure in mutual regulation) does to a baby; but it certainly is our clinical impression that in some sensitive individuals (or individuals whose early frustration was never compensated for) such a situation can be a model for radical disturbances in their relationship

to the "world," "to people," and especially to lover or otherwise significant people.

Chein et al. (1964) in their research on adolescent opiate addicts developed this theme further by noting that

a prominent feature of the family situation of the adolescent opiate addict . . . is the peculiarly close relationship between the addict and his mother. It is not a closeness of warmth or mutual regard so much as it is clinging and feeling of being bound together . . . it seems to us that there is a strong need on the part of the mothers to maintain their sons in a weak, dependent position for their own security.

Other researchers, most notably Savitt, 1963; Hendin, 1974; Khantzian et al., 1974; and Spotts and Shontz, 1982, have described radical disturbances in the heroin addict's personal relationships and attribute their observations that only a few addicts are capable of tolerating close, mutual relationships, as stemming from this disturbed relationship between the addict and his/her mother.

An extension of this theme is Erikson's belief that the amount of trust derived from the earliest infantile experience does not seem to depend upon the quantities of food or demonstrations of love, but rather on the quality of the maternal relationship. With the research indicating that the narcotic addict's relationship with his/her mother being very disturbed, it is not surprising that Cappel and Caffrey (1974) and Unger's et al. (1978)

research found that opiate abusers were significantly lower in trust than the other comparison groups.

Rado (1963) noted that in order to understand narcotic addicts,

we must penetrate the deepest strata of the mind, formed during the earliest stages of ontogenetic development. At a certain stage of neuro-muscular maturation, the infant becomes capable of carrying out little intentional acts with his body, hands, and feet. Enchanted by his, he now fancies that he can do everything. Describing his feelings in our words, we can only say that he believes in his own omnipotence. This illusion, the product of unwarranted generalizations, is the young organism's first self-image--it's primordial self.

As the individual grows and experiences frustration and disillusionment, it is a return or regression to this sense of omnipotence that is sought out. Chein et al. (1964) supports this view by noting that the narcotic addict easily regresses to this state of primary narcissism. Although somewhat simplistic, if there are consistent delays in obtaining satisfaction, inconsistent caregiving--including aspects of handling, playing, paying attention to, and so forth, and a large number of unavoidable pains--the infant develops frustrations that lead to a sense of abandonment, of helpless rage, and mistrust in others and the world. These unresolved frustrations and conflicts will remain until the subjective experience of heroin--rekindles the sought-after sense of omnipotence and dampens the rage and resentments toward the untrustworthy world (Zimmering et

al., 1952; Weider & Kaplan, 1969; Milkman & Frosch, 1973; Khantzian, 1974).

Erikson (1959) acknowledges that

in the psychiatric literature, we find frequent references to an "oral character," which is a characterological deviation based on the unresolved conflicts at this stage. Whenever oral pessimism becomes dominant and exclusive, infantile fears, such as that of "being left empty," or simply "being left," and also of being "starved of stimulation," can be discerned in the depressive forms of "being empty and at being no good." Such fears, in turn, can give orality that particularly avaricious quality, which in psychoanalysis is called "oral sadism," that is, a cruel need to get and to take in ways harmful to others.

Kaufman (1974) has emphasized that "behavior such as low frustration to tolerance, viewing others only as providers of supplies, manipulativeness, extractiveness, self-destructiveness, and impaired reality testing historically has been taken as evidence of the addicts oral character structure." In relation to the feelings of being empty and of being no good, Khantzian (1978) and Kaufman (1974) support the idea that the heroin addict feels cut off, hollow and empty, as Erikson has described, and that it is for this kind of individual that the heroin experience provides an absence of conflict, a dampening of rage, a peacefulness of being filled up, and an opportunity to engage in the pleasurable fantasies of omnipotence. The cruel need to get and to take becomes harmful to the addict under the guise of pleasure.

Erikson (1959) indicates that "in adults, the impairment of basic trust is expressed in a basic mistrust. It characterizes individuals who withdraw into themselves in particular ways when at odds with themselves or others." Having already developed some of the issues regarding the development of basic mistrusts in addicts, it is important to cite the research of Spotts and Shontz (1982) that lends support for the idea that heroin addicts indeed withdraw from the world in peculiar ways. Spotts and Shontz noted that the heroin abusers in their study

were all leading narrow and constricted lives, and were all isolates who were cynical and distrustful of others. Few could tolerate close or mutual relationships. They avoided intense emotionality. The chronic opiate users would rather withdraw from the problems of life than attempt to conquer them.

Chein et al. (1964) summed up the narcotic addict's developmental issues quite aptly by stating that the narcotic addict

though matured in years, he has yet to successfully manage the developmental hurdles of infancy (the acquisition of what Erikson has called "basic trust") and that, unlike the infant before him the tasks of achieving self-acceptance and trust in others, the addict is already carrying the psychic scars of his own failure and of the social world that has failed him.

It was the contention in this study that the heroin abuser has unresolved developmental conflicts and issues resulting from the unsuccessful resolution of Erikson's first stage of development--Trust vs. Mistrust.

Developmental Issues and Cocaine Abusers

Erikson (1959) in outlining his developmental sequence, noted the second stage of his theory as Autonomy vs. Shame and Doubt. This stage is described as the child's movement toward autonomous functioning. The learning to "let go" is an extension and abstraction paralleling the general physical development of the child. In Western societies, it parallels the task of learning sphincter control over bowel movements. What is central and important in this stage is not the anal "pleasure" and its frustrations, but rather, the clash of wills between the very young child--attempting to express his/her newly sensed freedom in such crude ways as not going to the toilet--and the imposition of parental authority. Erikson attributes a great deal of importance in this stage to the parenting agents, who may show respect and positive regard for the child's blossoming autonomy, while vigilantly acting to protect the child against failure experiences that produce shame and doubt. In the optimal experience, the respect, positive regard, and vigilance communicates to the child a recognition of the separateness between parents and child, allows for the availability of self-worth that is nonconditional, and facilitates the child's recognition of his/her own self-worth. When this particular approach is not the

consistent style of interaction between the parent and child, active shaming (either overt or covert) and/or exposure of the child's shortcomings occurs and the child experiences a sense of inferiority or badness that seems to be all pervasive. This sense of inferiority arises out of the feeling that one is not able to live up to parental expectations. Weigel (1974) supports this position by suggesting that active shaming by the parents prompts the child to feel that he/she is different and bad because of his/her shortcomings. This causes the child to hold himself/ herself responsible, not because of the doing or the not doing of a particular act, but because one is a certain way. This gives rise to shame and doubt in the child. Negri (1974) substantiated Weigels' stance and elaborated further on how parents may evoke shame in the child. Negri noted that shame can arise from the active shaming on the part of the parents, through ridicule or showing contempt. Shame may also arise out of the parent's indication of disappointment in or dislike of the child as a person, as well as the child's sexual or nonsexual impulses. Additional shame may arise from the inadvertent disregard for the child's immediate needs. These different routes can set the stage for a child to view himself/herself as unworthy of response or regard and can engender an introjected rage resulting from the perceived parental withholding of "at

oneness," closeness, and affections. Therefore, the child develops a sense of shame and doubt. Spotts and Shontz (1923) described the cocaine abuser in their study as having developed such shame and doubt. They stated that the

low level (dosage wise) abusers we studied are insecure persons, troubled by self-doubts and feelings of inadequacy; they are easy going people who avoid conflicts and intense emotionality. Cocaine helps them to feel more self-assured, enhances social relationships, warms and enlightens a dreary day or provides a brief escape from an otherwise dull existence.

In essence, cocaine helps the abuser to overcome the pervasive feelings of shame and doubt.

Erikson (1959) described shame as an experience of complete self-consciousness, complete exposure, and an awareness of being whole visible--both in one's external being and for one's internal life and thoughts; all of one's badness is visible whether the audience is real or imagined. Shame and doubt arises out of an awareness of societal expectations and pressures that are not adhered to or lived up to. Shame is the feeling that one does not look good in another's eyes and doubt stems from the realization that one is not so powerful after all and that others can control and perform actions much better. Erikson suggests that experiencing shame includes rage at oneself because failures and/or inadequacies have been exposed to or by significant others. Grinker (1955)

succinctly summed up this kind of experience by noting that in the same experience, a clear message is received stating that "I am not as good as he is or as they expect me to be, therefore, I hate myself." Lynd (1958) conceptualized shame in a very similar manner, by noting that shame is

a wound to one's self-esteem, a painful feeling or sense of degradation excited by the consciousness of having done something unworthy of one's previous idea of one's excellence. Also, a peculiarly painful feeling of being in a situation that incurs the scorn or contempt of others.

On an historical note, Fenichel (1945) viewed shame as arising from the loss or lack of bladder control in childhood. The child's failure is exposed to others and thus the experience of shame is equated with the experience of being looked at ". . . to be looked at is to be despised," which gives rise to a defensive posture of ". . . if you do this or that, you may be looked at and despised." Spotts and Shontz (1982) provided an acknowledgment of this kind of painful experience in the lives of chronic cocaine abusers when they stated that

the typical cocaine user almost broke free from the maternal control but still carries wounds from this battle with the Terrible Mothers. In childhood, when this man reached out for tenderness and compassion, the embarrassment and humiliation he experienced was a source of pain. Consequently, he vowed to become a strong, self-sufficient warrior who needs to lean on no one.

In their earlier research, Spotts and Shontz (1980) noted that the abusers of cocaine are "counter dependent

individuals who are wary, sensitive to slights, suspicious, and distrustful of others . . . (they seem to believe that in cocaine, they have found a shortcut to happiness and fulfillment." Cocaine seems to provide these individuals with a way to avoid feeling the shame and doubt and provides an illusion of autonomy.

Fenichel (1945) when describing the concept of shame, counterposed it with ambition. The purpose of ambition is the conquering or overcoming of shame. In the cocaine abuser, Gay et al. (1973), Sabbag (1976), and Spotts and Shontz (1980), have all indicated that the use of cocaine may be popular because of the fact that it reinforces the qualities in life that most Americans admire; namely, initiative, drive, optimism, and the need for achievement. Cocaine seems to allow the individual the illusion of overcoming the shame and doubt, the feelings of inadequacy and rage, and therefore, the cocaine abusers can be seen as a productive individual possessing the attributes that are admired in our society.

Levin (1967) states

the essential threat in shame . . . is that of rejection (which may be communicated through criticism, scorn, abandonment, etc.). Since acceptance (or respect) by a person is the antithesis of rejection, the wish to gain acceptance can be equated with the wish to avoid rejection. One can postulate that when acceptance (or respect) is obtained, the individual normally experiences

feelings which are the opposite of shame. Such feelings might be referred to as "pride," "honor," "self-esteem," etc.

Levin felt that shame may be seen as arising out of the fear of loss of life, to the point that "many of the people who have intense shame are very shy and try to keep a certain distance from others as a means of protecting themselves against the intense shame which they feel under certain conditions of self-exposure." Several important issues regarding cocaine abusers arise out of Levin's contentions. The first issue is noted in Spotts and Shontz's (1980, 1982) in that cocaine abusers "select careers in which supervision and control by others is minimal." In this case, the rejection, the contempt, and the scorn from others is kept to an absolute minimal level. The second point is that some cocaine users reported that cocaine enhanced their social relationships, with the cocaine dampening their feelings of shame, the individuals could bridge the distance that they normally felt toward others. Thirdly, cocaine abusers have related that cocaine enhances their sexual relationships. The cocaine abuser seems to find that the use of cocaine allows them the delusion of having overcome their shyness and the distance that they feel from others as well as prolonging sexual intercourse (Spotts & Shontz, 1980). In the sexual experience, the cocaine abuser may desperately attempt to please others,

in hopes that they might be able to regain the love that they missed as a child. At the same time, the individual may fear that the "letting go" into a true union with another without the use of cocaine will be overwhelming and devastating to their brittle sense of self. Relationships are approached out of a need for closeness, however, the cocaine abuser must recoil out of a fear of exposure based on earlier shamed needs, fears of insatiability (a likely resultant of the early experienced lack of fulfillment of some basic needs), and fears regarding the expression of early experienced rage at parental nonresponsiveness. The expression of needs and impulses have been connected to pain, frustration, lack of fulfillment, shame and doubt and ultimately the loss of the other through rejection and abandonment. Cocaine seems to provide the illusion of having overcome these fears.

Levin (1967) relates that shame acts to insure the attainment of parentally prescribed behaviors and values and the repression of the impulse or need. The initial fear of the child or infant is in losing the positive regard of the parents through rejection (i.e., criticism, ridicule, scorn, abandonment, etc.), for not living up to the parental expectations. A response to this fear of rejection is the use and abuse of cocaine with the subsequent illusion of mastery or sense of mastery that

it provides. With cocaine, the individual appears to be striving toward achieving the parental expectations of actively pursuing the American Dream.

Spotts and Shontz (1982) felt that their sample of cocaine abusers spanned the Eriksonian stages of Autonomy, Initiative, and Industry. It will be the contention of this study that the cocaine abuser is mainly engulfed in their struggle for independence--autonomy. Cocaine abusers will have core developmental conflicts and issues resulting from the unsuccessful resolution of Erikson's second stage of development--Autonomy vs. Shame and Doubt.

Overview

With the problem presented and the hypotheses stated, two important topics remain before the reader can evaluate the results of this study: a literature review and the methodology. In Chapter II, the literature relevant to this study is presented. This included a brief overview of the physiological effects of heroin and cocaine, the major psychodynamic theorizing about substance abuse, and specific psychodynamic theorizing about heroin abuse and cocaine abuse.

In Chapter III, the methodology used in this study was described. This included characteristics of the

sample, the measure, hypotheses, design, and statistical analyses.

In Chapter IV, the result of the statistical analysis of the study's hypotheses were presented. Chapter V was devoted to summarizing the research, discussing the findings, and their implications for further research.

CHAPTER II

REVIEW OF THE LITERATURE

After an extensive review of the literature in such disciplines as psychology, medicine, social work, education, sociology, and the addictions, quite a few research articles relative to this study were found. Since most literature reviews could extend ad infinitum, it was the goal of this literature review to present only the major theorizing and research investigations. Operating with such a framework, the literature review was organized so that the reader will be familiar with (a) a brief overview of the physiological nature of heroin abuse and cocaine abuse; (b) an overview of the major psychodynamic theorizing and investigations on the bases for substance abuse; and (c) the psychological research specific to heroin abusers and cocaine abusers.

Physiological Perspective

An in-depth discussion of the physiological and pharmacological actions and effects of cocaine and heroin is well beyond the scope of this study. However, a basic understanding of their effects and actions is of vital importance to the drug abuse researcher.

Heroin

Heroin is a member of the class of drugs designated as narcotics (from the Greek--narkoun, meaning to deaden or benumb). Narcotics are more properly known today as opioids, a collective designation for both natural opiates (opium and its derivatives) and synthetic opiates. Narcotics are described in the pharmacological literature as central nervous system depressants.

Narcotics act mainly upon the central nervous and digestive systems. They are used today for much the same medical purposes as they have been for hundreds of years, mainly to relieve pain, control diarrhea, and suppress coughing.

While narcotics can suppress coughing, they also stimulate other involuntary responses, such as nausea and vomiting. Their ability to reduce the movement of food through the intestines makes these drugs the most effective means yet discovered to treat diarrhea. Narcotics will constipate users who employ them for other purposes. Most narcotic abusers will report problems with constipation.

In addition to their analgesic properties, narcotics, such as heroin, produce euphoria, and it is the quality of the narcotic high that makes heroin such a seductive and powerfully reinforcing drug of abuse. Heroin creates a sense of warmth and well being, peace,

and contentment, feelings of strength and energy. Major problems and every day irritations fade. Anxiety and depression lessen. The world becomes more pleasant. The heroin high exerts a powerful hold. And as the saying goes, "It's so good, you don't even want to try it once."

Mothner and Weitz (1984) note that

the first semisynthetic narcotic, diacetylmorphine, was cooked by boiling morphine with acetic anhydride, in 1874 at St. Mary's Hospital in London. But it was nearly a quarter century before the German pharmaceutical firm Bayer marketed the drug, under the trade name Heroin, as a cough suppressant.

The physiological and pharmacological effects and actions of heroin, in depressing the functions of the central nervous system, are manifested by the following: (a) calming or relief of tension and anxiety; (b) drowsiness, sedation, sleep, stupor, coma, or general anesthesia; (c) increase of pain threshold; (d) mood depression or apathy; and (e) disorientation, confusion or loss of mental acuity (Nowlis, 1969).

The route of administration of heroin is usually through injecting it, either subcutaneously (beneath the skin) or intravenously ("mainlining" it directly into a vein). Heroin is rarely taken orally, due in the most part, because it is a highly inefficient route of administration. There are a growing number of heroin users now smoking street heroin.

Mothner and Weitz (1984) note that

the effects of smoking can be similar to intravenous injection in triggering heroin's orgasmlike "rush," the euphoric peak of the drug experience. The rush fades in a matter of minutes, and is replaced by a prolonged period of lethargy. The "nod," which can last six to twelve hours and is marked by a sense of overall contentment and the absence of anxiety and appetite.

When heroin is taken on a regular basis, tolerance develops over time, and therefore, increasingly larger doses are necessary to experience the rush and euphoria. In time, the compulsive heroin user experiences fewer and fewer of the pleasurable effects from the drug. However, usage must be continued--and even increased--to avoid the discomfort of withdrawal. The withdrawal symptoms begin with uncontrollable yawning, a runny nose, and a cold sweat. In the classical heroin withdrawal, symptoms will include nausea, vomiting, intestinal spasms, diarrhea, and muscular pains. There is alternatively shivers and sweat and an inability to remain still. There can be extreme anxiety and intense drug cravings. The symptoms usually diminish within two weeks, depending upon the degree of tolerance.

Mothner and Weitz note that

there is some agreement among scientists studying opiate receptors in the brain that the production of endorphins (the body's own morphinelike chemicals) seems to drop off when narcotics are regularly being supplied from outside the body . . . with no heroin and little endorphin to reach their receptors and trigger "slow down" signals, a number of centers in the brain start transmitting at an accelerated rate. Communication speeds up through all their networks. The autonomic nervous system, which controls such

involuntary functions as breathing and digestion, begins bombarding its outposts with garbled messages that bring on such withdrawal symptoms as nausea, cramps, diarrhea, and a runny nose.

Cocaine

Cocaine belongs to the class of drugs designated as stimulants. Stimulants have the general effect of increasing functional activity through the stimulation of the central nervous system.

Mothner and Weitz (1984) state that

what some users seek from cocaine is relief from depression . . . others use the drug to sharpen their performance on the job or in the social scene or during sex. And cocaine can, indeed, upgrade performance by increasing energy, creating a wide-awake-and-with-it-feeling and masking depression. Everything appears sharper and clearer with coke; confidence rises and problems seem simpler.

In essence, things really do go better with cocaine.

Spotts and Shontz (1980) related that "the details of the physiological and pharmacological actions and effects of cocaine are currently matters of some debate." Four years later, this sentiment was echoed by Jone's (1984) statement that one ". . . might assume that the scientific knowledge of cocaine is relatively complete, it is not." With this thought in mind, a brief survey of current knowledge about the physiological and pharmacological actions and effects of cocaine is being presented.

There seems to be general agreement among researchers that cocaine stimulates the central nervous system from above, downward. Its effects begin in the cortical cells of the brain (Ritchie, Cohen, & Dripps, 1970), and are associated with euphoria, garrulousness, excitation, restlessness, and a feeling of heightened physical and mental powers.

Cocaine is a short-acting stimulant that is unique in its dual ability to deaden feelings while constricting the blood vessels. Cocaine is the most potent of all sympathomimetic agents, and can induce rapid elevation of heart and respiration rates, as well as blood pressure (Post, Kotin, & Goodwin, 1974). Heavy use can produce euphoria, anorexia, and insomnia; anxiety; agitation and confusion; depression; visual, auditory, and tactile hallucinations; and acute psychosis, with paranoia and delusions (Gay et al., 1973; Spotts & Shontz, 1980; Wesson & Smith, 1977).

In general, stimulants work, at least in part, by causing the release of neurotransmitters (chemicals that stimulate neighboring neurons), such as norepinephrine, from nerve cells. Some stimulants mimic the functions of transmitters like norepinephrine through a direct effect on the nerve cells themselves. Specific to cocaine, Shuckit (1984) reports that

cocaine's effects occur through a variety of mechanisms, including the blocking of initiation or conduction of peripheral nerve impulses (contributing to its local anesthetic effect), direct stimulation of the CNS, and blockage of catecholamine uptake (norepinephrine more than epinephrine) at nerve terminals.

In its predominant effects, Schuckit relates that cocaine has a biphasic effect on CNS actions--lower doses tend to improve motor performance, with higher doses causing a deterioration, possibly with subsequent severe tremors and even convulsions. Additional CNS effects include nausea and possible emesis, dilated pupils, and an increase in body temperature, probably reflecting both direct actions on the brain and indirect actions through muscle contractions. There is a decrease in fatigue. The cardiovascular effects are also biphasic--lower doses tend to produce a decrease in heart rate via actions on the vagus nerve while higher doses produce both an increased heart rate and vasoconstriction, with a resulting elevation in blood pressure. The actions on the heart may produce arrhythmia both directly through the effects of the drug and indirectly through catecholamine release.

Since cocaine is absorbed at all sites of application, there are a number of routes of administration. In the United States, "most users take cocaine intranasally, snorting into the nostrils, a process technically called 'insufflation.' Cocaine is

readily absorbed by mucous membrane and easily reaches the bloodstream this way" (Mothner & Weitz, 1984). When cocaine is snorted, the maximum response is usually achieved within the first ten minutes, with the euphoria lasting usually not much longer than half an hour, sixty minutes at the most.

Some users take cocaine orally. However, this route of administration is rarely used due in a large part to the peak effect being much slower--roughly an hour after administration.

The smoking of cocaine has gained in popularity. This route of administration involved a process of smoking freebase. This is a highly efficient and heavily reinforcing means of administration, and is almost as rapid a route as injecting the drug intravenously. In smoking freebase, cocaine has to be converted back to its alkaloid form. This is usually achieved by boiling it with baking powder or more explosive solvents, which results in purifying the cocaine. The dangers involved in this time-consuming process were underscored by comedian Richard Pryor's near fatal 1980 accident.

Kinkopf (1986) notes that dealers have taken over the process of preparing cocaine for smoking. The result is "crack," a sliver of whitish, rocklike substance that measures between 70 and 90 percent pure cocaine.

Cocaine can be mainlined, injected intravenously. When injected directly into the bloodstream, cocaine provides a maximum rush to the central nervous system within minutes and a nerve-jangling rush (much like the freebase experience) within seconds of administration. Because cocaine constricts the blood vessels, cocaine is rarely ever injected subcutaneously or intramuscularly.

Psychodynamic Overview

The early psychodynamic formulations about the personality development of substance abusers were grounded in the prevailing psychoanalytic model of that time. Sigmund Freud never devoted a paper to addiction, and his references to addiction were little more than asides in papers devoted largely to other matters. One of these asides is Freud (1897) in his letters to Fleiss, which provided a brief glimpse of his view of substance abuse. Freud wrote that ". . . masturbation is the one great habit that is a 'primary addiction' and that the other addictions, for alcohol, morphine, tobacco, etc. . . ., only enter life as a substitute and a replacement for it."

Crowley (1939), in providing a comprehensive review of the literature on alcoholism and drug addiction, noted that the "clinical papers frequently mentioned other aspects of the addiction problem, sadism and masochism for

example. However, their theoretical sections emphasized the libidinal elements just as the general trend of analytic theory." On a specific note, Crowley stated that it was "not until 1926, did any paper attempt the problem of addiction as a whole. . . . Theoretical papers dealt almost exclusively with libidinal elements, mainly oral erotic." Crowley was referring to Rado (1926). Rado attempted to examine drug effects in light of Freud's (1920) concept of a protective shield or stimulus barrier. Freud considered that such a barrier was operative against external stimuli only and as such was powerless to defend the ego against internal excitations. Rado (1926) thought that the painkilling, sedative and hypnotic drugs made up for this deficiency by supplying a central artificial shield as a "second line of defence." The result is that the psychical apparatus is spared the helplessness and the psychic pain through the use of a drug which diminishes the sensory input. Regarding stimulants, Rado suggested that they act on the inhibitions and tensions arising from the conflicting claims on the ego by the instinctual demands and superego prohibitions by loosening the bound cathexes so that the conductivity of the system is increased.

Rado's (1933) writing represents a revision of the "classical" explanation of addiction. He suggested that although it was destructive in its effect, drug usage

might represent an individual's attempt to cope with difficult emotional states. Rado's theorizing had the significant effect of viewing drug addiction as a psychological problem for the first time. He argued, ". . . that it is not the drug but the individual's impulse to use it that makes an addict." Crowley (1939) emphasized the historical nature of this shift by stating that

the question is about the singleness of the impulse rather than the variety of drugs used. Rado discussed the question of why the addict must continue to seek out the pleasure effect even though it means self-injury and self-destruction. When human beings are frustrated, they react by what Rado calls a "tense depression." Relief of this depression by a drug is very impressive, so that the pharmacogenic pleasure effect may produce a sense of elation. During this "tense depression," the ego wants to get back to the stage of infantile omnipotence in which self-esteem may be enjoyed without coping with reality. This is magically obtained by taking the drug.

As the elation from the drug passes, there is a return to the original state with the exception that the addict has a greater fear of reality and guilt from escaping from it. This sets up a cyclical pattern of "tense depression" that leads to drug taking, which results in a transient elation followed by a new "tense depression" with the added features of fear and guilt and once again the craving for the elation necessary to maintain self-regard. Rado called this cyclical pattern "pharmacothymia." Rado stressed that the "pharmacothymic

regime" was set up by "defects in ego development, lack of satisfying early object relations, the lack of affectionate and meaningful object relations, and by an artificial technique used to maintain self-regard and satisfaction." Hendin (1974) related that the early psychodynamic studies of addiction, such as Rado's, placed all types of drug craving into a single disease or disorder characterized as an impulse disorder in which "the ego is subjugated by an archaic need for oral gratification."

The next major theorizing about drug addiction occurred when Fenichel (1945) hypothesized that drug addiction was a regression to orality and represented an attempt to find a substitute for the maternal object. Fenichel supported Rado's earlier suppositions by emphasizing that ". . . the origin and nature of addiction are not determined by the chemical effect of the drug but by the psychological structure of the patient." He noted that addicts represent the most clear-cut type of "impulsives." Fenichel affirmed that the same urges that govern other pathological impulses are operative in a addicts, namely, the need to get something that its not merely sexual satisfaction, but also provides security and self-assertion, and as such, essentials to the person's very existence. Fenichel recognized the need to differentiate between addicts and

temporary drug users. He made this distinction by noting that for the addict ". . . the drug effect is used to satisfy--archaic oral (sexual) longings, the need for security, and a need to maintain self-esteem."

Fenichel (1945) noted that in drug addiction, there is a "short circuiting" that occurs in the biological system, so that the normal pleasure-pain principles no longer function. He stated that an

analysis of drug addicts shows that genital primacy tends to collapse in those persons whose genital primacy has always been unstable. In analysis, all kinds of pregenital wishes and conflicts may reveal themselves in a confusing manner. The final stages are more instructive than the confusing pictures that appear during the process. The eventual "amorphous tension" actually resembles the very earliest stage in libidinal development, before there was any organization at all, namely, the oral and cutaneous tendencies are manifest in those cases where the drug is taken by mouth or by hyperdermic injection, the syringe, it is true, may also have genital symbolic quality; the pleasure, nevertheless, is secured through the skin and is a passive-receptive one. More important than any erogeneous pleasure in drug elation, however, is the extraordinary elevation in self-esteem. During the drug elation, erotic narcissistic satisfaction visibly coincide again. And this is the decisive point.

For Fenichel, addicts are "fixated to a passive-narcissistic aim."

Gerard and Kornetsky (1954) represents one of the finest in-depth studies on addicts. Using an analytic frame of reference, they studied the general, social, and psychiatric characteristics of 32 male adolescent addicts from the United States Public Health Services Hospital in

Lexington, Kentucky These subjects were given a comprehensive psychiatric interview, as well as a complete psychological testing battery consisting of the Rorschach, Thematic perception Tests, the Wechsler-Bellevue, Draw-a-man, and the Bender-Gestalt Test. The results from the interview and the independently formulated interpretations of the projective tests indicated that all of the subjects were seriously maladjusted. Gerard and Kornetsky felt that the opiate drugs fulfilled several adaptive functions, namely, (a) the addict can avoid awareness of his intrinsic source of discomfort, and therefore, rationalize that the drugs force one to act out hostile feelings and impulses as well as support their delusional and/or distorted perceptions and expectations of interpersonal relationships by living a life of deceit, manipulativenness, and suspicion; (b) drug usage diminished overt psychiatric symptomatology; (c) the opiates helped to control the anxiety in interpersonal relationships by allowing the addict to be able to participate more adequately in normal adolescent activities--i.e., dancing, dating, or going out with the gang; (d) the regressive, oral satisfaction at the "high" was valuable for the emotionally disturbed individuals who are not able to find adequate satisfaction in recreation, work, or interpersonal relationships. Gerard

and Kornetsky found "no essential relationship between drug addiction and socio-economic groups." Gerard and Kornetsky (1955) studied 55 male adolescent opiate addicts in a controlled group. The results indicate that becoming an opiate addict is a highly individualized process which can be understood only in the context of the individual's personality structure, past life experiences, and present interactions with the significant figures of his familial and peer group. Both of the Gerard and Kornetsky studies lend support to Fenichel and Rado's theorizing by emphasizing the personality structure of the addict and the use of drugs in an adaptive capacity.

As the focus of psychodynamic theory began to include concepts from ego psychology, a number of new formulations emphasizing ego organization and character structure were added to the addiction literature. As Fenichel (1945) heralded in this transition, it was Savitt (1954) who provided a good presentation of the concepts. Savitt presented an ego psychology framework, when from his somewhat meagre sampling, he stressed the following etiological factors contributing to drug addiction: "(1) early disturbances in the development of the ego; (2) ego weakness; (3) ego splitting; and (4) immaturing of the ego." Savitt related that "the mother-child relationship appears to be crucial," since the

infant can't develop any confidence or hope that will allow him/her to tolerate present frustrations in anticipation of future gains. In a later paper, Savitt (1963) reaffirmed his belief by stating that it is "vicissitudes of early ego development and later ego maturation which facilitate and encourage regression that appears to play a dominant role in predisposing an individual to other development of a crippling morbid craving."

Rado's (1956, 1957) work represents support for this new direction in conceptualizing addicts. In a reexamination of drug addiction based on his added experience and the point of view of adaptional psychodynamics, Rado (1956) stated that from his experience

certain individuals are unable as young children to make the adjustment and transition from "the narcissistic system" to the realistic regime of the ego; from the blissful state of self-loving with the omnipotent ego fancying itself as the center of the universe, where its commands and overdmands are equally fulfilled to the first contacts with the pains and frustrations of reality.

The first blow to self-esteem and the attempts to incorporate the frustrating love-object and subsequent hostility against the love-object results in a "tense initial depression." This "tense initial depression" may last according to Rado for years in various conflictual variations until the day when the analgesic, hypnotic,

and elatant effect of drug(s) is discovered, erasing reality and temporarily reinstating the narcissistic omnipotence. But, the pharmacological effect is short-lived, and there is a sobering reawakening in which the original "depression" is accentuated and compounded by the guilt feelings for escaping from reality. The "pharmacothymic regime" that he first described in 1933 is established and the vicious cycle with the inevitable alteration of mood is played out. Rado now emphasizes that the "pharmacothymic regime" displays a disorganization of psychosexual development in the individual.

Rado (1957), in considering the dependence on narcotics, emphasized the importance of regression and defects in development as being the key concepts to understanding narcotic dependent individuals. He stated that

under the revised system of psychoanalytic thought, dependence on narcotic drugs is regarded as a malignant form of miscarried repair, artificially induced by the patient himself . . . and to explain the remarkable reaction, we must penetrate into the deepest and oldest strata of the mind, formed during the earliest stages of ontogenic development. The narcotic superpleasure may be viewed as a developmental derivative of alimentary orgasm.

Rado felt that the individual, who is about to develop a narcotic drug dependence, is one who has had a long history of intolerance to pain, coupled with "strong but often overcompensated needs."

In the sixties, the work of Chein, Gerard, Lee, and Rosenfeld (1964) marked a significant shift in the psychoanalytic literature. By studying the adolescent addict in the ghetto, rather than the adult addict in the analytic office, they provided some new perspectives on which to build a better understanding about drug addiction. Chein et al. placed major emphasis on the individual's attempt to use drugs adaptively to cope with the overwhelming adolescent anxiety associated with anticipated adult roles in the absence of adequate preparation, models, and prospects. Chein et al. followed, for a large part, the view that preexisting personality disturbances and consequent psychosocial maladjustment results in the development of drug dependence. They argued for the necessity of specific social factors and the individual's experience of drug use as psychologically or socially helpful, useful, or adaptive as a precondition (determining) factor in addiction, instead of the widely accepted psychological deviance stance. Seldin (1972) reviewed the research of Chein et al. and felt that their work supported his contention that for young male addicts, the critical factor is the degree of family emotional health. This critical factor emphasizes the importance of the individual's relationship with his mother as being crucial. From a family therapy point of view, Seldin

indicated that the family process for the addict is seen as inconsistent, overindulging, as well as overdenying. This process seems to be determined arbitrarily by the mood swings of the parents, and by parental standards that are not always stressed. Seldin (1972) also reviewed the literature from the various disciplines studying the visible male addict and found that these research investigations emphasized the addicts immature personality development.

Hartmann (1969) reported the findings of a study group of the American Association of Child Psychoanalysis, that was formed to investigate the use of drugs by adolescents. The study group suggested that some of the points that Rado (1933) had made seemed to apply to the current adolescent drug-using population. The group stated that:

1. There is a basic depressive character with early wounds to narcissism and defects in ego development.
2. There is an intolerance for frustration and pain with a constant need to change a "low" into a high." This may come from an early lack of satisfying object relations.
3. There is an attempt to overcome the lack of affectionate and meaningful object relations through pseudocloseness and fusion with other drug takers during their common experience.
4. The artificial technique of maintaining self-regard and satisfaction with drugs, of avoiding painful affects, and alleviating symptoms results in a change from a reality-oriented to a pharmacothymic-oriented regime. This leads to severely disturbed ego functions and ultimately to conflict with reality. Eventually, the drug taking becomes a way of life.

Krystal and Raskin (1970) indicated that the psychological preconditions that disposed an individual to seek and become dependent upon drugs, as a developmental problem in the differentiation of affects. In their book, they have placed the preconditions in early infancy and in the defective development of the requisite skills necessary for the successful management of affective states. The drugs help the individual to avoid and/or manage the painful affective states.

In the late 1960's and into the 1970's, research investigations began to focus on the preferential use of drugs. Weider and Kaplan (1969) concluded from their experience that different drugs induce different regressive states that resemble specific phases of early childhood development. They stated that "the user harbors wishes or tendencies for a particular regressive conflict solution which the pharmacology of a particular drug may facilitate . . . the repeated experiences of satisfaction establishes preference for the specific drug." Weider and Kaplan lend support to Fenichel's (1945) statement that

the problem of addiction reduces itself to the question of the nature of the specific gratification which person's of this type receive or try to receive from their chemically induced sedation or stimulation and the conditions that determine the origin of the wish for such gratification.

Frosch (1970) offered further substantiation for Welder and Kaplan's contention by stating that

having once experienced a particular drug induced pattern of ego functioning, the user may seek it out again for defensive purposes as a solution to conflict or for primary delight. This seeking out of a special ego state will be related to the individual's previous needs for the resolution of conflict or anxiety. If a particular drug induced ego state resolves a particular conflict, an individual may seek out that particular drug when in that particular conflict situation. This will result in a preferential choice of drug.

Milkman (1974) summarized his research by stating that

the origins of specific drug abuse may be in the nature of the drug-induced altered ego states. These may recapture a series of similar experiences, the origins of which appear to exist in specific phases of child development. A particular drug may thus facilitate a specific regressive solution to conflict and may, therefore, be preferred.

Khantzian's (1975) research suggested that an individual "selects" one as opposed to another drug in an attempt to cope with specific problems in the internal and external environment, which without the drug's effect would be unmanageable or unbearable.

Wurmser (1972) related that in the compulsive drug user, the drug usage is only the tip of the iceberg--an indicator of all the deeper troubles he is beset with. Although speaking specifically about opiate addiction, Wurmer (1974) felt that opiate addiction was a response to, or an attempt, to cope with preexisting psychopathology. This supported Kohut (1971) who noted

that "the drug . . . serves not as a substitute for a loved or loving object or for a relationship with them, but as a replacement for a defect in the psychological structure."

In the study most relevant to this proposal, Spotts and Shontz (1982) researched the developmental antecedents of chronic drug abusers. Their overall goal was to obtain comprehensive information about drug effects, drug use, and the personality characteristics of chronic drug abusers. This research was the result of inferences derived from a six-year project that examined the life histories, drug experience, and use patterns, psychological adjustment, and personality characteristics of selected chronic users of cocaine, amphetamines, opiates, barbiturates, and sedative-hypnotics. Subjects were selected for the study on the premise that the structure, dynamics, and motivations underlying drug abuse would be more readily discernible in an in-depth study of those individuals than in a more traditional, but superficial, large-scale survey of heterogenous users. Participants were selected to produce groups that were matched for age, sex, intelligence, socioeconomic status, and lifestyles. Their compilations indicate that the five groups of chronic drug abusers were ordered along a continuum of psychological maladjustment ranging from barbiturate, sedative-hypnotic abusers--representing

the greatest amount of psychological maladjustment, to opiate abusers, to amphetamines, to cocaine abusers, to nonusers--representing the greatest degree of psychological adjustment. This continuum is representative of the schemata for development, with barbiturate, sedative-hypnotic abusers having the lowest level of development, to nonusers having the highest level of development. This research was based on the theories of development of Jung, Neumann, Edinger, and Campbell. The key implication of Spotts and Shontz's (1982) research is as follows:

once a person elects to use drugs, his ultimate choice of substance is systematically related to the core problem he is attempting to resolve; drugs temporarily produce something akin to a desired ego state, but without the pain, struggle, and assumption of personal responsibility that genuine individuation requires; the critical matter is not which drug a person takes but the level at which his core developmental problems occurred and the developmental status the person has achieved in spite of them.

Spotts and Shontz (1982) also noted "that chronic substance abusers cannot be reached therapeutically unless they fight through the psychological crises that remain unresolved from their earliest years."

Spotts and Shontz (1982) suggest that their findings should be compared with research findings using the theory of Erik Erikson (1963), which covers the entire life span. Dunnette (1975) indicated that "the psychosocial theory of Erik Erikson may well be

applicable for explaining and possibly predicting drug use, particularly among young people."

In spite of the theorizing and the research studies that have begun to consider the developmental problems or issues exhibited by chronic substance abusers, there has not been a published report using a paper and pencil measure to determine the level of psychosocial developmental impairment in chronic substance abusers. Nor has there been research on chronic substance abusers using an Eriksonian developmental perspective.

Psychological Perspectives

Over the past decades, addiction researchers and theorists have attempted to describe common personality characteristics among individuals dependent upon drugs. These investigative efforts have provided generalizations and suppositions which seem applicable to most types of drug abusers. The drug abuse literature, however, does not distinguish between the personality characteristics of individuals as involved in specific kinds of substance abuse (heroin and cocaine in this proposed study). Milkman (1974) made an excellent observation when he indicated that "there is now a sufficient backlog of theoretical material to begin testing hypothesis with regard to specific mind influencing agents." This observation holds true for today, for if one accepts the

research findings of Rosch, 1970; Milkman, 1974; Khantzian, 1975, 1978, 1980; and Spotts and Shontz, 1982, that indicate that specific drug abuse is based on the preferential choice of a drug as an attempt to cope with specific problems that remain unresolved from the drug abusers earliest life. One is confronted with the question of how heroin abusers differ in their psychosocial development from cocaine abusers? Regarding the unresolved problems from early childhood, which psychosocial development tasks or issues are characteristically unresolved by the abusers who prefer heroin or cocaine?

Kurland and Mule (1978) lend credence to this exploration of the psychosocial development of the heroin abusers and cocaine abusers, by noting that "the choice of a specific drug derives from the mutual interaction of the psychodynamic meaning and pharmacogenic effect of the drug with the particular conflicts and defects in a person's structure throughout his development."

The Phenomenology of Heroin Abuse

Zimmering, Tooland, Safrin, and Wortis (1952) whose investigation was one of the first studies to delineate some of the personality characteristics of adolescent heroin addicts. Their results have importance to this

proposed study. In their study of 65 adolescent heroin addicts, they found the following:

They (adolescent heroin addicts) have a very close empathic relationship with the mother or mother surrogate. They are frequently the mother's favorite; the father is usually out of the picture because of death, separation, or lack of emotional rapport. . . . Their interpersonal relationships in general are tenuous and readily given up. . . . All of the boys showed profound work and school inhibitions, a fear of new situations and tasks calling for active mastery, and difficulty in initiating aggressive activity. . . . All of the boys described a similar subjective experience under the influence of heroin, consisting of (a) a disappearance of anxiety and a feeling of euphoria with a sensation of buoyancy or floating, (b) increased self-esteem and self-confidence with a feeling of positiveness in a situation, (c) fantasies of omnipotence in the possession of great wealth and power. . . . They resent the intrusion of an any reality that challenges these illusions of omnipotence and as a consequence isolate themselves in order to preserve them. . . . They can adjust more easily to tasks and situations demanding passive attention and alertness than to those that require a more concentrated effort and independent ideation of a creative nature. . . . There is a trend toward dependent thinking and judgment. . . . A general constriction of interest which results in an inability to absorb adequately what is offered through the school and cultural environment. . . . Drive and energy tend to be inhibited or misdirected.

Zimmering et al. (1952) felt that narcotic addiction can be considered one style of handling problems and fits the needs of this type of individual. This type of individual

perceives his activities so dangerous that he has a strong need to inhibit all of his aggressiveness and sexual impulses. He can find peace only under the influence of the drug. When sexual appetite is gone, and all aggressive activity is suspended. Then can he engage in his pleasurable fantasies of

omnipotence. Even in these fantasies, there is an absence of conflict, of active achievement, and of sex.

Gerard and Kornetsky (1954) studied addicts at the U.S.P.H. Hospital in Lexington, Kentucky, the researchers found "no essential relationship between drug addiction and socioeconomic group." The gross aspects of family structures in which addicts were reared were "variable." Mothers were reported to be: excessively controlling and strict (40%) or excessively indulgent, nondisciplinary (48%), and/or seductive (24%). Fathers were reported to be: absent, deserted, separated, or divorced (60%), or actively punitive, moralistic (30%), or paranoid and controlling (20%). Of the relationships between parents, 70% were reported to be poor, with father seen as a weak and ineffectual figure, held in contempt by the mother and children. Gerard and Kornetsky conclude that "the least qualified generalization which could be made about the families of these patients, is that they were of the types which psychiatric experience suggests are productive of serious difficulties in adjustment."

Given that an individual's mode of coping with life's problems is learned and engendered by his familial experience and surroundings, Savitt (1963) presented a family approach to studying addicts. He notes that

addicts to heroin were grossly neglected and unloved by their mothers. . . . the infants were not physically unattended but the postnatal, as well as prenatal, emotional climate was a tense and discordant one, and one or both of the parents were ambivalent about having the child.

This supported Gifford's (1960) comments that

the predisposition to addiction . . . has a special interest, because the need to reduce reality perceptions, abolish time sense, and withdrawal from human contact suggests an early period when object relations existed only in terms of gratification and the infant required a specific substance but an undifferentiated person, and all sensations from the environment were experienced as unpleasurable.

For Savitt, the connection exists in that "like the child who alternates between hunger and sleep, the addict alternates between hunger for a drug and narcotic stupor." The elation produced by narcotics has received the major focus rather than the sleep or stupor that follows it. The transient euphoria preceding the stupor may be related both to the decreased pressure of the drives, libidinal and aggressive, and to the sense of gratification of needs-satiation. The user "seeks desperately to fall asleep as a surcease from anxiety, and the drug provides the obliteration of consciousness. Well expressed in the vernacular, the addict 'goes on the nod.'"

Savitt felt that

the person who needs to inject the drug intravenously requires more rapid protection than those who are gratified by the oral-incorporation of need-satisfying drug supplies. Unless tension is completely obliterated, he is left in a situation

akin to the undifferentiated state of the neonate, which Freud (1936) describes as the period in which the infant, not yet able to bind tension, is flooded with stimuli against which there is no adequate apparatus of defense.

The heroin addicts that Savitt experienced seemed to be in just such a chronic state of intolerable tension until they found release in heroin.

Wider and Kaplan (1969) related in a similar manner that for the addict, the narcotic produces

a state of quiet lethargy . . . (is) . . .
conductive to hypercatheting fantasies of
omnipotence, magical wish fulfillment and self-
sufficiency. A most dramatic effect of drive
dampening is experienced subjectively as satiation
may be observed in the loss of libido and aggression
the appetites they serve.

Wider and Kaplan suggest that this style of coping is reminiscent of the Narcissistic Regression Phenomenon described by Mahler (1967), as an adaptive pattern of the second half of the first year of life. It occurs after the specific tie to the mother has been established and is an attempt to cope with the disorganizing quality of even her brief absences. It is as if the child must shut out affective and perceptual claims from other sources during the mother's absence.

This particular formulation is consistent with Fenichel's (1945) statement that addicts are "fixated to a passive-narcissistic aim." The psychodynamic perspective, the term "narcissism" is used in a number of contexts. "Primary narcissism" is seen as a failure in

the inner awareness and acceptance of the separateness or differentiation between self and the object world: the "self" is unbounded and the infant is therefore never aware of him/herself as such. In the newborn, some degree of primary narcissism is assumed to be the normal state of affairs. The infant only gradually develops a sense of separateness from the caregivers. Under good conditions, the infant learns slowly and without much pain that he/she is indeed quite separate; that he/she cannot make unlimited demands on the caregiver's attention or interest; that the caregivers have only a limited capacity to give; but that the caregivers are still trustworthy and lovable persons nonetheless. The earliest attachments to others are rooted in this lack of differentiation even as the infant begins to realize that he/she is, in fact, not unbounded. The caregiver is experienced as an extension or part of the infant. The infant seemingly has but to wish or cry out, and these extensions will do whatever is necessary to relieve the distress. The infant develops a sense of omnipotence. Since the infant is not aware of external objects as such, he/she cannot attribute pleasure and pain, gratification and frustrations to others as causal agents; affective states are conditions of being and can be perceived reflexively. Being is wonderful or being is hateful.

As the infant develops, the self becomes more bounded. There is a differentiation that occurs between self and nonself. In this development, the infant enters the phase of "secondary narcissism." The infant's relationships are appropriately modified--the caregivers are experienced differently--they are no longer perceived as extensions; rather, they become instrumentalities. If the infant fails to make an effective transition to this type of relationship, i.e., to an acceptance of separateness and to the formulation of relationships with others who are consistently seen as different and separate--leaves the infant subject to certain maladaptive consequences. The infant never quite succeeds in perceiving others in terms of their objective properties. When they fail him/her, the ensuing rage is not focused simply on the frustrating object; it is, at least partially, directed at the primordial undifferentiate self, at the fact of existence. When they satisfy his/her needs, there is a corresponding unbalanced and unfocused elevation of mood which embraces the inadequately perceived others in its glow, but which also cannot achieve recognition of the qualities of others that have made the desirable outcome possible or which can give due credit for services rendered. Such a person cannot make any realistic appraisal of his/her own

qualities, and therefore, cannot deploy the resources necessary for the attainment of his/her ends.

As Chein et al. (1964) noted,

the adolescent addict has typically progressed well into the second stage, but has not outgrown and easily regresses to the first. Although his involvement with the outside world, in the sense of establishing sympathetic and empathic relationships with peers and adults, is meager, one figure does occupy a prominent place in his psychic life--his mother. He has little love for her, in the sense of warm sympathetic, responsible concern for the welfare of another person which features the gratification of many infantile impulses. In part, and in a more basic sense, it is a relationship with an undifferentiated portion of himself/herself, with the hated, feared, and unloved mother from whom he has not yet fully distinguished himself and who is still a part of himself or whom he himself still remains a part.

Hence, the Narcissistic Regressive Phenomenon that Weider and Kaplan (1969) referred to, where objects are need fulfilling sources of supply. The oral zone and the skin are the primary focus for satisfaction and self-esteem is dependent on supplies of food and warmth. The narcotic drug represents these supplies. Addicts are described as being intolerant of tension and cannot stand pain or frustrations.

Milkman and Frosch (1973) noted that in being intolerant of tension and not being able to stand pain or frustration, the heroin abuser seeks to avoid these confrontations with his environment. Milkman and Frosch stated that

the major preoccupation of the heroin abuser is survival. The heroin addict perceives the surrounding environment as hostile and threatening, and maintains equilibrium via withdrawal and passive expressions of hostility. The heroin abusers thinking is described as concrete and personalized, and the defensive structures are more primitive and fragile than the comparison groups of amphetamine abusers.

Milkman and Frosch noted that "the heroin addict who characteristically maintains a tenuous equilibrium via withdrawal and repression, bolsters these defenses by pharmacologically inducing a state of decreased motor activity, under-responsiveness to external situations and reduction of perceptual intake." With this reduction of responsiveness to the environment, the authors provide an explanation that is consistent with Freud's (1936) comment, in that the addict is responding very similarly to the infant who is overwhelmed by external stimuli and actively seeks to shut it out.

Khantzian (1974) made a valuable contribution to the literature about narcotic addicts by studying the interrelationship between use of narcotics as a means of self-medication and the narcotic addict's underlying problems centering mainly around aggression. The main point of this dissertation is that the major motivation for narcotic use is not the search for pleasure, but rather, the suppression or muting of various forms of severe unpleasure. Based upon his extensive professional experiences with narcotic addicts, Khantzian hypothesized

"that a significant portion of these individuals become addicted to opiates because they discover that the drug acts specifically to reverse regressive states by attenuating, and making more bearable dysphoric feelings involving aggression, rage, and depression." A muting of the aggression and rage occurs through the use of opiates. In the course of responding to carefully obtained drug histories, Khantzian found that narcotic addicts provided ample descriptions of the dysphoric states of bodily tension and restlessness, anger, rage, violent feelings, and depression, all of which were relieved by heroin. He states that "with almost monotonous regularity, the patients used terms such as 'relaxed,' 'mellow,' 'calming,' and emphasized a total body response, to describe the effects . . . when they first began to use such drugs."

Hendin (1974) has published an excellent article dealing with college students on heroin. This paper contains valuable case descriptions. Hendin views heroin use as a buffer against the anxiety about closeness, sexual and emotional intimacy, stemming from a very disturbed relationship with the heroin user's mother, but Hendin also adds that heroin has a dampening effect on rage (they "hide their rage behind a passive facade" (p. 248)). Hendin notes that in the willingness of heroin users to do what is potentially so destructive that two

central themes, of despair and invulnerability seem to intertwine.

Heroin is essentially a drug of despair. It has the effect of . . . making everyone unimportant, of turning human involvement into an only ancillary experience. No groups of students I have seen, with the exception of severely suicidal students, have been hurt so deeply and so early in life.

The immense despair of heroin users

is reflected (in the) increasing fear and abrasiveness bound up in human relationships, a sense that to be free, one must give up on the very possibility of closeness. In using heroin to achieve this withdrawal, these students achieve the illusory freedom and illusory invulnerability of the isolate and the emotionally dead.

Khantzian, Mack, and Schatzberg (1974) focused on the use of heroin to cope, stating that

the central problem for most people who become addicted to opiates is that they have failed to develop effective symptomatic, characterologic, or other adaptive solutions in response to developmental crises, stress, deprivation, and other forms of emotional pain . . . the drug is their characteristic or characterological way of adopting and dealing with their inner world of feelings and emotions and the real world around them.

In the clinical material presented in the study, the authors note that

the loss of a girlfriend, a sense of failure in social relations, painful self-consciousness among peers in adolescence, worries about success and achievement, anticipated inability to live up to parental expectations, loneliness, psychosomatic pain, feelings of rage, violent impulses, and many other forms of emotional distress and bodily tensions are relieved and made more manageable through the use of narcotic drugs.

Khantzian et al. (1974) relate

that it is not uncommon to hear many addicts and others insist that the reasons they repeatedly and avidly return to using opiates is that they have not escaped from those same societal influences that originally caused their problem. What tends to be overlooked in such a broad, over-simplified generalization is how these societal influence and intrafamilial factors can produce early ego impairment that leaves a person less equipped to deal with later developmental challenges and adult stresses.

Kauffman (1974), in conducting a study consisting of the psychodynamic interviews of college students who were heroin addicts, noted the following psychological factors:

frequent masturbatory fantasies about mother as well as overt sexual attraction to her were common in male addicts. . . . Heroin was frequently used to neutralize murderous aggressive fantasies. For several, the act of injecting heroin represented a type of sexual gratification. Heroin frequently provided a primitive homeostasis which helped reconstitute a feeling of total bodily disintegration. . . . behavior such as low frustration tolerance, viewing others only as providers of supplies, manipulateness, extractiveness, self-destructiveness, and impaired reality testing historically has been taken as evidence of the addicts oral character structure. The characterological traits occur in all opiate addicts regardless of social class.

With this supportive evidence that narcotic addicts have residual developmental issues stemming from a very early stage in their development, it is not surprising that empirical data suggests that opiate abusers are low in trust. Erikson's first developmental stage is trust vs. mistrust. Capel and Caffrey (1974) compared the

attitudes of heroin addicts with those of other deviants and nondeviants comparison groups. Although the study was not directly centering on the issue of trust alone, their research suggested that the heroin abusers were more distrusting than the other comparison groups. Capel and Caffrey's (1974) findings were further substantiated by the investigative work of Ungerer, Harford, Kleinhaus, and Coloni (1978). Ungerer et al. investigated trust in opiate abusers using the Rotter Interpersonal Trust Scale. This instrument measures the generalized expectancy that the oral or written promises of others are reliable or trustworthy. The authors compared the level of interpersonal trust in opiate abusers, and comparison groups consisting of the abusers of other drugs, college students, and noncollege students. The findings indicate that opiate abusers were significantly lower in trust than the other comparison groups. The authors suggested that

one possible explanation is that low trusters are predisposed to opiate use. Perhaps low trust results in heightened anxiety, and the low trusters find the anxiety-reducing effects of opiates rewarding . . . another explanation is that heroin dependence decreases interpersonal trust.

Ungerer et al. (1978) found support for their findings in the quote by Kamstra (1975), when he observed that:

heroin . . . always seems to involve a lack of trust. Perhaps it's the nature of the drug itself; anything that creates such a need in the body, a

need that has to be satisfied at all costs, is inherently dangerous.

Gallagher (1973), in a study concerned with certain personality variables characteristic of heroin addicts, found significant differences between the heroin addicted groups and the nonaddicted comparison group, on two demographic variables relevant to the study. The data "indicates that the addicted group showed a higher frequency of not growing up with their true fathers," and that the demographic information "supports the fact that the heroin addicted population more often do not grow up with their true mothers than the non-addicted group." Although these findings are, to a certain degree, contrary to other research findings, the ramifications upon development are extensive, due to the significant role that the mother and father plays in developmental theory as well as the psychoanalytic approach to psychotherapy.

Milkman (1974) represents one of the first research studies to focus on the preferential abuse of a substance as opposed to another. Milkman studied the ego functioning of the preferential abusers of heroin or amphetamines. The results were based on interviews in which the subjects were examined with Bellak and Hurvich's Interview and Rating Scale for Ego Functioning. The data indicate that the heroin abuser's thinking is

more concrete and personalized, regression is to an earlier level, the defensive structures are more primitive and fragile, and that the heroin addict has less "global ego strength" than the amphetamine abuser. Other findings indicate that:

The heroin addict is concerned with survival and self-maintenance. . . . Clinical and statistical impressions of the heroin abuser suggests an individual of quasi-stable sense of identity (based mainly on) feedback from outside sources. When external signals and cues are absent, identity can become poorly integrated Their general impression of the heroin abuser is one in which he is detached from people under stress and is moderately striving for nurturant relationship, of a highly dependent nature, leading to stormy and strained attachments. . . . Clinically, the heroin abuser appears to be relatively primitive in his defensive structure. Repression and denial are massively deployed and withdrawal is a predominant mode. Under stress, repression is easily disrupted and the emergence of anxiety and depression are readily observed. Defensive functioning may become minimal, as evidenced by recurrent outburst of inner and outer directed aggression.

Milkman summarized his investigation by stating that

the origins of specific drug abuse may be in the nature of the drug induced ego states. These may recapture a series of similar experiences, the originals of which appear to exist in specific phases of child development. A particular drug may thus facilitate a specific solution to conflict and may, therefore, be preferred.

Khantzian (1978) noted that the rigid character traits and alternating defenses employed by narcotic addicts were adapted against underlying needs and dependency in order to maintain a costly psychological equilibrium. He stated that

the defenses (and the associated character traits) are employed in the service of containing a whole range of longings and aspirations, but particularly those related to dependency and nurturance needs. It is because of massive repression of these needs that such individuals feel cut off, hollow and empty . . . and that the addict's inability to acknowledge and pursue actively their needs to be admired and to love and be loved, leave them vulnerable to reversion to narcotics.

Khantzian (1980) provided a further elaboration on this point by noting that "in my experience, many of the self-destructive aspects of drug dependence represent failures in ego functions involving self-care and self-protection." Self-care functions originate and are established in the early phases of human development. They become internalized as a result of and through the ministrations of the caring and protective role of the parents, particularly mother. If optimal, children gradually incorporate a capacity to care for themselves and to protect against and anticipate harm and danger. Extremes of indulgence and deprivation may do injury to the individual's developing ego and sense of self around vital functions of self-preservation and care, and may leave individuals vulnerable to a whole range of hazards and dangers, not the least of which is the use of dangerous drugs. Khantzian also felt that because of the lifelong preoccupation of heroin addicts with aggression, that heroin is used specifically as an anti-aggression drug.

Wurmser (1978) lends support to Khantzian's contentions by noting, in his excellent book on the psychodynamic aspects of compulsive drug use, that

narcotics calm . . . intense feelings of rage, shame, and loneliness and the pain and anxiety evoked by these overwhelming feelings. These affects are usually derivatives of pervasive conflicts about the limitations of life: rage and shame are reactions to the massive disappointment and disillusionment in regard to their own grandeur; the intolerable sense of loneliness and hurt is the result of a longing for a symbiotic bond with a need-fulfilling, powerful other person who would give in to all demands.

The author indicates that there are several theoretical possibilities of how the pharmacogenic effect of narcotics comes about:

Either the drug increases the thresholds of decompensation from narcissistic conflicts; or it decreases the intensity of these conflicts by elevating the sense of omnipotence and self-esteem; or it functions directly as an artificial dampener on overwhelming affects, as denial.

Wurmser felt that the importance of narcotics lay in the latter function of reducing, or even eliminating, five basic overwhelming effects.

Disappointment was the first, but most elusive and transient, rage the most prominent affect. Typically this narcissistic rage was close to murderous or suicidal dimensions. When the ideal self or the ideal world had collapsed, only total devastation remained. Shame was the third, as an outcome of the conflict between the limited, disappointing self and the grandiose ideal self. Hurt (loneliness, rejection, abandonment), the fourth basic emotion in these patients, was the outcome of the experience that the other person (mother, father, girlfriend, boyfriend) proved not to be as great and redeeming, as all-giving as expected; the experience that anything short of

total union with this person total isolation and rejection, the shattering of the symbiotic illusion which was sought and often found and confirmed externally and concretely.

Wurmser notes that

there is no question that these patients all suffered very massive traumatization throughout their childhood, mostly in the form of grossest violence and crassest seduction and indulgence . . . these patients experienced massive external conflicts of overwhelming dimensions, and going on from early childhood right through adolescence.

Spotts and Shontz (1982) focused on the developmental experience of addicts when they investigated the developmental antecedents of chronic drug abusers. The authors interviewed chronic drug abusers and the results of these interviews were then placed within a Jungian developmental framework. The results are consistent with the other investigations regarding opiate abusers. Specifically, the authors state

that in the early lives of chronic opiate users, the transformations . . . which permit the ego to break free and establish a secure, separate identity--were mismanaged, blocked, or only partially completed . . . the failure or partial success of the opiate user's separation from the maternal figure is suggested by the frequent findings that these individuals continue to live with mother long after reaching adulthood.

Spotts and Shontz attempted to define the typical opiate character. However, they indicated that

although no typical opiate character emerged, these men were all leading narrow and constricted lives, and were all isolates who were cynical and distrustful of others. Few could tolerate close or

mutual relationships. They avoided intense emotionality . . . chronic opiate users would rather withdraw from the problems of life than attempt to conquer them.

They reported that

these men did not feel at home in the world at large, showed little interest in the tasks of adulthood (work, sexuality, marriage, family, etc.), seemed unable to cope with these in any persistent fashion, and reacted with ego constriction and withdrawal. Though bound to the present, chronic opiate users seemed repeatedly drawn to the past so remote that it is only referenced in religion, mysticism, and myth.

In support for their findings, Spotts and Shontz noted that

other investigators have commented on the regressive character of the opiate experience. Rado (1933, 1963) describes opiate addiction as a situation in which the ego returns to a state of infantile narcissism in which all wishes are immediately gratified. Savitt (1963) contends that the addict's impulses to use drugs originate in their need to fuse with the mother. Thus, the heroin injection (mother's breast food) relieves tension and depression, and restores the integrity of the ego, but at a primitive and infantile level. However, one interprets the opiate experience, it is clear that the men studied feel an intense longing to withdraw from the world and periodically surrender themselves to a state which, from their own descriptions is not unlike that of the Babe at the Maternal Breast.

Blatt, Rounsaville, Eyre, and Wilbur (1984) provided supportive evidence for the early impairment in the lives of opiate addicts by stating that "opiate addicts are more chronically addicted individuals who frequently appear to be struggling primarily with intensely painful problems of self-worth . . . their memories of early

childhood are filled with negative images of both parents."

The research literature places primary focus on the opiate addicts--heroin abusers' problem of adjustment as emanating from the early phases of development. There are consistent themes of:

1. The need for immediate gratification.
2. Establishing as a sense of omnipotence.
3. A need to inhibit aggressiveness.
4. Experiencing the environment as hostile or unpleasurable--to the point that the child must shut out the stimuli from the environment and that the resultant rage, shame, despair needs to be dampened and that heroin achieves this result for them.
5. That significant other cannot be trusted to provide them with the protection so desperately desired.
6. That the addicts relationship with their parents was very tenuous and strained.

There is not an attempt to blame the parents for the problems of adjustment because individual's do not react to their parents as they really are, but to parental images--unconscious images--that are heavily influenced by fantasies and archetypal contents. Nevertheless, there is a need to recognize the existence of certain modal patterns of adjustment for heroin addicts that find their origins in the early developmental years based on

the interaction of parental, constitutional, societal, and environmental factors.

The Phenomenology of Cocaine Abuse

The psychological perspective on cocaine abuse has become a concern in the research literature over the past ten years. The increased use and abuse of cocaine has resulted in investigations that attempt to provide a better understanding of the cocaine abusers underlying problems. Unfortunately, there has been a paucity of investigations, and most of the significant work has been done by Spotts and Shontz (1980, 1982, 1984).

Byck (1974) noted that

strangely enough, there has been almost no recent research into the effects of cocaine on man . . . if a search is made for articles about cocaine's psychopharmacological effects, no papers are to be found at all. A recent edition of the Pharmacological Basis of Therapeutics (1970) does not give a single reference in the literature to document the central effects of cocaine in man.

One of the reasons for this lack of research might lie in the fact that cocaine has always been a mercurial drug. A century ago, it became popular overnight and lost favor just as quickly.

One of the most interesting footnotes in the history of cocaine is that Sigmund Freud wrote five papers on cocoa and cocaine in the mid to late 1880's. These papers have been published as the Cocaine Papers:

Sigmund Freud (Byck, 1974). Gay et al. (1973) indicated that cocaine was isolated in 1860. One of the early, enthusiastic supporters of its use was Sigmund Freud. Between 1884 and 1887, Freud wrote five papers on cocoa and cocaine, suggesting the therapeutic value of the drug, ranging from its use as an aphrodisiac to a cure for morphine and alcohol addiction. Musto (1968) related that Freud believed that cocaine was a "magical drug," and Freud described cocaine as an instrument of unbelievable curative power. Although Freud never publicly retracted his broad endorsement of cocaine, he eventually acknowledged its danger, and conceded that cocaine had failed as a cure for morphine addiction. Freud discontinued his work with cocaine in 1887, and subsequently, eliminated this period from his autobiography.

One of the first articles published that focused on the cocaine user was Seevers (1939). In this article, Seevers provides a brief glimpse of the type of individual who chooses to use cocaine. He states that the individual choosing to use cocaine may be a phlegmatic, egocentric individual with a subjective awareness of inferiority.

The next major thrust toward understanding the cocaine user appeared in the early 1970's. Gay et al. (1973) commented that "the pharmacological action of

cocaine reinforces the highest aspirations of American initiative and achievement by providing the user with greater energy and optimism." Their observation has been supported by Sabbag's (1976) suggestion that "cocaine's growing popularity in the United States may be a function of the fact that it reinforces the qualities that have come to be admired as truly American: initiative, drive, optimism, the need for achievement, and the embrace of power." To further substantiate this point, Spotts and Shontz (1980) described the subjects in their study in the following manner:

all participants are products of American culture, perhaps to an extreme. All want to escape from the world unless they can achieve what they regard as the ultimate in success--acquiring wealth and admiration through aggressive self-assertion, winning the war of life by competing harder than anyone else.

Although the researchers have described characteristics which might well be found in people who use other drugs or no drugs at all, it is noteworthy that the descriptions have been of individuals who preferred cocaine because it allowed them to compete for the American dream and to possibly be admired for their productivity.

Spotts and Shontz (1980) represents the first in-depth study on the users of cocaine. Although this investigation has been criticized for its small sample size, it provides valuable information about the chronic

users of cocaine. This study is based on interviewing and testing of nine men who used and preferred cocaine over all of the other available drugs. The subjects were interviewed and given a battery of dimensional, morphogenic, and sociopsychological measures. Each subject was treated as an expert who could provide rich empirical and clinical detail with regard to both the personal characteristics of cocaine users and the situational context of their cocaine use. The authors note that "the data from the subjects were combined to provide a broad picture of men using cocaine in America today."

The findings "indicate unequivocally that cocaine produces euphoric effects, a sense of enhanced well-being and for some individuals increased self-confidence." In noting the different responses due to dosage level, the authors found that

while most low-dose users felt that the drug enhanced social relationships, heavy users reported that the drug provided the opposite effect. When taking cocaine, they found it necessary to restrict social contacts, withdraw, and isolate themselves, because of the intense paranoia that the drug produced.

In addition to difference, low dosages may enhance sexuality, but higher dosages seem to decrease interest in sexuality. However, "there was general agreement (among subjects) that cocaine can prolong sexual intercourse . . . but the sexual effects depend on the

amount of dosage." These findings seem to support the hypothesis that "cocaine can become a substitute for sex . . . sex may be a pale and lifeless competitor for the user's attention."

In regard to the cognitive effects of cocaine's use, Spotts and Shontz found that

there was an agreement that when using cocaine, the participants felt an enhancement of physical strength and a sense of certainty that they could accomplish anything--"you feel like you could gnaw through steel" . . . "I not only felt like I could do more work, I did more work! I could do triple what everyone else was doing."

All of the subjects reported increased mental lucidity and acceleration of mental activity.

Regarding characterological effects, the authors reported that

when it comes to cocaine, all the persons in these studies have weak will power. . . . In fact, there seems to be an inverse relationship between level of cocaine use and capacity for self-discipline. Those who take less cocaine seem to be more at the mercy of their environment than those who take more. The latter are characterized by their determination to impose themselves upon their surroundings, to make a mark on their world.

Spotts and Shontz indicates that of the men who participated in the study,

the majority are strong, willful, manipulative, and action oriented; they are counter dependent individuals who are wary, sensitive to slights, suspicious, and distrustful of others. . . . Most of these people took cocaine to gain access to the boundless energy, self-confidence, ebullient optimism, ego-enhancement, and aggressiveness the drug reportedly provides. These characteristics are highly valued in America, where they are touted

hourly in commercials and espoused in novels, movies, and dramas on T.V. It could therefore be proposed that the men in these studies selected cocaine because it seemed to provide an easy way to fulfill the American dream. Our participants seem to believe that in cocaine they have found a shortcut to happiness and fulfillment.

The recurring life themes noted in this study centered around

a preoccupation with independence, social isolation, and denial of passivity. The men seemed fearful of normal dependency relationships and are intent on making sure that they are self-sufficient enough to need no other human beings. . . . Each person in these studies seems to have used the drug for the heightened distinctiveness of self-identity, self-confidence, and sense of mastery that it provides.

Spotts and Shontz (1982) studied the developmental antecedents of chronic drug abusers. The authors interviewed chronic drug abusers and drew inferences regarding their ego development. In describing the typical cocaine user, the authors indicate that most of the men in their study had established their adult identity and seek self-completion. However, they still retain the scars from their unresolved developmental issues. Spotts and Shontz state that

the typical cocaine user almost broke free from maternal control but still carries wounds from the battle with the Terrible Mother. In childhood, when this man reached out for tenderness and compassion, the embarrassment and humiliation he experienced from the maternal figure taught him to have or express such feelings was a source of pain. Consequently, he vowed to become a strong, self-sufficient warrior who needs to lean on no one.

The key to understanding this type of individual centers around the intense counterdependence. The cocaine user

equates dependence with submission and intimacy with vulnerability, and he sees expressions of weakness as conditions that set the stage for domination by others. This is evident in the fact that cocaine users select careers in which supervision and control by others is minimal.

The cocaine user is focused upon the "fears of dependency and helplessness, momentos from the Mother of Childhood."

In describing the core conflict confronting the cocaine user, Spotts and Shontz noted that

the core ego conflict of chronic stimulant users occur after the paternal affect image has differentiated. To the chronic users, the Father is positive in emotional tone, but is a source of competition: someone to be overcome in the battle for ecstatic union with the affect image of a mother . . . the men who choose cocaine strive to possess her in her most passionate and ecstatic form.

In their research, Spotts and Shontz related that the chronic cocaine user's core conflict is at Stage III of their model which they indicate is reasonably close to Erikson's fourth stage of development (industry vs. inferiority). However, the authors indicate that

people with core difficulties in the early phases of Stage III tend to be so enmeshed in their battle for independence that they give little attention to the future. Freedom alone is the goal, and it seems a sufficient incentive for continuing the struggle. Those with problems later in this stage have attained sufficient competence and independence to formulate life dreams and goals.

This is an indication that from an Eriksonian framework that the chronic cocaine user spans the stages of Autonomy to Industry (2 to 4).

Spotts and Shontz (1984) in a report that describes some important psychological factors associated with heavy, chronic use of cocaine, describe "findings that are integrated with other facts to produce a theory of why some persons are drawn to heavy, chronic use of cocaine; to describes persons at risk for heavy use of the drug. . . ." The authors report that the

low-level users we studied are insecure persons, troubled by self-doubts and feelings of inadequacy; they are easy going people who avoid conflicts and intense emotionality. Cocaine helps them feel more self-assured, enhances social relationships, warms and enlightens a dreary day, or provides brief escape from an otherwise dull existence . . . , heavy users . . . are intensive, achievement oriented men who are determined to be self-sufficient, they are strong but isolated loners who equate dependence with submission, intimacy with vulnerability, and expressions of weakness as setting the stage for defeat at the hands of others. . . . Most are economically successful; all resent authority and seek out occupations where supervision is minimal.

The authors related that in treating heavy cocaine users through psychotherapy,

the most obvious manifest problem is the counterdependence. . . . Heavy cocaine users do not trust people; they strive to achieve complete independence through competitive success and domination . . . the second problem is an intense anger that is externally oriented but not directed at any specific object. Anger serves a dual purpose in these men's lives. It supports their struggle against the world and justifies their antagonism toward other people. It is also a response to the frustration they feel when their attempts to achieve

self-sufficiency fail. It recharges their energies and gets them to try even harder for success next time. The third problem tends to appear only after the user begins to realize the futility of his efforts of conquest. This is the problem of despair, and it is reflected in feelings of defeat, helplessness, bitterness, and disappointment.

The three problems noted result from and feed into the first underlying theme which is betrayal. The heavy user feels betrayed when "their infantile belief in the divinity of the mother image" is shattered and "they also feel betrayed by their fathers, who were too weak to prepare their sons adequately to deal with the world at large."

The research literature places primary focus on the cocaine abusers' problem of adjustment as arising from the phase of psychosocial development related to independence. There are a consistent themes of:

1. An awareness of inferiority.
2. Of being admired for one's productivity.
3. That cocaine enhances self-confidence.
4. A preoccupation with independence.
5. That significant others need to be pleased.

There is a need to recognize the existence of certain core developmental issues that are associated with cocaine abuses and that these issues seem to have their origins in the second stage of Erikson's theory.

CHAPTER III

METHODOLOGY

In Chapter III, definitions, sample, measures, procedures, design, testable hypotheses, and analysis procedures are presented and discussed.

Definitions

Research in the area of substance abuse has been complicated by a variety of overlapping definitions and terms. Smart (1974) summed up the problem quite well when he noted that "conceptual clarity has never been prominent in the field of alcohol and drug research. Terms such as addiction, dependence, habituation, drug abuse, drug misuse, and the like are used sometimes differently, sometimes interchangeably."

Although terms may have a variety of meanings depending on one's perspective, all interpretations of substance abuse seem to imply some problem related to mind-altering chemicals being taken on a regular basis. Huberty (1975) provided a good definition when he stated that substance abuse occurs when

the substance becomes physiologically habituating
(creating a biological need for the drug) or

psychologically habituating (creating an emotional need for the drug). In either case, the substance abuser's daily thoughts and activities are focused primarily on getting money for the drug, obtaining the drug, and actually consuming it. This may be done to the full or partial neglect of one's social and familial responsibilities. An individual's potential to grow emotionally, interpersonally, socially, and financially is short-circuited by one's striving for the drug. This is not to imply that the substance abuser is unable to function from day to day. It is to say that drug taking is primary in one's life and that other responsibilities and goal directed behavior is of secondary importance, leading to some degree of impaired functioning in one's life.

In the Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM III), the American Psychiatric Association (1980) uniformly classified substance use disorders. For the sake of operational uniformity, all subjects in this research will be assessed as to their preferential substance of abuse based on the DSM-III classification. The DSM III nomenclature defines substance abuse as having the following components:

- 1) A pattern of pathological use;
- 2) Impairment in social or occupational functioning due to substance use;
- 3) Minimal duration of disturbance of at least one month.

These components of substance abuse are further delineated in the DSM III according to the following criteria:

A pattern of pathological use. Depending upon the substance, this may be manifested by: intoxication

throughout the day, inability to cut down or stop use, repeated efforts to control use to certain times of the day, continuation of substance use despite a serious physical disorder that the individual knows is exacerbated by the use of the substance for adequate functioning, and episodes of a complication of substance intoxication (e.g., alcoholic blackouts, opioid overdose).

Impairment in social or occupational functioning caused by a pattern of pathological use. Social relations can be disturbed by the individual's failure to meet important obligations to friends and family, by display of erratic and impulsive behavior, and by inappropriate expressions of aggressive feelings. The individual may have legal difficulties because of complications of the intoxicated state (e.g., car accidents) or because of criminal behavior to obtain money to purchase the substance. (However, legal difficulties due to possession, purchase, or sale of illegal substances are highly dependent on local customs and laws, and change over time. For this reason, such legal difficulty on a single occasion should not be considered in the evaluation of impairment in social functioning for diagnostic purposes.) Occupational functioning can deteriorate if the individual misses work or school, or is unable to function effectively because of being intoxicated. When the impairment is severe, the individual's life can become totally dominated by the use of the substance, with marked deterioration in physical and psychological functioning.

Duration: Abuse as used in this manual requires the disturbance last at least one month. Signs of the disturbance need not be present continuously throughout the month, but should be sufficiently frequent for a pattern of pathological use causing interference with social or occupational functioning to be apparent (DSM III, 1980, p. 164).

In this research, the duration of the disturbance will be for a period of at least six months instead of the one month provided for in the DSM III criteria. The DSM III criteria was used in this study because the research was approved and well under way before the DSM III-R was introduced for general usage.

Selected Population

The population for this research consisted of male preferential abusers of heroin or cocaine, who were admitted to the Comprehensive Substance Abuse Treatment Programs of the Clinton-Eaton-Ingham Community Mental Health Board. An explicit population description is included (see Table 3.1). It is projected that the reader will be in a position of generalizing the results of this study to other populations that have similar relevant attributes.

Sample

The sample consisted of 76 substance abusers: 38 heroin abusers and 38 cocaine abusers. All of the subjects were capable of informed consent for participation in the research project. The subjects met the following requirements for inclusion into the study:

1. Admissions to the drug treatment programs of the Clinton-Eaton-Ingham Community Mental Health Board. Admission were either self-referrals or court ordered for treatment.

2. A stated preference for either heroin or cocaine.

3. Met the DSM III classification for heroin or cocaine abuse.

Table 3.1

Key Demographic Variables for Heroin and Cocaine
Admissions to the Comprehensive Substance Abuse Treatment
Programs for October 1986 to November 1987.

Variable	Cocaine Abusers	Heroin Abusers
Number admitted	103	83
Mean age (range)	27.66 (18-47)	35.47 (23-55)
Race--Caucasian	60	53
Black	36	26
Hispanic	7	3
Other	0	1
Marital Status		
Never Married	65	36
Married	19	25
Separated	13	2
Divorced	6	20
Education--Mean Years	11.74	12.18
Income		
\$0 - \$ 4,000	41	24
\$ 4,001-\$ 6,000	18	11
\$ 6,001-\$10,000	12	15
\$10,001-\$15,000	12	6
\$15,001-\$25,000	9	8
\$25,001	11	13

4. Have impairment of social or occupational functioning greater than six months duration.

5. Have minimal exposure to previous drug treatment.

6. Have an absence of psychosis.

7. Volunteer for the study.

8. Be drug free at the time of the test administration.

The determination of the drug preference and duration of drug abuse was based on:

1. Subject self-report of preference.

2. Interviews conducted by the professional drug rehabilitation staff.

3. Report from an attending physician (where possible).

The sample of cocaine abusers in the study ranged in age from 10 to 40 with a mean of 24.58. The heroin abuser group had a mean age of 34.26 with a range from 21 to 45 years. Both groups were predominately Caucasian (68.4% cocaine; 78.9% heroin). There was only one Hispanic, and he was a cocaine abuser. Blacks accounted for the remaining subjects (28.9% cocaine; 21.1% heroin). This information can be found in Tables 3.2 and 3.3.

The cocaine abuser group responded that they were primarily never married (58.9%) at the time of data collection, with 39.5% of heroin abusers responding in a

Table 3.2

Age of Subjects

Sample	No.	Mean	Standard Duration	Range
Cocaine	38	24.58	6.22	19-40
Heroin	38	34.26	5.67	21-45

Table 3.3

Race of Subjects

Race	Cocaine		Heroin	
	No.	%	No.	%
Caucasian	26	68.4	30	78.9
Black	11	28.9	8	21.1
Hispanic	1	2.7		

similar manner. Further information about the subject's marital status can be found in Table 3.4.

Table 3.4

Marital Status of Subjects

Marital Status	Cocaine		Heroin	
	No.	%	No.	%
Never Married	22	57.9	15	39.5
Married	6	15.8	9	23.7
Separated	4	10.5	1	2.6
Divorced	6	15.8	13	34.2

The mean number of years of education for the cocaine abuser group was 12.0, with 78.9% completing 12 or more years of education. This compares with the heroin abuser sample having a mean of 12.58 years of education with 86.8% completing 12 years or more of education.

A sizeable percentage of the cocaine abusers (57.9%) in this study reported having an income of less than \$4,000 for the preceding 12 months, with 86.9% reporting an income of less than \$1,000. The heroin abuser group reported 42.1% having income less than \$4,000, while

65.8% had an income of less than \$10,000. Table 3.5 expands upon this information.

Table 3.5

Annual Income of Subjects

Income	Cocaine		Heroin	
	No.	%	No.	%
\$ 0 - 4,000	22	57.9	16	42.1
\$ 4,001- 6,000	5	13.2	4	10.5
\$ 6,001-10,000	6	15.8	5	13.2
\$10,001-15,000	2	5.3	3	7.9
\$15,001-20,000	1	2.6	3	7.9
\$20,001-30,000			5	13.1
\$30,001+	2	5.3	2	5.2
Total	38	100.0	38	100.0

Both groups rated their parents' social standing on a 9-point Likert scale. The cocaine abusers reported a mean of 5.16 with a standard deviation of 1.10, while heroin abusers indicated a mean of 4.84, with a standard deviation of 1.44. The cocaine abusers predominately reported their parents' social standing as middle class

(81.6%) and 76.3% of the heroin abusers reported the same. The results are depicted in Table 3.6.

Table 3.6

Rating of Parents' Social Standing

Scale	Cocaine		Heroin	
	No.	%	No.	%
Lower	4	10.5	7	18.4
Middle	31	81.6	29	76.3
Upper	3	7.9	2	5.2
Total	38	100.0	38	100.0

Both groups rated their sense of emotional well being on a 9-point Likert scale. Cocaine abusers had a mean of 5.26, with a standard deviation of 1.80. Heroin abusers had a mean of 5.37, with a standard of 1.32. Table 3.7 graphically illustrated that only 28.9% of the cocaine abusers and 21.1% of the heroin abusers rated their emotional well being as happy.

Subjects were asked to indicate the reason that they used their drug of preference. Cocaine abusers overwhelmingly responded that they were looking to speed themselves up (94.7%). Heroin abusers predominately were

Table 3.7

Rating of Emotional Well Being

Scale	Cocaine		Heroin	
	No.	%	No.	%
Unhappy	7	18.5	3	7.9
Average	20	52.6	27	71.0
Happy	8	28.9	8	21.1
Total	38	100.0	38	100.0

looking to slow themselves down (60.5%). The results are depicted in Table 3.8.

Table 3.8

Reason for Taking Drug of Preference

Reason	Cocaine		Heroin	
	No.	%	No.	%
Slow myself down	2	5.3	23	60.5
Speed myself up	36	94.7	15	30.5

Finally, the age at first use of the preferential drug was determined for both groups. Cocaine abusers had a mean age of first use of cocaine of 21.95 years old,

while heroin abusers had a mean age of first use of heroin of 25.08 years of age. Table 3.9 expands on this information. Both groups' length of usage for their drug of preference was determined. Cocaine abusers had a mean length of cocaine usage of 5.58 years, and heroin abusers had a mean length of heroin use of 9.18 years. Table 3.10 provided further information about length of usage of preferential drug.

Table 3.9

Age of First Usage of Drug of Preference by Drug of Preference

Age	Cocaine	Heroin
13-15	6	1
16-18	10	5
19-21	10	8
22-24	5	9
25-27	5	11
28-30	2	4

Table 3.10

Length of Preferential Drug Usage in Years

Number of Years	Cocaine Abusers	Heroin Abusers
1-2	4	2
3-4	16	8
5-6	8	5
7-10	8	11
11-15	1	7
16-20	1	4
20+	--	--

Measure

Erik Erikson's theory of psychosocial development has been an impetus for research investigations and clinical applications. Several attempts have been made to make it amenable to empirical assessment.

Assessment of Adult Adjustment
Patterns (AAAP)

The AAAP was developed by Farquhar, Wilson, and Parmeter (1977), as an objective, self-report instrument based on Erikson's theory of psychosocial development. Its rigorous test construction and its attempts to measure all eight of Erikson's stages makes it unique among Eriksonian assessment techniques currently reported

in the literature (Azar, 1982; Farquhar, 1983). It consists of 320 items which measure mastery or nonmastery of each of the eight stages, as well as the inclusion of two validity scales to check for deviant responding (F Scale) and attempts to present oneself in a favorable light (Social Desirability Scale).

The format of the AAAP requires that subjects rate themselves on a 4-point scale ranging from (1) definitely true of me to (4) definitely not true of me. Intermediate points are labeled (2) true of me and (3) not true of me. Mastery or nonmastery for each of the eight stages are measured by the AAAP as individual items are assigned weighted values with regard to whether they represent resolution or not of particular developmental stages. Responding in the direction of resolution, a specified percentage of the time for a given stage is considered to represent mastery. The normative sample of the AAAP was comprised of 322 staff and faculty from Michigan State University. Azar (1982) found that this sample mastered the eight stages in the following proportions: Stage 1=66%; Stage 2=73%; Stage 3=54%; Stage 4=68%; Stage 5=76%; Stage 6=74%; Stage 7=46%; and Stage 8=51%. His initial research approach had been to use the 80% standard adapted from the mastery learning model (Bloom, 1968). The mastery levels were manipulated, however, in an attempt to have the scales

reflect an ascending order of mastery from Stage 1 to Stage 8. The more traditional 80% mastery standard is the one used in this study.

The developmental stages, as measured by the AAAP, have quite high internal consistency (see Table 3.11).

The scales of the AAAP have internal consistencies ranging from .85 to .95 using the Cronbach Alpha coefficient. A factor analysis of the instrument produced 23 factors that were consistent with Erikson's theory, as well as having reliability coefficients ranging from .68 to .92 with a mean of .84 (Azar, 1982). See Table 3.12.

Assessment of Adult Adjustment Patterns

Scale reliabilities. Reliability estimates for the eight stage scales of the AAAP were computed for the combined samples. The reliability coefficient for the eight stage scales were consistently lower than those reported by Azar (1982) for the normative group and by Athy (1986) for a group of alcoholics. The greatest discrepancy between reliability coefficients for this study and Azar's normative group and Athy's alcoholic sample occurred on the first three stages. (See Table 3.13 for a comprehensive presentation of the reliability coefficients.) These early stages of psychosocial development are the ones that this study hypothesized

Table 3.11

Stage and Scale Statistics for the Assessment of Adult Adjustment Patterns

Erikson Stage	Number of Items	n=354 Mean*	Variance	Standard Deviation	Cronbach's Alpha Reliability
1. Trust	18	54.01	54.71	7.33	.88319
2. Autonomy	36	108.86	134.24	11.59	.90717
3. Initiative	26	75.27	79.29	8.90	.87019
4. Industry	63	190.56	440.53	20.99	.95076
5. Identity	33	100.08	108.39	10.41	.90255
6. Intimacy	28	88.09	116.72	10.08	.90126
7. Generativity	29	84.37	116.03	10.77	.88837
8. Integrity	25	74.23	75.83	8.71	.85431

Source: Based on individual items weighted one to four summed across the scale.

Note: From William Farquhar, "Assessment of Adult Adjustment Patterns (AAAP) Research Instrument: First Report," Unpublished Report, 1983.

Table 3.12

The Factors Emerging from the Assessment of Adult
Adjustment Patterns

Erikson Stage	Name of Factor	No. of Items N=354	Cron- bach's Alpha #
1. Trust vs. Mistrust	Basic Trust	18	.88
2. Autonomy vs. Shame and Doubt	Will to be oneself	23	.89
	Solitude	11	.82
	Holding on, letting go	13	.82
3. Initiative vs. Guilt	Self-punishment and Guilt	23	.86
	Anticipation of roles by parents	4	.81
4. Industry vs. Inferiority	Apply self to risk	26	.92
5. Identity vs. Identity Confusion	Trust in peers	16	.86
	Ideological thought	8	.79
	Molding identity	13	.84
	Fidelity tests	10	.79
6. Intimacy vs. Isolation	Commitment to affiliation	19	.90
	Genital maturity	11	.83
	Fusion with another	7	.68
7. Generativity vs. Self- Absorption	Establishing and guiding next generation	17	.68
	Charity	15	.84
8. Integrity vs. Disgust Despair	Order and Meaning	17	.83
	Accepting one's life cycle	13	.80

Source: William Farquhar, Assessment of Adult Adjustment Patterns (AAAP) Research Instrument: First Report." Unpublished Report, 1983.

Table 3.13.

Reliability Coefficients for the Stages

Stage	Present Study	Athy's Alcoholics	Azar's Normative
1	.66	.80	.88
2	.68	.83	.91
3	.51	.77	.87
4	.82	.93	.95
5	.71	.86	.90
6	.81	.86	.90
7	.80	.85	.89
8	.83	.85	.85

that heroin abusers and cocaine abusers would have the greatest degree of difficulty with than their nonsubstance abusing counterparts. Such internal deviation may be indicative of a great deal of instability in their psychosocial development as suggested by the research literature and this study.

The demographics of the AAAP normative sample are in marked contrast to the substance abusing samples used in this study (Azar, 1982). Several dimensions of the demographic presentations illustrate this point. The mean age of the normative sample was 41 years of age, while the mean age of the substance abusing subjects in this study was 29 years. The marital status of the groups were different. In Azar's study, 76% of the subjects reported that they were married. This is in distinct contrast to the 40% of the substance abusers in this study who indicated that they had never been married. Azar's normative group was composed of 12.2% subjects reporting an annual income of less than \$10,000 in comparison to 76% of the subjects in the present study. In assessing their personal life, Azar reported that 70% of the normative sample indicated that they were happy, while only 25% of the subjects in this study. The normative sample was composed of quite a large number of college graduates, 77.3% of its members reported having attained at least a bachelor degree in stark contrast to

only 4% of the subjects of the present study. Table 3.14 provides a comprehensive presentation of scale statistics for the present study, Athy's samples, and Azar's normative sample.

Construct validity was established by comparing a normal population with a psychiatric population. The means for each stage were significantly higher for the normal population than for the psychiatric population except for Stage 6, at a probability $<.001$ (Azar, 1982). See Table 3.15.

The AAAP represents a comprehensive effort by Farquhar and his research associates to develop a reliable and valid instrument that may be used to objectively measure all eight of Erikson's psychosocial developmental stages. The present format is a distillation of 2500 original items that were subjected to extensive cross validation and item analysis (Azar, 1982; Farquhar, Wilson, & Parmeter, 1977). Studies using it have been undertaken with college students (Valdez, 1983), handicapped college students (Scabbo, 1984), and male alcoholics (Athy, 1986). It has proven to be a reliable measure with these diverse samples and recommendations have been made for continued research with it. This study is the first administration of the AAAP to a sample comprised of heroin abusers and cocaine abusers.

Table 3.14

Mean, Standard Deviation for the Eight Stages of the AAP

Stage Scale	Means Present Study N=76	Athy Study N=162	Azar Study N=354	<u>Standard Deviation</u>		
				P.S.	Athy	Azar
1. Trust ^a	52.96	63.48	54.01	9.5	9.8	7.33
2. Autonomy	83.97	97.96	108.56	8.05	11.6	11.59
3. Initiative	66.17	67.39	75.27	5.37	9.37	8.9
4. Industry	147.05	175.39	190.56	14.42	23.4	20.99
5. Identity	75.04	91.29	100.08	8.35	12.3	10.41
6. Intimacy	62.24	80.81	88.09	9.31	12.0	10.08
7. Generativity	75.36	76.76	84.57	9.15	11.26	10.77
8. Integrity	53.84	68.58	74.23	8.77	10.34	8.71

^aThe normative study had 18 questions for Stage 1. The subsequent studies had 25 questions for Stage 1. The mean for the normative group would be approximately 74.4 if there were 25 questions.

Table 3.15

Comparison Between the Normal and Psychiatric Samples on the Ego Stage Scale of the Assessment of Adult Adjustment Patterns

Erikson Scale	(n=322) Means (n=32)		Standard Deviation		F-test	P
	Normal	Psychiatric	Normal	Psychiatric		
1. Trust	55.08	44.19	6.5	6.92	97.65	.00001
2. Autonomy	110.30	94.34	10.17	14.75	65.27	.00001
3. Initiative	76.49	63.00	7.18	10.01	82.13	.00001
4. Industry	193.14	164.59	18.72	24.96	63.34	.00001
5. Identity	103.44	91.66	9.73	12.21	40.62	.00001
6. Intimacy	88.34	85.56	10.74	11.30	1.94	.16504
7. Generativity	84.84	79.62	10.62	11.26	6.94	.00879
8. Wisdom	74.75	69.06	8.56	8.64	12.81	.00039

Note: From William Farquahr, "Assessment of Adult Adjustment Patterns (AAP) Research Instrument: First Report," Unpublished Report, 1983.

Procedures for Data Collection

The method for data collection was as follows:

1. Alert the various substance abuse treatment components regarding the requirements for subjects inclusion into the study.

2. Recruit subjects who meet the requirements by explaining the study and providing information regarding the risk and benefits that could reasonably be expected, as well as their rights as subjects.

3. Have subjects sign the consent for participation form.

4. Administer the AAAP and demographic questionnaire.

5. Review the AAAP and demographic questionnaire and return to the subject for completion if any missing information was noted.

6. All protocols were coded to ensure confidentiality.

7. A multichecking form was used to ensure that clients were appropriate for inclusion in the study by meeting the requirements.

Research Design

This study is descriptive in nature. While causality is not within the scope of a descriptive study, the proposed investigation will offer valuable

information on the relationship between psychosocial development and the preferential abuse of heroin or cocaine.

Testable Hypotheses

The following research hypotheses are stated in their alternative form. It is an implicit and accurate assumption that their null hypothesis will be initially tested.

Null Hypothesis 1: Heroin abusers will have a mean score on the AAAP that does not exceed the mastery level of Stage 1 (Trust vs. Mistrust).

Null Hypothesis 2: Cocaine abusers will have a mean score that does not exceed the mastery level of Stage 2 (Autonomy vs. Shame and Doubt) on the AAAP.

Null Hypothesis 3: The mean scores on the AAAP stages 1-8 will be lower for heroin abusers than cocaine abusers.

Analysis

The statistical analysis procedures to be used in testing the hypotheses of the study were chosen for their ability in analyzing the data for significant differences between and among groups. The probability level for significance was set at .05.

Hypothesis 1 will be tested using the analysis of variance procedure to test for significant differences between cocaine abusers and heroin abusers on the eight stages of the AAAP. The analysis of variance procedures require that the following statistical assumption are met:

1. Normality
2. Homogeneity of variance
3. Independence of observations

In the present study, the assumption of normality is addressed by the Central Limit Theorem. This theorem states that the greater the sample size, the more likely the sampling distribution will approach a normal distribution. The cocaine abuser sample size of 38 and the heroin abuser sample size of 38 could be suspect, but fortunately, the F-test is considered to be robust with regard to violations of the normality assumption. The assumption of homogeneity of variance requires that cell sizes for each category to be equal or nearly equal. This is the case for both samples in the present study. The study has 38 cocaine abusers and 38 heroin abusers in each cell. Furthermore, it should be noted that the analysis of variance procedure is also robust to the violation of the homogeneity of variance assumption. The independence of observations assumption is insured by each subject completing the measures used without

collaboration or discussion with others. Assignment to sample groups is based on the operational definition of the abuse of cocaine or heroin.

Hypotheses 2 and 3 will be tested by student's (one tailed) t-test of a single mean against a calculated theoretical value. The assumptions underlying the use of the t-test are:

1. Independent random sampling
2. Normality

In the present study, the independent random sampling requirement is met by considering the consecutive admissions to the various drug treatment programs as being representative of the larger group of heroin or cocaine abusers, and is therefore, treated as a random sampling. The assumption of normality is met by the Central Limit Theorem. The theorem states that when the sample size becomes sufficiently large, the sampling distribution will approach a normal distribution. The sample size in the present research meets the criterion of the Central Limit Theorem. The t-test usually provides a relatively accurate evaluation of experimental hypotheses even when its assumptions are violated (Boneau, 1960).

The mastery percentages for the AAAP stage performance were based on an 80% standard of responding in the direction of resolution.

The influence of relevant demographic variables was also considered using the analysis of covariance procedures.

Summary

The study presented was designed to delineate the psychosocial developmental characteristics of male cocaine abusers and male heroin abusers as manifested on the Assessment of Adult Adjustment Patterns (AAAP). Developmental differences between cocaine abusers and heroin abusers on the AAAP were explored.

Samples of 38 male cocaine abusers and 38 male heroin abusers were administered the AAAP, along with a short demographic questionnaire. Data analysis involved the use of analysis of variance procedures in testing for significance between and among sample groups on the AAAP and Student's t-test used to test specific hypotheses about the theoretically calculated level of psychosocial development impairment of sample groups. Cocaine abusers were hypothesized as having developmental impairments that results in not mastering Stage 2 (Autonomy vs. Shame and Doubt) on the AAAP and heroin abusers were hypothesized as having developmental impairments that results in not mastering Stage 1 (Trust vs. Mistrust) on the AAAP. Cocaine abusers were hypothesized as having mean scores on the AAAP stages 1-8 that were greater than

the heroin abusers mean scores. Demographic variables were also examined.

CHAPTER IV

RESULTS OF THE DATA ANALYSIS

In the following chapter, the results of the data analysis are presented. Each hypothesis is restated in a testable form. The results of the analysis are then given, followed by a statement of whether or not the hypothesis was accepted or rejected. A separate section focuses on the significance of the demographic variables and their influence on the data analysis.

Hypothesis About Heroin Abusers' Mean Score Performance on AAP Stage 1

Hypothesis 1: The mean score on Stage 1 of the AAP for Heroin Abusers will be equal to or greater than a score of 80, indicating mastery of Stage 1.

Alternate Hypothesis 1: The mean score on Stage 1 of the AAP for Heroin Abusers will be less than a score of 80, indicating a lack of resolution of Stage 1.

The results of a t-test (Table 4.1) allowed for the rejection of the null hypothesis. The alternative hypothesis could be accepted as it was significant in the

predicted direction ($p < .0005$). The observed sample mean deviates significantly for the specified a priori value as predicted.

Table 4.1

Student's T-Test for Heroin Abusers on AAAP Stage 1

Stage Scale	N	t-obtained	Critical Value	p
1. Trust	38	-10.15	Approx. 2.704	$p < .0005$

Hypothesis About Cocaine Abusers Mean Score
Performance on AAAP Stage 1

Hypothesis 2: The mean score on Stage 2 of the AAAP for Cocaine Abusers will be equal to or greater than a score of 115, indicating mastery of Stage 2.

Alternative Hypothesis 2: The mean score on Stage 2 of the AAAP for Cocaine Abusers will be less than a score of 115, indicating a lack of resolution of Stage 2.

The null hypothesis was rejected and the alternative hypothesis accepted as predicted. The observed sample mean deviates significantly from the a priori value. Tables 4.2 illustrates the results of the t-test.

Table 4.2

Student's T-Test for Heroin Abusers on AAAP Stage 1

Stage Scale	N	t-obtained	Critical Value	p
2. Autonomy	38	-9.13	Approx. 2.704	p<.0005

It was hypothesized that Cocaine Abusers would show a lack of resolution on Stage 2 of the AAAP and within that hypothesis was the assumption that Cocaine Abusers would show mastery on Stage 1 of the AAAP.

Hypothesis: The mean score on Stages 1 of the AAAP for Cocaine Abusers will be equal to or greater than a score of 80, indicating mastery of Stage 1.

Alternative Hypothesis: The mean score on Stage 1 of the AAAP for Cocaine Abusers will be less than a score of 80, indicating a lack of resolution of Stage 1.

The results supported rejecting the null hypothesis and supported the alternative hypothesis. Table 4.3 provides the results of a t-test on the mean score on Stage 1 of the AAAP for Cocaine Abusers.

Table 4.3

Student's T-Test for Cocaine Abusers on AAAP Stage 1

					.
Stage Scale	N	t-obtained	Critical Value	p	.
1. Trust	38	-9.43	Approx. 2.704	p<.0005	.

Hypothesis About AAAP Stages Discriminating
Between Cocaine Abusers and Heroin Abusers

Hypothesis 4: There will be no difference between the mean scores of Cocaine Abusers and Heroin Abusers on the AAAP Stages 1 through 8.

Alternative Hypothesis 4: The mean scores on the AAAP Stages 1 through 8 will be significantly higher for Cocaine Abusers.

The results of the one-way analysis of variance (Table 4.4) did not allow rejection of the null hypothesis. The alternative hypothesis was rejected as no significant difference was found between Cocaine Abusers and Heroin Abusers.

Demographic Variables

The demographic information pertaining to both cocaine abusers and heroin abusers was presented in Chapter II. Chi-square analyses revealed that the two sample groups were significantly on the variables of "I

Table 4.4

F-Test Comparisons Between Male Cocaine Abusers and Male Heroin Abusers on AAAP Stages 1-8

Stage Scale	Means		Standard Deviation		F-Test	P
	Cocaine	Heroin	Cocaine	Heroin		
1. Trust	68.63	67.37	7.42	7.68	.5219	.4681
2. Autonomy	99.29	100.50	10.58	10.34	.2544	.6155
3. Initiative	67.61	67.11	8.39	7.97	.0710	.7907
4. Industry	176.71	176.92	24.17	19.20	.0018	.9666
5. Identity	95.76	95.68	14.05	12.73	.0007	.9796
6. Intimacy	86.00	86.18	11.07	12.71	.0045	.9465
7. Generativity	75.03	75.55	11.70	10.24	.0435	.8353
8. Integrity	72.39	70.34	8.16	9.28	1.0480	.3093

take my drug of preference to (a) slow myself down; (b) speed myself up," ($p < .00001$). Analysis of variance procedures showed significant differences on the variable of age. The results of the analysis of variance for age is depicted in Table 4.5.

Table 4.5

F-Test Comparison Between Cocaine Abusers and Heroin Abusers on the Variable of Age

Sample	N	X	SD	DF	F	P
Heroin	38	34.26	5.67	1	23.97	<.00001
Cocaine	38	27.58	6.22			

An analysis of covariance was performed on the data, to consider the interaction of age and drug of preference upon mean stage scores, as well as the main effects of age and drug of preference.

The results of the analysis of covariance procedure indicated that age and the interaction effects of age and drug of choice were not significant.

Summary

The results of the analysis of data were presented in Chapter IV. All hypotheses formulated for the study were restated in testable form. The results of the analyses were given followed by a statement of whether or not the hypothesis was accepted or rejected. In addition, several other analyses were performed to examine closely the demographic variables and how they might influence the mean scores for the cocaine abuser and heroin abuser groups. In the next chapter, the study is summarized, the results discussed, and conclusions drawn.

CHAPTER V

SUMMARY AND CONCLUSIONS

This chapter is devoted to a summary of the study, a discussion of the conclusions drawn from the data and their analyses, and concludes with implications for future research.

Summary of the Study

Erik Erikson's theory of psychosocial development has provided innovative and systematic formulations from which to study the development issues and differences between male heroin abusers and male cocaine abusers. Erikson's theory outlines the lasting contributions to the individual's personality development that results from the interplay between parental and societal influences and demands, and the needs and capabilities of the individual. The theory includes eight stages that span the entire life cycle. Each stage is viewed as a crisis or a choice between alternatives. The relatively successful or unsuccessful resolution of each stage leaves the individual with a residual attitude or orientation toward himself/herself and the world. The successful resolution of prior stage(s) is presumed to be

necessary for the successful resolution of a current stage. For the purpose of this study, Erikson's theoretical assumptions were transposed into hypotheses regarding the developmental characteristics of male heroin abusers and male cocaine abusers. Specifically, heroin abusers were hypothesized to have developmental impairments associated with Erikson's first stage--Trust vs. Mistrust. The core developmental conflict for heroin abusers arises out of the lack of consistency, on predictability, and unreliability of their primary caregiver. The effect of this style of interaction between the heroin abuser and the caregiver is found in the individual's inability to trust that his/her needs will be met by others and the world. Heroin allows the individual to cope with the world and difficult emotional states.

Cocaine abusers were hypothesized as to having unresolved developmental issues related to Erikson's second stage of development--Autonomy vs. Shame and Doubt. In their early attempts at autonomy, the cocaine abuser engaged in a struggle of wills with their primary caregiver. In losing the struggle, the cocaine abuser tries to please others by living up to their expectations and thus thwarting his/her ability to function autonomously. A great deal of shame and doubt pervades the life of the cocaine abuser.

An overall hypothesis stating that cocaine abusers would have achieved a higher level of development was considered.

The present study was descriptive, with the drug of choice as the independent variable (two levels: cocaine abuse, heroin abuse), and the scores on the Eriksonian developmental measure (AAAP) as the dependent variable.

The cocaine abuser sample and the heroin abuser sample was comprised of males who were receiving treatment for their specific drug of choice in the Comprehensive Substance Abuse Treatment Programs of the Clinton-Eaton-Ingham County Community Mental Health Board. A total of 76 males were recruited as research subjects, with 38 males in the heroin abusing sample and 38 males comprising the cocaine abuser sample. The only significant difference of note between the two samples was the demographic variable of age. In general, the male cocaine abusers in the study were significantly younger than the heroin abusers sampled.

Both cocaine abusers and heroin abusers were administered a 13-item demographic questionnaire and the Assessment of Adult Adjustment Patterns. The AAAP is an objective, self-report instrument that is based on Erik Erikson's theory of psychosocial development. It attempts to measure the resolution or lack of resolution

of the eight stages. The AAAP has been proven to be a reliable instrument with diverse samples.

Data analysis involved the use of Student's t-test to determine significant differences between an observed sample means and some particular a priori value. The relationship between heroin abusers and the AAAP Stage 1 performance was examine using this procedure. The relationships between cocaine abusers and the AAAP Stage 1 and Stage 2 performance were also examined using these procedures. Analysis of variance procedures were used to test the significant differences between male cocaine abusers and male heroin abusers on the mean scores of all of the eight stages of the AAAP. The resolution percentage for the AAAP was based upon an 80% criterion of responding in the direction of resolution. Finally, an analysis of covariance procedures were used to determine the effect that age and drug of choice, as well as the interaction of those variables might have had upon the mean scores of the eight stage of development measured by the AAAP. The influence of the relevant demographic variables upon AAAP stage performance for cocaine abusers and heroin abusers was examined with analysis of variance procedures. The probability level for significance was set at .05 for all analyses.

Hypothesis 1 related to the heroin abuser sample mean performance score on AAAP Stage 1. Thus, Hypothesis

1 related to an expectation that heroin abusers would have a mean performance score less than the resolution criteria of 80%. The hypothesis was stated as follows:

Hypothesis 1: The mean score on Stage 1 of the AAAP for Heroin Abusers will be equal to or greater than a score of 80, indicating mastery of Stage 1.

Alternate Hypothesis 1: The mean score on Stage 1 of the AAAP for Heroin Abusers will be less than a score of 80, indicating a lack of resolution of Stage 1.

The null hypothesis was rejected, leading to the conclusion that heroin abusers have developmental issues and conflicts related to the developmental tasks theorized by Erikson to be associated with the development of trust and that are purported to be measured by Stage 1 of the AAAP.

Hypothesis 2 related to the expectation that cocaine abusers would have a mean score on Stage 2 of the AAAP that was less than the mastery criteria of 80%. The hypothesis was stated as follows:

Hypothesis 2: The mean score on Stage 2 of the AAAP for Cocaine Abusers will be equal to or greater than a score of 115, indicating mastery of Stage 2.

Alternative Hypothesis 2: The mean score on Stage 2 of the AAAP for Cocaine Abusers will be less than a score of 115, indicating a lack of resolution of Stage 2.

The null hypothesis was rejected, leading to a conclusion that cocaine abusers have developmental issues and conflicts related to Stage 2--Autonomy vs. Shame and Doubt--as theorized by Erikson and measured by Stage 2 of the AAAP. However, in considering the mean score of cocaine abusers for Stage 1 of Erikson's theory, the following hypothesis was considered:

Hypothesis: The mean score on Stages 1 of the AAAP for Cocaine Abusers will be equal to or greater than a score of 80, indicating mastery of Stage 1.

Alternative Hypothesis: The mean score on Stage 1 of the AAAP for Cocaine Abusers will be less than a score of 80, indicating a lack of resolution of Stage 1.

The null hypothesis was rejected, leading to a conclusion that cocaine abusers also have developmental issues and conflicts related to Stage 1--Trust vs. Mistrust--as theorized by Erikson and purported to be measured by Stage 1 of the AAAP.

Hypothesis 3 related to cocaine abusers having a higher level of development on all eight stage of

Erikson's theory as measured by the AAAP. This hypothesis was not supported indicating that cocaine abusers and heroin abusers are very similar in their development.

The demographic variables showed significant differences between the cocaine abuser sample and the heroin abuser sample on the variable age. However, the analysis of the main effects of age and drug of preference and their interactional effect indicated that these effects did not have a significant effect upon the mean performance scores.

Discussion

Hypothesis 1--Heroin Abusers

Male heroin abusers manifested psychosocial developmental impairments related to Erikson's first stage--Trust vs. Mistrust--as measured by the AAAP. The focal point of Erikson's first stage is the quality of the relationship that an individual has with his/her primary caregiver. If the primary caregiver is perceived as unpredictable, unreliable, and not being there when needed, the child feels a sense of abandonment and helpless rage. One cannot trust that one's needs will be met. Erikson (1959) expressed concern about inconsistent parenting by stating that ". . . such a situation can be a model for radical disturbances in . . . (the child's)

relationship to the 'world,' 'to people,' and especially to lover or otherwise significant people." Chein et al. (1964) suggested that a sense of abandonment, helpless rage, and mistrust in others and the world resulted in immense rage and resentments that would need to be avoided especially through heroin abuse. Edelstein (1986) states that

. . . heroin is the most disapproved drug. So in order to use it, one has to be a deviant, to be angry at the world, to have a rage that will often break down all social inhibiting barriers to certain forms of behavior.

Khantzian (1982) related that from his extensive experience, the primary appeal of heroin resides in the anti-aggression action of the drug. Khantzian stated that

in my early work with narcotic addicts, I became impressed quickly with the addict's lifelong experiences and problems with rage and aggression, most often dating back to family and environmental influences. . . . I began to suspect that there was a connection between the addict's rageful/aggressive feelings and impulses . . . and their attraction to opiates.

The findings of this study, that heroin abusers did not master Stage 1 of Erikson's model as measured by the AAAP, supports the conclusions of Cappel and Caffrey (1974) and Ungerer et al. (1978) that opiate abusers score low in the variable trust.

This research confirms that research of Chein et al. (1964), who stated that the narcotic addict

though matured in years, he has yet to successfully manage the developmental hurdles of infancy (the acquisition of what Erikson has called "basic trust") and that, unlike the infant before him the tasks of achieving self-acceptance and trust in others, the addict is already carrying the psychic scars of his own failure and of the social world that has failed him.

The residual scars from such early deprivations and disappointments result in individuals finding peace, contentment, a sense of omnipotence only while under the influence of a drug (Zimmering et al., 1952).

The conclusions about male heroin abusers lacking in trust, combined with Savitt's (1973) suggestion that "addicts to heroin were grossly neglected and unloved by their mothers . . . the emotional climate was a tense and discordant one, and one or both of the parents were ambivalent about having the child." Gallagher's (1973) finding that the heroin abuser's parents were just not available for the child has broad implications for the treatment of heroin abusers. The main concern for therapists in working with heroin abusers should be the development of a therapeutic alliance. An alliance that will allow the heroin abusers the opportunity to experience a closeness that he/she has not experienced, while ensuring them that they can trust the world and trust themselves.

Hypothesis 2--Cocaine Abusers

The results of this study indicated that cocaine abusers manifested developmental issues related to Erikson's second stage--Autonomy vs. Shame and Doubt--as measured by the AAAP. This conclusion is in keeping with the hypothesis presented and supported by the literature reviewed. However, the results also indicated that the cocaine abusers in this study had not mastered Stage 1 of Erikson's model--Trust vs. Mistrust--as measured by the AAAP. The failure of cocaine abusers to show mastery of Stage 1 of the AAAP was surprising. A review of the literature suggested that the core developmental issues for cocaine abusers would be related to their struggle for autonomy and evidenced in their need to overcome feelings of inferiority, shame and doubt (Spotts & Shontz, 1980, 1982; Seevers, 1939). One explanation for the low Stage 1 performance score may be found in Erikson's (1959) suggestion that later stages cannot be successfully or optimally dealt with by the individual unless the preceding crisis has been reasonably well resolved. Therefore, within the context of Erikson's model, cocaine abusers might have core developmental issues related to shame and doubt while still experiencing residual effects from not having resolved Stage 1 as effectively as possible. Erikson (1963) acknowledged that a basic sense of trust would provide

the child with an inner sense of goodness from which autonomy could develop; without the trust, there would be an inner sense of badness resulting in shame. Thus, in retrospect the research should have expected cocaine abusers to score low on Stage 2 of the AAP, as well as Stage 1--Trust vs. Mistrust. The conclusions of this study lends confirmation to Erikson's theory.

Overall Hypothesis

The overall hypothesis stated in the null form was that there would be no differences between the mean scores of cocaine abusers and heroin abusers on Stage 1 through 8 of the AAP. The literature review seemed to support a rejection of this hypothesis in favor of accepting that cocaine abusers would have higher mean scores on the stages, however, the null hypothesis was accepted.

The male heroin abusers and male cocaine abusers mean scores on the Stages of the AAP indicated a lack of resolution of all eight stages. Erikson (1959) indicated that there was a widely held "belief that the establishment of a basic sense of trust in earliest childhood makes adult individuals less dependent on mild or malignant forms of addiction," the results of this study provide support for his statement. The sample

groups were lacking in basic trust and had serious forms of addiction.

Alternative Examination of the Results

Alternative explanations for the results of this study center on three main areas, namely, the theory, the subjects, and the instrument. In this section, some of the key issues that might effect the results or the interpretation of the results will be presented. It is important to note that the discussions about the areas of concern will and do overlap.

The basic question posed by this study was: "Can the AAAP objectively measure and differentiate the psychosocial developmental issues of heroin abusers and cocaine abusers as suggested by the literature review?" And, more particularly: "Do heroin abusers have core developmental issues related to Erikson's Stage 1--Trust vs. Mistrust?" and "Do cocaine abusers have developmental issues related to Erikson's Stage 2--Autonomy vs. Shame and Doubt?"

The overall results of this study suggest that heroin abusers and cocaine abusers have similar psychosocial developmental impairments. These results are contrary to the research reports reviewed in the extensive literature review. In exploring alternative explanations, quite a few possibilities arise. If one

accepts that the literature review provides an accurate account of the different core developmental issues related to cocaine abusers and to heroin abusers, then the results support the idea that the AAAP is incapable of effectively discriminating the psychosocial developmental differences between heroin abusers and cocaine abusers. However, further analysis of Erikson's writings may provide a possible explanation for the results without negating the findings in the literature review. Erikson (1959) provides comments about Stage 2 that are worthy of further consideration in light of the results of this study. Erikson stated that:

If outer control by too rigid or too early training insists on robbing the child of his attempts to gradually control his bowels and other functions willingly and by his own free choice . . . he will be forced to seek satisfaction and control either by regression or by fake progression. In other words, he will return to an earlier, oral control, that is, by sucking his thumb and becoming whiny and willful, often using his feces (and later, dirty words) as communication; or he will pretend an autonomy and an ability to do without anybody to lean on, which he has by no means really gained.

Erikson's statement may well provide an adequate description of the cocaine abusers in this study. Cocaine abusers may have failed to develop autonomy and are experienced by researchers and clinicians as being autonomous when what could be observed and documented in a pseudo-autonomy or what Erikson calls a "fake progression." Spotts and Shontz (1982) propose some

support for a fake progression by stating that "the cocaine user almost broke free from the maternal control but still carries the wounds from the battle." Could such a battle and its subsequent scars result in such a breach of trust in the primary caregiver that a "fake progression" or pretend autonomy becomes the preferred style of interaction. This possibility could then be an alternative explanation.

Another possible explanation for the results may be found in Erikson (1976). Erikson published a little known essay entitled, "Reflections on Dr. Borg's Life Cycle." The essay was a commentary on Ingmar Bergman's film, Wild Strawberries. As Erikson analyzes Dr. Isak Borg's thoughts and memories of his life as it unfolds through the movie, Erikson strongly affirms a fundamental modification of his life-cycle model. According to Erikson, Dr. Borg does more than wrestle with the eighth stage of his psychosocial development model--the traditional conflict in the elderly between integrity and despair. Erikson states that while Dr. Borg attempts to come to grips with the psychological issues of this stage, he simultaneously struggles with the psychological issues from all the previous stages of the life cycle. Thus, as Fitzpatrick and Friedman (1983) note, "Erikson converts his life-cycle model (in which one stage is completed or near completion and then followed by the

next) to a 'life-spiral' model (in which the person's earlier developmental stages are never even partially transcended or bypassed as he grows older)." The psychosocial developmental issues a person wrestles with in all stage of his life invariably recur as he wrestles with new issues at alter stages. Development is no longer portrayed by Erikson as primarily a linear progression but becomes a spiral in which multiple interactions simultaneously link the past and the present. As a person labors with a stage, he also repeats, albeit in somewhat different terms, the issues on all previous stages. Vaillant and Milofsky (1980) presented a similar modification and support for Erikson's new life-spiral model. Erikson (1982) reaffirmed this life-spiral model by stating that

as each part comes to its full ascendance and finds some lasting solution during its stage, it will also be expected to develop further under the dominance of subsequent ascendancies and most of all, to take its place in the integration of the whole ensemble.

Within the framework of Erikson's reformulation, the possibility exists that the psychosocial developmental differences between heroin abusers and cocaine abusers noted in the literature review are accurate; however, the AAP is not sophisticated enough to discriminate between the initial working through of a core issue and the reworking that occurs at subsequent stage. Cocaine abusers might have progressed adequately though Stage 1,

but in laboring with Stage 2, the reworking of trust is detected by the AAAP responses.

The next area of concern, when attempting to develop alternative explanations for the results of this study, was the subjects. When considering the subjects, one is reminded of the story of the blind men investigating an elephant. Each grabbed hold of a different piece of the elephant--the trunk the leg, the tail--and each proceeded to extrapolate beyond the available data. The subjects questioned and tested in this research study were but part of the bigger picture of addicts and addiction. Kleber (1981) states that differences between addicts in treatment and addicts in the community is the amount of present symptomatology. The results of this study may well be indicative of sampling a group of "typical" heroin abusers and a group of cocaine abusers representing of "low" functioning cocaine abusers, a group that has had serious psychosocial developmental impairments in Stage 1. Perhaps if a "typically" functioning cocaine abusing group were sampled, the results would follow the path of the theory prediction.

The overall results of this study indicated that heroin abusers and cocaine abusers were similar in their psychosocial development impairments. The similarity between the groups may well have been the result of similar parental rearing patterns and familial

experiences. Spitz and Rosecan (1987) notes that as research continue,

the sharp line of distinction between the families of heroin abusers and cocaine abusers is rapidly changing. There is greater overlap among the family patterns than what was originally thought . . . especially in the use of denial, enmeshments, and disengagements, boundary problems, inadequate role definitions and difficulty with separation from the family.

Seldin (1972) suggested that the critical factor for drug addicts is the degree of emotional health available in and through the family. Gallagher (1973) and Spotts and Shontz (1980) offered similar suggestions. Emmelkamp and Heeres (1988) lend further credence to the important role of the family environment in the life of drug abusers by stating "that the lack of emotional warmth and rejection are dimensions that are most often associated with drug abuse." Gerard and Kornetsky (1954) summed it up best by noting that the "least qualified generalization which can be made about the families of drug addicts is that they were of the type which psychiatric experience suggests are productive of serious difficulties in adjustment." These types of families and the parental rearing practices may make children vulnerable to psychopathology in general, rather than just one or a few specific forms of psychopathology (i.e., addiction). The results of this study would

suggest that further examination of the rearing practices and the family of origin is warranted.

With regard to subjects, Spotts and Shontz (1984) noted certain differences between the low to moderate users of cocaine and the heavy users of cocaine.

Heavy cocaine users do not trust people . . . the second major problem of heavy cocaine users is an intense anger that is externally oriented but not directed at any specific object . . . the third problem is despair, and it is reflected in feelings of defeat, helplessness, bitterness, and disappointments.

The authors felt that "the psychodynamic appeal of the cocaine state . . . in suitably predisposed individuals, is the power to attract deep-seated, proverbial fantasies, and arouse infantile states." These heavy users of cocaine spend their life yearning for paradise in a world where chemical pleasure is the best that they can find. Edelstein (1986) states that "in order to use heroin, one has to be a deviant, to be angry at the world, to have a range . . . which they cannot contain. They seem to look for ways to avoid completely discomfort and pain." Edelstein's statement considered with Zimmering et al.'s (1952) suggesting that heroin abusers have "fantasies of omnipotence . . . resent the intrusion of any reality that challenges these illusions of omnipotence," and Weider and Kaplan's (1969) assertion that narcotics produce "a strong state of quiet lethargy and is conducive to hypercatheting fantasies of

omnipotence, magic wish fulfillment and self-sufficiency," results in the suggestion that heavy cocaine abusers are described in a manner similar to heroin abusers. The major implication for this study is that a cocaine abuser sample may be composed primarily of heavy cocaine abusers instead of a representative sampling of all cocaine abusers.

The final area of concern is the instrument. If one accepts that the literature review provides an accurate account of the developmental differences between heroin abusers and cocaine abusers then possible alternative explanations related to the survey exist. A study by Gibson, Wermuth, Sorenson, Menicucci, and Bernal (1987) found that substance abusers tend to deny negative things about themselves and their families. The substance abusers need for approval will skew self-reports. Rounsaville et al. (1981) found that when reporting psychological symptoms or family problems, drug abusers tend to exhibit denial and defensiveness associated with the need for approval. Capel and Caffrey (1974) and Ungerer et al. (1978) commented on the suspiciousness with which heroin abusers approach certain situations. The suggestion is that the results of this study may have been skewed due to the approval needs and/or the suspiciousness that the subjects approached the answering of the survey questions.

The results of this study could have been skewed by the following:

1. the length of the survey--320 questions
 2. the length of time necessary to complete the survey
 3. the questions for Stage 1, the pivotable stage in this study, were located at the end of the survey
- The first two points may have created fatigue, thereby skewing the results for Stage 1.

Limitations of the Study

The major problem for the present research centers on the fact that the samples used were samples of convenience. Like most of the studies cited in the literature review, samples drawn from populations of opportunity severely limit one's ability to make broad generalizations to other groups. Casky and Bell (1986) note that "those addicts in treatment are likely to have more serious addiction related problems." Addicts seen in treatment in general represent a discrete subpopulation of the entire population of abusers so generalizations must be limited.

The samples consisted of male Midwestern cocaine abusers and heroin abusers. This fact makes the generalizability of the conclusions of this study limited to a select population.

The use of volunteers as subjects makes the generalizations of the study restricted to volunteers from the same type of population.

An important limitation of this study is the extent to which other confounding variables were not controlled for, especially "family" variables (parent's marital status, type of parental child rearing style and discipline while growing up, openness of communications in the family, and parent's educational level) were not considered. Although all subjects had completed at least grade 8, intelligence was not controlled for.

Finally, the relative small sample sizes compared with the number of variables suggests that the power of the study was lower than it might have been had a greater number of subjects been recruited for the samples.

Implications for Future Research

The types of study described would certainly have more far-reaching implications if it were designed as a longitudinal study. However, due to the time constraints of a dissertation study, following the sample group of individuals from adolescence to adulthood is impractical. Therefore, the present study should be viewed as a pilot study with the expectation of a longitudinal study being done in the future.

As the study was a pilot, replication of the study is suggested. Replication of the study with a larger sampling is necessary in order to ensure that results reported in the study are valid. Replication should occur at the same site of the present study as well as other substance abuse treatment centers to determine if any differences exist due to locale.

Since the psychosocial development of male heroin abusers and male cocaine abusers was examined, future research should study the psychosocial development of female heroin abusers and female cocaine abusers. Research with the AAAP needs to proceed with a variety of populations.

Future research might be directed toward examining the effect that various psychotherapies might have upon the stage scores of the AAAP. A pretest-treatment-post-test paradigm. This could help determine if the AAAP could possibly serve as a measure of personal growth through therapy.

A study directed toward the further delineation and clarification of the developmental issues of heroin abusers and cocaine abusers and what the first two stages of the AAAP measure with regard to trust and shame. The study would involve the use of a measure of trust, a measure of shame, and the first two stages of the AAAP.

This research could be carried out with a variety of populations.

Finally, a study using chronic substance abusers, whereby the AAAP is compared with another measure of Eriksonian psychosocial development needs to be conducted.

APPENDICES

APPENDIX A

RESEARCH FORMS

CONSENT FOR PARTICIPATION FORM

1. I freely consent to take part in a scientific study being conducted by Shaun LaBlance under the supervision of William Farquhar, Ph.D.
2. I understand that the study being conducted is for the purpose of examining patterns of psychosocial development.
3. I understand that I am free to discontinue my participation in the study at any time.
4. I understand that participation in this study will not result in any direct benefits to me.
5. I understand that the information that I provide by filling out these forms will be kept in strict confidence. Only the researcher will have access to the original forms and that only general results will be reported, but none of those which identify participants.
6. I understand that, upon request, I will receive a report of this study's general results.
7. I understand that my participation or lack of participation in this project will have no effect upon receiving services from the Community Mental Health Board.

Signature

Date

AAAP SURVEY-FACT SHEET

Fill in completely, please.

1. Your age in years _____ and date of birth _____.
2. Your race: 1=Caucasian; 2=Black; 3=Hispanic;
4=Other
3. Your current marital status: 1=Never married;
2=Married; 3=Separated; 4=Divorced; 5=Widowed
4. How many years of formal education do you have?
(circle the number)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
5. Education (highest level completed)

1=Grade School	4=Trade School	7=Ed.S.
2=Junior High	5=BS/BA	8=Ph.D.
3=High School	6=MS/MA	
6. Income: (for the last 12 months)

1=Under \$4,000	4=\$10,000-15,000	7=\$25,000-30,000
2=\$4,000-6,000	5=\$15,000-20,000	8=\$30,000-40,000
3=\$6,000-10,000	6=\$20,000-25,000	9=Over \$40,000
7. Rate your parents social standing:

1	2	3	4	5	6	7	8	9
lower			middle			Upper		
8. Rate your sense of physical well being:

1	2	3	4	5	6	7	8	9
Unhealthy			Average			Healthy		
9. Rate your sense of emotional well being:

1	2	3	4	5	6	7	8	9
Unhappy			Average			Happy		
10. Rate your sense of satisfaction with personal relationships:

1	2	3	4	5	6	7	8	9
Dissatisfied			Average			Satisfied		
11. Which drug do you prefer: 1=Heroin; 2=Cocaine

12. Please indicate the primary reason for taking your drug of preference:
 - 1=Enjoyment or pleasure, to get high, to feel good
 - 2=To be social and friendly
 - 3=To reduce anxiety, tension, nervousness, or stress
 - 4=To relieve boredom
 - 5=To relieve anger or irritability
 - 6=To improve performance
13. Overall, I take my drug of preference to:
 - 1=Slow myself down
 - 2=Speed myself up

ASSESSMENT
OF
ADULT
ADJUSTMENT
PATTERNS

William W. Farquhar

Fredrick R. Wilson

James A. Azar

ASSESSMENT OF ADULT ADJUSTMENT PATTERNS

A
MEASURE OF HOW ADULTS RESOLVE
BASIC DEVELOPMENTAL ISSUES

by

William W. Farquhar, Ph.D.
Fredrick R. Wilson, Ph.D.
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With special assistance from:

Martha R. Anderson, Ph.D.
John A. Bellingham, M.A.
Elizabeth Parmeter, Ph.D.
Margaret B. Parsons, M.A.

Based on:

Erik Erikson's Epigenetic Developmental Model

Copyright applied for

William W. Farquhar
Fredrick R Wilson
1983
East Lansing, Michigan

Directions

Please answer the questions in this booklet as honestly as you can. The statements were designed to measure how you view yourself, and how you view life in general. Be as honest as you possibly can.

Work quickly, not spending too much time on any one question. There are no right or wrong answers to these questions.

Make your marks on the answer sheet next to the same number that appears before the question. Please use a number two pencil.

All items are to be rated:

- (1) Definitely true of me
- (2) True of me, more mostly true of me
- (3) Not true of me, or mostly not true of me
- (4) Definitely not true of me

Example:

1. I believe that people should save money.

ANSWER SHEET

- | | | | | |
|----|-----|-----|-----|-------------------|
| | | | | Please ignore |
| 1. | (1) | (2) | (3) | (4) |
| | | | | (5) this response |

This person marked space number one on question one indicating the belief that people should save money is "definitely true of me."

NOW TURN THE PAGE AND BEGIN

1. I learn fast.
2. I generally attend community or school meetings.
3. I have gone door-to-door collecting signatures on a petition.
4. I give blood (or would if not medically prohibited).
5. My life is the result of choices I have made.
6. When I have to speed up and meet a deadline, I can still do good work.
7. I generally feel pleased with my performance when I talk in front of a group.
8. I like children.
9. I have difficulty in getting down to work.
10. If I want to, I can charm a member of the opposite sex.
11. I make it a point to vote in all elections.
12. I check things out for myself.
13. When I argue, I use facts to support my position.
14. When the situation demands, I can do into deep concentration concerning just about anything.
15. I publicly question statements and ideas expressed by others.
16. People are more important to me than material things are.
17. It's easy for me to know whether people really like me.
18. I enjoy interacting with children.
19. I have volunteered my name as a witness at the scene of a crime or an accident.

20. I enjoy being sexually stimulated.
21. I have actually sought out information about my school board members in order to form an opinion.
22. I do things for my community.
23. How many friends I have depends on how pleasing a person I am.
24. I handle myself well at social gatherings.
25. I can work on ideas for hours.
26. I have "put myself on the line" in my relations with others.
27. My social life is full and rewarding.
28. When things are not going right in my work, I reason my way through the problems.
29. It is hard for me to keep my mind on what I am trying to learn.
30. I am confident when learning a complicated task.
31. If I can't solve a problem quickly, I lose interest.
32. I like problems that make me think for a long time before I solve them.
33. I enjoy finding out whether or not complex ideas work.
34. I like problems which have complicated solutions.
35. When I was younger, I wanted to run away from home.
36. I enjoy parties.
37. I feel self-confident in social situations.
38. I can work even when there are distractions.
39. I feel uneasy if I don't know the next step in a job.
40. I can work under pressure.

41. I feel that people are genuinely interested in me.
42. In times of trouble, I have friends I turn to.
43. It is hard for me to work on a thought problem for more than an hour or two.
44. I learn well when someone gives me the problem and lets me work out the details myself.
45. I have difficulty imagining how other people feel.
46. People like to work with me.
47. In times of crisis, I'm one of the first people my friends call for help.
48. When I was prepared, teachers couldn't fool me with trick questions.
49. I am dedicated to my work.
50. In my work, I show individuality and originality.
51. I am proud of my work.
52. My plans work out.
53. I get stage fright when I have to appear before a group.
54. When I'm in a group, I feel confident that what I have to say is acceptable.
55. I get caught up in my work.
56. I like to solve problems.
57. When I get hold of a complicated problem, I return to it again and again until I come up with a workable solution.
58. I get along with people.
59. The thought of making a speech in front of a group panics me.
60. I feel inferior to most people.
61. For me to learn well, I need someone to explain things to me in detail.

- 62. When I took a new course in school, I felt confident that I would do all right.
- 63. I play around so much I have a hard time getting a job done.
- 64. No matter what the task, I prefer to get someone to do it for me.
- 65. I feel proud of my accomplishments.
- 66. I will probably always be working on new projects.
- 67. My judgment is sound.
- 68. People expect too much of me.
- 69. I feel useless.
- 70. I'm interested in people.
- 71. I enjoy doing favors for my friends.
- 72. I am always a loyal friend.
- 73. I do many things well.
- 74. I like to participate actively in intense discussions.
- 75. When I sit down to learn something, I get so caught up that nothing can distract me.
- 76. I know the children who live in my neighborhood.
- 77. I think about the big issues of life.
- 78. I like to discuss ways to solve the world's problems.
- 79. When I decide to do something, I am determined to get it done.
- 80. I like to answer children's questions.
- 81. I give clothing and other items to charitable organizations such as the Salvation Army.
- 82. I lend things to my neighbors when they need them.
- 83. I work to make my community better for children.

84. I have gone door-to-door collecting money for charity.
85. I see to it that my work is carefully planned and organized.
86. I find it hard to keep my mind on a task or job.
87. I go at my work without much planning ahead of time.
88. I am proud of the accomplishments I have made at work.
89. Completed and polished products have a great appeal for me.
90. I read a great deal even when my work does not require it.
91. I have worked on a school committee.
92. I devote time to helping people in need.
93. I feel there is nothing I can do well.
94. I am active in community or school organizations.
95. Children bore me.
96. I can stay with a job a long time.
97. I like curious children.
98. Young people are doing a lot of fine things today.
99. I enjoy the times I spend with young people.
100. Children's imaginations fascinate me.
101. I have met the leaders of my community and have formed my own opinions about them.
102. I keep my word.
103. I do not understand myself.
104. Because I have to be so different from situation to situation, I feel that the real me is lost.
105. Children talk to me about personal things.

106. I am proud of my accomplishments.
107. I enjoy things that make me think.
108. I enjoy explaining complex ideas.
109. I get those things done that I want to do.
110. I am pretty much the same person from situation to situation.
111. I do not expect people to be consistent.
112. I have very few good qualities.
113. Often other people determine the kind of person I am.
114. My work is usually up to the standards set for me.
115. I am determined to be the kind of person I am.
116. I'm just not very good with children.
117. I am good at solving puzzles.
118. My happiness is pretty much under my own control.
119. I feel disappointed and discouraged about the work I do.
120. I keep up with community news.
121. Once I have committed myself to a task, I complete it.
122. I feel more confident playing games of skill than games of chance.
123. I feel confident when learning something new that requires that I put myself on the line.
124. I never have serious talks with my friends.
125. I like the way young children say exactly what they think.
126. I like to participate in intense discussions.
127. I feel awkward around members of the opposite sex.

128. I analyze my own motives and reactions.
129. I feel deep concern for people who are less well off than I am.
130. People of the opposite sex think well of me.
131. I enjoy interacting with children.
132. I find it easy to introduce people.
133. My table manners at home are as good as when I eat out in a restaurant.
134. I am a worthwhile person.
135. It is very important that my mate loves me.
136. My life is what I made it to be.
137. My basic state of happiness is dependent upon me.
138. I make my own decisions.
139. I can't stand the children who live in my neighborhood.
140. It's pretty neat to be me.
141. I get a feeling for the meaning of life through contemplation.
142. I have not deliberately said something that hurt someone's feelings.
143. I like myself.
144. Compliments embarrass me.
145. I am self confident.
146. I am not irked when people express ideas very different from my own.
147. Getting along with loudmouthed, obnoxious people is impossible for me.
148. Even though I do not like the thought of it, my death does not frighten me.

149. I have had experiences in life which were so intense that they were almost mystical.
150. I feel good when others do something nice for me.
151. I am close to someone with whom I talk about my feelings.
152. I have been so close to somebody, that it is not possible to find adequate words to describe the feelings.
153. I don't think I'll ever find someone to love.
154. My values change as I discover more about life and the universe.
155. I ignore the feelings of others.
156. I would not care to be much different than I am.
157. I get a feeling for the meaning of life through art.
158. My feelings about nature are almost sacred.
159. I am sometimes irritated by people who ask favors of me.
160. With the person I am closest to, I share my inner feelings of confidence.
161. I find myself thinking about things much more deeply than I did in years past.
162. There have been times when I was quite jealous of the good fortune of others.
163. I keep my word.
164. I cannot stand silence.
165. When someone says something critical about me, I keep my composure.
166. The best times of my life were in the past.
167. Even when I am doing something I really enjoy, I can never get totally involved.

- 168. After a lot of hard struggling, I am comfortable being me.
- 169. I enjoy privacy.
- 170. I have been so close to someone that our relationship seemed almost mystical.
- 171. When I get angry at someone, I boil inside without letting them know.
- 172. As far as I know about myself, once I choose a mate, I do so for life.
- 173. For me to act on a sexual urge, I have to have feelings for the other person.
- 174. I am sensitive to how other people feel.
- 175. When I am alone, silence is difficult to handle.
- 176. I learn from constructive criticism.
- 177. There have been occasions when I felt like smashing things.
- 178. It's good to be alive.
- 179. I have been so close to someone, that at times it seemed like we could read each other's mind.
- 180. I have no one with whom I feel close enough to talk over my day.
- 181. I get a feeling for the meaning of life through beauty.
- 182. I like to be by myself a part of every day.
- 183. I have had experiences in life when I have been overwhelmed by good feelings.
- 184. I trust the spontaneous decisions I make.
- 185. With the person I am closest to, I share my inner anxieties and tensions.
- 186. I play fair.
- 187. I can make big decisions by myself.

188. I am amazed at how many problems no longer seem to have simple right and wrong answers.
189. I don't worry whether anyone else will like the friend I choose.
190. I like being by myself.
191. I am a citizen of the world.
192. I am basically cooperative when I work.
193. It is very important that my mate likes to snuggle.
194. When I get angry at someone, it rarely wrecks our relationship.
195. I can see little reason why anyone would want to compliment me.
196. I am strong enough to make up my own mind on difficult questions.
197. I am comfortable being alone.
198. I have a person with whom I talk about my deepest feelings about sex.
199. The more I look at things, the more I see how everything fits with everything else.
200. I find there are a lot of fun things in this world to do alone.
201. Even though I am pretty much in touch with who I am, I am always discovering new aspects of myself.
202. The inner wisdom of people never ceases to amaze me.
203. I feel strongly about some things.
204. It is very important that my mate be thoughtful of me.
205. I get a feeling for the meaning of life through nature.
206. Life gets better as I get older.

- 207. When I get angry at someone, I tell them about it, and it's over.
- 208. There is at least one person in my life with whom I can talk about anything.
- 209. Whatever age I am always seems to be the best.
- 210. With the person I am closest to, I share my inner feelings.
- 211. There have been times when I felt like rebelling against people in authority even though I knew they were right.
- 212. No matter who I'm talking with, I'm a good listener.
- 213. If someone criticizes me to my face, I listen closely to what they are saying about me before reacting.
- 214. I have had an experience where life seemed just perfect.
- 215. I am outspoken.
- 216. Circumstances beyond my control are what make me a basically unhappy person.
- 217. I can take a stand.
- 218. I have a sense of awe about the complexity of things in the universe.
- 219. I have had moments of intense happiness, when I felt like I was experiencing a kind of ecstasy or a natural high.
- 220. I can remember "playing sick" to get out of something.
- 221. I give help when a friend asks a favor.
- 222. No matter what the task, I prefer to do it myself
- 223. I like to gossip at times.
- 224. If someone criticizes me to my face, I feel low and worthless.

- 225. I sometimes try to get even rather than forgive and forget.
- 226. I do not intensely dislike anyone.
- 227. I like being able to change my plans without having to check with somebody.
- 228. I see to it that my work is carefully planned and organized.
- 229. My values are formed from many sources, and I integrate them to give meaning to my life.
- 230. With the person I am closest to, I share my inner feelings of weakness.
- 231. I seem to understand how other people are feeling.
- 232. I just can't be courteous to people who are disagreeable.
- 233. When people express ideas very different from my own, I am annoyed.
- 234. When I was young, there were times when I wanted to leave home.
- 235. Being close to another person means sharing my inner feelings.
- 236. I value the deep relationships I have formed with the opposite sex.
- 237. I sometimes feel resentful when I don't get my way.
- 238. It is very important that my mate likes to touch me and be touched by me (hold hands, hug, etc.).
- 239. I feel free to express both warm and hostile feelings to my friends.
- 240. Being deeply involved with someone of the opposite sex is really important to me.
- 241. How many friends I have depends on how pleasant a person I am.
- 242. I am ashamed of some of my emotions.
- 243. I never like to gossip.

- 244. For me, sex and love are tightly linked together.
 - 245. The closest I get to another person is to share my opinions and ideas.
 - 246. Reading or talking about sex stimulates me.
 - 247. I get a feeling for the meaning of life through music.
 - 248. I have not found a person with whom I can be close.
 - 249. As I look back at my past decisions, although I wish I might have done things differently, I realize those were the best decisions I could make at the time.
 - 250. My morals are determined by the thoughts, feelings, and decisions of other people.
 - 251. I act independently of others.
 - 252. I wouldn't enjoy having sex with someone I was not close to.
 - 253. I go out of my way to avoid being embarrassed.
 - 254. I rarely check the safety of my car no matter how far I am traveling.
 - 255. I have been punished unfairly.
 - 256. Sometimes I deliberately hurt someone's feelings.
 - 257. With the person I am closest to, I share my inner feelings of tenderness.
 - 258. I have had experiences in life when I have felt so good that I have felt completely alive.
-
- 1. If I were one of the few surviving members from worldwide war, I would make it.
 - 2. People like me.
 - 3. No one understands me.
 - 4. My parents caused my troubles.

5. I takes a lot to frighten me.
6. There are questions that interest me which will not be answered in my lifetime.
7. I must defend my past actions.
8. It's hard for me to say "no" without feeling guilty.
9. I feel optimistic about life.
10. My free time is spent aimlessly.
11. Feelings of guilt hold me back from doing what I want.
12. My word is my bond.
13. I admit my mistakes.
14. I worry or condemn myself when other people find fault with me.
15. I am happy.
16. I believe people are basically good.
17. My feelings are easily hurt.
18. Whatever stage of life I am in is he best one.
19. When somebody does me wrong, I get so hung up on my own feelings I can't do anything but brood.
20. When I feel tense, there is a good reason.
21. I like being able to come and go as I please.
22. I have taken time to help my neighbors when they need it.
23. I worry about things that never happen.
24. I trust others.
25. I trust others.
26. I am basically an unhappy person.
27. My family understood me while I was growing up.

28. Mostly I like to just sit at home.
29. I am happy with the pace or speed with which I make decisions.
30. People hurt my feelings without knowing it.
31. I take the unexpected in my stride.
32. I frighten easily.
33. I eat balanced meals.
34. I find people are consistent.
35. My day-to-day frustrations do not get in the way of my activities.
36. I think the best way to handle people is to tell them what they want to hear.
37. I worry about my future.
38. It takes something of real significance to upset me.
39. My mistakes annoy me, but do not frighten me.
40. Guilt is a feeling I seem to have outgrown.
41. I believe the best times are now.
42. I constantly need excuses for why I behave the way I do.
43. When I feel worried, there is usually a pretty good reason.
44. Basically, I feel adequate.
45. I like people who say what they really believe.
46. I learn things as fast as most people who have my ability.
47. People respect my work because I do a good job.
48. I am picky about my food.
49. I don't need to apologize for the way I act.

50. I have a lot of energy.
51. I am calm.
52. No matter what the task, I prefer to get someone to do it for me.
53. I am willing to admit it when I don't know something.
54. I enjoy being sexually stimulated by someone I don't know.
55. I am an even-tempered person.
56. If a clerk gives me too much change, I correct the error.
57. I punish myself when I make mistakes.
58. My duties and obligations to others trap me.
59. I was raised in a happy family.
60. When it's time to go to bed, I fall asleep easily.
61. My parents treated me fairly.
62. I am a stable, dependable worker.

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