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A COMPARATIVE STUDY OF THE ASPECTS OF ADJUSTMENT AMONG ADULT CHILDREN OF ALCOHOLICS AND ADULT CHILDREN OF NONALCOHOLICS IN THE FORM OF PERSONALITY CHARACTERISTICS AND ITS RELATIONSHIP TO THE DESCRIPTION OF CODEPENDENT BEHAVIOR

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ABSTRACT

A COMPARATIVE STUDY OF ASPECTS OF ADJUSTMENT AMONG ADULT CHILDREN OF ALCOHOLICS AND ADULT CHILDREN OF NONALCOHOLICS IN THE FORM OF PERSONALITY CHARACTERISTICS AND ITS RELATIONSHIP TO THE DESCRIPTION OF CODEPENDENT BEHAVIOR

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The purpose of this study was to examine aspects of adjustment exhibited in the form of five particular personality characteristics among adult children of alcoholics (ACOA), adult children of alcoholics with alcoholism (ACOAA), and adult children of nonalcoholics (control) to determine the degree to which these three groups differ. The five personality characteristics of concern were passive aggressiveness, dependency, obsessive compulsiveness, depression, and low self-esteem. In addition, each group was analyzed to see the number of significant relationships that existed among the personality characteristics and the extent to which each group was descriptive or not descriptive of the codependent construct.

The samples for this study were made up the three groups (ACOAA, ACOA, and control), each containing 30 males and 30 females (N=180). The age range was divided into two categories, 25-34 and 35-45 years old. Each group was tested with four personality inventories which measured the five personality characteristics of interest (passive aggressiveness, dependency, obsessive compulsiveness, depression, and low self-esteem). The inventories consisted

of the Minnesota Multiphasic Personality Inventory, the Millon Clinical Multiaxial Inventory, the Coopersmith Self-Esteem Inventory, and the Tennessee Self-Concept Scale. The chi-square test of independence, analysis of covariance, and post hoc two-sample t-tests were used to analyze the data at a .01 alpha level.

The results of this research study provide evidence that the ACOAA and the ACOA groups significantly differed from the control group with respect to exhibiting higher indications towards passive aggressiveness, dependency, obsessive compulsiveness, depression, and lower levels of self-esteem but did not significantly differ from each other to be considered separate. In addition the findings support that these five personality characteristics correlate as discriminators that can predict and explain group membership. The results support Cermak's (1991) notion that diagnostic criteria for codependency be included in the DSM-III-R as an entity for which operational diagnostic criteria can be developed. Implications for clinical applications and further research are discussed.

This dissertation is dedicated to my family, friends, and clients. Their codependent behaviors both inspired this dissertation and supported its end. Their encouragement, love, help, support, and belief in me gave me the determination and stamina to endure this endeavor to its completion. And especially to the family values that were instilled in me by my parents and their culture to value education, knowledge, my freedom, and respect for myself and others.

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CHAPTER ONE

INTRODUCTION

STATEMENT OF THE PROBLEM

Alcoholism has existed for thousands of years, but we are now beginning to accept, assess, and treat the alcoholic (Ackerman, 1987). In 1984 a general population survey was conducted on drinking in the United States which revealed that 18% of all men and 5% of all women were frequent heavy drinkers (Hilton, 1987). It is estimated that 1 in 4 Americans are regular drinkers consuming alcohol virtually every day (Landers, 1990). Approximately 8.63 percent of the population at any given time are alcoholics or abuse alcohol (an estimated 15.3 million). For every alcoholic, it is estimated that, on the average, 2.2 family members (an estimated 28 million who sought help), friends, work associates, or some 20 to 36 million people are affected by the disease (Lender and Martin, 1982; West, 1984). Vaillant and Milofsky (1982) report that one of the strongest predictors for alcoholism developing later in life is an alcoholic relative. Further national studies on parental alcoholism approximately 14% of the adult population (Russell, Henderson, and Blume, 1984) to be alcoholic parents, leaving approximately 22 million adult children of alcoholics (approximately one out of every ten adults) to cope in today's society (Haack,1990; NIAAA, 1991). Currently we have begun to seriously research this disorder

and the magnitude of problems it manifests, not only for the alcoholic but for others closely related to the alcoholic. Many investigators are recognizing that the family plays an essential role in the initiation, maintenance, cessation, and prevention of alcohol and drug use by one or more of its members (Ben-Yehuda and Schindell, 1981; Pardeck et al. 1991; Stanton, 1978; Wilson and Oxford, 1978). In many respects there is a tendency for clinicians and researchers to focus on the problem of the alcoholic and pay too little attention to the impact of alcoholism on the spouse, the children, and adult children of alcoholics (ACOA).

Literature concerning the effects of the alcoholic parent on his or her child has concluded that certain risks and problems arise based solely on the fact that one of the child's parents is an alcoholic (Earl el al., 1988; Knop et al., 1985; Woititz, 1984). Compared to other groups, children of alcoholics have been found to have higher rates of behavioral and emotional problems as well as an increased risk for developing alcoholism (Adler and Raphael, 1983; Black, 1981; El-Guebaly and Offord, 1977; Rubio-Stipec et al., 1991; Scavnicky-Mylant, 1984; Goodwin, 1979). From a family perspective, the critical issue may be the structural and behavioral dimensions that determine both the ACOA's and the family's coping style along with the prediction of whether family members will be protected from or succumb to the stress of long-term alcoholism.

Miller and Tuchfeld (1986) describe the alcoholic home environment as a primary contributor to the problems now seen in adult children of alcoholics. They state that the children of alcoholics (COA) are often raised in homes that lack a consistent role model of adulthood or of healthy relationships which often results in significant problems in developing healthy relationships in the future. Often the environment may be so dysfunctional that it is difficult for the child to distinguish normal from abnormal behaviors. Children or their parents may have difficulty processing and evaluating their experiences or may unintentionally distort reality in order to better cope with their environment. This is best seen in one's tendency to learn early to distance oneself from the anxiety and pain, as well as from the alcoholic parent, and in so doing learn to deny feelings. In fact, what may appear to be denial of emotions could be an absence of feeling. Such emotional deficits could be misinterpreted as symptomatic of a borderline personality. Henderson and Blume (1988) state that these children and adult children of alcoholics are at high risk for alcoholism and other emotional and behavioral problems, including difficulties with social adjustment, substance abuse, low self-esteem, and greater external locus of control. Further, these children have been found to be at increased risk for externalizing behaviors such as conduct disorder, antisocial behavior, and aggressive behavior,

along with the tendency to internalize symptoms by somatic and medical problems (Earls et al., 1988; Guze et al., 1968; Robins, 1966; Rubio-Stipec el al., 1991; Rydelius, 1981). These children have also been found to have an increase for neurological deficits related to perceptual-motor ability, memory language processing, reading comprehension, and hyperactivity, (Cantwell, 1972; Knop et al., 1985; Morrison and Stewart, 1971; Tarter et al., 1985).

The lives of children of alcoholics often are filled with unpredictable chaos because they do not know what to expect when they come home. He/She may be confronted with a sober parent or one who is a drunk and out of control. This inconsistency and lack of predictability in the situation may lead to the development of passive aggressive, obsessive compulsive or pleasing-dependent type behaviors. In addition, problems with low self-esteem often arise due to experiencing a lack of attention or neglect from the home (Wegscheider-Cruse, 1985; O'Brien, Woody and McLellan, 1983). It appears that one concept that seems to describe a similar cluster of personality characteristics as adult children of alcoholics is codependent behavior. Clinically many codependents exhibit behaviors from all of these various disorders. It is this researcher's belief that codependent people tend to exhibit passive aggressive, dependent, depressed, low self-esteem, and obsessive compulsive behaviors. These problems are

emotional, developmental, physiological, and social (Weiner,1986). In addition, adult children of alcoholics are currently recognized as a relevant clinical population which manifests symptoms that are often misdiagnosed (Miller and Tuchfeld, 1986). This misdiagnosis often lends itself to inadequate and inefficient treatment plans which can result in increased rates of recidivism and persistence of dysfunctional coping patterns. These problems or so called dysfunctional characteristics that may arise in adult children of alcoholics must first be identified and understood. It appears that one concept that seems to capture these personality problems and dynamics of the alcoholic is referred to as codependent behavior.

It has been inferred that the adult children of alcoholics (ACOA) are probably codependent (Beattie, 1987; O'Brien and Gaborit, 1992; Lyon and Greenberg, 1991)). An estimated 80 million people are chemically dependent or in a relationship with someone who is and many of these people are adult children of alcoholics (ACOA) (Beattie 1987). Many definitions of codependence exist; yet the concept and definition are not clear. The concept of codependence is so new that it still suffers from having no set definition. Timmen L. Cermak defines dependence as "being influenced or controlled by something else," and the prefix co- means "mutually." When the two words are combined codependency suggest a person who is dependent on and controlled by

others who are themselves dependent on or controlled by forces such as alcoholism, compulsive behavior, or chronic illness. The prototypical example would be someone who sacrifices his or her own needs to accommodate an alcoholic loved one whose life is out of control (Cermak, 1988, p. 111). A.W. Schaef (1986, p.15), who combined Sondra Smalley and Robert Subby's definitions, best conceptualizes codependency as an emotional, psychological, and behavioral condition that is characterized by an exaggerated dependent pattern of learned behavior, beliefs, and feelings within the individual where all focus of their life is on another individual (usually a problemed individual) or addictive agent and in so doing they become consumed so as to lose all sense of self-identity, worth, and feelings. Further, it is a pattern of coping that is born of the dynamics and oppressive rules of a family which prevents the open expression and direct discussion of feelings, needs, and personal as well as interpersonal problems. Thus, codependence is a dependence on people and things outside of the self, along with neglect of the self to the point of having little self-identity. Further, the codependent person (many of whom are ACOAs) may think that others depend on them, yet they are themselves dependent. They may appear strong but deep down feel helpless and powerless. They seem very controlling but in essence are really controlled themselves (Beattie, 1987, p. 28). Whitfield (1989) simply

defines codependency as any suffering and/or dysfunction that is associated with or results from focusing on the needs and behaviors of others. It is also an addiction of its own that arises from an individual's focusing so much upon the external environment that internal processes (e.g., emotions, desires) are forgotten or lost. Whitfield's definition no longer restricts codependency to only the association with an alcoholic. Whitfield's definition and Cermak's definition combined appear to offer the most parsimonious definition of codependency found in the literature. Schaef's definition appears to be the best conceptualization. For the purpose of this study, codependency will be defined as an addictive and dysfunctional pattern of coping where a substantial focus of a person's life is on the needs and behaviors of others (or addictive agent) to the extent that ones own internal processes (e.g., emotions and desires) are forgotten or lost. Further, a codependent person is one who fears abandonment by others and is dependent on and controlled by others who are themselves dependent on or controlled by forces such as alcoholism, compulsive behavior, mental illness, abuse, or chronic illness. This fear is so encompassing that it interferes with a person's every day functioning by making them worry about pleasing others and second guessing others so as to avoid conflict. This results in the person not being genuine and truthful to

themselves and others while opening themselves up to being taken advantage of and overextended.

Codependence is not particular to a specific age group, type of relationship, or gender. As professionals began to understand codependency better, more groups other than adult children of alcoholics appeared to possess codependent characteristics. Co-dependent characteristics were observed in people who were in relationships with or who had parents who were emotionally or mentally disturbed, parents of children with behavior problems, people in relationships with irresponsible people, professionals (i.e. nurses, social workers), and others in "helping" occupations. Even recovering alcoholics and addicts noticed that they were codependent and perhaps had been long before becoming chemically dependent. Codependents seemed to be everywhere (Beattie, 1987)! In addition, codependents seemed to manifest certain personality characteristics that interfered with functioning effectively in life and that also made life painful. The most cardinal features of codependent behaviors are caretaking, rescuing, dependency, depression, passive aggressiveness, obsessive compulsiveness, low self-esteem, cognitive inflexibility, and issues of control (Beattie, 1987). For the focus of this study, passive aggressiveness, dependency, obsessive compulsiveness, depression, and self-esteem are the features of interest.

SIGNIFICANCE OF THE STUDY

The concerns about the effects of an alcoholic parent on children as they become adults have provided theories and research about personality characteristics that develop as a result of trying to cope in an alcoholic home. As mentioned, these characteristics have paralleled the description of codependent behavior. Codependence is considered a part of treatment center jargon and related to "pop psychology" and is not yet recognized as a clinically legitimate construct within the mental health field. It has received little scrutiny from clinicians and researchers perhaps due to the lack of an operational definition. An overabundance of varying definitions makes the construct validity of the term suspect (O'Brien and Gaborot, 1992; Cermak, 1986; Gierymski and Williams, 1986; Gomberg, 1989).

For the most part mental health professionals do not get in-depth exposure about addictions not to mention the construct of co-dependency in their graduate training. Charles Whitfield (1984), a clinician and writer in the fields of chemical dependency and the family, states, "I estimate that today, conservatively, 89 percent of all helping professionals remain untrained in this crucial area. ...As a result of this lack of knowledge we find many individuals coming back into treatment or leaving treatment still in pain" (p. 7).

However, as discussed earlier, the concept of

codependency is new and still suffers from having no precise definition. The research about adult children of alcoholics and codependency is scant, and there exist no formal diagnostic grouping for affected people nor any movement toward creating more precision in defining and treating codependents as a legitimate problem and disorder. Therefore, the most that we can do is to communicate to clinicians typical problems and personality characteristics that cluster together to form evidence of co-dependent behavior. Then we can try to identify, address, and effectively treat someone with a history that reveals the existence of alcoholism during childhood or adolescence. This is an essential point in that many times these people come in for help and are labelled using diagnostic groups from the DSM III-R or ICD-9 which do not adequately address all areas of dysfunction that adult children of alcoholics experience. Therefore, in recognizing that alcoholism can have an effect on adult children of alcoholics, it has been the hope of this researcher to investigate if particular personality characteristics in adult children of alcoholics which might differentiate them from adult children of nonalcoholics. Thereby, a more precise definition of codependency may be created. In addition, it is hoped that results from this study may be useful in the creation of a recognized and clinical diagnostic category under the name

of Codependent Personality Disorder which can lead to more effective treatment planning.

PURPOSE OF THE STUDY

The central aim of this study was to examine certain aspects of adjustment exhibited in the form of personality characteristics among adult children of alcoholics (ACOA) and adult children of alcoholics with an alcoholic diagnosis (ACOAA) to determine the degree to which particular personality characteristics in each group differ from one another and from a peer group of adult children of nonalcoholics (control). In addition, the study examined these characteristics to see if there existed a pattern within the groups that would be descriptive of a codependent construct.

The study compared five personality characteristics identified as codependent (e.g. dependency, depression, passive aggressiveness, obsessive compulsiveness, and low self-esteem) among adult children of alcoholics (ACOA) and adult children of alcoholics with a clinical diagnosis of alcoholism (ACOAA) with a control group of peers who were adult children of nonalcoholics. The subjects from all three groups had no parental or family history of substance abuse (excluding alcoholism), mental illness, physical handicaps, or chronic illness in their medical history. The study attempted to answer two important research questions with six specific questions explored and eleven hypotheses tested.

Research Questions:

I. Among the personality characteristics measured how do adult children of alcoholics with alcoholism (ACOAA) and adult children of alcoholics (ACOA) compare to a peer group of adult children of nonalcoholics (control)?

II. To what extent do these personality characteristics exhibit significant correlations within each group (ACOAA, ACOA, control), and to what extent in each group are these descriptive of the codependent construct?

Specific questions to be explored in terms of identifying the personality characteristics of interest were as follows:

1. Are there differences among the ACOAA, ACOA, and control groups in terms of Passive Aggressiveness?

2. Are there differences among the ACOAA, ACOA, and control groups in terms of Dependency?

3. Are there differences among the ACOAA, ACOA, and control groups in terms of Obsessive Compulsiveness?

4. Are there differences among the ACOAA, ACOA, and control groups in terms of Depression?

5. Are there differences among the ACOAA, ACOA, and control groups in terms of Self-Esteem?

6. Do these personality characteristics correlate within each group to suggest a particular pattern that may be descriptive of a codependency construct?

The following are hypotheses tested in the study.

HYPOTHESIS 1

The ACOAA and ACOA groups will demonstrate a level of passive aggressiveness that is greater than that of the control group.

HYPOTHESIS 2

The ACOAA and ACOA groups will demonstrate a level of dependency that is greater than that of the control group.

HYPOTHESIS 3

The ACOAA and ACOA groups will demonstrate a level of obsessive compulsiveness that is greater than that of the control group.

HYPOTHESIS 4

The ACOAA and ACOA groups will demonstrate a level of depression that is greater than that of the control group.

HYPOTHESIS 5

The ACOAA and ACOA groups will demonstrate a level of self-esteem that is lower than that of the control group.

HYPOTHESIS 6

There will exist significant correlationships within the ACOAA and ACOA groups that will predict and explain group membership and be descriptive of the codependent concept.

CHAPTER TWO

REVIEW OF THE LITERATURE

HISTORICAL VIEW OF CODEPENDENCY

The term "codependent behavior" emerged simultaneously in several Minnesota treatment centers in the late seventies and was labeled by 1979 (Beattie, 1987). Exactly how or who coined the name is a mystery. Robert Subby and John Friel wrote, "originally it was used to describe the person or persons whose lives were affected as a result of their being involved with someone who was chemically dependent. The codependent spouse or child or lover of someone who was chemically dependent was seen as having developed a pattern of coping with life that was not healthy, as a reaction to someone else's drug or alcohol abuse" (Beattie,1987, p. 28). Since then other definitions have emerged defining codependency in various ways. The following are a few of these definitions found in the literature. Earnie Larsen defines codependency as those self-defeating, learned behaviors or character defects that result in a diminished capacity to initiate or to participate in loving relationships (Beattie, 1987, p. 28). Sondra Smalley refers to co-dependency as a pattern of learned behavior, feelings, and beliefs that make life painful; it is human-relationship-dependent on and focuses their lives around an addictive agent (Schaef,1986, p. 14). She rejects a disease model of codependency, thus viewing it as a personality

disorder that still allows a person to be functional within society like most neurotics. Later, Robert Subby revised his definition to say that, codependency is an emotional, psychological, and behavioral condition that develops as a result of an individual's prolonged exposure to, and practice of, a set of oppressive rules- rules which prevent the open expression of feelings as well as the direct discussion of personal and interpersonal problems...it is a pattern of coping that is born of the rules of a family and not as a result of alcoholism (Schaef,1986, p. 15). For the purpose of this study codependency will be defined as an addictive and dysfunctional pattern of coping where all focus of a person's life is on the needs and behaviors of others (or addictive agent) to the extent that one's own internal processes (e.g., emotions and desires) are forgotten or lost. Further, one who is codependent is a person who fears abandonment and is dependent on and controlled by others who are themselves dependent on or controlled by forces such as alcoholism, compulsive behavior, mental illness, abuse, or chronic illness. This fear is so encompassing that it interferes with a person's every day functioning by making him/her worry about pleasing others and second guessing others so as to avoid conflict. This results in the person not being genuine and truthful to himself/herself and others while opening oneself to being taken advantage of and overextended.

In order to better understand codependency we must first briefly describe its history. After the creation of Alcoholics Anonymous in the 1940's, a group comprised primarily of wives of alcoholics came together to form their own self-help group to deal with ways their spouses' alcoholism affected them. They created their own twelve-step program and formed what is known today as Al-Anon. Many have benefitted from this program. The basic thought in 1979 was that codependents were people whose lives seemed unmanageable due to living with an alcoholic. Gierymski and Williams (1986) state that the codependent term originally designated the spouse of the alcoholic but is now generalized to all family members and their close social network. Professionals and researchers have long surmised that something significantly different was happening to the people who lived with an alcoholic. Something that seemed to be physical, mental, emotional, and spiritual. Words such as co-alcoholic, non-alcoholic, and para-alcoholic began to surface. However, the definition later expanded to include other compulsive disorders such as overeating, undereating, gambling, and certain sexual disorders. These compulsive and addictive disorders paralleled the addictive and compulsive disorder of alcoholism. Professionals began to notice many people in close relationships with these compulsive and addicted people who had also developed patterns of reacting and coping that resembled the coping

patterns of people in relationships with alcoholics. Something peculiar had happened to these families; and they too had felt the effects of codependency long before it was given a label (Beattie,1987).

Though apparently no empirical data exist to define codependency, it seems from much of the clinical literature and the above history that Smalley and Subby best conceptualize this construct. Codependency can best be viewed according to Schaef (1986, p. 22) as being an emotional, psychological, and behavioral condition that is characterized by an exaggerated dependent pattern of behaviors, beliefs, and feelings within the individual where all focus of their life is on another individual (usually a problemed individual) or addictive agent, and in so doing they become consumed in such a way as to lose all sense of self-identity, worth, and feelings. Further, it is a pattern of coping that is born out of the dynamics and oppressive rules of a family which prevents the open expression and direct discussion of feelings, needs, and personal as well as interpersonal problems. A more parsimonious definition by Timmen L. Cermak (1988) defines a codependent person as one who is dependent on and controlled by forces such as alcoholism, compulsive behavior, or chronic illness (p. 112). Thus, as professionals began to understand codependency better more groups other than adult children of alcoholics appeared to possess codependent

characteristics. The fact that codependency is not restricted to alcoholism is now being documented. Co-dependent characteristics were observed in people who were in relationships with or who had parents while growing up with emotionally or mentally disturbed illnesses, handicapped and chronic illness, parents of children with behavior problems, people in relationships with irresponsible people, professionals (i.e. nurses, social workers), and others in "helping" occupations (Fausel,1988; O'Brien and Gaborit, 1992; Schaef, 1986; Whitfield, 1983). Pest and Storm (1988) researched the relationship of compulsive eaters and drinkers and found no significant difference between married couples in which one spouse was married to a compulsive eater or drinker. They found that all couples, whether married to compulsive eaters or to alcoholics, resembled each other and demonstrated the same codependent effects. Even recovering alcoholics and addicts noticed that they were co-dependent and perhaps had been long before becoming chemically dependent. Codependents started cropping up everywhere (Beattie,1987, p. 30).

It appears that these codependent behaviors, or coping mechanisms, seemed to prevail or cycle throughout the co-dependent's life if that person doesn't change or seek help. Characteristically, as a codependent discontinued a relationship with a troubled person, the codependent frequently sought another troubled person to repeat the

codependent relationship. Codependent people derive their sense of wholeness by receiving liking and approval from others and by solving the problems of, relieving the pain of, and protecting others. Because the codependents pay more attention to the feelings and desires of other people than to their own... they then sacrifice their own values, feelings, and desires to be close to others. They trust the opinions of others more that their own, and they believe that the quality of their lives depends upon the lives of other people (Whitfield, 1989). Further, the rules or learned coping mechanisms of an alcoholic family prohibit discussion about problems, open expression of feelings, direct, honest communication, realistic expectations (such as being human, vulnerable, or imperfect), selfishness, trust in other people and one's self, playing and having fun, and rocking the delicately balanced family canoe through growth or change- however healthy and beneficial that movement might be. As mentioned earlier though these rules are common to alcoholic family systems, they can emerge in other families, too (Schaef,1986).

CHARACTERISTICS OF CODEPENDENCE

Codependency throughout the literature exhibits itself in various personality characteristics; namely low self-esteem, caretaking, dependency, a need for control, denial, depression, worrying, anxiety, non-assertiveness, weak boundaries, powerlessness, repressed hostility, and cognitive inflexibility. It is often diagnosed as dependent personality disorder, passive aggressive personality disorder, or obsessive compulsive personality disorder.

The following description of characteristics of co-dependency are adapted from Beattie's book, Codependent No More, (1987) and Schaef's book, Codependence Misunderstood-Mistreated, (1986).

LOW SELF-ESTEEM

Coopersmith (1987), defines self-esteem as "judgement of worthiness that is expressed by the attitudes one holds towards the self" (p. 5). It is a confidence and satisfaction in oneself along with having respect and value for oneself. It is to have dignity and knowledge of one's own feelings, beliefs, behaviors, and attitudes, and respecting them. To have self-esteem is to have enough confidence in who you are and what you feel to value and stand up for yourself. However, codependents have low self-esteem and low self-worth. Rosenberg (1965) defines low self-esteem as a sense of self-dissatisfaction and rejection

while high self-esteem is defined as a sense of self-respect and worthiness. Persons with low self-esteem tend to not like, respect, or value themselves by feeling ashamed, embarrassed, and critical of themselves. They often feel that they are not good enough, yet have difficulty accepting criticism and compliments.

Codependents have difficulty in decision-making because they are unsure of what they want along with their need to please and be liked by everyone. This pleasing behavior serves to give an artificial sense of self-worth because they do not believe that others can genuinely love or like them for themselves and therefore settle for just being needed.

CARETAKING

Caretaking and rescuing are synonymous and closely related to enabling. They are destructive forms of helping. It is any help to the alcoholic that prevents him/her from suffering the consequences of his/her drinking or contributes to making it easier to continue drinking. Caretakers rescue the alcoholic from the consequences of his/her actions by taking care of responsibilities or mistakes even without being asked. As mentioned earlier, codependents suffer from feelings of low self-esteem and worth, and rescuing or caretaking gives an artificial sense of worth. It provides a temporary feeling of elation, self-

worth, and power to someone who doesn't feel good about him/herself. "Just as a drink helps an alcoholic momentarily feel better, a rescue move momentarily distracts us from the pain of being who we are. We don't feel loveable, so we settle for being needed. We don't feel good about ourselves, so we feel compelled to do a particular thing to prove how good we are (Beattie, 1987, p. 84)". Codependents doubt that someone could accept, love, or want them around for their own intrinsic worth, so they have to make themselves indispensable even to the point of inconveniencing themselves or giving up their own desires. Codependents accomplish this by doing for others or by taking care of everything that others may need to do for themselves. In this way they facilitate dependence and can forestall their own sense of abandonment. There is no one more indispensable in an alcoholic family than the codependent spouse. In addition, the co-dependent person thinks that the person they are taking care of is helpless and unable to do for themselves and as a result cannot be held responsible for themselves. They will think, speak, and problem-solve for the other person. Although this helplessness on the part of the alcoholic may appear true, it is not a fact. "Unless a person has brain damage, a serious physical impairment, or is an infant, that person can be responsible for him or herself (Beattie, 1987, p. 84)". Scott Egleston states that,"we rescue any time we

take responsibility for another human being- for that person's thoughts, feelings, decisions, behaviors, growth, well-being, problems, or destiny (Beattie,1987, p. 78). The codependent finds safety and self-esteem in giving and rescuing others and will stand up and assert for the rights and injustices done to others but not for themselves. This giving and rescuing is so addictive that they appear controlling and smothering and are enmeshed into others lives and neglect their own individuality, thus allowing others to hurt and take advantage of them. They often find themselves attracted to needy people and the cycle is continued.

DEPENDENCY

Codependents not only create a dependency in others for their help but are in their own way dependent on others to give their lives meaning and worth. Dependence, according to Cermak (1988), is defined as "being influenced or controlled by something else" (p. 111). Many codependents tend to lack happiness by being alone and within themselves, thus centering their lives around outside things and people. They feel threatened and desperate with loss and feel anguish when they are not liked or accepted. As a result they desperately seek the love and approval from others because they fear they can not function nor be happy alone.

Unfortunately they tend to seek love from those who are emotionally inaccessible.

CONTROLLING

Kalat (1990) describes control as that which has influence, power or rule over one's actions or life. Codependents are excellent controllers and manipulators. They believe they can control others' perceptions, feelings, behaviors, and thoughts. They feel they should control everything in hopes of making everything turn out right. They believe they know what's best, how things should be and how others should behave and act to the point of trying to control others by manipulation, guilt, helplessness, threats, coercion, advice giving, or domination. They also believe with just a little bit more effort they can change and fix everything. As things become increasingly more intense and chaotic the codependent exerts more and more control. There isn't really anything they wouldn't do to not try to control. As a result they are fearful to let events unfold naturally or let others take control or be who they are. Thus the codependent does not deal with nor recognize loss of control or helplessness. Ironically they tend to feel controlled by others and by events.

DEPRESSION

Depression is a condition in which the person experiences overwhelming sadness while taking little pleasure in life and experiences feelings of worthlessness, powerlessness, and guilt (Kalat, 1990). All these attempts to control everything and everyone lead to tremendous disappointment and eventually to depression often related to the codependent's feelings of failure. Repeated experience with these failures results in greater depression and pessimism.

DENIAL

Denial is the refusal to acknowledge, admit to or believe information that provokes anxiety (Kalat, 1990). Codependents live painful and fearful lives and rely on denial and repression to defend against the impending threat on their egos. Codependents often push their feelings, wants, desires, and thoughts out of awareness because of fear and guilt resulting in believing and telling themselves lies. They try not to acknowledge problems or their severity, often telling themselves things will be better tomorrow. They often try to stay busy to avoid problems or pain. They are afraid to be who they are while appearing to be in control and unbending.

OBSESSING

The DSM III-R defines obsessions as recurrent, persistent ideas, thoughts, images, or impulses that are not experienced voluntarily but rather are thoughts that invade consciousness. Many codependents tend to obsess, worry, and ruminate over loved one's problems, and experience the need to be in control and perfect. These feelings are so intense that many times they are the cause of great stress, anxiety, and guilt. This hampers the individual's way of coping effectively. They will feel anxious and uneasy, often losing sleep over other's and problems even if concerns do not involve them. They continually ruminate about people and constantly talk about concerns and worries. Codependents will focus all their energies into concerns while complaining that they can't take the time out to do anything for themselves nor have they any energy left.

TRUST

Trust is defined as having assured reliance on or faith in the character, ability, or truth of someone or something (Webster,1988). Codependents frequently don't know who or when to trust. Many times they are unable to explain how to develop and maintain trust because of never properly developing trust when growing up. What they have learned is that others can not be relied upon to be truthful or consistent. In addition to their lack of faith in others,

they have learned not to trust their own feelings, thoughts, or perceptions. "Codependents tend to dismiss their own perceptions of situations unless and until they are verified externally by others. Even though they might have a very clear intuitive impression of a person or a situation, they will often dismiss it as crazy or off the wall" (Schaef,1986, p. 51). Codependents often don't believe others will remain loyal and continue to like them in spite of either temporary disagreements or not needing them for specific reasons. They don't believe that others will not abandon or like them if they don't please. They tend to trust untrustworthy people and lose faith and trust in God if they believe and feel He has abandoned them.

WEAK BOUNDARIES

Boundaries are certain limits and expectations we have about what we would or wouldn't tolerate from others (Beattie,1987). Co-dependents often do not know where they end as individuals and where others begin. They will tend to take on emotions such as anger, depression, and confusion without knowing if they are their own or others. Whatever others think, feel, or do the codependent will also think, feel, or do. They tend to live in a society (i.e. family, school, and church) that conditions them to think, feel, or know what is taught to them. Ironically, notes Beattie (1987), they learn at a time that their referent point to

all that they think, feel, behave, and know is external to themselves thus not producing proper boundaries. In order to have and experience boundary-making they need to know how they think and feel inside (tapping into an internal referent) and then relate it to the outside world from that perspective. Not knowing boundaries from others and themselves does not allow them to develop healthy intimate relationships. This deficit of boundaries lead to symbiotic, dependent relationships that destroy their sense of self, esteem, and others sense of self, esteem, and independence. It allows others to take advantage of and hurt them by tolerating most everything, including violation of their own basic rights. In the alcoholic family nearly everyone focuses on and takes on the alcoholic's problem. The entire household often revolves around and defines itself with reference to the alcoholic. The family learns to take on the general mood, feelings, and attitudes of the one who drinks. As the codependent relationship intensifies, the boundaries become more and more blurred. Thus, letting go, allowing others to separate, and to be independent and different is made difficult.

ASSERTIVENESS

Assertiveness is the ability to express feelings in a direct and honest way that neither humiliates nor degrades other people (Crider, Goethals, Kavanaugh, and Soloman,

1989). Codependents often exhibit poor communication skills. They tend to be indirect or unassertive for fear of displeasing others and causing conflict or rejection. They carefully choose words to please, manipulate, control, conceal, or even to avoid guilt and pain. The codependent is often filled with hurt, pain, worry, repressed hostility, ulterior motives, low self-esteem, and shame. They laugh when they want to cry; cry when they are angry, and say they're fine when they are not. They allow themselves to be bullied, ruled, and dominated by others. Often they get overwhelmed and burdened with responsibilities and worries. They sometimes react inappropriately due to these feelings but later learn to justify, rationalize, deny, or over-compensate for them. They may nag or threaten only to back down or lie later. Codependents will apologize for everything, take responsibility for everything, and hint around at what they need or want. They tend to be indirect in voicing their needs and feelings. They hardly ever use the word "NO" in their vocabulary. Often they avoid decision-making where others may want them to decide for both parties. They do this because in childhood it was wrong to talk or express feelings, desires, and attitudes. They had to please to keep peace and not stand up for themselves so as to survive. Thus they learn not to be sure of what they think, feel, want, or believe. They are inhibited and controlled though they appear to be in

control. They tend to be afraid to let others know and see who they really are for fear of not being seen as okay or accepted by others. Codependents tend to repress and deny their anger and hurt, often possessing passive aggressive behaviors. They fear their own anger and feel shame and guilt when angry or hurt while on the other hand may feel controlled by others' anger and hurt.

POWERLESSNESS

Codependents are likely to feel a strong sense of powerlessness. Powerlessness is to feel devoid of resources to alleviate one's pain and the alcoholic's drinking. There is an encompassing sense and fear of loss of control. There exists, a "there is nothing I can do" attitude because of a lack of an identity that they can value. Often there is a failure to see that their achievements can be separate from those of the alcoholic, because of the belief that since they cannot stop the alcoholic from drinking, they cannot help themselves. Codependents need to establish a valued identity and sense of achievement independent of their identities as children of alcoholics (Ackerman, 1983).

COGNITIVE INFLEXIBILITY

Codependents tend to possess cognitive inflexibility which is an inability to generate different ways of perceiving. They tend to see the world and think

dichotomously. Dichotomous thought is a rigid, either/or; black or white perception. Codependents tend to judge things from either poles; either it is right or wrong, black or white. They usually allow themselves two options which results in an avoidance/avoidance or approach/approach conflict. Often compromise or having many alternatives is not an option for them. This way of thinking can greatly affect the codependent's decision-making abilities, opportunities, and sense of freedom.

Codependency exhibits itself in a variation of the above indicators. O'Brien and Gaborit (1992) sum up codependency in five major characteristics based on the work of Cermak and others. First, the codependent displays a continual investment of self-esteem in the ability to influence or control feelings and behavior in the self and in others despite painful consequences. Second, the codependent assumes responsibility for meeting the needs of others to the exclusion of his or her own needs. Next, the codependent suffers anxiety in periods of intimacy or separation because of poor personal boundaries. Fourth, the codependent enters into emotionally enmeshed relationships with personality disordered, drug dependent, and/or compulsive people. Finally, the codependent can exhibit constriction of emotions, depression, hyper-vigilance, compulsive, anxiety, excessive reliance on denial, substance abuse, stress-related medical illness, and/or a primary

relationship with an active substance abuser. Some professionals say it is not an illness but a normal reaction to abnormal behavior. However, the result often is dysfunctional. Others view it as a disease that is progressive and chronic. It tends, according to Schaef (1986), to fit the disease concept in that it has an **onset** (a point at which the person's life is just not working, usually as a result of an addiction), a **definable course** (the person continues to deteriorate mentally, physically, psychologically, and spiritually), and, untreated, has a **predictable outcome** (death, physical illness, or depression). Perhaps the reason why many professionals call codependency a disease is because it is progressive and habitual like many other self-destructive behaviors that repeat habits without thinking. It is also a reactionary process; one of overreacting or underreacting, but seldom do they act on the basis of their own responsiveness. However, they react to an illness such as alcoholism. Codependent behaviors are self-destructive (Schaef, 1986, p. 26). Codependence can lead to such physical complications as gastrointestinal problems, ulcers, high blood pressure, and even cancer. The codependent will often die sooner than the chemically dependent person (Subby and Friel, 1984 and Whitfield, 1984). It is for these reasons that Cermak (1988) writes that careful and accurate identification, diagnosis, and treatment be given to these individuals.

COMPETING DIAGNOSES

Many professionals argue that codependence should not exist as a diagnostic category in and of itself because of other diagnostic categories from the DSM III-R, or the ICD-9 such as Dependent Personality Disorder, Passive Aggressive Personality Disorder, and Compulsive Personality Disorder. However, when one compares the characteristics of each of these disorders to the characteristics of codependent behavior, it can seen that the above mentioned disorders do not exclusively encompass or accurately addresses the clusters of personality characteristics referred to as codependency. Cermak (1986) agreed that codependency most resembles the Dependent Personality Disorder, but rejected that diagnostic framework on the basis that it oversimplifies the disorder. Codependency is so conceptually complex that it requires characteristics from at least four separate DSM categories: Alcoholism, Dependent, Borderline, and Histrionic Personality Disorders, as well as an additional category made up of associated features (Cermak, 1986).

Following are DSM-III-R descriptions that this researcher believes apply to but do not completely describe codependency.

DEPENDENT PERSONALITY DISORDER

* Dependent Personality Disorder is described by the DSM-III-R (1987) as a pervasive pattern of dependent and submissive behavior, beginning early in adulthood and is present in a variety of contexts, as indicated by at least five of the following:

1) is unable to make everyday decisions without an excessive amount of advice or reassurance from others

2) allows others to make the most of his or her important decisions, e.g., where to live, what job to take

3) agrees with people even when he or she believes they are wrong, because of fear of being rejected

4) has difficulty initiating projects or doing things on his or her own

5) volunteers to do things that are unpleasant or demeaning in order to get other people to like him or her

6) feels uncomfortable or helpless when alone, or goes to great lengths to avoid being alone

7) feels devastated or helpless when close relationships end

8) is frequently preoccupied with fears of being abandoned

9) is easily hurt by criticism or disapproval.

PASSIVE AGGRESSIVE PERSONALITY DISORDER

* Passive Aggressive Personality Disorder is described by the DSM III-R (1987) as a pervasive pattern of passive resistance to demands for adequate social and occupational performance, beginning by early adulthood and present in a variety of contexts, as indicated by at least five of the following:

1) procrastinates, i.e., puts off things that need to be done so that deadlines are not met
2) becomes sulky, irritable, or argumentative when asked to do something he or she does not want to do
3) seems to work deliberately slow or does a bad job on tasks that he or she really does not want to do
4) protests, without justification, that others make unreasonable demands on him or her
5) avoids obligations by claiming to have "forgotten"
6) believes that he or she is doing a much better job than others think he or she is doing
7) resents useful suggestions from others concerning how he or she could be more productive
8) obstructs the efforts of others by failing to do his or her share of the work
9) unreasonably criticizes or scorns people in positions of authority.

OBSESSIVE COMPULSIVE PERSONALITY DISORDER

Compulsive Personality Disorder as described by the DSM-III-R (1987) is a pervasive pattern of perfectionism and inflexibility, beginning by early adulthood and present in a variety of contexts, as indicated by at least five of the following:

1) perfectionism that interferes with task completion, e.g., inability to complete a project because overly strict standards are not met

2) preoccupation with details, rules, lists, order, organization, or schedules to the extent that the major point of the activity is lost

3) unreasonable insistence that others submit to exactly his or her way of doing things, or unreasonable reluctance to allow others to do things because of conviction that they will not do them correctly

4) excessive devotion to work and productivity to the exclusion of leisure activities and friendships (not accounted for by obvious economic necessitary)

5) indecisiveness: decision-making is either avoided postponed, or protracted, e.g., the person cannot get assignments done on time because of ruminating about priorities (do not include if indecision is due to excessive need for advice or reassurance from others)

6) over conscientiousness, scrupulousness, and inflexibility about matters of morality, ethics, or values (not accounted for by cultural or religious identification)

7) restricted expression of affection

8) lack of generosity in giving time, money, or gifts when no personal gain is likely to result

9) inability to discard worn-out or worthless objects even when they have no sentimental value.

Cermak (1991) has proposed, for the clinical assessment of individual clients, that codependence be seen as a disease entity for which operational diagnostic criteria can be developed. He first presented the criteria in 1986. The following is the diagnostic criteria for codependency to be use by professionals followed by a list of symptoms commonly understood by lay men (Cermak, 1991).

Diagnostic Criteria for Codependence

A. Continued investment of self-esteem in the ability to influence/control feelings and behaviors, both in oneself and in others, in the face of serious adverse consequences.

B. Assumption of responsibility for meeting other's needs, to the exclusion of acknowledging one's own needs.

C. Anxiety and boundary distortions around intimacy and separation.

D. Enmeshment in relationships with personality-disordered, chemically dependent, and impulse-disordered individuals.

E. Exhibits at least three of the following:

1. Excessive reliance on denial
2. Constriction of emotions (=/- dramatic outbursts)
3. Depression
4. Hypervigilance
5. Compulsions
6. Anxiety
7. Substance abuse
8. Recurrent victim of physical or sexual abuse

9. Stress-related medical illnesses

10. Has remained in a primary relationship with an active substance abuser for at least 2 years without seeking outside support

Lay Symptoms of Codependence

1. Changing who you are to please others.

2. Feeling responsible for meeting others people's needs at the expense of your own.

3. Low self-esteem.

4. Driven by compulsions.

5. Denial (Cermak, 1991, p. 270).

Though each of the above personality disorders have characteristics that are shared in the description of codependent behavior neither one encompasses and adequately describes co-dependency. Therefore, it is the view of this researcher that many aspects of this behavior are overlooked and not addressed in the treatment plans. This results in inadequate and inefficient treatment as well as an increased rate of recidivism and/or personality dysfunction. Thus, an additional classification is essential if adequate, efficient, and effective diagnosis and treatment is to be accomplished. Upon examining the above descriptions of personality traits one observes a similar cluster of personality characteristics between adult children of alcoholics and codependent behavior; namely passive aggressiveness, dependency, obsessive compulsiveness,

depression, and low self-esteem. To further understand this similarity a discussion of adult children of alcoholics is presented.

ADULT CHILDREN OF ALCOHOLICS

Sharon B. Sloboda (1974), indicates that alcoholism is undoubtedly one of the most widespread, destructive, and costly health problems facing our country; one that directly or indirectly affects the lives of millions of Americans. It is impossible, she states to estimate its cost in human suffering resulting from broken homes, deserted families, and the psychological problems commonly found in the children of alcoholics.

During the last 20 years research around alcoholic-related issues has grown immensely. Research endeavors in this field have focused attention on the alcoholic, the spouse, and the effects of alcoholism on children and the family unit. Miller and Tuchfeld (1986) conclude, however, that the literature is relatively small and methodologically weak with few well-controlled studies available. Empirical research on the spouse has been done in the early 40's, 60's, and 70's; while the more current literature tends to be clinical and descriptive.

In the past several years attention has been on parental alcoholism as an important factor in children's current and future adjustment. Children of alcoholics have

been found to have higher rates of behavioral and emotional problems (Adler and Raphael, 1983; El-Guebaly and Offord, 1977; Scavnicky-Mylant, 1984) along with an increased risk for developing alcoholism (Black, 1981 Goodwin, 1979; Dinning and Berk, 1989). Much of what is known about adult children of alcoholics is based on clinical reports and anecdotal information in which most hypotheses are drawn from individual testimony (Woititz, 1983). However, the MMPI has been utilized more recently as an assessment technique for understanding differences among alcoholics and for designing treatment interventions that are more effective. These studies, however, have shown inconsistent results and indicate that no single personality type is characteristic of all alcoholics or adult children of alcoholics (Graham and Strenger, 1988; Knowles and Schroeder, 1990).

McKenna and Pickens (1983) compared 1,929 MMPI's on male and female alcoholics and found that the sons of the alcoholics showed significantly higher scores on one validity scale and on five clinical scales (4, 5, 7, 8, and 9), with Scale 4 (Psychopathic Deviate) showing a clinically significant elevation (T.70 or above).

On the Wiggins Content scales, alcoholic sons of alcoholics scored higher than controls on measures of family problems, authority conflict, poor morale, and psychoticism. Bradley and Schneider (1990) found adult children of

alcoholics to have significantly higher scores on the MMPI control scale reflecting a higher need for control in their interactions with others. The most consistent finding across several studies revealed elevations on Scale 4 in outpatient and inpatient settings, and across race and gender differences (Butcher and Owen, 1978; Donovan, 1986; McKenna, 1986; McKenna and Pickens, 1983; Mayo, 1985; MacAndrew, 1978; Miller, 1976; Page and Bozlee, 1982; Walfish, Shealy, and Krone, 1992). The research consistently suggests the mean profile for groups of alcoholics is characterized by a 4-2 two-point code type (Graham, 1978; Levi and Watson, 1981; McKenna and Pickens, 1981). Page and Bozlee (1982) found the 4-9 code type characteristic of white alcoholics, the 2-4 code type for Hispanics, and the 9-6 code type for American Indians. Kammeier et al. (1973) and Loper et al. (1973) reported that young men who later became alcoholics were of the 4-9/9-4 code type. After admission for health care they tended to exhibit 4-2 code types. Graham (1987) describes individuals with the 2-4/4-2 code type (at or above a T score of 70) as persons who create a favorable first impression displaying, energetic, sociable, and outgoing dispositions, but who harbor feelings of inadequacy, self-consciousness, passive dependency, and discomfort in social interactions. They are likely to be in trouble with the law or with their families due to a lack of respect for social standards and authority.

They display hyperactive and acting-out behaviors. They are insincere about their depression and can be manipulative. The prognosis for traditional treatment is not good due to premature terminations. Whipple and Noble (1991) conducted a discriminate analysis on personality characteristics using several personality measures, including the MMPI. An index resulting from combinations of best personality discriminators was significantly correlated in father-son pairs. In sum, the evidence to date suggests that a parental history of alcohol abuse is associated with significant elevations on personality measures in clinical samples namely those personality characteristics that depict tendencies toward dependency, depression, passive aggressiveness, obsessive compulsiveness, and low self-esteem.

Miller and Tuchfeld (1986) have found that adult children of alcoholics are increasingly recognized as a relevant clinical population who may manifest symptoms that are subject to misdiagnosis. They assert that this error in diagnosis often leads to inadequate and ineffective treatment planning and inefficient recovery as well as pain for both the individual and the family. Consequently, one can understand that the presence of a complex cluster of personality characteristics can lead to misdiagnosis or insufficient treatment planning.

Children of alcoholics have three times the divorce rate of their controls (Goodwin et al., 1974). Kroll, Stock, and James (1985) reviewed the charts of 411 patients hospitalized for alcoholism treatment and found 13% had been abused as children and that they had themselves demonstrated more legal difficulties, domestic violence, suicidal attempts, and increased levels of pervasive and situational anxiety. Other studies indicate an increased incidence of anxiety and panic disorder in alcoholic patients (Bibb-Chambless, 1986; Haack, 1990). Whether anxiety is a complication of alcoholism or a contributor to the need for self medication that leads to alcohol abuse is not known.

There tend to be psychological as well as biomedical components to alcohol and anxiety disorders (Haack, 1990). Haack (1990) compared ACOAs with a comparison group and found significantly higher elevated scores on anxiety and depression, though the vast majority of them were not clinically depressed or anxious. This finding coincides with the clinical literature that describes ACOAs as more depressed and anxious than non-ACOA controls (Brown, 1988; Clair and Genest, 1987; Gravitz and Bowden, 1986; Tweed and Ryft, 1989; Williams and Corrigan, 1992; Woititz, 1983;). ACOAs also tend to be troubled by concerns of trust, difficulties acknowledging their needs, excessive feelings of responsibility, lack of autonomous identification, problems identifying and expressing feelings, concerns over

their own alcoholism or the likelihood of becoming an alcoholic as well as having feelings of helplessness and depression (Cutter and Cutter,1987; Beletsis and Brown,1981; Cermak and Brown, 1982; Greenleaf,1983). Not only have there been assumptions that biomedical and psychological components to alcoholism exist, but also a genetic component as well.

Currently empirical data has directed much attention on a developmental perspective which particularly focuses on the genetic and environmental influence of alcoholism on the child and the alcoholic. Schuckit (1986,1988), Goodwin (1984,1985), and Cotton (1979) are among theorists postulating a genetic factor or predisposition to alcoholism in persons with one or both parents having histories of alcoholism. Twin and adoption studies have been powerful in investigating such issues. Studies by Goodwin et al.,(1973, 1974,1983, and 1985), Kaija (1960), and Bohman, Sigvardsson, and Cloninger (1981) have shown that the identical twin of an alcoholic is significantly more likely than the fraternal twin to exhibit alcoholism, while sons of alcoholic biological fathers were significantly more likely to develop alcoholism than sons of non-alcoholic biological fathers, both groups of which were adopted out early in their lives. Adopted-out sons and daughters of alcoholics have a risk of becoming alcoholic at least four times greater than adopted-out children of controls (Goodwin, 1983). Cadoret, Cain,

and Grove (1980) also found significant associations between adoptee alcoholism and an alcoholic biologic background. Templer, Ruff, and Ayers (1974) found three quarters of their sample of hospitalized alcoholics to have reported alcoholism in the first degree relatives (first generation aunts, uncles, and grandparents). The incidence of alcoholism in near relatives (i.e. parents and siblings) appears to be higher than that in more distant relatives of alcoholics. Studies by Cruz-Coke and Varela (1966) postulated a difference between men and women with X-linked recessive genes which predisposed them to alcoholism. Schuckit (1988) examined reactions to alcohol (ethanol) as measured by their subjective self reports, measures of body sway, changes in several hormones after drinking, and the intensity and persistence of ethanol-related changes on two electrophysiological measures. Results indicated significantly less intense feelings of intoxication and less intense changes in psycho-motor test performance and hormonal reactions to ethanol doses (equivalent to approximately six drinks to the average individual) in the sons of alcoholics compared to their controls. This may imply, according to Schuckit (1988), that there exists a genetic effect in sons of alcoholics which produces greater tolerance to the effects of alcohol in doses at which most people would make the decision to quit drinking.

These studies have created a substantial impact and interest in the area of genetics effects in the etiology of alcoholism. However, the study has been based on relatively small and highly selective samples. Goodwin's (1983) studies were not significant in finding a strong genetic link to development of alcoholism in daughters of alcoholics, thus reflecting that environmental factors may play more of a role in the development of alcoholism in women. In light of this, Goodwin and associates (1974) carried out a study in Denmark which revealed that daughters of alcoholics raised by their alcoholic parents have a considerably higher rate of depression (approximately 30% of the sample in this study). Therefore, this may suggest that there may be a connection between alcoholism in men and depression in women, but the association is strongest when the women have been raised by their alcoholic parents, thus suggesting strong experiential factors or an interaction of genetic and experiential factors (Goodwin et al. 1974).

Berkowitz and Perkins conducted a study comparing the personality characteristics of late adolescent and young adult children of alcoholics with a control group and examined the extent of personality differences with regard to gender and related gender of the alcoholic parent. Data examined familial alcoholism by an alcohol survey of young college students (N=860). Personality characteristics including impulsiveness, self-deprecation, lack of tension,

independence/autonomy, need for social support, directiveness, sociability, and other-directedness were also examined. Results revealed no significant differences between groups except in the area of self-depreciation. There existed a significant difference in COA respondents experience of greater feelings of self-depreciation with a greater difference in women than in men. Women with alcoholic fathers were significantly more likely than women with alcoholic mothers to report greater self-depreciation (Berkowitz and Perkins,1988). However studies by Clair and Genest (1987) and Werner et al., (1986, 1991) found no significant difference in measures of self-esteem, depression, and internal locus of control in ACOAs vs. a control group. Though findings may be mixed, the prevailing empirical data suggest discernable personality characteristics associated with alcoholism. These personality characteristics manifest themselves in behaviors which attempt to cope in an alcoholic home which in turn may threaten their normal functioning in life.

Research on adult children of alcoholics (ACOA) which focuses on the long-term and psychological effects of growing up with an alcoholic parent is far more scarce. Yet, our mental health facilities are overwhelmed with adults who are suffering from difficulties in coping, depression, passive aggressive behaviors, dependent behavior, fear of abandonment, alcoholism, and destructive,

addictive relationships, all of whom have the common characteristic of growing up in an alcoholic family.

A longitudinal study by Werner (1986) compared the characteristics of resilient children of alcoholics with those of the offspring who developed adjustment problems. Most of the resilient children were female daughters of alcoholic fathers whose mother were gainfully employed and who had grown up in less conflictual homes. A small proportion of resilient children were from separated or divorced homes by the time they reached puberty. The resilient children also did not suffer infant separation from their primary caretaker, nor had any siblings born within a 20 month period. This suggested that social and environmental factors play an important role in a person's adjustment. Once again we are faced with questions of nature versus nurture. This argument can best be examined by looking further into a developmental perspective and the effects of learning from the environment.

Bandura's (1977,1986) social learning theory of behavior has emphasized learning by way of observation, modelling, and imitation. Numerous studies have given support to this theory by demonstrating that young children become aware of alcohol and its socially appropriate contexts through environmental influences (Gaines, Brooks, Maisyo, Dietrich, and Shagena, 1988: Jahoda, Davies, and Tagg, 1980; Spiegler, 1983). Two such influences shown by

these studies used the media, (in particular, television programming) and parental alcohol use (Huston, Watkins, and Kunkel, 1989; Wallack,Breed, and Cruz, 1987). It demonstrated the child's early ability to label alcohol beverages as such thus indicating early learning about alcoholic beverages. Recent studies by Noll, Zucker, and Greenberg (1983,1990) tested evidence for early socialization about drugs in the home through the identification of alcohol by smell among preschoolers (30 to 72 months in age). The findings revealed that preschoolers possess the ability to accurately verbalize associations to alcoholic beverage odors and that success improves with age. Noll, Zucker, and Greenberg further state that this success is partially explained by prior exposure. Children from homes where alcohol was consumed in greater amounts performed better on the first trial.

Zucker, Greenberg, and Noll (1989) provide further evidence that preschool children already have a well-developed cognitive schema for alcoholic beverages. They know that adults drink alcohol more than children do, that men drink more than women, and that these results are increasingly apparent over the preschool years (Noll, Zucker and Greenburg, 1990). Other studies comparing adolescents and parental drinking patterns have revealed significant correlations, thus supporting the social learning perspective that young people model the drinking behaviors

of their parents (Barnes and Welte, 1990; Barnes, Farrell, and Cairns, 1986; Zucker, 1976). Evidence was also found by Pandina and Johnson (1990) that offsprings of families exhibiting a positive history of parental alcoholism had reported a serious alcohol or drug problem twice the rate and 1.5 times higher than those without a history of parental alcoholism. These results are supported by those found by Schuckit (1983) and Hesselbrock et al. (1982) which indicate that offsprings of alcoholic parents are at greater risk for experiencing negative outcomes related to substance abuse. Research with adolescents (aged 12-19) revealed alcohol expectancies that developed in childhood prior to significant drinking experience which later covaried directly with drinking behavior (Miller, Smith, and Goldman, 1990; Christiansen and Goldman, 1983; Brown et al., 1980, 1985). A study by Brown, Creamer, and Stetson (1987) indicated that adolescent alcohol abusers in treatment expected significantly more reinforcement from alcohol than nonabusing peers. Adolescents with an alcohol abusing parent reported more cognitive and motor enhancement from drinking than did adolescent without a family history of abuse demonstrating that both personal and parental alcohol use are related to adolescent alcohol expectancies. Only a few studies have compared adolescent children of alcoholic and recovered alcoholics with a control group. One such study found that the children of alcoholics were lower in

self-esteem, perceived less paternal affection and had more external locus of control (suggestive of less nurturing protective parenting) than children of nonalcoholics. In contrast, children of recovered alcoholics had a less external locus of control and higher perceived levels of paternal affection toward them (O'Gorman,1975). In addition Russell, Henderson, and Blume (1984) found that children of alcoholics are one of the most prevalent groups at risk for the development of substance abuse, anxiety, and depressive disorder. Tarter, Alterman, and Edwards (1985) suggest that children of alcoholics may be more prone to experience negative mood states, higher emotional arousal, and less soothability and that the alcohol and substances may be used to regulate temperament and emotional arousal. Other problems cited include aggressive and antisocial behaviors, difficulty with peers, and poor school adjustment (Ackermann, 1983; Black, 1979; Chassin, Cork, 1969; Pareck, 199 ; Rogosch, and Barrera, 1991). These findings support the theory that a dysfunctional family system plays a role in an increased potential for maladjustment and alcoholism.

The National Epidemiologic Catchment Area Study (Regier et al., 1990) estimated the comorbidities (other than drug disorder) prevalence rates for the general United States alcohol dependence/alcohol abuse population to be approximately 37 percent and among 55 percent of those in specialized treatment centers. The most frequently observed

comorbid conditions associated with alcoholism are those of anxiety disorder (19%), antisocial personality (14%), affective disorders (13%), and schizophrenia (4%). Schuckit (1984) and Chassin, Rogosch, and Barrere (1991) found that earlier and more severe alcohol-related and anti-social problems appear more frequently among persons with an alcoholic parent. The findings are also consistent with adoptee data reported by Cadoret, Troughton, and O'Gorman (1987), who found that alcohol abuse and anti-social behavior were related to alcoholism and anti-social behavior in the biological family, suggesting a genetic basis for the influences. Thus the general stresses and family disorder in being raised by an alcoholic parent could be associated with a genetic loading for alcoholism. Schuckit and associates (1984) interviewed 60 males and 9 females who were half-siblings aged 22-54 along with 90 of their relatives. The incidence of alcoholism in children with an alcoholic biological parent who had been raised by a nonalcoholic parent figure was compared with the incidence in children who did not have an alcoholic parent but were raised by an alcoholic parent figure. Also, children with and without alcoholic biological parents who shared their homes with an alcoholic were compared. Their results suggest that a genetic factor seemed to be more closely associated with alcoholism than an environmental one.

Other studies on adolescence found antisocial behavior,

greater aggressive activity, and greater difficulty in achievement-related activity consistently related to alcoholic outcome. Males who later were alcoholic were more likely to be loosely connected interpersonally to others. In addition studies revealing heightened marital conflict, inadequate parenting and closeness as well as inadequate role models suggest that antisocial patterns of behavior in the parental generation may be playing a significant role (Tarter, Alterman, and Edwards, 1985; Hesselbrock et al., 1985; Cloninger, 1987; Zucker and Fitzgerald, 1991). Conduct disorder, hyperactivity, and impulsivity during childhood and adolescence have also been repeatedly identified in longitudinal studies as predictors of adult alcoholism (McCord and McCord, 1962; Vaillant, 1983; Robins, 1962; Cantwell, 1972; Morrison and Steourt, 1973; Goodwin, 1975). Also cited are difficulties in achievement-related activities such as poorer school performance,truancy, and higher drop-out rates (Hegedus, Alterman, and Tarter, 1984; Knopf, Teasdale, Schulsinger, and Goodwin, 1985). However prevalence data seem to be confounded by the fact that comorbid factors (i.e. psychopathology) among alcoholics may be present because alcoholism caused the psychopathology or that the base rate of co-occurrence for that factor is so high among the general population that the probability of it is more likely to be found among individuals with an alcoholic disorder than without it (Zucker and Fitzgerald,

1991).

Consequently, the above results suggest that if alcoholism is viewed as a genetically influenced disorder there are probably multiple genetic factors which interact with the environment to increase or decrease an individual's risk for alcoholism and its effects. Though genetic factors may predispose one to the risk of alcoholism, there are also a host of environmental factors and behavioral factors that can influence acquisition and maintenance of the disease. Though some 70% of children are resilient to the effects of growing up in an alcoholic home, other children of alcoholics do not resolve the effects of growing up in a troubled household. Some children grow into adulthood demonstrating more legal difficulties, domestic violence, suicide attempts, depression, low self-esteem, passive aggressiveness, dependency, obsessive compulsiveness, and four times the rate of divorce than their controls (Bibb-Chambless, 1986; Berkowitz and Perkins, 1988; Brown, 1988; Clair and Genest, 1987; Goodwin et al., 1974; Haack, 1990; Kroll et al., 1985; Woititz, 1983). In sum, past literature on adult children of alcoholics has indicated most often passive aggressiveness, dependency, obsessive compulsiveness, depression, and low self-esteem as cardinal features of their personality. In addition, the literature has indicated the same five personality characteristics for codependents along with others. However, these five when

comparing the array of characteristics mentioned, seem the most prudent and efficient as interests for research. Also, past research has depicted personality characteristics and the effects of coping that develop due to alcoholism to be similar to the description of codependent behavior. It appears that adult children of alcoholics learn and exhibit particular coping strategies and/or behaviors of codependency, as discussed above, to a greater degree than that of offsprings of nonalcoholics without a history of parental alcoholism. The findings in this study suggest that adult children of alcoholics do exhibit personality characteristics of passive aggressiveness, dependency, obsessive compulsiveness, depression, and low self-esteem that differ significantly from adult children of nonalcoholics.

CHAPTER THREE

DESIGN OF THE STUDY

Chapter 3 presents the research methodology used to collect and analyze the data to answer the research questions. This chapter is organized into the following sections: The Sample, Variables, Instrumentation, Research Questions and Hypotheses, Data Collection, Method, Procedures, and Data Analysis.

THE SAMPLE

The study consisted of three groups of sixty adults; thirty males and thirty females in each group. The first two groups, adult children of alcoholics with alcoholism (ACOAA) and adult children of alcoholics (ACOA) had a past history of paternal alcoholism as children. Selection was based on their father actively drinking for at least 5 years of the subject's life at home between the ages of 5-18. Past family history of paternal alcoholism was also assessed by a modified version of Feigner Criteria (1972) and Research Criteria (Spritzer, 1975). In addition, the first group of subjects (ACOAA) were alcoholics whose illness was diagnosed and documented by a physician. The third group was a control group of adult children of nonalcoholic parents with no history of personal alcoholism documented. None of those in the three groups selected had a past family or personal history of a diagnosed mental disorder or

psychiatric treatment history; child abuse (e.g. physical, sexual, or emotional abuse); physical handicap or disability, mental disability, or neurological history (evidenced by injury and treatment of spinal cord, brain dysfunction, or neurosurgery). The absence of psychiatric history was defined as evidence of no previous records of hospitalization for treatment of mental disorders or treatment by a psychiatrist, psychologist, or social worker. However, alcoholics (ACOAA) selected from treatment facilities had to be in the first two weeks of their program with no other psychiatric treatment history.

Ages for subjects in all three groups ranged from 25-45 with a mean age of 35.2. Approximately 46% of the subjects were in the 25-34 age range and of that 22% of these were male. The 35-45 age range made up approximately 54% of the sample with 28% of these being males. This age range was selected because it was considered to be in the developmental period of middle adulthood. According to Kimmel (1980) and Orstein (1989) this age range depicts the "prime of life" (considered to be in the 30's for blue collar workers and in the 40's for white collar workers). In addition, past literature shows little empirical data on this age group.

The educational levels ranged from high school graduates to master's degrees: 38.5% held high school diplomas or GED certificate, 29.3% had some college, 13.2% held an associates degree, and 19% had a BA or above.

Socio-economic status (SES) was divided into nine categories. The following are the categories with their respective percentages: 14% professionals, 5.3% business, 1.8% semi-professional, 5.8 administration, 19.9% clerical or technical, 11.1% skilled manual, 12.3 semi-skilled, 15.8% unskilled, and 14% unemployed. Socio-economic status was assessed using the Hollingshead Social Class Index (Hollingshead, 1969).

DEPENDENT VARIABLES

The dependent variables for the study were passive aggressiveness, dependency, obsessive compulsiveness, depression, and low self-esteem. Definitions for these characteristics were based on the DSM III-R. Passive aggressiveness, dependency, obsessive compulsiveness, and depression were measured using specific criteria on the Minnesota Multiphasic Personality Inventory and the Millon Clinical Multiaxial Inventory profiles. Low self-esteem was measured by the Coopersmith Self-Esteem Inventory and the Tennessee Self-Concept Scale.

Instrumentation

Human Subject Participation Information Form.

The Human Subject Participation Information Form was a demographic information form and personal and family history of alcoholism, psychiatric, and neurological disorder (see

Appendix A) requiring approximately five minutes to complete.

Parental Alcohol Screener.

The Parental Alcohol Screener is a check list screener of parental alcohol symptoms and description of the alcohol problem (see Appendix B) also requiring five minutes to complete.

Minnesota Multiphasic Personality Inventory.

The Minnesota Multiphasic Personality Inventory (MMPI) is a widely used self-administered true and false test designed to objectively measure and assess major personality characteristics (Hathaway and McKinley, 1951). The shortened 420 item group form of the MMPI was used in this study. It is made up of ten clinical scales, three validity scales, and specialty scales which identify salient profile characteristics with respect to pattern and personality type. High point configurations and T score cut offs were selected from MMPI manuals by Greene (1980) and Lachar (1987). Interpretation of personality patterns in terms of the four variables (passive aggressiveness, dependency, obsessive compulsiveness, and depression) under consideration were measured by the presence of two or more scales from the relevant high point configurations elevated at or above the normal range (normal range = T score of 50; elevated range = T score of 70). Profile patterns under

consideration were categorized as the following high point configurations: passive aggressive scale (1-2-3-4, 2-7-4, 3-2-1, 4-3, 4-6-2, or 4-7), dependency (1-2, 2-4, 1-9, 4-7/7-4, or by the special Navran Dy scale), Obsessive compulsiveness (2-7, 2-7-8,or 7-9/9-7), and depression (scale 2 elevation, validity scale K between T-score of 36-45, or elevations on the Wiggens Content Dep special scale at or above T score of 70). The MMPI established a normal curve with the mean at a T score of 50 thus making a T score of 70 fall two standard deviations below the mean indicating a marked elevation (Greene, 1980; Lachar, 1987). It is this marked elevation in the specific configurations that the researcher was interested along with configurations being exhibited in the order it was listed and descending in T score while still maintaining a T score of 70 or above.

Researchers indicates on the MMPI good face validity, content validity, and construct validity (Haier and colleagues, 1979; Greene,1980; Lachar, 1987). Content validity is the degree to which the items represent the content which they are designed to cover. Construct validity is the degree to which the inventory measures the constructs of personality variables. The Roche MMPI interpretive computer program scored the profiles. This interpretive computer program is found to be judged quite favorably on a wide range of trait and behavioral criteria (Greene, 1980). The most widely used MMPI test form is the standard booklet version, published in 1947 by the

Psychological Corporation. This form was used in the study. Test taking time averaged approximately one hour and thirty minutes.

Millon Clinical Multiaxial Inventory

The Millon Clinical Multiaxial Inventory (MCMI) is a self-administered test designed to measure and assess major personality characteristics. It reports relationships between the DSM-III-R clinical disorders (Axis I) and more pervasive disorders more commonly reported on Axis II. The test provides 22 scores: eight basic personality styles (schizoid, avoidant, dependent, histrionic, narcissistic, antisocial, compulsive, and passive aggressive), three pathological personality syndromes (schizotypal, borderline, paranoid), six symptom disorder scales of moderate severity (anxiety, somatoform, hypomanic, dysthymia, alcohol abuse, and drug abuse), three symptom disorder scales of extreme severity (psychotic thinking, psychotic depression, and psychotic delusion), plus two additional correction scales which provide a means to identify and adjust possible test-taking distortions (Millon, 1982). High point elevations of T scores at 75 or above were used as inclusive criteria for the study. The T scores of 75 or above fall two standard deviations below the mean (T score of 50) and considered as marked elevations by the author (Millon, 1982) on the passive aggressive, dependency, obsessive compulsive, and the dysthymia scales. The MCMI was developed in accordance

with well-established principals of test design and validation (Butcher and Owen, 1978; Millon, 1977, 1981, 1982). It is a 175 true-false item test. This test requires an examiner and can be administered in a group and requires approximately 20-45 minutes.

Coopersmith Self-Esteem Inventory.

This is a 25 item self-administered test developed by Stanley Coopersmith measuring attitudes towards oneself in social, academic, and personal contexts in the areas of: social self-peers, home-parents, school-academics, and general self. The maximum possible Total self Score is 100 with the mean generally ranging from 70 to 80 with a standard deviation of 19 (Coopersmith, 1987, p. 8). In this study the cut off for low self-esteem was established by the author (Coopersmith, 1987, p. 19). The cut off for low self-esteem for caucasian adults were scores of 56 and below. It is used for individual diagnosis, classroom screening, and clinical and research studies. It ranges from eight years of age to adult. It is suitable for group use, and requires approximately 15 minutes.

Reliability for this inventory is reported to be quite high (Kimball, 1972; Fullerton, 1972, and Taylor and Reitz, 1968). A co-efficient of .773 was reported in the study and is considered acceptable. Validity has also been favorably established for this tool (Hilbert and Allen, 1985; Kokenes,

1973, 1974, 1978; Kimball, 1972; Donaldson, 1974, and Simon and Simon, 1975).

Tennessee Self-Concept Scale.

The Tennessee Self-Concept Scale is a self-administered instrument employed to measure self-concept or an individual's self-perception. The items employ Likert-type scales for responses to each of the 100 descriptive statements regarding one's perception of self. The scale may be used with individuals age 12 and higher and at least a sixth grade reading level. It is available in two forms; a consulting form and a clinical and research form. Though each form uses the same booklet and test items the differences lie in the scoring and profiling of the scales. The clinical and research form was used for the study. The test requires 10-20 minutes.

The Tennessee Self-Concept Scale was normed from a broad sample of subjects from various parts of the country. The age range covered from 12 to 68 with equal gender distributions, and blacks and whites representing a range of social, economic, intellectual, and educational levels. The test-retest reliability co-efficients in the literature show scores falling in the .80 to .90 range; reflecting good test-retest reliability (Fitts, 1965 and Lund et al.,1981).

For purposes of this study the researcher was interested in two of the scales: the Total P Score and the Self-Criticism Score (SC). The Total P Score is considered

the most important single score reflecting overall level of self-esteem. Persons with high scores, these of 344 and above with a standard deviation of 6.7, tend to like themselves, feel that they are worthwhile and have value, have confidence in themselves, and act accordingly. People with low scores, these of 315 and below, with a standard deviation of 6.7, are doubtful about their own worth; see themselves as undesirable; often anxious, depressed, and unhappy; and have little faith or confidence in themselves (Fitts, 1965, p. 14).

The SC scale is comprised of 10 items which are mildly derogatory statements that most people admit to themselves. Individuals who deny most of these items are most often defensive and making a deliberate effort to present a favorable picture of themselves. High scores 35 and above indicate openness and a capacity for self-criticism. Low scores, 28 and below, indicate defensiveness and suggest that the Positive Scores are probably artificially elevated by this defensiveness (Fitts, 1965, p. 14). The study examines these five personality characteristics (passive aggressiveness, dependency, obsessive compulsiveness, depression, and self-esteem) as measured by the MMPI, MCMI, Coopersmith Self-Esteem Inventory, and Tennessee Self-Concept Scale to determine if ACOAA and ACOA groups differ from their control group. The study attempted to answer six research questions. The following lists the research questions and hypotheses tested in the study.

RESEARCH QUESTIONS AND HYPOTHESES

Research Questions

1. Are there differences among the ACOAA, ACOA, and control groups in terms of passive aggressiveness?

2. Are there differences among the ACOAA, ACOA, and control groups in terms of dependency?

3. Are there differences among the ACOAA, ACOA, and control groups in terms of obsessive compulsiveness?

4. Are there differences among the ACOAA, ACOA, and control groups in terms of depression?

5. Are there differences among the ACOAA, ACOA, and control groups in terms of low self-esteem?

6. Do these personality characteristics correlate within each group to suggest a particular pattern that predict and explain both group membership and is descriptive of the codependent construct?

HYPOTHESES

The hypotheses tested were:

Hypothesis 1: The ACOAA and ACOA groups will demonstrate a level of passive aggressiveness that is greater than that of the control group.

Hypothesis 2: The ACOAA and ACOA groups will demonstrate a level of dependency that is greater than that of the control group.

Hypothesis 3: The ACOAA and ACOA groups will demonstrate a level of obsessive compulsiveness that is greater than that of the control group.

Hypothesis 4: The ACOAA and ACOA groups will demonstrate a level of depression that is greater than that of the control group.

Hypothesis 5: The ACOAA and ACOA groups will demonstrate a level of self-esteem that is lower than that of the control group.

Hypothesis 6: There will exist significant correlations within the ACOAA and ACOA groups that will predict and explain group membership and be descriptive of the codependent construct.

DATA COLLECTION

The researcher received permission to conduct the study from Michigan State University's University Committee on Research Involving Human Subjects (UCRIHS). That permission was granted through the letter appearing in Appendix C.

The ACOA and control groups were solicited by public posting and announcements for volunteers at local colleges (Henry Ford, Oakland and Schoolcraft Community Colleges, and University of Michigan Dearborn) and at local churches in Wayne Oakland, and Macomb Counties areas. The ACOAA group was selected from the Holly Garden In-patient Treatment Center and the Bi-County Outpatient Treatment Center. All subjects were diagnosed by a physician as alcoholic with no dual diagnoses.

An announcement of the research study was given to the relevant contact person at each facility, school, and church (see Appendix D). A request for volunteers was made with a brief written explanation. The testing was done at each facility at a pre-arranged time in a group setting. The rooms utilized for testing were well lit, comfortable, and quiet conference rooms and classrooms with a desk or table. These rooms were conducive for effective test taking. A packet of materials was given to each subject with a written explanation; this was verbally reinforced at the time of testing. The packets contained a demographic sheet, a parental alcohol screening form, four inventories with answer sheets, and an informed consent form (see Appendix E).

The subjects in the study were asked to complete a short demographic survey at the beginning of the study to provide the researcher with information about the subjects. Subjects were assured confidentiality of all results by eliminating all identifying information on all forms except the demographic form. The demographic form was the only form with identifying information on it. Upon completion of the test packets, the researcher checked the packets to see if all items were answered and all criteria (e.g. age, race, history of paternal alcoholism, etc.) were met. If requirements were met the demographic form was assigned a number and this number was placed on all testing answer sheets. This identification number along with age, sex, and education was the only identifying information on the testing answer sheets. Subjects were also informed that they could withdraw at any time. The researcher only discarded those subjects who did not meet the criteria for inclusion of any of the three groups (ACOAA, ACOA, and control group). They were encouraged to answer all items on the inventories and they were informed that an accumulation of nonresponses would warrant the results invalid and they could therefore not be used in the study. Each contact person was aware of the criteria to be met and the number of subjects to be selected (e.g. 30 males and 30 females). The researcher was able to collect exact or near to exact numbers of subjects needed from the various facilities, schools, and churches. Consequently, the need for the

remaining few subjects (only six needed) not collected was announced to the researcher's college classes and within the researcher's group private clinic. The subjects from the private clinic were selected from other therapists whose clients were seen for one to two sessions with no other past psychiatric history. As a result the number of subjects needed for each group was met evenly without having to eliminate anyone from any of the three groups (ACOAA, ACOA, and control).

METHOD, PROCEDURES, AND DATA ANALYSIS

Descriptive statistics were computed for each of the main variables: passive aggressiveness, dependency, obsessive compulsiveness, depression, and self-esteem.

The following statistical procedures were used to analyze the data:

1. Frequency Counts were obtained for each of the four variables by programming the computer to check for the various configurations depicting each variable while also noting that all configurations were in the order they were listed. All high points in the configuration had to be in descending order at or above a T score of 70. Consequently, if a subject's MMPI protocol met one of the various configurations for a variable it was considered a hit for that variable category. Therefore individual high point distinctions were not examined exclusively. The frequency counts and their respective percentages for each of the four

variables were totalled and used to build contingency tables. A chi-square analysis was used to assess the four variables (passive aggressiveness, dependency, obsessive compulsiveness, and depression) in hypotheses 1, 3, 5, 7, and 9 due to the categorical nature (nominal) of the data derived from the high point configurations on the MMPI. This analysis tested the differences among the three groups (ACOA, ACOAA, and control).

2. Each of the four variables, as measured by the MMPI and analyzed by the chi-square test of independence, were further analyzed by investigating the differences between the observed frequency values and the expected frequency values to determine the major source for the differences and for the level of each variable within each group. This procedure was used to assess hypotheses 1-4.

3. A one-way analysis of covariance (with education and socio-economic status as covariates) was used to test hypotheses 1-5 which stated that expected differences in each of the five independent variables (passive aggressiveness, dependency, obsessive compulsiveness, depression, and self-esteem) on the MMPI, the Coopersmith Self-Esteem Inventory and the Tennessee Self-Concept Scale would be demonstrated among the three groups (ACOAA, ACOAA, and control).

4. Hypotheses 1-5 were also tested using post hoc two-sample t-tests for each of the statistically significant comparisons in order to determine to what extent the levels

had differed. In addition the adjusted means were examined to further assess to what extent of the levels of each variable differed among the three groups (ACOAA, ACOA, and control).

5. A final analysis was conducted on hypotheses 1-5 which retested all dependent variables using procedures 1-4 and analyzing the effects of gender and group on each of the five dependent variables.

6. A discriminant analysis was used to test hypothesis 11 by classifying individuals into the three groups on the basis of the five independent variables (passive aggressiveness, dependency, obsessive compulsiveness, depression, and self-esteem). The discriminant function is a regression equation with a dependent variable that represents group membership. The first analysis examined all three groups separately. A second analysis combined the ACOAA and the ACOA groups together and compared it to the control group to see if prediction could be enhanced and in so doing prediction and explanation of group membership could be achieved in the two analyses.

All inferential analyses were tested using a .01 alpha level.

CHAPTER FOUR

RESULTS OF DATA ANALYSIS

This chapter presents the results of the statistical analysis that were used to test the research hypotheses in this study. A brief description of the demographic characteristics of the subjects is presented to provide a profile of the individuals who participated in the study.

Demographic Characteristics

The subjects in the study were asked to complete a short demographic survey. The sample totalled 180 subjects consisting of 90 males and 90 females who volunteered to participate in the study. The subjects made up the three groups (ACOAA, ACOA, and control) each containing 30 males and 30 females. The age range was divided into two categories, 25-34 and 35-45 years old. There were a total of 82 subjects (45.6%) in the 25-34 age range and 98 subjects (54.4%) in the 35-45 age range with a mean age of 35.2. A chi-square analysis was conducted to see the effects of age on the groups. It resulted in nonsignificance. Table 1 presents the data on the number and percent of ages within the three groups (ACOAA, ACOA, and control).

Table 1
Age Range of Subjects by Group Membership

AGE RANGE						
	25-34		35-45		Total	
Group	N	%	N	%	N	%
ACOAA	32	17.8	28	15.6	60	33.3
ACOA	28	15.6	32	17.8	60	33.3
Control	22	12.2	38	21.1	60	33.3
Total	82	45.6	98	54.4	180	100
Chi-Square.....3.40 Degrees of Freedom.....2 Significance.....NS						

The subjects were asked to indicate their education and socio-economic status (SES) on the demographic survey. There were four education groups consisting of 72 subjects (40%) with high school diplomas or GED certificates, 54 subjects (30%) with some college, 24 (13.3%) with an associates degree, and 30 subjects (16.7%) with a Baccalaureate or higher. A chi-square analysis was conducted and was found to be significant for having some effect on the three groups. A complete description of the sample by education is presented on Table 2.

Table 2
Education of Subjects by Group Membership

	GED/High School		Some College		Associate Degree		Bachelor +		Total	
Group	N	%	N	%	N	%	N	%	N	%
ACOAA	27	15.0	17	9.4	11	6.1	5	2.8	60	33.3
ACOA	32	17.8	12	6.7	6	3.3	10	5.6	60	33.3
Control	13	7.2	25	13.9	7	3.9	15	8.3	60	33.3
Total	72	40.0	54	30.0	24	13.3	30	16.7	180	100

Chi-Square.....19.61
Degree of Freedom.....6
Significance.....*

*$p \leq .01$

Socio-economic status (SES) was divided into nine categories. Approximately 20.6% were clerical or technical and 16.7% were professional with both unskilled and unemployed at 13.9% and 13.3% respectively. Skilled manual and semi-skilled each had 11.7% and 11.1% with business and administrative position each having 5.6% of the subjects. Semi-professional had the lowest percentage of subjects with a 1.7%. A chi-square analysis was conducted to test the effects of SES on the groups. It resulted in nonsignificance. A complete description of the sample by SES is presented on Table 3.

Table 3
Socio-economic Status on Subjects by Group Membership

	ACOAA		ACOA		Control		Total	
SES Category	N	%	N	%	N	%	N	%
Professional	3	1.7	9	5.0	18	10.0	30	16.7
Business	3	1.7	5	2.8	2	1.1	10	5.6
Semi-Professional	1	.6	2	1.1	0	.0	3	1.7
Administrative	5	2.8	1	.6	4	2.2	10	5.6
Clerical-Technical	11	6.1	14	7.8	12	6.7	37	20.6
Skilled Manual	6	3.3	11	6.1	4	2.2	21	11.7
Semi-Skilled	6	3.3	8	4.4	6	3.3	20	11.1
UnSkilled	13	7.2	6	3.3	6	3.3	25	13.9
Unemployed	12	6.7	4	2.2	8	4.4	24	13.3
Total	60	33.3	60	33.3	60	33.3	180	100
Chi-Square.....29.81 Degrees of Freedom.....16 Significance.....NS								

Research Questions

Six research questions were posed in this study. Each of these questions were addressed by testing their associated hypotheses. For complete descriptions of the process for data analysis refer to the Method, Procedures, and Data Analysis section on page 63. In addition the results of the analysis for all hypotheses are conveniently summarized on Tables 32-46 appearing on pages 117 to 125.

Research Question One. Are there differences among the ACOAA, ACOA, and control groups in terms of passive aggressive behavior?

Research Hypothesis One. The ACOAA and ACOA groups will demonstrate a level of passive aggressiveness that is greater than the control group.

This hypothesis was tested using chi-square analysis for all high point configurations indicating passive aggressiveness from the Minnesota Multiphasic Personality Inventory (MMPI).

The MMPI produced nominal data which were recorded as those scores below a T score of 70 on the different high point configurations (1-2-3-4, 2-7-4, 3-2-1, 4-3, 4-6-2, or 4-7) indicating no significant passive aggressive tendencies and those scores at or above T score of 70 indicating a significantly marked tendency towards passive aggressive behavior (Greene, 1980; Lachar, 1987: see chapter three for further details). The two levels of passive aggressive behavior (T scores at or above 70 indicating marked presence of passive aggressiveness and T scores below 70 indicating passive aggressiveness not present) and the three groups (ACOAA, ACOA, and control) were compared using a cross tabulation procedure to produce a contingency table. The results of this analysis showed that 19 (37.1%) of the subjects in the ACOAA group scored below the high point with 41 (68.3%) scoring at or above the high point. In the ACOA group, 23 (38.3%) of the subjects were below the high point configurations on the passive aggressive profile on the MMPI

with 37 (61.7%) scoring at or above the high points. The control group had 55 (91.7%) scoring below the high point configurations, while 5 (8.3%) scored at or above the high points.

A chi-square analysis was used to test for significant differences among the three respondent types. The resultant chi-square value of 52.23 was statistically significant at an alpha level of .01 with 2 degrees of freedom. This result indicates a statistically significant difference among the three groups (ACOAA, ACOA, and control). Results of this analysis may be found on Table 4.

Table 4
Contingency Table
Passive Aggressive Configurationss on the MMPI by Group Membership

	Passive Aggressiveness Present		Passive Aggressiveness Not Present		Total	
Groups	N	%	N	%	N	%
ACOAA	41	68.3	19	31.7	60	33.3
ACOA	37	61.7	23	38.3	60	33.3
Control	5	8.3	55	91.7	60	33.3
Total	83	46.1	97	53.9	180	100.0
Chi-Square Significance.....52.23* Degrees of Freedom.....2						

*$p \leq .01$

In order to further investigate the differences among the groups found, the differences between the observed values and the expected values were examined. From this examination, the control group yielded a discrepancy of

-22.7 between the observed and expected frequency scores which was greater and in an opposite direction (where the control group's residual score was negative while the ACOAA and ACOA group scores were positive) from both the ACOAA and ACOA groups thus, indicating the major source of the difference among the three groups. This difference indicates a higher level of passive aggressiveness among the ACOAA and ACOA groups compared to their control group. This information is displayed on Table 5.

Table 5
Chi-Square Contingency Table
Passive Aggressive Configurations on MMPI by Group Membership

	YES			NO		
Group	Observed	Expected	Residual	Observed	Expected	Residual
ACOAA	41	27.7	13.3	19	32.3	-13.3
ACOA	37	27.7	9.3	23	32.3	-9.3
Control	5	27.7	-22.7	55	32.3	22.7
Total	97 (53.9%)			83 (46.1%)		
Chi-Square..... 52.23* Degrees of Freedom..... 2						

*p≤.01

A one-way analysis of covariance (using education and SES as covariates) was used to analyze the differences among the three groups (ACOAA, ACOA, and control) on the passive aggressive scale of the MCMI. The results of the analysis of covariance provided an F ratio of 30.92 which was statistically significant at an alpha level of .01 with 2 and 175 degrees of freedom. This indicated that the three

groups did differ significantly on the passive aggressive scale of the MCMI (scores at or above 75). The covariates, education and SES, on the passive aggressive scale of the MCMI, yielded an F ratio of 1.17 and 7.09 respectively in which SES was found to be statistically significant indicating that SES contributed to some of the variance in the passive aggressive scores. The results of this analysis is revealed on Table 6.

Table 6
Analysis of Covariance
Passive Aggressive Scale on the MCMI by Group Membership

Source	Sum of Squares	DF	Mean Square	F-Ratio	Sig of F
Covariates					
SES	5265.01	1	5265.01	7.09	*
Education	867.74	1	867.74	1.17	(NS)
Main Effect Passive Aggressive	45946.95	2	22973.47	30.92	*
Residual	130017.70	175	742.96		
Total	182097.39	179			

*$p \leq .01$

The analysis of covariance for the passive aggressive scale on the MCMI yielded adjusted mean scores of 70.73 for the ACOAA group, 52.13 for the ACOA group and 30.41 for the control group thus adjusting for variance due to education and SES on the passive aggressive scale of the MCMI.

The means of the three groups were compared using a post hoc two sample independent t-test to determine which group had a higher level of passive aggressiveness. The adjusted means for the ACOAA, ACOA, and control were used in the t-test formula. The control group yielded the lowest adjusted mean of 30.41 compared to ACOAA's adjusted mean of 70.73 and ACOA's adjusted mean of 52.13. However, the post hoc t-test between ACOAA and control and between ACOA and control yielded t-values of 1.48 and .80 respectively, neither were statistically significant at an alpha level of .01. The ACOAA and ACOA groups were also compared resulting in a t-value of .68, also not statistically significant at an alpha level of .01. However care must be taken in interpreting these results of no significant difference due to the existence of a very large standard error (residual score of 742.96). This large standard error is probably due to the large variations within the scores on the MCMI (individual scores ranging from 3-110) thus accounting for the lack of significant difference on the post hoc t-tests.

The adjusted means and t-values derived from the analysis of covariance are displayed on Table 7.

Table 7
Descriptive Statistics
Passive Aggressive Scale on the MCMI by Group Membership

Group	Mean	Adjusted Mean
ACOAA	71.22	70.73
ACOA	52.23	52.13
Control	29.83	30.41

Table 8
A Posteriori Testing
Passive Aggressive Scale on the MCMI by Group Membership

Comparison	t-value	Sig. of t
ACOAA vs. ACOA	.68	NS
ACOAA vs. Control	1.48	NS
ACOA vs Control	.80	NS

Analysis of passive aggressiveness, as measured by the MMPI and MCMI using chi-square test of independence and an analysis of covariance, resulted in a statistically significant difference among the three groups. It appears that there are statistically significant differences for passive aggressive tendencies among the three groups (ACOAA, ACOA, and control) as measured by the Minnesota Multiphasic Personality Inventory and the Millon Clinical Multiaxial Inventory.

The chi-square test for independence and the analysis of covariance provided mixed results in terms of the different levels of passive aggressive behavior among the

three groups (ACOAA, ACOA, and control). The chi-square demonstrated different levels of passive aggressiveness on the MMPI among the three groups and provided observed frequency scores and expected frequency scores. Discrepancies between the observed frequency scores and the expected frequency scores for all three groups (ACOAA, ACOA, and control) were observed. Results indicated a lower level of passive aggressiveness on the MMPI (residual score of -24.7) for the control group as compared to the ACOAA and the ACOA groups (residual scores of 13.7 and 9.3 respectively). Though the ACOAA group residual score was higher (13.7) than the ACOA group residual score (9.3) the difference was very small between the two groups to determine them distinct from one another. While the analysis of covariance found significant differences among the three groups (ACOAA, ACOA, and control), the adjusted means yielded lower mean levels of passive aggressiveness on the MCMI for the control group (adjusted mean score of 30.41) as compared to the ACOAA and ACOA groups (adjusted mean scores of 70.75 and 52.13 respectively). However, due to the post hoc t-test yielding no significant results, significant differences among the groups were found, it is not clear where those differences lie.

Research Question Two. Are there differences among the ACOAA, ACOA, and control groups in terms of dependent behavior?

Research Hypothesis Two. The ACOAA and ACOA groups will demonstrate a level of dependency that is greater than the control group.

This hypothesis was tested using chi-square analysis for all high point configurations indicating dependent behavior on the MMPI. The second form of analysis utilized analysis of covariance and a post hoc two-sample independent t-test on quantitative scores obtained from the dependent scale of the MCMI.

The MMPI produced nominal data which were recorded as those scores below a T score of 70 on the different high point configurations (1-2, 2-4, 1-9, 4-7/7-4) indicating no significant dependent tendencies and those scores at or above T scores of 70 indicating a significantly marked tendency towards dependent behaviors (Greene, 1980; Lachar, 1987: see chapter three for details). The two levels of dependent behavior (T scores at or above 70 indicating a presence of dependency and T scores below 70 indicating dependency not present) and the three groups (ACOAA, ACOA, and control) were compared using a cross tabulation procedure to produce a contingency table. The results of this analysis showed that 20 (33.3%) of the subjects in the ACOAA group scored below the high point with 40 (66.7%) scoring at or above the high point. In the ACOA group, 24 (40%) of the subjects were below the high point configurations on the dependent profile on the MMPI with 36 (60%) scoring at or above the high points. The control

group had a 59 (98.3%) subjects scoring below the high point configurations, while 1 (1.7%) scored at or above the high points.

A chi-square analysis was used to test for significant differences among the three groups. The resultant chi-square value of 62.69 was statistically significant at an alpha level of .01 with 2 degrees of freedom. This indicates a statistically significant difference among the three groups (ACOAA, ACOA, and control). Results of this analysis may be found on Table 9.

Table 9
Contingency Table
Dependency Configurations on the MMPI by Group Membership

	Dependency Present		Dependency Not Present		Totals	
Groups	**N**	**%**	**N**	**%**	**N**	**%**
ACOAA	40	66.7	20	33.3	60	33.3
ACOA	36	60.0	24	40.0	60	33.3
Control	1	1.7	59	98.3	60	33.3
Total	77	42.8	103	57.2	180	100.0
Chi-Square..... 62.69*						
Degrees of Freedom..... 2						

*$p \leq .01$

The levels of dependency among the three groups was investigated by examining the differences between the observed frequency values and the expected frequency values produced by the chi-square analysis. A discrepancy of -24.7

was found in the control group between the observed and expected scores which was greater and in an opposite direction (where the control group's residual score was negative while the ACOAA and ACOA groups score were positive) from both the ACOAA and ACOA groups. This indicated that the major source of the difference among the three groups was due to the control group. This difference indicated a higher level of dependency between the ACOAA and ACOA groups as compared to their control group which was lower. This information is displayed on Table 10.

Table 10
Chi-Square Contingency Table
Dependency Scale on the MMPI by Group Membership

	YES			NO		
Group	Observed	Expected	Residual	Observed	Expected	Residual
ACOAA	40	25.7	14.3	20	34.3	-14.3
ACOA	36	25.7	10.3	24	34.3	-10.3
Control	1	25.7	-24.7	59	34.3	24.7
Total	77 (42.8%)			103 (57.2%)		
Chi-Square.....62.69*						
Degrees of Freedom.....2						

*$p \leq .01$

An analysis of covariance was used to test dependency on the MCMI for significance among the three groups. The results of the analysis of covariance provided an F ratio of 31.65 which was statistically significant at an alpha level

of .01 with 2 and 175 degrees of freedom. This indicated that the three groups differed significantly on the dependent scale of the MCMI (scores at or above 75). The covariates, education and SES, on the dependent scale of the MCMI, yielded an F ratio of 4.61 and 1.27 respectively which was not found to be statistically significant indicating that education and SES did not appear to contribute significantly to the variance in the dependency scores. Results of analysis is displayed on Table 11.

Table 11
Analysis of Covariance
Dependency Scale on the MCMI by Group Membership

Source	Sum of Squares	DF	Mean Square	F Ratio	Sig F
Covariates					
SES	689.93	1	689.93	1.29	(NS)
Education	2471.94	1	2471.94	4.61	(NS)
Main Effect					
Dependency	33970.67	2	16985.34	31.65	*
Residual	536.69	175			
Total	732.15	179			

*$p \leq .01$

Analysis of covariance on the dependent scale of the MCMI resulted in the adjusted mean scores of 70.33 for the ACOAA group, 67.11 for the ACOA group and 38.92 for the control group. The control group yielded the lowest adjusted mean of 38.92 compared to ACOAA's adjusted mean of 70.33 and ACOA's adjusted mean of 67.11. The means of the

three groups were compared using a post hoc two sample independent t-test to determine which group had a higher level of dependency. The adjusted mean for the ACOAA, ACOA, and control were used in the t-test formula. The post hoc t-test of significance between ACOAA and control and between ACOA and control yielded t-values 1.36 and 1.22 respectively, neither being statistically significant at an alpha level of .01. The ACOAA and ACOA groups were also compared resulting in a t-value of .14 which also was not statistically significant at an alpha level of .01. However, care must be taken in interpreting these results of no significant difference due to the existence of a very large standard error (residual score of 536.69) in the analysis of covariance. This large standard error is probably due to the large variations within the scores on the MCMI (individual scores ranging from 14-115) thus accounting for the lack of significant difference on the post hoc t-tests.

The adjusted means and t-values derived from the analysis of covariance and post hoc two sample t-test is displayed on Table 12 and Table 13.

Table 12
Descriptive Statistics
Dependency Scale on the MCMI by Group Membership

Group	Mean	Adjusted Mean
ACOAA	70.02	70.33
ACOA	67.65	67.11
Control	38.70	38.92

Table 13
A Posteriori Testing
Dependency Scale on the MCMI by Group Membership

Comparisons	t-value	Sig of t
ACOAA vs. ACOA	.14	NS
ACOAA vs Control	1.36	NS
ACOA vs. Control	1.22	NS

Following the analysis of dependency among ACOAA, ACOA, and the control group as measured by the MMPI and MCMI the findings resulted in statistically significant differences among the three groups. There is indication that there are statistically significant differences in the levels of dependent behavior among the three groups (ACOAA, ACOA, and control) as measured by the MMPI and the MCMI.

The chi-square test of independence and the analysis of covariance provided mixed results in terms of the different levels of dependent behavior among the three groups (ACOAA, ACOA, and control). The chi-square demonstrated different levels of dependency on the MMPI among the three groups and

provided observed frequency scores and expected frequency scores. Discrepancies between the observed frequency scores and the expected frequency scores for all three groups (ACOAA, ACOA, and control) were examined. Results indicated a lower level of dependency for the control group on the MMPI (residual score of -24.7) as compared to the ACOAA and the ACOA groups (residual scores of 14.3 and 10.3 respectively). Though the ACOAA group residual score was higher (14.3) than the ACOA group residual score (10.3) the difference was very small between the two groups. While the analysis of covariance found significant differences among the three groups (ACOAA, ACOA, and control), the adjusted means yielded lower mean levels of dependency on the MCMI for the control group (adjusted mean score of 38.92) as compared to the ACOAA and ACOA groups (adjusted mean scores of 70.33 and 67.11 respectively). However, contrary to the differences found among the three groups, the post hoc t-test yielded no significant results thus, making it unclear to determine exactly where the differences lie.

Research Question Three. Are there differences among the ACOAA, ACOA, and control groups in terms of obsessive compulsiveness?

Hypothesis Three. The ACOAA and ACOA groups will demonstrate a greater level of obsessive compulsiveness than the control group.

The chi-square analysis for all high point configurations indicating obsessive compulsiveness from the MMPI was used to test this hypothesis. The second analysis utilized the analysis of covariance on quantitative scores obtained from the obsessive compulsive scale on the MCMI.

Nominal data produced by the MMPI recorded those scores below a T score of 70 on different high point configurations (2-7, 2-7-8, or 7-9/9-7) indicating no significant obsessive compulsive tendencies while the scores at or above T scores of 70 indicated a significantly marked tendency towards obsessive compulsiveness (Greene, 1980; Lachar, 1987: see chapter three for details). The two levels of obsessive compulsive behavior (present and not present) and the three groups (ACOAA, ACOA, and control) were compared using cross tabulations producing a contingency table. The results of this analysis showed that 25 (41.7%) of the subjects in the ACOAA group scored below the high point with 35 (58.3%) scoring at or above the high point. In the ACOA group, 32 (53.3%) of the subjects were below the high point configurations on the obsessive compulsive profile on the MMPI with 28 (46.7%) scoring at or above the high points. The control group had 60 (100%) subjects scoring below the high point configurations, while 0 (.0%) scored at or above the high points.

A chi-square analysis was used to test for significant differences among the three respondent types. The resultant chi-square value of 50.26 was statistically significant at

an alpha level of .01 with 2 degrees of freedom. This result indicates a statistically significant difference among the three groups (ACOAA, ACOA, and control). Results of this analysis may be found on Table 14.

Table 14
Contingency Table
Obsessive Compulsive Configurations on MMPI by Group Membership

	Obsessive Compulsive Present		Obsessive Compulsive Not Present		Total	
Groups	**N**	**%**	**N**	**%**	**N**	**%**
ACOAA	35	58.3	25	41.7	60	33.3
ACOA	28	46.7	32	53.3	60	33.3
Control	0	0.0	60	100.0	60	33.3
Totals	63	35.0	117	65.0	180	100
Chi-Square.....					50.26*	
Degrees of Freedom.....					2	

*$p \leq .01$

The differences among the observed values and the expected values were examined. From this examination, the control group yielded a discrepancy of -21 (referred to as the residual score) between the observed and expected scores which was greater and in an opposite direction (where the control group residual score was negative while the ACOAA and ACOA group scores were positive) from both the ACOAA (residual score of 14) and ACOA (residual score of 7) groups thus, indicating the major source of the difference among the three groups. The resultant residual scores for the ACOAA and ACOA group indicated a higher level of obsessive

compulsiveness for the ACOAA group as compared to the ACOA group. This difference indicates a higher level of obsessive compulsiveness between the ACOAA and ACOA groups as compared to their control group with the ACOAA group demonstrating the greatest level of obsessive compulsiveness as measured by the MMPI. This information is displayed on Table 15.

Table 15
Chi-Square Contingency Table
Obsessive Compulsive Configurations on the MMPI by Group Membership

	YES			NO		
Group	Observed	Expected	Residual	Observed	Expected	Residual
ACOAA	35	21	14	25	39	-14
ACOA	28	21	7	32	39	-7
Control	0	21	-21	60	39	21
Total	60 (35%)			117 (65%)		
Chi-Square..... 50.26*						
Degrees of Freedom..... 2						

*p≤.01

A one-way analysis of covariance (using education and SES as covariates) was used to analyze the differences among the three groups (ACOAA, ACOA, and control) on the obsessive compulsive scale of the MCMI. The results of the analysis of covariance provided an F ratio of 1.14 which was not statistically significant at an alpha level of .01 with 2 and 175 degrees of freedom. This indicated that the three groups did not differ significantly on the obsessive

compulsive scale of the MCMI (scores at or above 75). Once again care must be taken in interpreting these results of no significance due to the very large standard error of 540.19 which is probably due to the great variation within the scores (ranging from 20-110) for each group. The covariates, education and SES, on the obsessive compulsive scale of the MCMI, yielded an F ratio of 3.59 and .08 which was found not to be statistically significant indicating that education and SES did not appear to contribute to the variance in the obsessive compulsive scores. Results of analysis is displayed on Table 16.

Table 16
Analysis of Covariance
Obsessive Compulsive Scale on the MCMI by Group Membership

Source	Sum of Squares	DF	Mean Square	F Ratio	Sig of F
Covariates					
SES	41.23	1	41.23	.08	(NS)
Education	1939.71	1	1939.71	3.60	(NS)
Main Effect Obsessive Compulsive	1235.81	2	617.90	1.14	(NS)
Residual	540.19	175			
Total	97749.91	179			

The adjusted means from the analysis of covariance were examined to determine the levels of obsessive compulsiveness. The adjusted means on the obsessive compulsive scale on the MCMI for the ACOAA group was 57.44,

the ACOA group was 63.94 and the control group was 61.68. Findings reveal ACOA group to be higher in obsessive compulsiveness though the means were considered too close in size to be considered different. The adjusted means obtained is displayed on Table 17.

Table 17
Descriptive Statistics
Obsessive Compulsive Scale on the MCMI by Group Membership

Groups	Mean	Adjusted Mean
ACOAA	57.98	57.44
ACOA	62.92	63.94
Control	62.17	61.68

The analysis of obsessive compulsiveness among ACOAA, ACOA, and the control group as measured by the MMPI and MCMI resulted in mixed findings among the three groups. Chi-Square testing using the MMPI high point configurations as measures yielded a statistical significance among the three groups (ACOAA, ACOA, and control). However, due to no significant findings on analysis of covariance among the groups measuring the level of obsessive compulsiveness on the MCMI obsessive compulsive scale research hypothesis three was not supported.

Research Question Four. Are there differences among the ACOAA, ACOA, and control groups in terms of depression?

Research Hypothesis Four. The ACOAA and ACOA will demonstrate a greater level of depression than the control group.

This hypothesis was tested using chi-square analysis for all high point configurations indicating depression from the MMPI. The second form of analysis was utilizing the analysis of covariance for the dysthymia scale of the MCMI. The dysthymia scale on the MCMI measures a state of depression or affective disorder.

The MMPI produced nominal data which were recorded as those scores below a T score of 70 on both scale 2 and on the Wiggens Content Dep Special scale which did not indicate tendencies towards depression. Consequently, the scores at or above T score of 70 on the above mentioned scales along with a K scale score between the T score of 36 to 45 indicated a significantly marked tendency towards depression. The two levels of depression (depression present and not present) and the three groups (ACOAA, ACOA, and control) were compared using a cross tabulation procedure to produce a contingency table. The results of this analysis showed that 25 (41.7%) of the subjects in the ACOAA group scored below the high point with 35 (58.3%) scoring at or above the high point. In the ACOA group, 21 (35%) of the subjects were below the high point configurations on the on the MMPI profile with 39 (65%) scoring at or above the high point. The control group had a 53 (88.3%) scoring below the high point configurations,

while 7 (11.7%) scored at or above the high points. A chi-square analysis was used to test for significant differences among the three respondent types. The resultant chi-square value of 40.94 was statistically significant at an alpha level of .01 with 2 degrees of freedom. This result indicates a statistically significant difference among the three groups (ACOAA, ACOA, and control). Results of this analysis may be found on Table 18.

Table 18
Contingency Table
Depression Configurations on the MMPI by Group Membership

	Depression Present		Depression Not Present		Total	
Group	**N**	**%**	**N**	**%**	**N**	**%**
ACOAA	35	58.3	25	41.7	60	33.3
ACOA	39	65.0	21	35.0	60	33.3
Control	7	11.7	53	88.3	60	33.3
Total	81	45.0	99	55.0	180	100
Chi-Square.....						40.94*
Degree of Freedoms.....						2

*$p \leq .01$

In order to investigate this difference, the differences between the observed frequency values and the expected frequency values were examined. From this examination, the control group yielded a discrepancy of -20 between the observed and expected scores which was greater and in an opposite direction (where the control group

residual score was negative while the ACOAA and ACOA group scores were positive) from both the ACOAA (residual score of 8) and ACOA (residual score of 12) groups thus, indicating the major source of the difference among the three groups. This difference indicates a higher level of depression between the ACOAA and ACOA groups compared to their control group. The difference between the ACOAA and ACOA is too small to make distinctions. This information is displayed on Table 19.

Table 19
Chi-Square Contingency Table
Dysthymia Scale on the MCMI by Group Membership

	YES			NO		
Group	Observed	Expected	Residual	Observed	Expected	Residual
ACOAA	35	27	8	25	33	-8
ACOA	39	27	12	21	33	-12
Control	7	27	-20	53	33	20
Total	81 (45%)			99 (55%)		
Chi-Square..... 40.94*						
Degrees of Freedom..... 2						

*p≤.01

A one-way analysis of covariance (using education and SES as covariates) was used to analyze the differences among the three groups (ACOAA, ACOA, and control) on the dysthymia scale on the MCMI.

The results of the analysis of covariance provided an F ratio of 24.77 which was statistically significant at an

alpha level of .01 with 2 and 175 degrees of freedom. This indicated that the three groups did differ significantly on the dysthymia scale of the MCMI (scores at or above 75). The covariates, education and SES, on the dysthymia scale of the MCMI, yielded an F ratio of 2.33 and 2.41 respectively in which education and SES was not found to be statistically significant indicating that neither education or SES appeared to contribute to the variance in the dysthymia scores. Table 20 summarizes the results from the analysis of covariance.

Table 20
Analysis of Covariance
Depression Scale on the MCMI by Group Membership

Source	Sum of Squares	DF	Mean Square	F Ratio	Sig of F
Covariate					
SES	1510.09	1	1510.09	2.41	(NS)
Education	1461.17	1	1461.17	2.33	(NS)
Main Effect					
Depression	31059.89	2	15529.94	24.77	*
Residual	109731.81	175	627.04		
Total	143762.95	179			

*$p \leq .01$

The analysis of covariance conducted on the dysthymia scale of the MCMI yielded adjusted means of 76.1 for the ACOAA group, 72.85 for the ACOA group, and 45.99 for the control group thus adjusting for variance due to education and SES. Thus, the control group yielded the lowest

adjusted mean of 45.99 compared to ACOAA's adjusted mean of 76.1 and ACOA's adjusted mean of 72.85.

The adjusted means of the three groups were compared using a post hoc two sample independent t-test to determine which group had a higher level of dysthymia. The adjusted mean for the ACOAA, ACOA, and control were used in the t-test formula. The post hoc t-test of significance between ACOAA and control and between ACOA and control yielded 1.20 and 1.07 respectively both of which were not statistically significant at an alpha level of .01. The ACOAA and ACOA groups were also compared resulting in a t-value of 1.30 which also was not statistically significant at an alpha level of .01. However care must be taken in interpreting these results of no significant difference due to the existence of a very large standard error (residual score of 627.04). This large standard error is probably due to the large variations within the scores on the MCMI (individual scores ranging from 0-112) thus accounting for the lack of significant difference on the post hoc t-tests.

The adjusted means and t-values derived from the analysis of covariance were obtained. This information is displayed on Table 21 and Table 22.

Table 21
Descriptive Statistics
Dysthymia Scale on the MCMI by Group Membership

Group	Mean	Adjusted Mean
ACOAA	76.18	76.10
ACOA	73.08	72.85
Control	45.68	45.99

Table 22
A Posteriori Testing
Dysthymia Scale on the MCMI by Group Membership

Comparisons	t-value	Sig of t
ACOAA vs. ACOA	1.30	NS
ACOAA vs. Control	1.20	NS
ACOA vs. Control	1.07	NS

Following the analysis of depression among ACOAA, ACOA, and the control group as measured by the MMPI and MCMI the findings resulted in a statistically significant difference among the three groups. There is indication that there are statistically significant differences among the three groups (ACOAA, ACOA, and control) with respects to depression as measured by the MMPI and MCMI.

The chi-square test of significance and the analysis of covariance provided mixed results in terms of the different levels of depression among the three groups (ACOAA, ACOA, and control). The chi-square demonstrated different levels of depression on the MMPI among the three groups and

provided observed frequency scores and expected frequency scores. Discrepancies between the observed frequency scores and the expected frequency scores for all three groups (ACOAA, ACOA, and control) were observed. Results indicated a lower level of depression on the MMPI for the control group (residual score of -20) as compared to the ACOAA and the ACOA groups (residual scores of 8 and 12 respectively). Though the residual score (score of 12) for the ACOA group was higher than the ACOAA group residual score (score of 8) the difference was very small between the two groups to make distinctions. While the analysis of covariance found significant differences among the three groups (ACOAA, ACOA, and control), the adjusted means yielded lower mean levels of depression on the MCMI for the control group (adjusted mean score of 45.99) as compared to the ACOAA and ACOA groups (adjusted mean scores of 76.11 and 72.78 respectively). However, due to the post hoc t-test yielding no significant results it is unclear to determine exactly where the differences lie.

Research Question Five. Are there differences among the ACOAA, ACOA, and control groups in terms of low self-esteem?

Hypothesis Ten. The ACOAA and ACOA groups will demonstrate a level of self-esteem that is lower than the control group.

This hypothesis was tested using analysis of covariance on quantitative scores obtained from the Coopersmith Self-Esteem Inventory and The Tennessee Self-Concept Scale.

The Coopersmith Self-Esteem Inventory measures attitudes towards oneself in social academic, and personal contexts in the areas of: social self-peers, home-parents, school-academics, and general self. The maximum possible Total Self-Score is 100 with the mean generally ranging from 70 to 80 with a standard deviation of 19 (Coopersmith, 1987, p. 8). The researcher in this study used the cut off for low self-esteem scores (for caucasian adults) to be 56 and below as suggested by the author (Coopersmith, 1967). The results of the analysis of covariance provided an F ratio of 42.33 which was statistically significant at an alpha level of .01 with 2 and 175 degrees of freedom. This indicated that the three groups differed significantly on the self-esteem score of the Coopersmith Self-Esteem Inventory. The covariates, education and SES, on the dependent scale of the MCMI, yielded an F ratio of 1.15 and 5.78 respectively which was not found to be statistically significant indicating that education and SES did not appear to contribute significantly to the variance among the three groups. Results of analysis is displayed on Table 23.

Table 23
Analysis of Covariance
Coopersmith Self-Esteem Inventory by Group Membership

Source	Sum of Squares	DF	Mean Square	F Ratio	Sig of F
Covariates					
SES	2776.31	1	2776.31	5.78	NS
Education	551.14	1	551.14	1.15	NS
Main Effect CSE	40679.91	2	20339.96	42.33	*
Residual	84092.38	175			
Total	128099.75	179			

*$p \leq .01$

The Tennessee Self-Concept Scale was used to measure self-concept or how one perceives oneself. For purposes of this study the researcher was interested in two of the Tennessee Self-Concept scales, the Total P Score and the Self-Criticism Score (SC). The Total P Score is considered the most important single score reflecting the overall level of self-esteem. Persons with high score, would have scores of 344 and above with a standard deviation of 6.70, to have an average to high self-concept. People with low scores, 315 and below would be considered to have low self-concepts (Fitts, 1965, p. 2). The results of the analysis of covariance provided an F ratio of 9.52 which was statistically significant at an alpha level of .01 with 2 and 175 degrees of freedom. This indicated that the three groups differed significantly on self-esteem as measured by

Tennessee Self-Concept Scale. The covariates, education and SES, on the dependent scale of the MCMI, yielded an F ratio of 1.90 and .03 respectively which was not found to be statistically significant, indicating that education and SES did not appear to contribute significantly to the variance among the three groups (ACOAA, ACOA, and control). Results of this analysis may be found on Table 24.

Table 24
Analysis of Covariance
Total P Score on the Tennessee Self-Concept Scale by Group Membership

Source	Sum of Squares	DF	Mean Square	F Ratio	Sig of F
Covarites					
SES	76.74	1	76.74	.03	NS
Education	4497.49	1	4497.49	1.99	NS
Main Effect					
Total P	45180.55	2	22590.28	9.52	*
Residual	415128.89	175	2372.17		
Total	464883.58	179	2597.12		

*$p \leq .01$

The SC scale on the Tennessee Self-Concept Scale is comprised of 10 items in which high scores are 35 and above indicating openness and a capacity for self-criticism. Low scores, 28 and below indicate defensiveness, and suggest that the Positive Scores are probably artificially elevated by this defensiveness (Fitts, 1965, p.2). The results of the analysis of covariance provided an F ratio of 185.91

which was statistically significant at an alpha level of .01 with 2 and 175 degrees of freedom. This indicated that the three groups differed significantly with respect to self-concept. The covariates, education and SES, on the dependent scale of the MCMI, yielded an F ratio of 2.34 and 2.98 respectively which was not found to be statistically significant indicating that education and SES did not appear to contribute significantly to the variance among the three groups. Results of this analysis is displayed on Table 25.

Table 25
Analysis of Covariance
SC Scale on the Tennessee Self-Concept Scale by Group Membership

Source	Sum of Square	DF	Mean Square	F Ratio	Sig of F
Covariates					
SES	106.87	1	106.87	2.98	NS
Education	83.84	1	83.84	2.34	NS
Main Effect					
SC Scale	371.81	2	185.91	5.18	*
Residual	6280.19	175	35.89		
Total	6842.71	179	38.23		

*$p \leq .01$

The analysis of covariance was preformed on the self-esteem scores from the Coopersmith Self-esteem Inventory and the Tennessee Self-Concept Inventory with adjusted means calculated. The Coopersmith resulted in a higher adjusted mean for the control group (adjusted mean of 80.50) as

compared to the ACOAA (adjusted mean of 49.02) and ACOA groups (adjusted mean of 46.73). Results of this analysis may be found on Table 26.

Table 26
Descriptive Statistics
Coopersmith Self-Esteem Inventory by Group Membership

Group	Mean	Adjusted Mean
ACOAA	48.47	49.02
ACOA	47.05	46.73
Control	80.73	80.50

The Tennessee Self-Concept Inventory resulted with both the Sc and Total P Scores being higher for the control group (adjusted mean scores of 36.45 and 354.06 respectively) as compared to the ACOAA (adjusted mean scores of 32.84 and 315.96) and ACOA groups (adjusted mean scores of 34.33 and 345.76 respectively). Information displaying the adjusted means are on Table 27 and Table 28.

Table 27
Descriptive Statistics
Total P Score for Tennessee Self-Concept Scale by Group Membership

Group	Mean	Adjusted Mean
ACOAA	317.83	315.96
ACOA	343.98	345.76
Control	353.95	354.06

Table 28
Descriptive Statistics
SC Scale for the Tennessee Self-Concept Scale by Group Membership

Group	Mean	Adjusted Mean
ACOAA	32.72	32.84
ACOA	34.23	34.33
Control	36.67	36.45

The means of the three groups were compared using a post hoc two sample independent t-test to determine which group had a higher level of dependency. The adjusted mean for the ACOAA, ACOA, and control were used in the t-test formula. The post hoc two-sample t-test of significance on the Coopersmith Self-Esteem Inventory between ACOAA and control and between ACOA and control yielded t-values of -1.44 and -1.54 respectively neither statistically significant at an alpha level of .01. The ACOAA and ACOA groups were also compared resulting in a t-value of .10 which also was not statistically significant at an alpha level of .01. Table 29 displays t-values for the Coopersmith Self-Esteem Inventory.

Table 29
A Posteriori Testing
Coopersmith Self-Esteem Inventory by Group Membership

Comparisons	t-value	Sig of t
ACOAA vs. ACOA	.10	NS
ACOAA vs. Control	-1.44	NS
ACOA vs. Control	-1.54	NS

The t-test of significance on the Tennessee SC between ACOAA and control and between ACOA and control were -.60 and -.35 respectively neither statistically significant at an alpha level of .01. The ACOAA and ACOA groups were also compared resulting in a t-value of -.25 which also was not statistically significant at an alpha level of .01. While the post hoc t-test on the Tennessee positive P score between ACOAA and control and between ACOA and control yielded t-values of -.78 and -.17 respectively both of which were not statistically significant at an alpha level of .01. The ACOAA and ACOA groups were also compared resulting in a t-value of -.61 which also was not statistically significant at an alpha level of .01. However, care must be taken in interpreting these results of no significant difference due to the existence of a very large standard error in both the Coopersmith (standard error of 480.52 with scores ranging from 8-100) and the Tennessee total P score (standard error of 2372.17 with scores ranging from 236-409). This large standard error is probably due to the large variations

within the scores thus accounting for the lack of significant difference on the post hoc t-tests.

The t-values derived from the post hoc two sample t-test is displayed on Table 30 and Table 31.

Table 30
A Posteriori Testing
SC Scale for the Tennessee Self-Concept Scale by Group Membership

Comparisons	t-value	Sig of F
ACOAA vs. ACOA	-.60	NS
ACOAA vs. Control	-.35	NS
ACOA vs. Control	-.25	NS

Table 31
A Posteriori Testing
Total P Score for the Tennessee Self-Concept Scale by Group Membership

Comparisons	t-value	Sig of F
ACOAA vs. ACOA	-.78	NS
ACOAA vs. Control	-.17	NS
ACOA vs. Control	-.61	NS

Following the analysis of self-esteem among ACOAA, ACOA, and the control group as measured by the Coopersmith Self-Esteem Inventory and the Tennessee Self-Concept Inventory the findings resulted in statistically significant differences among the three groups thus indicating that there are statistically significant differences among the

three groups (ACOAA, ACOA, and control) with respects to low self-esteem.

Differences among the adjusted means on the Coopersmith Self-Esteem Inventory and the Tennessee Self-Concept Scale demonstrated a higher level of high self-esteem in the control group as compared to the ACOAA and ACOA groups. However, due to non-significant post hoc t-tests among the groups measuring the levels of self-esteem using the Coopersmith Self-Esteem Inventory and the Tennessee Self-Concept Scale it is difficult to statically determine exactly where these differences lie.

Research Question Six. Do these personality characteristics correlate within each group to suggest a particular pattern that may predict and explain group membership and be descriptive of the codependent construct?

Research Hypothesis Eleven. There will exist significant correlations within the ACOAA and ACOA groups that will predict and explain group membership and be descriptive of the codependent construct.

This hypothesis was tested using a discriminant analysis which classifies individuals into groups on the basis of their scores on the three interval scaled tests (MCMI, Coopersmith Self-Esteem Inventory, and the Tennessee Self-Concept Scale) used in this study. It also explains the discrimination. The discriminant function is a regression equation with dependent variables that represent group membership. The discriminant function equals the number of dependent variables minus one. The three groups

in this study (ACOAA, ACOA, and the control) derived two canonical discriminant functions which were used to maximally discriminate the members of the samples by indicating to which group each member probably belongs. The discriminant function is a regression equation with a dependent variable that represents group membership. Both function 1 and function 2 were significant at the .01 level. Function 1 was found to explain 90,01% of the variance with an eigenvalue of 1.0695. The eigenvalue signifies the amount of variation that is accounted. This value was found to be greater than 1 and therefore considered significant. Function 2 was found to explain approximately 10% of the variance with an eigenvalue of .1187. Thus, for the purpose of this study Function 1 will be utilized to generate group membership in terms of creating the regression equation.

The percent of "grouped" cases that were correctly classified overall was 70%. The control group had the greatest number of predicted cases which were 56 cases out of 60 thus correctly classifying 93.3%. The ACOA group was least predictable with 51.7% of correctly classified cases (a total of 31 out of 60 cases). The ACOAA group correctly classified 65% (a total of 39 out of 60 cases).

The predictors that were strongest in explaining and predicting group membership were (discriminant coefficient of -.65), passive-aggressiveness (discriminant coefficient of .43), and dependency (discriminant coefficient of .40).

Upon examining these results and viewing little difference in predictability percentages between ACOAA and ACOA, the two groups were combined to form one group and one canonical discriminant function to see the effects on group predictability. This analysis found overall a 87.22% of "grouped" cases correctly classified which was a 7.22% increase in predictability. The canonical discriminant function was significant at the .01 level with an eigenvalue of 1.0419 which explained 100.00% of the variance in group membership. The predictors that were strongest in explaining and predicting group membership were self-esteem (discriminant coefficient of -.69), dependency (discriminant coefficient of .43), and passive aggressiveness (discriminant coefficient of .38). In conclusion the five variables do correlate within each group to suggest a particular pattern that predicts group membership. The ACOAA and ACOA groups were similar and enhanced group predictability when joined thus indicating that the groups are closely related yet both differed from the control. Though hypotheses 1-5 have resulted in mixed results there exists consistency that the ACOAA and ACOA groups differed significantly from their control group with the exception, mixed results for hypothesis three on the obsessive compulsiveness. In addition, though the ACOAA and ACOA groups differed from each other the difference was considered relatively small throughout the study and

consequently not rendering the groups distinct enough to be considered separate.

In order to more specifically determine if these differences may be affected by gender further post hoc analyses were conducted. Therefore, hypotheses 1-5 were repeated to analyze the effects of gender among the groups with respects to the four dependent variable (dependency, passive aggressiveness, obsessive compulsiveness, and depression). The chi-square analysis were executed on the four dependent variables revealing gender as having a significant effect in the ACOAA group for depression. The resultant chi-square value of 5.55 was statistically significant indicating statistically significant differences between gender in the ACOAA group for depression, however, results for the remaining groups and variables were not statically significant with regards to the effects gender for hypothesis 1-5. The two levels of depression and the 2 gender groups for the ACOAA group was compared using a cross tabulation procedure to produce a contingency table. The results of this analysis revealed that 13 of the males (43.3%) and 22 of the females (73.3%) in the ACOAA group scored at or above the high point while 17 of the males (56.7%) and 8 of the females (26.7%) scored below the high point. Thus, these results indicate that the greatest difference lies in the ACOAA female group where approximately 73% of the females had tendencies towards depression on the MMPI depression scale and 27% did not

exhibit tendencies towards depression. The results of the ACOAA group for depression may be found on Table 32.

Table 32
Contingency Table
Depression configurations on the MMPI in the ACOAA Group by Gender.

ACOAA Group Gender	Depression Present		Depression Not Present		Total	
	N	%	N	%	N	%
Male	13	43.3	17	56.7	30	50
Female	22	73.3	08	26.7	30	50
Total	35	58.3	25	41.7	60	100
Chi-Square						5.55 *
Degree by Freedoms						1

*p≤.01

Results for the entire chi-square analysis for hypotheses 1-5, analyzing the effects of gender on the four dependent variables may be seen on tables 47-50 (in Appendix F).

A one way analysis of covariance (with education and socio-economic status as covariates) in a simple factorial design was used to retest hypothesis 1-5 by gender to see to what extent gender had an effect on the differences found among the 3 groups (ACOAA, ACOA, and control). The results of the statistical analysis once again found that the ACOAA, ACOA, and control groups differed significantly on all dependent variables except for obsessive compulsiveness. In addition, the analysis of covariance for all five dependent variable did not result in statistical significance with

regards to the effects of gender. However, the results indicated a statistically significant two-way interaction effect with respects to gender and group on three of the dependent variables. These variables for which gender and group had interaction effects were on dependency, obsessive compulsiveness and one of the three self-esteem measures. As a result of the factorial design, F ratios for the two way interaction effects with 2 degrees of freedom at the .01 alpha level were obtained. Results revealed two way interaction F ratios of 7.24 for dependency, 11.80 for obsessive compulsiveness, and 4.36 for the positive score on the Tennessee Self-Concept Scale. These interaction effects were statistically significant at the .01 alpha level thus indicating the possibility that certain combinations of gender and group may contribute to producing effects over and above those that would be expected from analyzing gender and group separately and independently.

The interaction effects for these variables revealed six adjusted means for each variable. The six means were for the three groups (ACOAA, ACOA, and control) and the two gender groups (male and female). Results of the differences among the groups may be seen by observing the adjusted mean scores for each of the three dependent variables (dependency, obsessive compulsiveness and the positive score on the Tennessee Self-Concept Scales). Both dependency as measured by the MCMI and low self-esteem score as measured by the Tennessee Self-Concept positive score revealed

greater mean scores for the ACOAA female group with adjusted mean scores of 77.10 for dependency and 307.37 for dependency and 367.6 indicating high self-esteem on the Tennessee positive scores. Thus the greatest interaction effect demonstrated where between the female ACOAA group and the male control group. The two way interaction results for obsessive compulsiveness revealed the greatest differences among adjusted means were between the ACOAA female group and the female control group. The adjusted mean scores for obsessive compulsiveness for the female ACOAA group was 47.90 and 70.63 for the female control group thus indicating the greatest interactive effects to be found between the female ACOAA group and the female control group with regards to obsessive compulsiveness as measured by the MCMI. Results of the analysis of covariance for the five dependent variables may be seen on Tables 33-39 and results of the adjusted means for all five dependent variables may be seen on Tables 40 to 46.

Table 33
Analysis of Covariance
Passive Aggressive Scale on the MCMI by Group Membership and Gender

SOURCE	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO	SIG OF F
Covariates					
SES	5265.01	1	5265.01	7.22	*
Education	867.74	1	867.74	1.19	NS
Main Effects					
S	45946.95	2	22973.47	31.48	*
Sex	163.13	1	163.13	.22	NS
2-Way Interaction (S and Gender)	4338.45	2	2169.22	2.97	NS
Residual	125516.12	172	729.75		
Total	182097.39	179	1017.30		

$p \leq .01$

Table 34
Analysis of Covariance
Dependent Scale of MCMI by Group Membership and Gender

SOURCE	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO	SIG OF F
Covariates					
SES	689.93	1	689.93	1.37	NS
Education	2471.94	1	2471.94	4.91	NS
Main Effects					
S	33970.67	2	16985.34	33.74	*
Sex	31.99	1	31.99	.06	NS
2-Way Interaction (S and Gender)	7293.91	2	3646.96	7.24	*
Residual	86595.53	172	503.46		
Total	131053.98	179	732.15		

$p \leq .01$

Table 35
Analysis of Covariance
Obsessive Compulsive Scale for MCMI by Group Membership and Gender

SOURCE	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO	SIG OF F
Covariates					
SES	41.23	1	41.23	.09	NS
Education	1939.71	1	1939.71	4.04	NS
Main Effects					
S	1235.81	2	617.90	1.29	NS
Sex	606.54	1	606.54	1.26	NS
2-Way Interaction (S and Gender)	11340.37	2	5670.19	11.81	*
Residual	82586.25	172	480.15		
Total	97749.91	179	546.09		

$p \leq .01$

Table 36
Analysis of Covariance
Dysthymia Scale MCMI by Group Membership and Gender

SOURCE	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO	SIG OF F
Covariates					
SES	1510.10	1	1510.10	2.47	NS
Education	1461.17	1	1461.17	2.39	NS
Main Effects					
S	31059.88	2	15529.94	25.41	*
Sex	264.90	1	264.90	.43	NS
2-Way Interaction (S and Gender)	4327.81	2	2163.90	3.54	NS
Residual	105139.10	172	611.27		
Total	143762.95	179	803.15		

$p \leq .01$

Table 37
Analysis of Covariance
Coopersmith Self-Esteem Inventory by Group Membership and Gender

SOURCE	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO	SIG OF F
Covariates					
SES	2776.31	1	2776.31	5.68	NS
Education	551.15	1	551.15	1.13	NS
Main Effects					
S	40679.91	2	20339.96	41.63	*
Sex	2.44	1	2.44	.01	NS
2-Way Interaction (S and Gender)	50.57	2	25.28	.05	NS
Residual	84039.38	172	488.60		
Total	128099.75	179	715.64		

$p \leq .01$

Table 38
Analysis of Covariance
TPS Score on the Tennessee Self-Concept Scale by Group Membership and Gender

SOURCE	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO	SIG OF F
Covariates					
SES	76.74	1	76.74	.03	NS
Education	4497.49	1	4497.49	1.99	NS
Main Effects					
S	45180.55	2	22590.28	9.98	*
Sex	6220.94	1	6220.94	2.75	NS
2-Way Interaction (S and Gender)	19717.40	2	9858.70	4.36	NS
Residual	389190.46	172	2262.74		
Total	464883.58	179	2597.12		

$P \leq .01$

Table 39
Analysis of Covariance
SC Scale on Tennessee Self-Concept by Group Membership and Gender

SOURCE	SUM OF SQUARES	DF	MEAN SQUARE	F RATIO	SIG OF F
Covariates					
SES	106.89	1	106.89	3.07	NS
Education	83.84	1	83.84	2.41	NS
Main Effects					
S	371.81	2	185.91	5.34	*
Sex	211.75	1	211.75	6.08	NS
2-Way Interaction (S and Gender)	77.19	2	38.60	1.11	NS
Residual	5991.24	172	34.83		
Total	6842.73	179	38.23		

$P \leq .01$

Table 40
Descriptive Statistics
Passive Aggressive Scale on MCMI by Group Membership and Gender

Group	Gender	
	Male Adjusted Mean	**Female** Adjusted Mean
ACOAA	65.07	77.37
ACOA	55.43	49.03
CONTROL	35.43	24.23

Table 41
Descriptive Statistics
Dependent Scale on the MCMI by Group Membership and Gender

Group	Gender	
	Male Adjusted Mean	**Female** Adjusted Mean
ACOAA	62.93	77.10
ACOA	75.23	60.07
CONTROL	37.37	40.03

Table 42
Descriptive Statistics
Obsessive Compulsive Scale on the MCMI by Group Membership and Gender

Group	Gender	
	Male Adjusted Mean	Female Adjusted Mean
ACOAA	68.07	47.90
ACOA	66.00	59.63
CONTROL	53.70	70.63

Table 43
Descriptive Statistics
Dysthymia Scale on the MCMI by Group Membership and Gender

Group	Gender	
	Male Adjusted Mean	Female Adjusted Mean
ACOAA	68.27	84.10
ACOA	74.33	71.83
CONTROL	48.80	42.57

Table 44
Descriptive Statistics
Coopersmith Self-Esteem Inventory Score by Group Membership and Gender

Group	Gender	
	Male Adjusted Mean	Female Adjusted Mean
ACOAA	49.07	47.87
ACOA	47.83	46.27
CONTROL	80.13	81.33

Table 45
Descriptive Statistics
TPS Score of Tennessee Self-Concept Scale by Group Membership and Gender

Group	Gender	
	Male Adjusted Mean	Female Adjusted Mean
ACOAA	328.30	307.37
ACOA	335.60	352.37
CONTROL	367.60	340.30

Table 46
Descriptive Statistics
SC Scores of Tennessee Self-Concept Scale by Group Membership and Gender

Group	Gender	
	Male Adjusted Mean	Female Adjusted Mean
ACOAA	34.63	30.80
ACOA	34.63	30.80
CONTROL	37.60	35.73

Summary of Results of Statistical Analysis.

Six research questions with associated hypotheses were developed for this study. These questions and hypotheses were used to determine the statistical equivalence of the three groups (ACOAA, ACOA, and control) with comparisons conducted to determine the level of each variable (passive aggressiveness, dependency, obsessive compulsiveness, depression, and low self-esteem).

In order to determine equivalence among the three groups, a chi-square test of independence and analysis of covariance were conducted using the five variables (passive aggressiveness, dependency, obsessive compulsiveness, depression, and low self-esteem) as the independent variables, with the three groups (ACOAA, ACOA, and control) as the dependent variables, and education and socio-economic as the covariates.

Upon determining the statistical difference among the three groups (ACOAA, ACOA, and control) by conducting the chi-square test of independence, the differences between observed frequency scores and expected frequency scores were examined to determine the level of each of the four variables (passive aggressiveness, dependency, obsessive compulsiveness, and depression as measured by the Minnesota Multiphasic Personality Inventory) among the three groups. A set of second assessments utilized were the post hoc two-sample t-test and examination of adjusted means were used to determine the levels of all five variables (passive aggressiveness, dependency, obsessive compulsiveness, depression, and low self-esteem as measured by the Millon Clinical Multiaxial Inventory, Coopersmith Self-Esteem Inventory, and the Tennessee Self-Concept Scale) for the three groups (ACOAA, ACOA, and control). The three comparisons conducted for each variable in the post hoc two-sample t-test were the ACOAA vs ACOA, ACOAA vs control, and the ACOA vs control. Upon review of the above results,

further post hoc analyses retesting hypothesis 1-5 were conducted to examine the effects of group and gender on the five dependent variables. A simple factorial design was conducted to include 2-way interaction effects.

The sixth and final hypothesis examined correlations among the five variables within each group to determine if group membership could be predicted and explained. This hypothesis was tested using a discriminant analysis to classify the individual cases into groups on the basis of their scores on the three measures using the five variables as the discriminators in order to correctly distinguish group membership and establish predictability. The results of the analyses used to test each hypothesis are summarized in Table 47 appearing on pages 128-135.

Table 47
RESULTS OF STATISTICAL ANALYSIS

Research Questions	Results
1. Are there differences among the ACOAA, ACOA, and control groups in terms of passive aggressiveness . Research Hypotheses 1. The ACOAA and ACOA groups will demonstrate a level of passive aggressiveness that is greater than the control group.	Chi-Square Test of Significance Chi-square= 52.23 Significant* Analysis of Covariance F ratio= 30.92 Significant* Observed-Expected Scores Group — Residual ACOAA..... 13.30 ACOA..... 9.30 control..... -22.70 ANCOVA Adjusted Means ACOAA..... 70.73 ACOA..... 52.13 Control..... 30.41 Post Hoc t-Tests Comparisons — t-Value ACOAA and ACOA..... 1.48 (NS) ACOAA and control..... .80 (NS) ACOA and control..... .68 (NS) Summary of Findings Results of the chi-square and ANCOVA for passive aggressiveness on the MMPI and MCMI resulted in a statistically significant difference. These results led to the conclusion that there are differences among the three groups (ACOAA, ACOA, and control). The findings of the differences between the observed frequency scores and the expected frequency scores on the MMPI resulted in higher levels of passive aggressiveness than the control group. The results of the post hoc comparisons were not significant however, comparisons of adjusted means indicated higher levels of passive aggressiveness on the MCMI in the ACOAA and ACOA groups than in the control. In sum, significant differences exists among the three groups with respect to passive aggressiveness but exactly where these differences lie statistically is not clear.

Table 47 (Continued)
Results of Statistical Analysis

Research Questions	Results
2. Are there differences among the ACOAA, ACOA, and control in terms of dependency. Research Hypotheses 2. The ACOAA and ACOA groups will demonstrate a level of dependency that is greater than the control group.	Chi-Square Test of Significance Chi-square= 62.68 Significant* Analysis of Covariance F ratio= 31.65 Significant* Observed-Expected Scores Group — Residual ACOAA..... 14.30 ACOA..... 10.30 control..... -24.70 ANCOVA Adjusted Means ACOAA..... 70.33 ACOA..... 67.11 Control..... 38.92 Post Hoc t-Tests Comparisons — t-Value ACOAA and ACOA..... .14 (NS) ACOAA and control..... 1.36 (NS) ACOA and control..... 1.22 (NS) Summary of Findings Results of the chi-square and ANCOVA for dependency on the MMPI and MCMI resulted in a statistically significant difference. These results led to the conclusion that there are differences among the three groups (ACOAA, ACOA, and control). The findings of the differences between the observed frequency scores and the expected frequency scores on the MMPI resulted in higher levels of dependency than the control group. The results of the post hoc comparisons were not significant however, comparisons of adjusted means indicated higher levels of dependency on the MCMI in the ACOAA and ACOA groups than in the control. In sum, significant differences exist among the three groups with respect to dependency but exactly where these differences lie statistically is not clear.

Table 47 (Continued)
Results of Statistical Analysis

Research Questions	Results
3. Are there differences among the ACOAA, ACOA, and control in terms of obsessive compulsiveness. Research Hypotheses 3. The ACOAA and ACOA groups will demonstrate a level of obsessive compulsiveness that is greater than the control group.	Chi-Square Test of Significance Chi-square= 50.26 Significant* Analysis of Covariance F ratio= 1.14 (NS) Observed-Expected Scores Group Residual ACOAA..... 14.00 ACOA..... 7.00 control..... -21.00 ANCOVA Adjusted Means ACOAA..... 57.44 ACOA..... 63.94 Control..... 61.68 Summary of Findings Results of the chi-square on the MMPI resulted in a statistically significant difference but nonsignificance for the ANCOVA on the MCMI for obsessive compulsiveness. These results led to mixed conclusions about the differences among the three groups (ACOAA, ACOA, and control). The findings of the differences between the observed frequency scores and the expected frequency scores on the MMPI resulted in higher levels of obsessive compulsiveness than the control group. Comparisons of adjusted means indicated higher levels of obsessive compulsiveness on the MCMI in the ACOAA and ACOA groups than in the control. In sum, the results do not support hypothesis 3 that there exists a greater difference in the level of obsessive compulsiveness in the ACOAA and ACOA groups as compared to the control group.

Table 47 (Continued)
Results of Statistical Analysis

Research Questions	Results
4. Are there differences among the ACOAA, ACOA, and control groups in terms of depression. Research Hypotheses 4. The ACOAA and ACOA groups will demonstrate a level of depression that is greater than the control group.	Chi-Square Test of Significance Chi-square= 40.94 Significant* Analysis of Covariance F ratio= 24.77 Significant* Observed-Expected Scores Group — Residual ACOAA..... 8.00 ACOA..... 12.00 control..... -20.00 ANCOVA Adjusted Means ACOAA..... 76.10 ACOA..... 72.85 Control..... 45.99 Post Hoc t-Tests Comparisons — t-Value ACOAA and ACOA..... 1.30 (NS) ACOAA and control..... 1.20 (NS) ACOA and control..... 1.07 (NS) Summary of Findings Results of the chi-square and ANCOVA for depression on the MMPI and MCMI resulted in a statistically significant difference. These results led to the conclusion that there are differences among the three groups (ACOAA, ACOA, and control). The findings of the differences between the observed frequency scores and the expected frequency scores on the MMPI resulted in higher levels of depression than the control group. The results of the post hoc comparisons were not significant however, comparisons of adjusted means indicated higher levels of depression on the MCMI in the ACOAA and ACOA groups than in the control. In sum, significant differences exist among the three groups with respect to depression but exactly where these differences lie statistically is not clear.

Table 47 (Continued)
Results of Statistical Analysis

Research Questions	Results
5. Are there differences among the ACOAA, ACOA, and control groups in terms of self-esteem. Research Hypotheses 5. The ACOAA and ACOA groups will demonstrate a level of self-esteem that is lower than the control group.	Analysis of Covariance Measure — F Ratio — Sig Coopersmith.....42.33 * Tennessee (TPS)..... 9.52 * Tennessee (SC)..... 5.18 * ANCOVA Adjusted Means Coopersmith ACOAA..... 49.02 ACOA..... 46.73 Control..... 80.50 Tennessee (TPS) ACOAA..... 315.96 ACOA ..... 345.76 Control..... 354.06 Tennessee (SC) ACOAA..... 32.84 ACOA..... 34.33 Control..... 36.45 Post Hoc t-Tests Coopersmith Comparisons — t-Value ACOAA and ACOA..... .10 (NS) ACOAA and Control..... -1.44 (NS) ACOA and Control..... -1.54 (NS) Tennessee (TPS) ACOAA and ACOA..... -.61 (NS) ACOAA and Control..... -.78 (NS) ACOA and Control..... -.17 (NS) Tennessee (SC) ACOAA and ACOA..... -.25 (NS) ACOAA and Control..... -.60 (NS) ACOA and Control..... -.35 (NS Summary of Findings Results of the ANCOVA revealed a statistically significant difference among the groups on all three self-esteem scores. These results led to the conclusion that there are differences among the three groups (ACOAA, ACOA, and control). Findings were not significant on the post hoc t-tests however, comparisons of adjusted means indicate lower levels of self-esteem in the ACOAA and ACOA groups than in the controls. In sum, significant differences exist among the three groups with respect to low self-esteem but exactly while these differences lie statistically is clear.

Table 47 (Continued)
Results of Statistical Analysis

Research Questions	Results
6. Do these personality characteristics correlate within each group to suggest a particular pattern that predict and explain both group membership and is descriptive of the codependent construct. Research Hypothesis 6. There will exist significant correlations within the ACOAA and ACOA groups that will explain and predict group membership and also be descriptive of the codependent construct.	Percent of Grouped Cases Correctly Classified All 3 groups..... 70.00 Combined + Control..... 87.22 Actual Groups / Predicted Groups % ACOAA: 65.00 / 23.30 / 11.70 ACOA: 35.00 / 51.70 / 13.30 Control: 3.30 / 3.30 / 93.30 Groups: Combined / Control ACOAA vs. ACOA: 84.20 / 15.80 Controls: 6.70 / 93.30 Summary of Findings Results of the discriminant analysis revealed that the percent of "grouped" cases that were correctly classified overall was 70%. The control had the greatest number of correctly predicted cases. The ACOAA and ACOA groups were combined and analysis was repeated. Results indicated increased predictability resulting in 87.22% of "grouped" cases correctly predicted, an increase of 7.22%. In summary, the 5 variables correlated within the three groups to predict group membership.

*$p \leq .01$

Table 47 (Continued)
Results of Statistical Analysis

Research Questions	Results
7. Does gender have an effect on the results for hypothesis 1-5. Research Hypotheses 1-5 by Gender and Group Research Hypothesis 1. The ACOAA and ACOA groups will demonstrate a level of passive aggressiveness that is greater than the control group.	Chi-Square Test of Significance ACOAA Chi-Square = .69 (NS) ACOA Chi-Square = .07 (NS) Control Chi-Square = 1.96 (NS) Analysis of Covariance Group F ratio = 31.48 * Gender F ratio = .22 (NS) 2-Way Interaction F ratio = 2.97 (NS)
Research Hypothesis 2. The ACOAA and ACOA groups will demonstrate a level of dependency that is greater than the control group.	Chi-Square Test of Significance ACOAA Chi-Square = .00 (NS) ACOA Chi-Square = .28 (NS) Control Chi-Square = 1.02 (NS) Analysis of Covariance Group F ratio = 33.73 * Gender F ratio = .06 (NS) 2-Way Interaction F ratio = 7.24 * High/Low Adjusted Means Female ACOAA = 77.10 Male control = 37.37
Research Hypothesis 3. The ACOAA and ACOA groups will demonstrate a level of obsessive compulsiveness that is greater than the control group.	Chi-Square Test of Significance ACOAA Chi-Square = .62 (NS) ACOA Chi-Square = .27 (NS) Control Chi-Square = can't compute Analysis of Covariance Group F ratio = 1.29 (NS) Gender F ratio = 1.26 (NS) 2-Way Interaction F ratio = 11.81 * High/Low Adjusted Means Female ACOAA = 47.90 Male control = 70.63

*$p \leq .01$

Table 47 (Continued)
Results of Statistical Analysis

Research Questions	Results
Retest by Gender and Group Research Hypothesis 4. The ACOAA and ACOA groups will demonstrate a level of depression that is greater than the control group.	Chi-Square Test of Significance ACOAA Chi-Square = 5.55 * ACOA Chi-Square = 1.83 (NS) Control Chi-Square = 1.46 (NS) % of Depression Present / % of Depression Not Present ACOAA Male 43% 57% ACOAA Female 73% 27% Analysis of Covariance Group F ratio = 25.41 * Gender F ratio = .43 (NS) 2-Way Interaction F ratio = 3.54 (NS)
Retest by Gender and Group Research Hypothesis 5. The ACOAA and ACOA groups will demonstrate a level of self-esteem that is lower than the control group.	Analysis Covariance Coopersmith Self-Concept Inventory Group F Ratio = 41.63 * Gender F Ratio = .01 (NS) 2-Way Interaction F Ratio = .05 (NS) TPS Score on Tennessee Self-Concept Scale Group F Ratio = 9.98 * Gender F Ratio = 2.75 (NS) 2-Way Interaction F Ratio = 4.36 * High/Low Adjusted Means ACOAA Female = 307.37 Control Male = 367.60 SC Score on Tennessee Self-Concept Scale Group F Ratio = 5.34 * Gender F Ratio = 6.08 (NS) 2-Way Interaction F Ratio = 1.11 (NS) Summary of Findings Results of retesting hypothesis 1-5 examining the effects of gender on the results indicated no affects of gender for the chi-square analysis except for depression. Depression was significant for gender effects in the ACOAA female group. The post hoc factorial designs revealed no significant independent differences for group and gender, however, significant interaction effects for dependency, obsessive compulsiveness and the TPS score on the Tennessee Self-Concept Scale.

CHAPTER FIVE

DISCUSSION

The purpose of this study was to examine aspects of adjustment exhibited in the form of five particular personality characteristics among adult children of alcoholics (ACOA), adult children of alcoholics with alcoholism (ACOAA), and adult children of nonalcoholics (control) to determine the degree to which these three groups differ. The five personality characteristics of concern were passive aggressiveness, dependency, obsessive compulsiveness, depression, and low self-esteem. In addition, each group was analyzed to see the number of significant correlationships that existed among the personality characteristics and the extent to which each group was descriptive or not descriptive of the codependent construct.

The results of this research study provided evidence that adult children of alcoholics and adult children of alcoholics with alcoholism differ significantly from adult children of nonalcoholics with respect to passive aggressiveness, dependency, obsessive compulsiveness, depression, and self-esteem. However, contrary to the statistical significance found among the three groups the post hoc t-test was not significant thus making it difficult to determine where these differences lie. Though the ACOAA and ACOA groups differ from each other the difference was considered relatively small and insignificant to render the

two groups distinct from each other when considering adjusted mean scores. In addition, post hoc factorial designs were conducted to examine the effects of gender on the results. Results revealed significant interaction effects for dependency, obsessive compulsiveness, and no measure of self-esteem. Also found was significant gender effects on the chi-square analysis for depression. Thus, it appears that the two groups (ACOA and ACOAA) are similar in exhibiting the five personality variables discussed in the literature as being descriptive of codependency. These results support the description of codependency as described in the literature. In addition the findings support that these five personality characteristics correlate as discriminators which can predict and explain group membership. As a result, this study suggests that after a more extensive and rigorous testing is done in this area that a more complete and inclusive diagnostic category be created that is not as restrictive and insufficient as the current diagnostic categories presented in the DSM-III-R and ICD-9. In addition, this study is in agreement with Cermak (1991) that codependency can be seen as a dysfunctional way of coping for which operational diagnostic criteria can be developed and is needed.

Summary of Related Literature.

Alcoholism is one of the most prevalent psychiatric disorders affecting approximately 10 million people in the

United States (Robins et al., 1984; Woodside, 1982). For every alcoholic it is estimated that, on the average, 2.2 family members, friends, work associate, or some 20 to 36 million people are affected by this disorder (Lender and Martin, 1982; West, 1984). Consequently, there exist much concern about the effects of an alcoholic parent on his or her children. Research has depicted the effects of coping and the personality characteristics that develop due to an alcoholic background to be similar to the description of codependent behavior. Many definitions of codependency exist yet the concept and definition is not yet precise or clear. The research in this area is scant and new. As a result it still suffers from having no precise definition nor any formal diagnostic grouping. For the purpose of this study, Whitfield's (1989) definition and Cermak's (1988) definition in combination best defined codependency. Codependency is described as an addictive and dysfunctional pattern of coping where all focus of a person's life is on the needs and behaviors of others (or addictive agent) to the extent that ones own internal processes (e.g., emotions and desires) are forgotten or lost. Further it is a person who fears abandonment by others and is dependent on and is controlled by others who are themselves dependent on or controlled by other forces such as alcoholism, compulsive behavior, mental illness, abuse, or chronic illness. In a codependent relationship, the needs of the two people are met in dysfunctional ways (O'Brien and Gaborit, 1992). It

appears that many adult children of alcoholics are suffering in such relationships. The literature concerning the effects of the alcoholic parent on his or her children has concluded that certain risk factors and problems arise based solely on the fact that one of the parents is an alcoholic (Woititz, 1984). Studies identify the association between parental alcoholism and increased risk for psychopathology in the offspring (Earls et al., 1988; Knop et al., 1985; Rydelius, 1981; Steward et al., 1980). Children of alcoholic parents exhibit a higher overall rate of psychiatric disorders and dysfunctional behaviors than that of children in the general population (Earls et al., 1988; Herjanic et al., 1977). Specifically, these children have been found to be at increased risk for conduct disorders, truancy, antisocial behavior, and aggressive behaviors (Earls et al., 1988; Guze et al., 1968; Robins, 1966; Rydelius, 1981); for hyperactivity and neurological deficits (Cantwell, 1972; Knop et al., 1985; Tarter et al, 1984); and for somatic and medical problems (Rydelius, 1981; Werner, 1986). Some children of alcoholics do not resolve the effects of growing up in a troubled household. They may as adults develop pathological behaviors and dysfunctional coping styles such as inappropriate emotional expression, dependency, manipulation, and personality disorders (Black, 1979; Glenn and Parsons, 1989; Parker and Hartford, 1987; Plescia-Pikus etal., 1988). Recently the literature reveals that as these children emerge into adulthood they are at

risk for continued psychological dysfunction and potential psychopathology (Black et al., 1986; Sher, 1987; West and Prinz, 1987). As increasing numbers of individuals identify themselves as adult children of alcoholics there has been a concomitant increase in clinical services in terms of traditional psychotherapy, support and self-help groups (Brown and Beletsis, 1986; Seixas and Youcha, 1985). Compared to other groups, children of alcoholics not only have higher rates of behavioral and emotional problems but an increased risk of developing alcoholism themselves (Adler and Raphael, 1983; Black, 1981; El-Guebaly and Offord, 1977; Goodwin, 1979; Scavnicky-Mylant, 1984).

The concerns about the effects of an alcoholic parent on children has stimulated research in the areas of genetics in order to investigate the possibility of a genetic link to alcoholism.

Genetic studies have found that the number of alcoholic relatives is one of the strongest predictors for alcoholism developing later in life (Glueck and Glueck, 1968; Vaillant and Milofsky, 1982). The risk for adult alcoholism in biological sons of alcoholics reared by adoptive parents is four times as great as it is in the sons of nonalcoholics (Goodwin, 1983; Goodwin etal., 1973, 1974; Schuckit, 1984). These findings and more (Cadoret et al., 1980; Cloninger et al., 1979) suggest a strong genetic influence. However, studies have also found that over half of the children of alcoholics do not suffer from the disorder later in life,

thus indicating that other mediating factors may influence outcome (Beardslee and Vaillant, 1984; Clair and Genest, 1987; Miller and Jang, 1977; Rutter, 1989). These mediating factors maybe associated to socio-environmental factors.

A series of studies by Moos and Billings (1982) and Moos and Moos (1984) have looked at socio-environmental factors that might moderate the effect of parental alcohol abuse on family members. The results identified several mediating factors such as the presence of family stressors, increased parental conflicts, downwardly fluctuating socio-economic status, and inconsistent patterns of discipline and affection appear to be predictive of dysfunction in family members of an alcoholic. Further, adult children of alcoholics have demonstrated more legal difficulties, domestic violence, suicide attempts, increased levels of anxiety, panic, passive aggressiveness, dependency, low self-esteem, and four times the rate of divorce than their controls (Bibb-Chambless, 1986; Berkowitz and Perkins, 1988; Goodwin et al., 1974; Haack, 1990; Kroll et al., 1985). Other finding in the literature describe adult children of alcoholics as more depressed and anxious than controls (Brown, 1988; Clair and Genest, 1987; Gravitz and Bowden, 1986; Haack, 1990; Tweed and Ryft, 1989; Woititz, 1983).

In addition, studies revealed comobid conditions of antisocial patterns of behavior within prealcoholic homes in both the children and in the parental generation (Tarter, Alterman, and Edwards, 1985; Hesselbrock et al., 1985;

Schuckit, 1984; Zucker and Fitzgerald, 1991). The literature also demonstrates other comorbid conditions along with antisocial disorder associated with alcoholism such as anxiety disorders, affective disorder, and schizophrenia (Cadoret, Troughton, and O'Gorman, 1987).

Recent studies utilizing the Minnesota Multiphasic Personality Inventory reveals no single personality type is characteristic of all adult children of alcoholics (Graham and Strenger, 1988; Knowles and Schroeder, 1990) but that the most consistent finding was elevation on scale 4 (Psychopathic Deviate) (Butcher and Owen, 1978; Donovan, 1986; McKenna, 1986, Mayo, 1985; Walfish et al., 1992). The research suggests the mean profile are characterized by 4-2 and 4-9 two point code type (Graham, 1978; Kammeier and Pickens, 1981; Levi and Watson, 1981; Loper et al., 1973; McKenna and Pickens, 1981; Page and Bozlee, 1982). Graham (1987) describes the 4-2/2-4 person as feeling inadequate, depressed, passive dependent, and in trouble with their families or with the law.

Whipple and Noble (1991) conducted a study using the discriminant analysis on several personality inventories including the MMPI. Findings resulted in significant father-son pairs with the highest discriminators describing the group as compulsive, controlled, more worried, and with lower self-esteem. In addition they were found to be greater internalizers, and who expressed more somatic symptoms, to name a few.

The results from this study support these past studies using the MMPI. However, contrary to past studies that measured specific personality traits, this current study specifically measures five personality disorders as symptom clusters in hopes of creating a rigorous definition of codependency with implications for treatment planning.

Adult children of alcoholics are currently recognized as a relevant clinical population that manifests symptoms often misdiagnosed (Miller and Tuchfeld, 1986). Research has depicted the effects of coping and the personality characteristics that develop due to alcoholism to be similar to the description of codependent behavior. Thus, it appears that adult children of alcoholics learn and exhibit particular coping strategies and behaviors of codependency to a greater degree than that of offsprings of nonalcoholics with normal family backgrounds. Consequently, they (ACOA's) exhibit such coping behaviors as passive aggressiveness, dependency, obsessive compulsiveness, depression, and low self-esteem (Bibb-Chambless, 1986; Berkowitz and Perkins, 1988; Goodwin et al., 1974; Haack, 1990; Kroll et al., 1985; Weiner, 1986; Woititz, 1983). Other codependent characteristics also included are caretaking, rescuing, need for control, denial, anxiety, worry, nonassertiveness, weak boundaries, and cognitive inflexibility. Currently codependency is often diagnosed as dependent personality, passive aggressive, narcissistic, borderline, depressed, or obsessive compulsive disorder. However, codependent

individuals seem to exhibit personality characteristics from all of these disorders. Often due to the presence of a cluster of personality characteristics that lack a rigorous definition or a recognized acceptance of the concept of codependency as a disease entity; treatment plans are often insufficient leading to increased rates of recidivism and persistence of painfully dysfunctional coping patterns. These problems are emotional, developmental, physiological, and social (Weiner, 1986).

Codependency seems to be one concept in the literature that attempts to conceptualize the dynamics and personality characteristics of adult children of alcoholics.

Therefore, it was the aim of this study to add empirical research in demonstrating evidence of the existence of particular personality characteristics, namely passive aggressiveness, dependency, obsessive compulsive, depression, and low self-esteem in adult children of alcoholics that supports the notion of codependency. Thereby, after further extensive research into this phenomena typical problems and personality characteristics that cluster together to form codependent behavior that can be communicated to clinicians. It is then that we can begin to adequately identify, address, and effectively treat someone with a history that reveals the existence of alcoholism during childhood or adolescence.

Limitations of the Study.

As with most research, this study has limitations that restrict its generalizability and usefulness. The sample was proposive thus adhering to specific criteria such as selecting only Caucasian adult children of alcoholics from the age range of 25-45 which allows the results to be generalizable only to this specific group, age range, and race. The restricted range of subjects available is limited to the Wayne, Oakland, and Macomb county areas.

The methodology and design limitations include having to rely on a nonrandom sample of the subjects asked to complete the inventories. Subjects who volunteered were self-selected and may be more highly motivated towards self-understanding and achievement than those who heard of the study but chose not to participate. Both this volunteering quality and those who attend church, colleges, and treatment centers may represent a select population who are more active towards self-enhancement, more active, and feel more empowered and supported than the average person.

The analysis is not a complete inventory of all possible ways these data could have been examined. Limited choices were made based on relevance, economy, and clarity. Other correlations or analysis of variance might have provided different or additional information (see Recommendations For Future Research). The analysis was also limited to the use of descriptive statistics.

Summary of Research Method

A relationship study was used in this research conducted in an attempt to gain insight into the factors or variables that related to complex variables or phenomena, namely codependency (Gay, 1981). Three groups were used for this study adult children of alcoholics with alcoholism (ACOAA), adult children of alcoholics (ACOA), and adult children of nonalcoholics (control). Each group received four personality inventories which measured the five personality characteristics of interest (passive aggressiveness, dependency, obsessive compulsiveness, depression, and low self-esteem). The inventories consisted of the Minnesota Multiphasic Personality Inventory, the Millon Clinical Multiaxial Inventory, the Coopersmith Self-Esteem Inventory, and the Tennessee Self-Concept Scale. The three groups were then examined to determine the degree to which the three groups differed from one another and to see if a pattern among the five personality characteristics existed within each group thus, predicting and explaining group membership.

A chi-square test of independence, analysis of covariance, examination of discrepancies between observed and expected frequency scores from the chi-square analysis and post hoc two-sample t-tests were used to analyze the data along with a simple factional post hoc design. The data were analyzed at an alpha level of .01.

Descriptive Analysis.

The samples for this study totalled 180 subjects consisting of 90 males and 90 females, who volunteered to participate in the study. The subjects made up the three groups (ACOAA, ACOA, and control) each containing 30 males and 30 females. The age range was broken down into two categories, 25-34 and 35-45 years old with a mean age of 35.2.

Education was divided into four groups and socio-economic status (SES) was divided into nine categories (see Method, Procedures, and Data Analysis section for further details). A chi-square analysis revealed age and SES as insignificant. However education was significant revealing more educated subjects in the control group as compared to the ACOAA and ACOA groups. This difference can contribute to the differences found among the groups due to the increased coping abilities education gives to an individual (e.g. increased abilities for: cognitive flexibility, insight, problem solving, and general information). Consequently, all analyses of variance conducted in the study included covariates for education and SES to account for possible added variation.

Conclusions

The results of the statistical analysis lead to several conclusions regarding the five personality characteristics (passive aggressiveness, dependency, obsessive

compulsiveness, depression, and low self-esteem) proposed to be descriptive of adult children of alcoholics and of the codependent construct. These conclusions include:

* The adult children of alcoholics with alcoholism and the adult children of alcoholics differed from their control group of adult children of nonalcoholics with respect to passive aggressiveness, dependency, and depression. Both the chi-square test of independence and the analysis of covariance were found to be significant thus concluding that there were statistically significant group differences among the ACOAA, ACOA, and control groups with respect to passive aggressiveness, dependency, and depression.

* However despite the significant difference found on the analysis of covariance for group differences for passive aggressiveness, dependency, and depression using the MCMI, the associated post hoc two-sample t-tests resulted in nonsignificant results thus, making it unclear to determine the level and exactly where the differences lie.

* The ACOAA and the ACOA groups demonstrated trends towards higher levels of passive aggressiveness,

dependency, and depression as compared to their control group. Both the examination of the discrepancy scores between the observed frequency scores and the expected frequency scores from the chi-square analysis and the examination of the adjusted mean scores derived from the analysis of covariance demonstrated a trend toward the control group demonstrating a lower level of passive aggressiveness, dependency, and depression than the ACOAA and ACOA groups. However, statistical significance was not found in the post hoc two sample t-test thus not statistically supporting the levels of differences on these variables.

* Further, the difference among the level of passive aggressiveness, dependency, and depression for the ACOAA and the ACOA groups are relatively small and do not render them distinctly different from one another. In sum the ACOAA and the ACOA groups appear to exhibit a trend towards a higher level of passive aggressiveness, dependency, and depression than the control group of adult children of nonalcoholics.

* The ACOAA and ACOA groups differed from their control group of adult children of nonalcoholics with respect to obsessive compulsiveness. The

chi-square test of significance was found to be significant resulting in statistically significant group differences among the ACOAA, ACOA, and control groups. However no significant difference was found on the analysis of covariance for group differences for obsessive compulsive scale on the MCMI thus indicating no significant differences among the groups.

* The ACOAA and the ACOA groups demonstrated trends towards higher levels of obsessive compulsiveness as compared to their control group of adult children of nonalcoholics on the MMPI. The examination of the discrepancy scores between the observed frequency scores and the expected frequency scores from the chi-square analysis derived from the MMPI concluded that the control group had a lower level of obsessive compulsiveness than the ACOAA and ACOA groups. In sum the ACOAA and ACOA groups appeared to exhibit a trend toward higher level of obsessive compulsiveness on the MMPI than the control group. Examination of adjusted means derived from the analysis of covariance resulted in differences being too similar across all groups to adequately make distinctions. Noteworthy is that this examination is by observation of trends but most

importantly is that the Analysis of Covariance resulted in nonsignificance indicating no significant difference among the groups were found.

* The ACOAA and ACOA groups differed from their control group with respect to self-esteem. The analysis of covariance was found to be significant resulting in statistically significant group differences among the ACOAA, ACOA, and control groups with regards to self-esteem.

* The ACOAA and the ACOA groups demonstrated a trend toward lower levels of self-esteem as compared to their control group. The examination of the adjusted mean scores derived from the analysis of covariance resulted in a trend towards higher levels of self-esteem found in the control group in comparison to the ACOAA and the ACOA groups. However, despite the significant difference found on the analysis of covariance among the groups for self-esteem using the Coopersmith Self-Esteem Inventory and the Tennessee Self-Concept Inventory, the associated post hoc two-sample t-tests resulted in a large standard error and no significant findings this making it difficult to determine statistically where the differences lie.

* Further the difference between the level of self-esteem for the ACOAA and the ACOA groups are relatively small and does not render them distinctly different. In sum the ACOAA and the ACOA groups demonstrated trends towards lower levels of self-esteem than the control group.

* post hoc retesting of hypothesis 1-4 assessing the affects of gender on the results for the chi-square analysis resulted in gender having a significant effect on results for depression but not significant for passive aggressiveness, dependency or obsessive compulsiveness. The results indicated that the greatest differences lies in the ACOAA female group demonstrating the highest tendency toward depression.

* post hoc retesting using a simple factorial design for hypothesis 1-5 to determine the effects of gender found that gender independently did not have an affect on the results. However, significant interaction effects for dependency, obsessive compulsiveness and TPS low self-esteem scores was found indicating the possibility that certain combinations of gender and group may contribute to producing effects over and above

those that would be expected from analyzing gender and group separately and independently.

* Lastly, there existed significant correlations within the ACOAA and the ACOA groups which predict and explain group membership correctly with an overall prediction percent of 70% for all the cases included in this study. However predictability increased to 93.3% overall for all cases in the study when the ACOAA and the ACOA groups were combined to form one group and then compared to the control group. This indicates that the ACOAA and ACOA are similar and not different enough in predictive percentage to be considered distinct from one another and therefore they would be best combined into one group to more adequately explain the cluster of personality characteristics (passive aggressiveness, dependency, obsessive compulsiveness, depression, and low self-esteem) they share. This similarity between the ACOAA and ACOA group has been consistently demonstrated throughout the entire study for all five personality variables. The highest correlations found in the discriminant analyses were low self-esteem, dependency, and passive aggressiveness.

Much of the literature on personality characteristics of adult children of alcoholics had indicated increased levels of passive aggressiveness, dependency, and obsessive compulsiveness as compared to controls (Bibb-Chambless, 1986; Berkowitz and Perkins, 1988; Cutter and Cutter, 1987; Goodwin et al., 1974; Haack, 1990; Kroll et al., 1985; Whipple and Noble, 1991). The results of this study further support these findings. The literature describes adult children of alcoholics as more depressed, anxious, and with lower self-esteem (Brown, 1988; Berkowitz and Perkins, 1988; Gravitz and Bowden, 1986; Haack, 1990; Tweed and Ryft, 1989; Williams and Corrigan, 1992; Woititz, 1983). Contrary to these findings other studies have found no significant differences in measures of self-esteem and depression (Clair and Genest, 1987; Werner et al., 1986, 1991) in adult children of alcoholics. The findings in this study provide evidence that adult children of alcoholics and adult children of alcoholics with alcoholism demonstrate a trend toward a higher level of depression and a lower level of self-esteem than their control group of adult children of nonalcoholics. With regards to self-esteem the question may lie with investigating further the source of self-esteem, be it from being in a relationship based on being needed and helpful to others or from a general sense of self-worth from within and not contingent on relationships with others. If this is the case then self-esteem at the time of assessment

would be influenced by the person's particular social situation.

Studies utilizing the Minnesota Multiphasic Personality Inventory reveal the most consistent finding to have been elevations on scale 4 (psychopathic Deviate scale) and the most frequent two-code configuration was a 4-2/2-4 and 4-9 (Butcher and Owen, 1978; Donovan, 1986; Kammeier and Pickens, 1981; Levi and Watson, 1981; McKenna, 1986; McKenna and Pickens, 1981; Page and Bozlee, 1982). This particular 4-2/2-4 configuration is interpreted most often as exhibiting dependent tendencies while the 4-9 configuration depicts the alcoholic or addictive personality tendencies (Graham, 1987; Lashar, 1986). This study also supports these findings and found dependency and self-esteem to be one of the strongest predictors in the ACOAA and ACOAA groups.

Whipple and Noble (1991) recently conducted a study using the discriminant analysis resulting in significant father-son pairs with highest discriminators describing them as having compulsive behaviors, poor self-esteem, and several other descriptors. The findings of this study provides further support for the above research and also goes further by naming clusters of personality disorders (passive aggressive personality, dependent personality, obsessive compulsive personality, depression, and low self-esteem) as the discriminators rather than specific personality traits that could be found within these

personality disorders. However, contrary to Whipple and Noble's findings, the results of this study found low self-esteem, dependency and passive aggressiveness to be the highest discriminators in the discriminant analyses. As mentioned earlier this finding supports previous literature mentioned in this study and literature describing dependency, low self-esteem, and passive aggressiveness as cardinal features of codependency. This finding tends to make sense because it is the fear of abandonment and the need to please others which enhance the codependent's sense of esteem and reduce the probability of being rejected. However, this fear and need is so encompassing that it results in the avoidance of any conflict thus leaving the codependent person unprotected due to the fear to assert, set boundaries, and get their needs met.

The results of this research study have provided consistently supportive evidence that adult children of alcoholics and adult children of alcoholics with alcoholism differ significantly from adult children of nonalcoholics with respect to exhibiting a trend towards higher levels of passive aggressiveness, dependency, obsessive compulsiveness, depression, and lower levels of self-esteem. However, due to nonsignificant post hoc t-test results, it is unclear at this time to determine exactly where these differences lie and the level of difference that exists. In addition, the findings support that these five personality characteristics correlate as discriminators that can predict

as well as explain group membership. Cermak (1991) presented diagnostic criteria for codependency to be included in the DSM-III-R. He reports that for the clinical assessment of individual clients, operational diagnostic criteria for codependency are needed and can be developed. The results in this study are interpreted as only adding empirical support for the description of codependency found in the literature. The researcher is in agreement that after extensive empirical research into this phenomena that a more rigorous definition of codependency is needed along with a more complete and inclusive diagnostic category that is less restrictive and incomplete then those found in the DSM-III-R and the ICD-9.

Recommendations For Future Research.

This study has provided answers to several research questions but has given rise to additional areas that must be studied in order to learn more about the effects of parental alcoholism on adults. Some of these recommendations include:

* Replicate the study to verify the existence of this phenomena exists.

* Replicate the study and examine obsessive compulsiveness more closely by using a less conservative alpha level and using a measure of obsessive compulsiveness that has less variability within the scores.

* Replicate the study using adults from other dysfunctional parental histories such as chronic illness, abuse, mental illness, or medical handicap to determine if the results are similar to the findings of this study.

* Replicate the study and explore the added variable of anti-social tendencies in both parental personality and in the codependents or adult children of alcoholics personality.

* Further explore self-esteem in terms of internalized self-worth or self-worth arising externally by doing for and being needed by others.

* Explore the issue of fear of abandonment and the influences and consequences it has on this population's ability to cope.

* Conduct research on the use of traditional treatment plans versus a new model including aspects of treatment that are useful and effective in the treatment of each of the personality disorders (e.g. assertiveness training, boundary setting, self-esteem enhancement, identifying own needs, decision making skills, indicators of functional relationships including love and trust, and dealing with fear of abandonment issues).

APPENDIX A

HUMAN SUBJECTS PARTICIPATION INFORMATION FORM

Identification# _____ ____Exp. ____Con.

HUMAN SUBJECTS PARTICIPATION INFORMATION FORM

NAME:_____ Home phone:_____ Work:_____

ADDRESS:_____
_____

DATE OF BIRTH:_____ SEX:_____

MARITAL STATUS: ___single ___married
___separated ___divorced ___widowed

RACE: ___Caucasian/white ___Am.Black/African
___Hispanic ___ Native Am./Alaskan
___Asian Am./Pacific Islander
___Other (please specify)_____

EMPLOYMENT/STUDENT STATUS:
___Full-time student ___Part-time student
___Full-time work ___Part-time work
___Unemployed ___Retired
Please specify occupation:_____

SES CODE:_____ (note: Please leave blank)

EDUCATION: ___0-6 years
___7-11 years
___High school grad/GED
___Assos. degree/trade, technical, or Business certificate.
___Bachelor degree
___Master's degree
___Other (Please specify):_____

Please check if you personally have a past history of:
___Alcoholism
___Psychiatric history or mental disorder (i.e. hospitalization due to psychiatric or mental illness; time spent in counselling or psychotherapy with a psychiatrist, psychologist, or social worker.
___Physical disability or handicaps
___Mental disability or handicaps (i.e. learning disability)
___Neurological history (i.e. neurosurgery, neurological: visits, disease, or injury or illness to the brain, spinal cord or central nervous system illness.
___Child abuse (i.e. sexual, emotional, or physical abuse).

Please briefly explain any of the above you checked:

Please check any past Family History of:

____ Alcoholism

____ Psychiatric History/Mental Disorder

____ Physical Disability or Handicaps

____ Mental Disability or Handicaps

____ Neurological History

____ Child Abuse

Please explain any of the above that you checked:

Please specify which parent had any of the above and at what age you were when this occurred:

How many years did it last:_____

Did both parents live with you during the age of 3-18:___yes ___no

If no please specify ages and years the entire family was not living together; also state with whom you did live with:

APPENDIX B

PARENTAL ALCOHOL SCREENER

PARENTAL ALCOHOL SCREENER

Which parent was drinking while you were between the ages of 5-18?

_____ Mother _____ Father

Were they diagnosed by a physician or mental health specialist?

_____ Yes _____ No

Were they ever hospitalized for alcoholism? _____ yes _____ no

Were they ever arrested or placed in a detoxification unit or jail?

If you answered No to the two previous questions then please explain how you knew you parent had a drinking problem:

During childhood did you wish your parent would not drink?

Please list anyone else who objected to your parent's drinking while you were growing up.

Please check if your parent had any of the following symptoms associated with drinking:

_____ Black-outs

_____ Passing-out

_____ Memory loss

_____ Withdrawal (tremors &/or delirium)

_____ Violent outbursts

_____ Marital separation or divorce

_____ Interference with work or duties

_____ Job loss or lay off

_____ Trouble on the job

PARENTAL ALCOHOL SCREENER PG. 2

_____ Loss of friends

_____ Hallucinations

_____ Cirrhisis, pancreatitis

_____ Alcohol binges (48 hours or more)

_____ Early morning drinking

_____ Attempts to quite derinking but could not

_____ Drinking non beverage forms of alcohol
(i.e. mouth wash, cough medicine, etc.)

_____ Arrests of traffic difficulties

Please specify:

APPENDIX C

UCRIHS LETTER

CHIGAN STATE UNIVERSITY

CE OF VICE PRESIDENT FOR RESEARCH
DEAN OF THE GRADUATE SCHOOL

EAST LANSING • MICHIGAN • 48824-1046

uly 23, 1992

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515 Yale Rd. #718
estland, MI 48185

E: A COMPARATIVE STUDY OF ASPECTS OF ADJUSTMENT AMONG ADULT CHILDREN OF ALCOHOLICS AND ADULT CHILDREN OF NONALCOHOLICS IN THE FORM OF PERSONALITY CHARACTERISTICS AND ITS RELATIONSHIP TO THE DESCRIPTION OF CODEPENDENT BEHAVIOR, IRB #92-060

ear Ms. Biddy:

am pleased to advise that because of the nature of the proposed esearch, it was eligible for expedited review. This process has een completed, the rights and welfare of the human subjects appear o be adequately protected, and your project is therefore approved.

ou are reminded that UCRIHS approval is valid for one calendar ear. If you plan to continue this project beyond one year, please ake provisions for obtaining appropriate UCRIHS approval prior to uly 21, 1993.

ny changes in procedures involving human subjects must be reviewed y the UCRIHS prior to initiation of the change. UCRIHS must also e notified promptly of any problems (unexpected side effects, omplaints, etc.) involving human subjects during the course of the ork.

hank you for bringing this project to our attention. If we can be f any future help, please do not hesitate to let us know.

incerely,

avid E. Wright, Ph.D., Chair
niversity Committee on Research
nvolving Human Subjects (UCRIHS)

EW/pjm

c: Dr. John Powell

APPENDIX D

ANNOUNCEMENT OF RESEARCH STUDY

ACOA RESEARCH STUDY

This research study is designed to provide information about the psychology of Adult Children of Alcoholics and the construct of codependency. Your participation is entirely voluntary and therefore you may withdraw at any time. All results and identifying information will be held confidentially. The results will be treated as group results and not as individual results. Your participation will consist of answering questions to five inventories and a screening form. Pleases indicate which group from which you meet the criteria.

GROUP A CRITERIA:

1. Age: 25-45
2. High school diploma or GED
3. Alcoholic Father
4. Father is an alcoholic at least 5 years during your childhood.
5. Father and mother lived together while you were a child.
6. Father is an alcoholic during age 3-18 years old of your life.

GROUP B CRITERIA:

1. Same as Group A.
2. You have a personal history of alcoholism yourself.

GROUP C CRITERIA:

1. Age: 25-45
2. High school diploma or GED
3. No past family history or personal history of alcoholism.
4. Father and mother lived together while you were a child.

All groups must have no past personal history or family history (while growing-up) of psychiatric disorder or hospitalization, mental illness, chronic illness, mental disability, or neurological disease.

Thank-you

Karen Biddy MA.LLP

6515 Yale Rd. #718
Westland,Mich.48185

Dear

Thank-you for the opportunity to submit my dissertation proposal for consideration to collect my data by way of using volunteers from your out-patient and in-patient facilities.
My study calls for 30 males and 30 females who are adult children of alcoholics with a MD diagnosis of Alcoholoism (excluding all dual diagnosed patients), along with 30 males and 30 females who are adult children of alcoholics with no psychiatric or neurological history. They will be compared with volunteers who are with out any personal or family history of psychiatry, alcoholism, or neurology. The test battery will be a questionaire screener, MMPI, MCMI, and two self-esteem inventories.

Enclosed is a copy of my abstract and chapter 3; The Design of my proposal. Please feel free to contact me at 595-8462.

Thank-you for you time and consideration. My study is for the Michigan State University doctorial program in Counseling Psychology.

Sincerely,

Karen Biddy MA. LLP.

APPENDIX E

INFORMED CONSENT FORM

CONSENT FORM

The purpose of this study is to provide information about the psychology of Adult children of Alcoholics and the construct of codependency.

The central aim of this study is to examine certain aspects of adjustment exhibited in the form of personality characteristics among adult children of alcoholics (ACOA) and adult children of alcoholics with an alcoholic diagnosis (ACOAA) to determine the degree to which these particular personality characteristics differ from a peer group of adult children of nonalcoholics (ACONA). In addition the study will see if these characteristics exist in a pattern that is descriptive of the codependent construct.

Your participation will consist of answering questions to 5 inventories and one screening form. These inventories are subjective and consist of indicating true and false answers along with one 5 point continuum questionnaire. Your participation will require approximately 3-3.5 hours of your time to complete the inventories. Your participation is completely voluntary. You are also free to withdraw your participation at any time you wish. Choosing to participate or not participate will not affect your receiving services.

The results of this study will be treated in strict confidence and you will not be personally identified in any reports. Your counselor or group will not have access to your questionnaire responses. If you agree to participate in this study.

1. I agree to participate in the study conducted by Karen Biddy, under the supervision of John Powell, Ph.D. The study has been approved by the University Committee on Research Involving Human Subjects.

2. The nature of this study has been explained to me and I understand that my participation will involve answering 5 questionnaires and a screening form.

3. I understand that my participation is completely voluntary and that I may discontinue at any time I choose. No risks or discomforts are posed by my participating.

4. Participation or lack of participation will not affect my receiving services now or in the future. I understand that involvement in this study does not guarantee any special benefits to me.

5. I understand that the data resulting from this research will be kept confidential and I will never be personally identified in any report of this study. My counselor or group will not have access to my responses.

Print name: _____

Sign name: _____ Witness: _____

Date: _____

APPENDIX F

DESCRIPTIVE STATISTICS FOR GENDER AFFECTS

Table 48
Contingency Table:
Dependency Configurations on the MMPI for Group Membership and Gender

ACOAA Group Gender	Depending Present		Depending Not Present		Total	
	N	%	N	%	N	%
Male	20	66.7	10	33.3	30	50.0
Female	20	66.7	10	33.3	30	50.0
Total	40	66.7	20	33.3	60	100.0
Chi-Square..... .00						
Degrees of Freedom..... 1						

ACOA Group Gender	Depending Present		Depending Not Present		Total	
	N	%	N	%	N	%
Male	19	63.3	11	36.7	30	50.0
Female	17	56.3	13	43.3	30	50.0
Total	36	60	24	40	60	100.0
Chi-Square..... .28						
Degrees of Freedom..... 1						

Control Group Gender	Depending Present		Depending Not Present		Total	
	N	%	N	%	N	%
Male	1	3.3	29	96.7	30	50.0
Female	0	0.0	30	100.0	30	50.0
Total	1	1.7	59	98.3	60	100.0
Chi-Square..... 1.02						
Degrees of Freedom..... 1						

Table 49
Contingency Table
Passive Aggressive Configurations on the MMPI by Group Membership and Gender

ACOAA Group Gender	Passive-Aggressiveness Present		Passive-Aggressiveness Not Present		Total	
	N	%	N	%	N	%
Male	19	63.3	11	36.7	30	50.0
Female	22	73.3	8	26.7	30	50.0
Total	41	68.3	19	31.7	60	100.0
Chi-Square..... .69 Degrees of Freedom..... 1						

ACOA Group Gender	Passive-Aggressiveness Present		Passive-Aggressiveness Not Present		Total	
	N	%	N	%	N	%
Male	18	60.0	12	40.0	30	50.0
Female	19	63.3	11	36.7	30	50.0
Total	37	61.7	23	38.3	60	100.0
Chi-Square..... .07 Degrees of Freedom..... 1						

Control Group Gender	Passive-Aggressiveness Present		Passive-Aggressiveness Not Present		Total	
	N	%	N	%	N	%
Male	4	13.3	26	86.7	30	50.0
Female	1	3.3	29	69.7	30	50.0
Total	5	8.3	55	91.7	60	100.0
Chi-Square..... 1.96 Degrees of Freedom..... 1						

Table 50
Contingency Table
Obsessive Compulsive Configurations on the MMPI by Group Membership and Gender

ACOAA Group Gender	Obsessive-Compulsive Present		Obsessive-Compulsive Not Present		Total	
	N	%	N	%	N	%
Male	19	63.3	11	36.7	30	50.0
Female	16	53.3	14	46.7	30	50.0
Total	35	58.3	25	41.7	60	100.0
Chi-Square..... .62 Degrees of Freedom..... 1						

ACOA Group Gender	Obsessive-Compulsive Present		Obsessive-Compulsive Not Present		Total	
	N	%	N	%	N	%
Male	13	43.3	17	56.7	30	50.0
Female	15	50.0	15	50.0	30	50.0
Total	28	46.7	32	53.3	60	100.0
Chi-Square..... .27 Degrees of Freedom..... 1						

Control Group Gender	Obsessive-Compulsive Present		Obsessive-Compulsive Not Present		Total	
	N	%	N	%	N	%
Male	0	0	30	100.0	30	50.0
Female	0	0	30	100.0	30	50.0
Total	0	0	60	100.0	60	100.0
Chi-Square..... can't compute Degrees of Freedom..... can't compute						

Table 51
Contingency Table
Depression Configurations on the MMPI by Group Membership and Gender

ACOAA Group Gender	Depression Present		Depression Not Present		Total	
	N	%	N	%	N	%
Male	13	43.3	17	56.7	30	50.0
Female	22	73.3	8	26.7	30	50.0
Total	35	58.3	25	41.7	60	100.0
Chi-Square..... 5.55*						
Degrees of Freedom..... 1						

$p \leq .01$

ACOA Group Gender	Depression Present		Depression Not Present		Total	
	N	%	N	%	N	%
Male	17	56.7	13	43.3	30	50.0
Female	22	73.3	8	26.7	30	50.0
Total	39	65.0	21	35.0	60	100.0
Chi-Square..... 1.83						
Degrees of Freedom..... 1						

Control Group Gender	Depression Present		Depression Not Present		Total	
	N	%	N	%	N	%
Male	5	16.7	25	83.3	30	50.0
Female	2	6.7	28	93.3	30	50.0
Total	7	11.7	53	88.3	60	100.0
Chi-Square..... 1.48						
Degrees of Freedom..... 1						

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