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Coping resources utilized by Adult Children of Alcoholics

Querry, Mark Edwin, Ph.D.
The Ohio State University, 1992

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COPING RESOURCES UTILIZED BY
ADULT CHILDREN OF ALCOHOLICS

DISSERTATION
Presented in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy in the
Graduate School of The Ohio State University
by
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The Ohio State University
1992

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CHAPTER 1
Introduction

Background of the Problem

The field of alcoholism throughout history has primarily focused on the alcoholic him or herself as the person most affected by this disease. Research in intervention and treatment have remained directed toward the alcoholic as the sole entity of alcoholism.

The alcoholic has been studied in terms of neuropsychological (e.g., Parsons & Farr, 1981; Schuckit, 1984; Tarter & Van Theil, 1985), psychological (e.g., Eshbaugh, Tosi & Hoyt, 1978; Jones, 1968; Nerviano, 1976; Skinner, Jackson, & Hoffman, 1974), emotional (e.g., Bowen, Cipywnyk, D'Arly, & Keegan, 1984; Mullaney & Trippett, 1979; Shuckit, 1983), physical and behavioral (e.g., Jellinek, 1960, Taylor & Gammon, 1975; Zeichner & Pihl, 1980), biological (e.g., Cloninger, 1984; Goodwin, 1985; Li, 1977; Schuckit, 1987), social (e.g., Abrams & Wilson, 1979; Biddle, Bank, & Marlin, 1980; Collins & Marlatt, 1981), epidemiologic (e.g., deLint, 1978; Helzer, 1987; Mulford, 1982; Sclare, 1978) and etiological (e.g. Nathan & Hay, 1984; Vaillant & Milofsky, 1982) aspects. The alcoholic, as
a pathological individual entity, has received significant empirical attention. The offspring of alcoholics, however, has only recently been recognized as a population with problems relative to alcoholism.

It is estimated that, as of 10 years ago, between 28 and 34 million offspring of alcoholics exist in this country (Booz-Allen & Hamilton, 1974), and 6.6 million of these are children (Ackerman, 1986). Therefore, as a conservative estimate, there exist approximately 23 million adults in the United States who were raised in an alcoholic environment. A large number of these adult children of alcoholics (ACOAs) are seeking psychological help in the form of counseling and therapy.

The exploration of the effects on the offspring of the alcoholic historically has been minimal. The majority of the research pertaining to the offspring of the alcoholic has been of a biological nature, centering on the propensities of genetic transmission of alcoholism from an alcoholic parent to the children (Goodwin, Schulsinger, & Hermansen, 1973; Goodwin, Schulsinger, & Molter, 1974). However, the understanding of the alcoholic's effects on the psychological characteristics of the offspring has been investigated only sparingly.

One of the first known published studies of the children of alcoholics was conducted by Roe & Burks (1945). They tracked the children from alcoholic families who were
raised in foster homes to adulthood, to compare adult
adjustment of children from non-alcoholic families raised in
foster homes. Their longitudinal study found no differences
between ACoA's and controls (non-ACoA's), in terms of
drinking proclivity or psychopathology. However, the study
has been criticized for employing a poor design (Goodwin,
Schulsinger, and Hermansen, 1973), limiting its usefulness.

A significant instrumental development in the
understanding of children's problems came in the middle
1950s with the emergence of the family treatment movement.
Advocates of this approach to human behavior recognized that
problematic behavior in the child was often reflective of a
dysfunctional nuclear family.

Bateson, Jackson, Haley, and Weakland (1956) pioneered
related studies on family interaction and communication.
They postulated that schizophrenia in a family may be
directly associated with dysfunctional or ineffective
communication styles. Moreover, in his review of the
literature on ill parents, Rutter (1966) noted the
importance of crucial family member interaction. Research
in this area has allowed investigators to gain a better
understanding of how family dynamics could affect an
individual in a given family.

In approximately this same time period several studies
emerged examining the dynamics and behavioral correlates of
children growing up in environments where alcohol was
consumed by their parents or caretakers (Hawkins, 1950; Jackson, 1954; MacDonald, 1956). However, the studies on offspring of alcoholics mostly pertained to these children in their formative years (Aronsen & Gilbert, 1963; Cork, 1969; Haberman, 1966; Kearney & Taylor, 1969; Nylander, 1960). Consequently, very little research had been done on this population in their adulthood to assess the lasting effects the child of an alcoholic would possess.

Longitudinal studies of this population have been reported (Miller & Jang, 1977; Roe & Burks, 1945; Werner, 1986) over the years. These studies of duration tended to view children of alcoholics as one homogeneous population. Werner (1986), however, acknowledged that not all of the children of alcoholics in her study turned out the same in terms of psychosocial characteristics. Still, a syndrome denoting the psychological and emotional effects of growing up in an alcoholic environment had not been conceptualized when these longitudinal studies were initiated.

Only in the late 1970s and early 1980s did clinicians and researchers begin to view children of alcoholics (CoA’s) as a population with legitimate treatment needs (Black, 1979; Chafetz, 1979; Hecht, 1973; Hindman, 1976; Wegscheider, 1980; Wilson & Orford, 1978; Woititz, 1983). This movement primarily evolved as a result of the family systems theory movement in the late 1950s. It was in the family treatment modality that all family members were
recognized as being affected in a dysfunctional alcoholic family.

Two other historical developments aided in the conceptualization of the children of alcoholic (CoA) psychosocial syndrome. They were (1) the creation of the child protection laws, and (2) the emergence of self-help support groups. First, by the late 1960s, each state in this country had passed laws mandating the requirement of reporting all suspected child abuse cases. This development generated the public’s concern for the well-being of children. In the 1970s a national center for the study of child abuse and neglect was established, indicating a growing interest in child welfare.

Secondly, self-help support groups dealing with the effects of alcohol use began in 1935 with the creation of Alcoholics Anonymous (AA). These anonymous groups fostered a 12-step recovery program to help the alcoholic live a lifestyle of sobriety. However, Alcoholics Anonymous groups only dealt with the alcoholic and neglected the alcoholic’s family members' needs for support and guidance in living in an alcoholic environment.

In 1951 the Al-Anon support groups were founded. These groups were a direct descendant of the AA groups, only they were designed to help the spouses of alcoholics cope in daily living with the drinker. This support group movement coincided with the development of the family systems.
treatment movement. Al-Anon successfully grew into a viable supportive resource for spouses of alcoholics. From that point the Alateen and Alatot support groups were developed to help the children who lived with an alcoholic parent emotionally survive. The Al-A-Teen and Al-A-Tot support groups are also based on a 12-step model of recovery.

In the early 1980s clinicians and other professionals began to report their observations that adults who were raised in alcoholic environments carried complaints of suffering, negativism, and poor coping resources from childhood into adulthood. (Black (1981) describes the following:

It is about this time, when a young person reaches the mid-twenties that the effects of growing up in an alcoholic home begin to become apparent. These now adult children of alcoholics begin to experience a loneliness which doesn't make sense to them. They become aware of feelings which separate them from others, and find themselves depressed. As this depression occurs more frequently and lasts longer, the source of depression seems unidentifiable. Feelings of being fearful and anxious occur more frequently; again, the source is not identifiable. They have problems related to intimacy. They find themselves having difficulty maintaining a close relationship, or find that something seems to be missing in their
relationships. A lack of meaningfulness begins to permeate every aspect of their lives (pp. 32-33).

This specific population of adults are referred to in the literature as "Adult Children of Alcoholics" (ACoA's), and are often categorized into a stereotypic personality pattern encompassing distinct traits describing most, if not all, ACoA's. ACoA's are often defined operationally as "the individual raised in an alcoholic family" or even more sophisticatedly, by scoring a minimal numeric criterion on the Children of Alcoholic Screening Test [(CAST) (Pilat & Jones, 1981)].

Over the past 10 years, a limited number of support groups for adult children of alcoholics (ACoA's) began emerging throughout the United States. These groups exist to aid the ACoA in coping with aspects of daily living. In early 1982 there were 14 registered adult children of alcoholic groups in the United States under the Al-Anon support model. By the end of 1983 the number of these groups had grown to 194 (Cermak, 1984). Currently, a strong social movement in the attempt to foster support for adult children of alcoholics exists.

In 1983 the National Association for Children of Alcoholics (NACoA) was founded. This association primarily serves to network and share information relative to ACoA's. There are also several state associations for ACoA's. Many professionals who are members of these associations author
various self-help books pertaining to ACoA's, as well as publish research articles in respected scientific journals in the counseling and psychological community.

**Statement of the Problem**

The ACoA syndrome is associated with information found in the self-help literature. The literature appears to be mostly founded on clinical observations and perceptions of CoA and ACoA clients in the treatment setting. Several clinicians and theoreticians have proposed ideas and views of the psychological manifestations comprising the ACoA personality (Ackerman, 1986; Black, 1981; Wegscheider-Cruse, 1985; Woititz, 1983). However, the bulk of the information about alcoholic offspring lacks controlled research.

For example, Wegscheider-Cruse (1983) acknowledges that the material in her book is based on her work with hundreds of chemically dependent individuals and their families. In another self-help book Woititz (1983) discusses at length what she calls "generalizations," these being 13 common characteristics of adult children of alcoholics. These characteristics state that ACoA's (1) guess at what normal behavior is, (2) have difficulty following a project through from beginning to end, (3) lie when it would be just as easy to tell the truth, (4) judge themselves without mercy, (5) have difficulty having fun, (6) take themselves very seriously, (7) have difficulty with intimate relationships,
(8) overreact to changes over which they have no control, (9) constantly seek approval and affirmation, (10) usually feel that they are different from other people, (11) have a sense of being overly responsible or are very irresponsible, (12) are extremely loyal, even in the face of evidence that the loyalty is undeserved, and (13) are impulsive (Woititz, 1983, p. 4). These 13 generalizations are stated to have been derived from her ongoing weekly group work with ACoA’s. Black (1981) authored a self-help book where she describes ACoA dynamics and roles played out in the alcoholic family. The material in her book reportedly also comes from clinical interviews and experiences.

Ackerman (1987), Black (1981), and Wegscheider (1976) have described certain roles in which CoA’s engage in as an emotional survival mechanism to cope with the daily stress, chaos, and tension inherent in the alcoholic family. In other words, functionally, these roles are formulated unconsciously in reaction to the drinker’s behavior. They are stated to evolve in early childhood and maintain themselves to some degree throughout a lifetime. Black (1981) posits that family members change roles as the family system changes and that the child in the family can fit into more than one of the roles.

Paradoxically, although these behavioral roles function as a way to cope, they are also dysfunctional (Ackerman, 1987; Black, 1981; Wegscheider, 1976). These pseudo-
adaptive roles are self-defeating in nature and are tied to ineffective daily functioning.

Ackerman (1987) describes three common roles which CoA's engage in. He refers to the Hypermaturity, the Detacher and the Invulnerable roles. The Hypermature CoA maintains an overly-serious attitude throughout life. He or she is frequently mentally on guard, i.e. hypervigilant. Emotions are typically strictly controlled; there is little effort made to relax or to have fun. This role is stated to be much more emotionally developed than its physical counterpart of actual behavior. Ackerman (1987) acknowledges that the Hypermature CoA is emotionally drained and often feel "burned out" (p. 98).

The Detacher role places significant emotional and psychological distance between s/he and others. The agenda of this role is to minimize a sense of feeling somehow vulnerable of others. This may be a reflection of being raised in an aversive environment. Emotional numbness and denial of feelings is common. The Detacher has difficulty knowing when it is, and is not, healthy to detach from others and situations.

The Invulnerable role, according to Ackerman (1987), is characterized by healthy adaptive behavior. This type of CoA experiences stress in a dysfunctional environment as with other CoA's; however, s/he has learned how to reduce stress effectively. Unlike other types of CoA's, the CoA in
this role admits vulnerabilities and acts on them. This role is very similar to Niven's (1984) identified group of "Invulnerables" in dysfunctional families.

Black (1981) describes four possible CoA roles which can develop as a result of being raised in an alcoholic family. They are the Responsible One, the Adjuster, the Placater, and the Acting Out Child. The Responsible One adopts the role of taking care of the family, engaging in leadership behaviors, and functioning as a young adult. This behavior is pursued when the parents fail to carry out the responsibilities of providing stability in the family. The outcome of acting in this role is anxiety, tension throughout the life span, and difficulty having fun or relaxing. Depression, loneliness, and isolation are common characteristics of this role that perpetuate throughout adulthood (Black, 1981).

The persons in the Adjuster role experience a sense of not having significant control over their lives. Hence, their survival strategy within the family is to be avoidant and to physically and emotionally withdraw from familial situations as much as possible. A great degree of emotional turmoil and instability is often experienced in the alcoholic family so it is much easier to avoid the family completely. The unfortunate outcome of this role, according to Black (1981), is that the Adjuster role leads to difficulty developing trust on an ongoing basis, since s/he
did not have the stable opportunity to do so as a child through interacting with others; he or she remained uninvolved. This role is similar to Ackerman’s (1987) identified role of the Detacher. Relationships for this person are difficult to hold onto because healthy relationships were never learned to be developed and maintained.

The Placater grew up in a household where everyone else’s emotional needs were taken care of before his or her own. This role centers on making others feel comfortable. The Placator carries this dynamic into adulthood to the point where taking care of oneself is secondary to meeting others’ needs first. Throughout life the Placator may never seriously consider what he or she wants; the other person is most often the focus. Consequently, the Placator usually does not get what he or she wants from life (Black, 1981).

The Acting Out Child usually experiences much anger in childhood. He or she frequently gets into trouble and causes problems. The child focuses on the anger while tending to ignore other significant feelings. Often, the Acting Out Child will associate with similar peers and will not respond significantly to positive role models. Alcohol and other chemical abuse are common within this role. As an adult, significant problems reflecting antisocial types of behavior occur, such as difficulty controlling anger.
impulses, troubled relationships, limited education, and alcoholism (Black, 1981).

Wegscheider (1983) has also proposed CoA roles, some which are similar to Black's (1981). She describes the Hero, Scapegoat, Lost Child, and Mascot. The Hero is similar to Black's (1981) Responsible One role. The Hero senses and attempts to alleviate the family's pain and emotional sickness by creating self-worth to the family system through excellent behavior or superior accomplishments. This may be found, for example, in the form of honor role performance in school, doing the majority of the chores at home, and behaviors which give the family a sense of pride. The Hero experiences inner feelings of hurt, inadequacy, loneliness, and anger.

The Scapegoat functions to provide distraction from the family pathology (which is usually the alcoholic parent) by becoming the member who is in the family public eye as the "black sheep." This role gets much negative attention because, unlike the Hero, he or she does not have a need to prove self-worth to the family. The Scapegoat harbors much repressed anger that manifests itself in negative behaviors such as truancy, running away, pregnancy, oppositional behaviors, and alcoholism. Internally, the Scapegoat feels rejection, hurt, fear, and anger (Wegscheider, 1976).

The Lost Child is similar to the Adjuster role (Black, 1981). The Lost Child does not emotionally connect with the
family. Much time is spent being alone or in isolation; the Lost Child feels safest this way. In this role, neither significant positive nor negative attention is received. The child in this role blends in with others and rarely stands out socially. Internally, this person experiences hurt, loneliness, inadequacy, and anger (Wegscheider, 1976).

The Mascot role is to provide fun and humor in the family. The person in this role learned that humor in the family can relieve some of the pain and tension. Very few people take the person in this role seriously. The Mascot experiences fear, insecurity, confusion, and loneliness inside (Wegscheider, 1976).

Unlike Black (1981) who emphasizes that the CoA may use the survival roles interchangeably as needed in various situations, Wegscheider (1976) implies that these roles are somewhat more stable.

These examples of clinical work illustrate by and large that ACoA’s who are identified as such are perpetually playing out behavioral roles. Black (1979) states that children raised in alcoholic environments resort to these various roles to adjust to, or cope with, their disruptive homelife. These roles tend to be ineffective coping responses to a dysfunctional childhood, which was often perceived as out of control and chaotic. As Brown (1988) states:
Our clinical experience and the literature on roles tell us that many children develop adaptive coping mechanisms and defenses that serve them well as children. In this sense, they are certainly positive. However, these same "positives" become maladaptive and restrictive for the adult. The high achiever is fueled by compulsion—the individual cannot change or broaden focus—the model child feels controlled and driven by the need to please. These "positive" outcomes are all the adult has to draw upon. This individual frequently has no sense of stable, autonomous identity, no initiative stemming internally from a cohesive sense of self, and little social or interpersonal knowledge of, or capacity for, intimate relationships (p. 30).

Brown and Cermak (1980) and Gravitz and Bowden (1986) similarly state that ACoA's cope by trying to maintain control over the environment, over others and over themselves. However, to date there has been no empirical studies validating this syndrome.

Need for the Study

The clinical picture of ACoA's as a unique population with concrete and realistic treatment needs, exists mainly in the absence of empirical research data to substantiate its legitimacy. There is a need to empirically validate coping resources of ACoA's as a prophylaxis to stress, in
light of the fact that the roles identified above are generally maladaptive.

The ACoA empirical literature, albeit scarce, has drawn attention to the problem issues in this population. Overall, the specific literature on the assessment of coping within this population is weak. Many clinicians today could profit from specific knowledge relative to coping behaviors within this population since they are specializing in the treatment of ACoA’s. Also, treatment and support groups are increasing as more ACoA’s are recognizing their unmet developmental needs and current issues. Therefore, there is a great need to further examine the ACoA population empirically.

Knowledge in this area is needed in order to (1) foster a greater understanding of this syndrome, in terms of the type and extent of resource domains used in coping, (2) provide specific assessment information of diagnostic utility which addresses the needs and issues of ACoA’s, (3) guide future research within this population in more meaningful and applicable directions, (4) provide empirical data to create a standardized measure of coping within this population as measured by the Coping Resources Inventory (CRI; Hammer, 1988), and (5) provide knowledge relative to this syndrome for prevention programming.
Purpose of the Study

In this study, it is hypothesized that ACoA's have greater difficulty coping in adulthood than their non-ACoA cohorts. ACoA's strive to maintain control, such as coping, within themselves and their environment to achieve a sense of security. The aim of this study is to ascertain the coping resources of ACoA's with reference to Locus of Control type as a moderator variable, as measured respectively by the Coping Resources Inventory [(CRI) (Hammer, 1988) and the Locus of Control (LOC) (Rotter, 1966)] scale. Kuypers (1972) found that subjects who scored significantly higher on internal LOC measures were also higher than external LOC subjects on Haan's (1965) measures of coping mechanisms.

Research Questions

This study examines the following research questions:

(a) Do female ACoA's significantly use primarily one or more types of coping domains?

(b) Is there a significant relationship between specific demographic variables and specific domains used in coping?

(c) Is there a significant relationship between locus of control and specific domains used in coping?
(d) Is the female ACoA population statistically different from female non-ACoA population in terms of specific coping domains used?

(e) Do female ACoA's and female non-ACoA's significantly differ in locus of control?

Hypothesis

All hypotheses are stated in the null form.

Hypothesis #1: There is no statistically significant relationship between coping domains used among female ACoA's as measured by the CRI.

Hypotheses two through seven refer to the relationship between the demographic variables of the sample and each coping domain, including the Total domain score.

Hypothesis #2: There is no statistically significant relationship between demographic variables and the Cognitive coping domain of the CRI.

Hypothesis #3: There is no statistically significant relationship between demographic variables and the Social coping domain of the CRI.

Hypothesis #4: There is no statistically significant relationship between demographic variables and the Emotional coping domain of the CRI.

Hypothesis #5: There is no statistically significant relationship between demographic variables and the Spiritual/Philosophical coping domain of the CRI.
Hypothesis #6: There is no statistically significant relationship between demographic variables and the Physical coping domain of the CRI.

Hypothesis #7: There is no statistically significant relationship between demographic variables and the Total coping domain of the CRI.

Hypothesis 8 through 13 address the relationship between locus of control and coping domains used.

Hypothesis #8: There is no statistically significant relationship between locus of control and the Cognitive coping domain among female ACoA’s.

Hypothesis #9: There is no statistically significant relationship between locus of control and the Social coping domain among female ACoA’s.

Hypothesis #10: There is no statistically significant relationship between locus of control and the Emotional coping domain among female ACoA’s.

Hypothesis #11: There is no statistically significant relationship between locus of control and the Spiritual/Philosophical coping domain among female ACoA’s.

Hypothesis #12: There is no statistically significant relationship between locus of control and the Physical coping domain among female ACoA’s.

Hypothesis #13: There is no statistically significant relationship between locus of control and the Total coping score among female ACoA’s.
Hypothesis #14: There is no statistically significant difference between female ACoA's and female non-ACoA's on locus of control orientation.

Hypothesis #15: There is no statistically significant difference between female ACoA's and female non-ACoA's on the Cognitive scale of the Coping Resources inventory.

Hypothesis #16: There is no statistically significant difference between female ACoA's and female non-ACoA's on the Social scale of the Coping Resources Inventory.

Hypothesis #17: There is no statistically significant difference between female ACoA's and female non-ACoA's on the Emotional scale of the Coping Resources Inventory.

Hypothesis #18: There is no statistically significant difference between female ACoA's and female non-ACoA's on the Physical scale of the Coping Resources Inventory.

Hypothesis #19: There is no statistically significant difference between female ACoA's and female non-ACoA's on the Spiritual scale of the Coping Resources Inventory.

Hypothesis #20: There is no statistically significant difference between female ACoA's and female non-ACoA's on the Total Scales score of the Coping Resources Inventory.

Definition of Variables in the Study

Independent Variables

The following are the independent variables:
(a) The existence of problematic alcohol use within the subject's nuclear family by a parent or caretaker during childhood is definitive of an ACoA. Operationalization of this independent variable is reflected by the utilization of (1) the Children of Alcoholics Screening Test (Pilat & Jones, 1984), an objective instrument which assesses for alcoholic parents and (2) family history as reported by the subjects.

(b) Eleven demographic variables were examined in this study. They were the following: (1) illicit substance use other than marijuana and alcohol (stimulants, narcotics, depressants and hallucinogens), (2) the group to which a subject belonged (ACoA v.s. Non-ACoA), (3) number of siblings, (4) age of subject, (5) degree of stress the subject currently felt to be under, (6) highest level of education completed, (7) marital status, (8) locus of control, (9) use of marijuana, (10) occupation, and (11) number of times married.

Dependent Variables

The dependent variables are ACoA coping resource domains as measured by the Coping Resources Inventory (Hammer, 1988). The specific measures of coping are assessed on the following domains: Cognitive, Social,
Emotional, Spiritual/Philosophical, and Physical. A Total Scaled score of these domains has also been determined.

Moderating Variables

The moderating variable in this study is locus of control of the subjects as measured by Rotter's (1966) Internal-External Locus of Control Scale.

Definition of Terms

Several terms in this study need to be defined for purposes of research clarity and consistency. The definition of terms are elucidated below.

Adult: For purposes of this study adults are females between the ages of 18 and 55. No males are used in this study.

Adult Children of Alcoholics (ACoA’s): ACoA’s in this study consist of females between the chronological ages of 18 and 55 who were raised by an alcoholic parent(s) or caretaker(s), as reported by the subjects themselves.

Alcoholism: There is no one universal definition of alcoholism. For purposes of this study the term "Alcoholism" refers to the phenomenon of engaging in significant and problematic use of alcohol. The screening instrument used in this study does not discriminate between the various definitions of alcoholism. The instrument refers only to parents' use of alcohol per se and thus serves to rule out problematic alcohol use. Therefore, by
implication, the definition of alcoholism in this study is that of the operative function of the Children of Alcoholics Screening Test (CAST) (Pilat & Jones, 1984). The subjects in this study provided data in identifying their parents or caretakers as alcoholics via the CAST.

**Alcoholic:** The subjects identified as adult children of alcoholics are implied to have had a parent(s) or caretaker(s) who engaged in significant and problematic use of alcohol. These parents will be considered to be alcoholic for purposes of this study.

**Children of Alcoholics (CoA’s):** Children of any age under 18 years who have been raised by alcoholic parents or alcoholic caretakers. The specific length of time the subjects in this study were raised under these conditions can vary. This study relies on the self-report of the participating subjects herein to document the parental/caretaker influences of living in an alcoholic environment.

**Coping:** Coping is defined as "those resources inherent in individuals that enable them to handle stressors more effectively, to experience fewer or less intense symptoms upon exposure to a stressor, or to recover faster from exposure (Hammer, 1988, p. 2)." Some of the literature refers to (1) "problem-focussed" coping and (2) "emotional-focussed" coping. Problem-focussed coping refers to actions taken to handle situations; emotional-focussed coping refers
to working with one's emotions only when it is perceived that any action taken will be fruitless or ineffective. These two aspects of coping are not utilized in this study, since coping per se' will not be examined.

**Coping Domains:** What will be explored are the various coping domains, not coping mechanisms. For purposes of this study coping (domains) is measured by the Coping Resources Inventory (Hammer, 1988). A coping domain is the focus of a medium an individual uses in developing coping strategies or techniques. Coping domains used in this study are Cognitive, Social, Emotional, Spiritual/Philosophical, and Physical.

**Locus of Control:** This concept is used from the work of Rotter (1954, 1966). The locus of control construct reflects the generalized expectancy related to an individual's belief as to whether life events are determined by (1) personal attributes and/or behavior, or (2) luck, chance, fate, or power beyond the individual's control. Individuals who believe his/her own behavior is a result of the relative consequences of such behavior are considered to be "internals." Conversely, individuals who believe consequences they experience are not casual results of his/her behavior are considered to be "externals." For purposes of this study, locus of control is a dichotomous measure of either internal or external orientation, not one of degree.
Non-ProBLEMATIC DRINKING: For purposes of this study, this term can entail either complete alcohol abstinence or mild to moderate alcohol use where there are no documented problems in the person's life as a result of the drinking, either directly or indirectly. Neither alcohol abuse nor alcohol dependence is characteristic of the non-problematic drinker.

Roles: For purposes of this study, alcoholic roles are personality patterns engaged in by family members in an alcoholic family. These behaviors are viewed by most clinicians as emotional and psychosocial survival mechanisms to cope with family problems. The names of roles identified by various clinicians are the following: Responsible One, Scapegoat, Lost Child, Mascot (or Clown) (Black, 1981), Placator, Adjuster, Dependent, Hero (Wegscheider, 1976), Detacher, Hypermaturity, and Invulnerable (Ackerman, 1987).

Summary

Theory and research has cultivated the knowledge of family dynamics in examining the psychosocial effects on the offspring of parents. The concept of the adult children of alcoholics (ACoA) syndrome has emerged only in the past few years. It has developed as an indirect result of the family systems movement of the 1950s. The Alcoholics Anonymous (AA) movement, as well as the national Al-Anon support groups, and the child protection laws were instrumental in
drawing public attention to the welfare of children living in alcoholic environments.

The Adult Children of Alcoholics syndrome has taken on a solid identity in the past six years or so. However, the literature tends to reflect this population as engaging in roles as a coping mechanism to provide a sense of control in life which is by and large ineffective. ACoA's strive to control their environment, themselves, and others. Control is a core issue within this syndrome. It is hypothesized in this study that adult children of alcoholics can be differentiated from non-ACoA's by types of, and/or combinations of, coping resources they use.

Chapter I has elucidated the background on the problem examined in this study in addition to the statement of the problem, need for the study, purpose of the study, research questions and hypotheses, definition of terms, and the summary. Chapter II contains a review of the relevant literature on offsprings of alcoholics. The focus is on adult children of alcoholics in childhood as well as adulthood. Chapter III describes the methodology of this study, including the empirical design, research instrumentation, subject sample, statistical analysis, and procedure. Limitations of this study are also discussed. Chapter IV presents the results of this study via data analysis. Chapter V summarizes the research findings of this study, draws conclusions, cites limitations of this
study, and discusses implications and recommendations for additional related research in this area of inquiry.
CHAPTER II

Review of the Literature

This chapter contains a review of the relevant literature pertaining to children of alcoholics. There are four sections to this chapter. The first section examines the effects of an alcoholic parent on the remainder of the nuclear family. In this section, dynamics of the alcoholic family as a syndrome are described. The second section includes literature on children of alcoholics. This section includes emotional, psychological, social, and behavioral aspects pertaining to children of alcoholics. The third section discusses the literature on adult children of alcoholics, in terms of emotional, psychological, social, and behavioral effects. Aspects of locus of control, coping, and use of alcohol within the ACoA population are discussed. Finally, the fourth section is a chapter summary.

Alcoholic Effects on the Family

Alcoholism is a familial disorder (Cotton, 1979). It is the central organizing principle which determines the interrelationships of the alcoholic family (Brown, 1985;
Steinglass, 1980). Everyone in the immediate family is affected in some way by the alcoholic or problem drinker. The family members become more and more preoccupied with thoughts and behaviors in reaction to the drinker as the alcoholism progresses (Black, 1981). The family focus of behavior is on the drinking and associated actions of the alcoholic while the cognitive focus becomes centered on the process of denial and/or rationalization of the drinking behavior (Brown, 1985).

The alcoholic as well as the other family members may be defensive and tolerable of the drinking behaviors. As the alcoholism progresses within the family, social relationships and activities not associated with alcohol are given up. This kind of isolation has been referred to as "social disengagement" by Ackerman (1986). He identifies both a physical disengagement and an emotional disengagement the alcoholic family experiences.

Physical disengagement commonly is manifested by the family declining social invitations and not initiating events outside of the family. The children very often cease to invite their peers over to visit. The family members who do not drink work consistently at preventing social embarrassments and confrontations (Ackerman, 1986). As the alcoholism develops and physical disengagement proceeds, positive emotional relationships become scarce. The family withdraws increasingly to the point where tension, anxiety,
despair, a sense of helplessness (Ackerman, 1986), fear, embarrassment, guilt, anger, and loneliness (Black, 1981) dominate the family climate. In reaction to this the family members deny, repress, or avoid their feelings in which Ackerman (1986) calls emotional disengagement. Positive and negative feelings alike are avoided. Many family members isolate themselves and do not pursue building relationships, outside or even inside the family.

The alcoholic family has become a point of interest in the empirical literature over the past few years. Steinglass (1981) examined alcoholic families in terms of member interaction. He considers the homeostasis of family behavior to be a crucial aspect in conceptualizing the effects of parental drinking on the other immediate family members (Steinglass, 1980). Specifically, Steinglass (1980) considers alcoholism to disrupt the naturally occurring family life cycle of healthy emotional development.

Ablon (1976) concluded from reviewing the literature on alcoholism in the family that empirical evidence points to families as being a social system with many interdependent parts. These parts consist of personalities and expected role behaviors; if one part is interrupted then other parts will react via a domino effect and the entire family system will be in disarray. This suggests that alcoholism, even in only one member, will affect the entire family in terms of behavioral stability.
Ironically, researchers (Steinglass, 1981; Steinglass, Davis, & Berenson, 1977) have concluded that spouses' behavior during the drinking can be viewed as adaptive in the family in that it provides consistency and predictability; however, the relationships remain unhealthy. As the drinking within the family progresses with greater intensity, frequency, and duration, the non-drinking spouse increasingly takes over the alcoholic's role obligations. As a result, the readjustment of role behavior to the alcoholic when s/he becomes abstinent can create problems associated with stress and confusion (Bailey, 1967; Estes & Hanson, 1976; Orford, 1975). Steinglass (1981) cites an example of drinking that re-establishes equilibrium in the family by (1) increasing interactional distance, e.g., "the drinker goes off to drink in the basement" (p. 300), or (2) developing closer interactional distance, e.g., "the nonalcoholic makes contact by fighting after the alcoholic spouse has been drinking" (p. 300). These adaptive consequences can actually reinforce the drinking to continue in abusive proportions (Dunn, et al., 1987).

Steinglass (1981a) observed 31 alcoholic families in their homes on nine different occasions during a six-month period to assess the familial interactional behavior. Specifically, the domains of verbal and physical distance were examined within the families. Of the 31 alcoholics, 23 were male and eight were women. All had intact families and
drinking histories of at least five years. The families were observed during three phases of the alcoholic process: (1) a wet or active drinking phase, (2) a dry or an abstinent phase, or (3) a transitional phase, which was defined as the period of time between wet and dry phases where the alcoholic alternates between abstinence and drinking. Steinglass defined these phases from a broad time perspective, which could have lasted for months at a time. He did not use control families nor were any of the families observed throughout all three phases in a longitudinal fashion.

The results of the Steinglass study suggested the following. Alcoholic families do tend to manifest at least three dynamic phases. The dry phase reflected greater decision making, display of effect, and disagreement within the family, suggesting the members were more involved with each other than the other two phases. The wet phase indicated greater physical distance between the family members, and interacting only when someone needed something for a purpose. In terms of verbal behavior, there was significant variability within this group, implying that when some of the members in the actively drinking phase of the alcoholic family did talk, the verbal content was appropriate and contained an emotional flavor to it. However, the frequency of verbal interaction was significantly less than the dry-phase families.
The transitional phase families had the greatest variability of behavior within the three groups, and overall, the relationships in these families were chaotic. Reportedly, the dry families had a more flexible behavioral pattern overall, whereas the wet and transitional families were typically more rigid. This study suggests alcoholic families experience the greatest behavioral and emotional disengagements when the alcoholic is in the drinking phase, even though active drinking does not necessarily occur perpetually in this phase.

Wolin, et. al (1980) have investigated the relationship of family rituals to the intergenerational transmission of alcoholism. They hypothesized that a disruption of rituals such as vacations, visitors to the family, weekend time, and holidays) via alcoholism within the family is instrumental in the intergenerational transmission alcoholism. They interviewed 25 middle- and upper-middle-class Caucasian families of which at least one parent was classified as either an alcoholic or problem drinker. The families consisted of one to six children with the mean age of 23.1 years of age. The father was identified as the alcoholic in 18 of the families; the mother was the alcoholic in five families; and both parents were alcoholic in two of the families.

In the Wolin, et. al. (1980) study, 12 families did not transmit alcoholism to the next generation, six families did
in fact transmit alcoholism, and the remaining seven families transmitted "heavy drinkers (but not alcoholics)" to the next generation. The results supported the hypothesis that heavy drinking associated with family ritual changes is likely to generate alcoholism in the next generation of the respective family. The authors describe rituals as "patterned behavior" that gives the family meaning or purpose with its continuation.

The implications of the study are that rituals provide prediction and structure for the family, and that a disruption of them perpetuates a sense of chaos within the family. Thus, intergenerational alcoholism is a coping method to deal with the disruption of behavior patterns. Caution should be used when generalizing this study as no control families were reported, only a middle-class status was employed, and the children were relatively young.

Wilson and Orford (1978) state that the family climate is essential in the children understanding the parental alcoholism and that chaos is common in this environment (Brown, 1988). Beletsis and Brown (1981) and Brown (1986) point out that chaos in the alcoholic family may be covert or overt, depending on how these families adapt and cope with the alcoholism. Brown (1988) maintains that alcoholic families which appear non-problematic in terms of the drinking "reflects the overriding dominance the alcoholic exercises over the family and the ever-present sense of
impending doom: things are or soon will be out of control" (p. 49).

Chafetz, Blane, and Hill (1971) examined clinical and demographic data on 100 children of alcoholics and 100 psychiatrically disturbed children of non-alcoholics. Their study yielded significantly higher rates of instability such as marital problems, separation, and lower family income in the alcoholic families. It was not indicated in the study if alcoholism was associated or causally related to the instability.

McLachlan, Walderman, and Thomas (1973) interviewed 54 children of treated alcoholics and 54 "normal" controls. The groups were equivalent on age, sex, education, and father's occupation. The subjects were also assessed with the Wolfgang Social Distance Measure, the McLachlan Social Competence Scale, and the Minnesota Multiphasic Personality Inventory (MMPI). The two groups yielded differences in family relationships. The children of alcoholics (CoA's) rated their families as having lower family harmony compared to the controls, and also a higher degree of disturbance in the relationship with the alcoholic parent. The alcoholic parent was described to be recovered by the subjects in 54% of the experimental group; this subset reflected family relationships that were rated as significantly improved. This research study has limitations that prohibit generalization since most of the marriages in the families
were intact and there was also a high attrition rate (Jacob, et. al., 1978). Results should be interpreted with caution.

Dunn, et. al. (1987) conducted a three-month longitudinal study on marital stability in alcoholic families. They examined both (1) type of drinking and (2) place of drinking as the independent variables. Type of drinking was dichotomized as either "binge" drinking or "steady" drinking, where the steady drinker was defined as one who continuously drinks more or less on a daily basis; binge drinkers were assumed to drink less than continuously. Place of drinking was, again, dichotomized as either (1) "in-home" or (2) "out-of-home." Thus, there were four types of experimental groups within the study: (1) in-home steady drinkers, (2) in-home binge drinkers, (3) out-of-home steady drinkers, and (4) out-of-home binge drinkers. The sample size was eight couples; in four of the couples the drinker drank in-home and the other four couples contained a spouse who drank out-of-home. The number of children living at home ranged between one and three. All the alcoholics in the Dunn, et. al. (1987) study were male who were skilled laborers or salesmen. At least one spouse in the marriages worked full time and all the wives but one were employed part time or full time. Length of marriage ranged from 15 to 27 years.

A daily assessment was taken to monitor the spouse's drinking, psychiatric symptoms, and marital satisfaction.
throughout the three month period. This information was provided via self-report which was mailed back to the researchers.

The results in the Dunn, et al. study yielded distinct differences across the groups. In the in-home, steady drinking condition, the wives' symptomatology decreased two days after drinking resumed and reported marital satisfaction increased, thus supporting Steinglass' (1981) provocative hypothesis that alcoholism serves an adaptive purpose within the family. Dunn, et al. suggests that the steady, in-home drinker provides a sense of stability and predictiveness in the family, thus reducing chaos and stress. This group was the highest functioning of the four in the study. For the other three groups, the wives' marital satisfaction decreased immediately five days after drinking resumed.

The binge drinkers and the steady drinkers exhibited distinct differences. The binge drinker engaged in more sociopathic behavior and had more relationship problems overall (inside and outside the marriage) than did the steady drinkers. This scenario is deemed to create and maintain a destabilizing influence upon the family. Overall, the type of drinking and the place of drinking appear to be associated with differences in the alcoholic family environment. The Dunn, et al. study adds depth to understanding the influence of drinking on the family.
environment, however, some limitations of generalization do appear to exist in that the sample size was small (n=8), and the information was collected via self-report from the subjects, reflecting questionable reliability.

The families of recovering alcoholics can regain healthy and adaptive functioning. Moos & Moos (1984) studied recovering alcoholic families two and one-half years after alcoholic residential treatment was completed by the patients. In both the experimental and control groups, the spouses were considered to be in a stable marriage. The patients and their families were compared to sociodemographically matched families of community controls. The authors measured (1) role-functioning, (2) the family environment, and (3) the congruence between the spouse's opinions regarding the family functioning and family environment.

The results indicated that the family environments of recovering alcoholics were healthy and adaptive overall. These families maintained significant cohesion, expressiveness, and organization. Their level of conflict was no higher than the controls, although this may have been because recovering families often take extra measures to avoid conflict so as not to risk family disruption and the possibility of alcoholic relapse (Moos & Moos, 1984). The recovering families were also noted to decrease their social and recreational involvement, possibly to stay away from
places where alcohol may be served or used, to minimize the changes for a relapse. Others have documented this post-recovery avoidance pattern (Bacon, 1973; Moos, et al., 1979; Moos, et al., 1982).

The families of relapsed alcoholics demonstrated poorer daily functioning than either the recovered families or the controls. They had less cohesion, expressiveness, involvement in recreational activities, and less family member agreement about the environment in their homes than the community controls. The alcoholics engaged in fewer household tasks than did the non-drinking spouses. Heaver drinking intensified the conflict in the families of this group.

Moos and Moos (1984) state that the decline of healthy family functioning in the alcoholic family rests on a cumulative effect on both marital partners. Greater impaired family functioning (i.e., less agreement about joint task performance, less cohesion, and more family arguments) was associated with higher anxiety, depression, and physical symptoms noted in the nonalcoholic spouses. If both spouses exhibited affective and physical complaints, as well as other stress, the family would experience greater dysfunction, as has been shown elsewhere (Finney, et al., 1980; Moos, et al., 1982). Family functioning was indeed predictive of how the families responded to stress. If the alcoholics and their spouses used avoidance coping, more
family arguments would prevail. Overall, significant stress was found within alcoholic families, however, decreased drinking does appear to alleviate the stress to some degree (Edwards, Harvey, & Whitehead, 1973; Jacob, Favorini, Meisel, & Anderson, 1978). The sex of the alcoholic spouse did not make any difference in the degree of family dysfunctioning in the Moos and Moos (1984) study. Sex also did not make any difference in the perceptions of the family environment, including the children's viewpoint of the condition of their respective family.

Children of Alcoholics

There is equivocal empirical evidence pointing to the deleterious effects of having one or more alcoholic parent. The majority of the literature, however, suggests negative outcomes are associated with having an alcoholic parent and/or growing up in an alcoholic environment in terms of developmental, cognitive, affective, and behavioral aspects.

There is considerable evidence that chronic prenatal alcohol use is linked with developmental abnormalities (Jones & Smith, 1973; Jones, Smith, & Ulleland, 1973; Streissguth & LaDue, 1985; Ulleland, Wennberg, & Igo, 1970). A specific syndrome has been termed the "Fetal Alcohol Syndrome" [FAS] (Clarren & Smith, 1978) in explaining the effects of prenatal alcohol use. Children of alcoholic pregnant mothers have shown to exhibit significant
anomalies. The primary teratogenic effects of prenatal alcohol use yields physical growth and mental deficiencies, although the documentation which deal with such deficient mental aspects of this syndrome are limited (Steinhausen, Nestler, & Huth, 1982).

Fetal alcohol syndrome children have been studied in various areas. One such focus has been on the morphological and growth abnormalities. Jones (Jones & Smith, 1973; Jones, Smith, & Ulleland, 1973) reported craniofacial defects, limb abnormalities, cardiovascular problems, growth deficiency, and developmental delay in FAS children.

The area of intellectual functioning of children of alcoholics has also received much attention. Olegard, Sabel, Aronsson, Sandin, Johansson, Carlsson, Kyllerman, Iversen, and Hrbek (1979) determined that 58% of the probands had IQs below 85 on standardized testing in their sample of this population; an additional 19% had IQs below 70. Similarly, Kyllerman, Aronsson, Karlberg, Olegard, Sabel, Sandin, Johansson, Carlsson, and Iversen (1979) found children born to active alcoholic mothers to have IQs that were 19 points lower than their controls. Poorer performance was also noted in areas of perception and motor development. Steinhausen, et al (1982) found FAS children’s IQ to be lower (89) than a comparison group of epileptic children (107). In a sample of 20 children of alcoholic mothers, Streissguth, et al. (1978) reported the mean IQ to
be 65. Sixty percent of these children fell to more than two standard deviations below the mean. Clarren and Smith (1978) reviewed the world literature on FAS and ascertained that 85% of the children also had lower IQs than two standard deviations below the mean.

Shaywitz, et al. (1980) examined a group of 15 FAS children between the ages of 6 1/2 and 18 1/2 years old. The sample consisted of 11 boys and four girls; all except one child was caucasian. Most of the subjects were middle- and upper-social classes. Standardized intelligence testing yielded a mean full scale IQ of 98, reflecting average intelligence. The findings of this study are not consistent with the bulk of literature in this area in that the subjects appeared normal in terms of intellectual development.

Others have investigated various effects of prenatal alcoholism. Steinhausen, et al. (1982) examined a FAS group of subjects were 66.1 months old. They found this group exhibited higher rates of eating problems, sleeping problems, headaches, limited speech, hearing impairment, head and body rocking, stereotyped habits, clumsiness of the extremities, hyperactivity, difficulty concentrating, problems interacting with peers, dependency, and behavior control. There was a comparison epileptic mother group and a control group. In this study, 53% of the fathers in the FAS group were described as alcoholics.
Rosett (1977) and Quellette (1977), in a control group study, identified 140 (7%) pregnant women in a prenatal clinic who were "heavy drinkers" out of 2,000 pregnant females overall. Eighty-two of the offspring from the alcoholic material group, rated by physicians blind to the nature of the experimental group, showed more morphological, functional abnormalities, and physical growth retardation compared to the controls.

In addition to cognitive and physiological disturbances, children of alcoholics also suffer from emotional, psychological, social, and behavioral abnormalities. These effects have been well documented across a variety of studies.

**Emotional and Psychological Characteristics**

Children raised in alcoholic families typically experience chaos and inconsistency in everyday life and hence develop a sense of not having control in their lives (Ackerman, 1987; Black, 1981, Brown, 1988; Brown & Cermak, 1980; Woititz, 1983). Kearney and Taylor (1969) investigated the psychological effects of having alcoholic parents (n=20) with controls (n=20) treated in a New England psychiatric clinic for one to four years. The CoA's were more likely to manifest more psychiatric disturbances than the controls, and were prone to act out internal conflicts. Specifically, five of the children had attempted suicide, eight had been institutionalized, nine had legal
difficulties, and eight were school dropouts. These groups, however, were poorly matched for age and were not matched for race, sex, or socioeconomic level.

Cork (1969) interviewed 115 children across a non-random set of 62 alcoholic parents. The children's ages were between 10-16 years of age (n=115). She found significant tension and competition among the siblings. Twenty percent in the study stated that they felt no positive bond with any family member; many had a great desire to escape from their family. The older children in the sample had significant school problems and only a few were noted to be socially outgoing and involved in activities within the community. No child in the study indicated his/her family was "normal" or typical of other children, although the ratings in Cork's study were not operationally defined. Cork (1969) assessed aspects of the children such as hostility, depression, trust, and uneasiness with the opposite sex to determine emotional adjustment of the CoA's. Her results indicated that 43% of the children were very seriously damaged, 49% as fairly seriously damaged, and 8% as slightly damaged. Cork's study is criticized (El-Guebaly & Offord, 1977) due to lack of control subjects.

Nylander (1960) examined 229 children of alcoholics ages four to 12 compared with 163 controls. The experimental group exhibited significantly more emotional
problems (29%) as did the control group (5%). As CoA’s perceive they are not in control of their environment, feelings of depression (Sloboda, 1974), leading to low self-concept (Bosma, 1975) often emerge as an internalized chronic state. Low self-esteem is also prevalent (Hughes, 1977; McLachlan, Walderman, & Thomas, 1973). Winokur, Cadoret, Dorzab and Baker (1971) found a 15.5 chance of offspring of alcoholics developing depression. Nylander (1963) also found a higher rate of depression in CoA’s than in controls. Others (Tarter, 1983) have identified the offspring of alcoholics to be at high risk for developing depression later on in life, as well. Some research points to the male alcoholic father as tending to have female relatives with a depressive disorder (Winokur, Reich, Rimmer, & Pitts, 1970).

Children of alcoholic environments at home tend to be more anxious and distressed by family conflict, fear of parental rejection, and abandonment than the drinking itself (Homonoff & Stephen, 1979). LePantois (1986) found that CoA’s between six and 12 years of age often denied or repressed their feelings in efforts to cope with behavior in the alcoholic home. Acting out was also common in some cases to gain attention from parents. These children were described to have a strong need to discuss their problems with other CoA’s, even though initially appearing isolated when observed in group therapy, possibly reflecting shame at
that time. They, however, appeared to resist expressing affectionate or tender feelings toward each other.

Similarly, Aronson and Gilbert (1963) explored pre-adolescent CoA's in a controlled study. They identified a tendency for the subjects to avoid unpleasantness and to be more dependent than the controls. This group exhibited passive-aggressive personality traits, similar to adult alcoholics (Goldstein & Linden, 1969). Fairchild (1964) found that adolescents in this population had dependency needs which were unsatisfied and problems with authority figures. Jacob, Favorini, Meisel, and Anderson (1978) and Rouse, Waller, and Ewing (1973) cite problems with emotional detachment and dependency, as well as significant depression in children of alcoholics.

From her clinical studies, Black (1979) states that CoA's learn they cannot rely on adults for help when they need it. Hence, CoA's grow up perceiving adults as noncaring and insensitive (Black, Bucky, & Wilder-Padilla, 1986). Other CoA's have been found to be overtly aggressive, anxious, defiant (Parnitzke & Prussing, 1966). Deutsch (1982) documented hate, anger, insecurity, fear, shame, guilt, and inconsistency to be common characteristic feelings among children in alcoholic homes. These children harbor an aura of embarrassment relative to their families (Black, 1981; Bucky, 1979; Wilson & Orford, 1978), avoid intimacy and lack trust to a significant degree (Beletsis &
Brown, 1981; Black, 1981). In a similar vein, Mik (1970) found that projective tests of delinquent male adolescents revealed more ambivalence toward fathers or other authority figures, greater identification with the mothers, as well as lower self-esteem. McLachlan, Walderman, and Thomas (1973) also identified children of alcoholics to have lower-self esteem than controls, even in intact families where the alcoholics were treated.

Nylander (1960) and Rydelius (1981) found evidence that low social economic status (SES) children of male alcoholics express emotional disturbance through psychosomatic means, indicating a proclivity to deal with emotions indirectly. These findings are congruent with Black (1981) and Beletsis and Brown (1981). Nylander (1960) identified CoA's in health care facilities to exhibit complaints of sleep disorders, stomach pain, anxiety, and tiredness, primarily among females; males had a tendency to be symptomatic of incontinence, hyperactivity, and speech disorders. In a follow-up controlled study, Nylander and Rydelius (1982) compared the social adjustment of Swedish children of alcoholic fathers of high SES to children of alcoholic fathers of low SES. The results indicated that high SES CoA's were just as likely to experience social maladjustment problems, including substance abuse, as were the low SES CoA's while growing up. Once again, maladjustment problems
such as substance abuse may be reflective of the tendency of this population to deal with emotions in an indirect manner.

Social and Behavioral Characteristics

A number of studies point out the maladaptive social effects of being raised in an alcoholic family. For example, Beletis and Brown (1981) and Black (1981) portray problems of identity and role confusion within the alcoholic environment. Jackson (1962) indicates that in drinking families, the alcoholic father assumes a role of a mischievous little boy, thus projecting a poor role model and confusing the children in terms of emulating their parents. Hawkins (1950) noted a high degree of anxiety and ambivalence in CoA's toward the father, as well as aggression and hostility.

Children of alcoholics tend to experience an overall sense of interpersonal discomfort (Beletsis & Brown, 1981; Cermak & Brown, 1982). Girls, as well as boys, are stated to have identity problems in terms of relating to others. Fox (1963) points out that female children of alcoholics tend to develop fear, disgust, and hatred toward males as a projection of their alcoholic father. However, there is evidence that a satisfying supportive emotional relationship with a non-alcoholic mother may offset the negative consequences of having an alcoholic father (Obuchowska, 1974).
Chafetz, Blane, and Hill (1971) suggest that alcoholism in the family causes disruption to the degree of impeding adult socialization of the children. Common problems the CoA's exhibited were school problems, accidents, involvement with the police or courts, and a tendency of early separation from their parents. Similarly, MacKay (1961) determined that among a sample of delinquent male adolescents, 16 percent came from alcoholic homes. In a controlled study, Haberman (1966) noted that children of alcoholics exhibited more incidences of temper tantrums, fighting with peers, and getting into trouble in school than children from non-alcoholic families. Miller and Yang (1977) have concluded similar trends, emphasizing CoA's fare less well in school overall.

Fine, Yudin, Holmes, and Heinemann (1976) examined behavioral disorders in children of alcoholics. They found that CoA's do tend to have a greater likelihood of behavior problems and difficulty controlling their moods. Significant disturbances were noted in areas of social aggression. The CoA's were socially isolated, fearful, anxious, and preoccupied with inner thoughts. Several had attention problems, suggesting a prevalence of attention deficit disorder.

Morrison and Stewart (1971) identified an association between hyperactivity and alcoholism. In a controlled study, they interviewed parents of 59 hyperactive children
and parents of 41 control children. In the experimental condition, 20 percent of the fathers and five percent of the mothers were described as alcoholic, compared to 10 percent of the control fathers and zero percent of the control mothers. In a follow-up study, Morrison and Stewart (1973) examined the adoptive parents of adopted hyperactive children and did not find a significant prevalence of alcoholism, again supporting the notion that alcoholism may indeed have a direct association with hyperactive offspring. In another controlled study, Cantwell (1972) conducted psychiatric examinations with parents of 50 diagnosed hyperactive children and parents of 50 control children. The parents of the hyperactive children exhibited higher tendencies of alcoholism, sociopathy, and hysteria than the controls, congruent to other studies in the literature.

Studies in Scandinavia and the United States alike have pointed to evidence of illicit drug abuse and eating disorders among children of alcoholics. For example, Haastrup and Thomsen (1970), Nylander (1962), and Shade and Hendrickson (1971) identified the prevalence of parental alcoholism of adolescent drug-abusers as high as 45 percent.

In another study, Halmi and Loney (1973) examined a treatment group of 94 adolescent patients diagnosed as anorexia nervosa. Of this group, paternal alcoholism was reported across 18 percent of the probands.
Herjanic, Herjanic, Penick, Tomeller, and Armbruster (1977) assessed adolescent children of alcoholic fathers compared to non-CoA's attending a pediatric clinic. The CoA's were found to be engaged in significantly more antisocial behavior, substance abuse, school suspensions, and home problems. However, the validity of the findings in the above study is equivocal due to negligence in reporting the method of selecting the comparison group (Adler & Raphael, 1983). In families of delinquents, Waters and Offord (1982) found no association between parental alcoholism and offspring delinquency unless the parents were well engaged in criminal behavior. This suggests that alcoholism may play only a secondary role in the etiology of childhood delinquency in families of alcoholics. The literature in this area, however, remains sparse and controversial.

The foregoing literature pertaining to children of alcoholics explicates a syndrome of emotional, social, psychological, and behavioral problems inherent within this population. There is consistent evidence that children of alcoholics appear to exhibit problems in several emotional and social areas including dependency, identify, depression, anxiety, chemical abuse, eating disorders, aggression and deviance, school problems, home problems, low self-esteem, isolation, hyperactivity, and psychosomatic complaints. Overall, the psychological adjustment of this population
seems poor, in light of the majority of the probands studied indicate they have maladaptive coping skills.

Several studies (e.g., Beletsis & Brown, 1981; Black, 1979; Claydon, 1987; Miller & Jang, 1977; Robbins, 1966) give support to the notion that children of alcoholics manifest patterns of maladaptive adjustment which carry over into adulthood. The following is a review of the relevant literature on adult children of alcoholics.

**Adult Children of Alcoholics**

As issues of developmental maladjustment have been documented with children of alcoholics, the adult offspring also experience perpetuating adjustment problems. Brown and Beletsis (1986) have documented that ACoA's indicate they have significant difficulty with emotional and psychological aspects of their adult lives which emanated from childhood, particularly from parental alcoholism and a dysfunctional family environment.

**Emotional and Psychological Characteristics**

Research on this population consistently identifies depression (or affective disorder) to be frequently associated with the adult offspring of alcoholic parents. In a statistically significant controlled study, Pitts and Winokur (1966) examined a stratified sample from a pool of 748 consecutive caucasian psychiatric patients admitted to a psychiatric ward of a midwest general hospital. The family
histories of the patients were examined relative to the patients' diagnoses. Controls in this study were matched by age, sex, marital status, and socioeconomic status with the experimental group. The age range was from 20 to 79 years of age.

The results of the study indicate that the depression group, significantly more than the controls, had parents with affective disorder; the mothers experienced depression in almost twice as many cases as the fathers. In addition, the fathers reportedly exhibited considerably more alcoholism than the mothers and both parents in the control group. Pitts and Winokur (1966) point out that ACoA mothers turning to depression and the ACoA fathers engaging in alcoholism may be a product of cultural sex-roles, in that females may tend to express distress via depression and males may tend to use alcohol as a coping medium. Pitts and Winokur (1966) indicate that alcoholism may be symptomatic of an affective disorder.

In his later work, Winokur and his associates (Schuckit, Rimmer, & Winokur, 1971; Winokur, 1972; Winokur, Cadoret, Baker, & Dorzab, 1975; Winokur, Cadoret, Dorzab, & Baker, 1971; Winokur, Reich, Rimmer, & Pitts, 1970) introduced the notion of a "depressive spectrum disorder" to explain the coexistence of both depression and alcoholism within families. They tentatively proposed that affective disorder and alcoholism are genetically linked, with sex
being a variable that determines the phenotypic symptom of this entity. Specifically, male ACoA's tend to turn to alcoholism whereby female ACoA's tend to become depressed as a result of this disorder.

Pitts and Winokur (1966) noted that the fathers, but not the mothers, of patients with affective disorder in their study had significantly more alcoholism that subjects in the matched control condition, while the mothers had more affective disorder than the fathers in the study. Cotton (1979) offers two explanations to account for the research of Winokur, et al.: (1) relatives of affective disordered individuals simply yield higher rates of alcoholism and depression when compared to controls, or (2) other than alcoholism, relatives of alcoholics experience significant degrees of depression as an entity. Conversely, Schuckit (1986) concludes from his literature review that affective disorder and alcoholism seem to be independent entities (Cloninger, Reich, & Wetzel, 1981; Mirin, Weiss, Sollogub, & Michael, 1984) with some overlap in clinical symptomology.

Goodwin, Schulsinger, Knop, Mednick, and Guze (1977) examined a group of 49 adopted-out daughters of male alcoholics in Denmark. The subjects were compared to a control group with no drinking history. Both the experimental and control groups averaged 35 years of age. The daughters of the alcoholics exhibited no more depression (or other psychiatric disorders) than the control group,
suggesting that heredity effects had no bearing on the subjects developing depression in daughters raised in foster homes. Goodwin, et al. (1977) propose that daughters of alcoholics raised by their alcoholic parents have a rate of depression of about 30% higher than being raised out of the dysfunctional home. This suggests the possibility of an environmental link between an alcoholic parent(s) and the onset of depression, as well as the onset of offspring alcoholism (Frances, Timm, & Bucky, 1980; Goodwin et al., 1977) in females.

Merikangas, Weissman, Prusoff, Pauls, and Leckman (1985) also conclude that alcoholism and depression are not manifestations of the same underlying disorders in families. Nonetheless, an association between depression and alcoholism remains to be a clinical entity.

Cassidy, Flanagan, Spellman, and Cohen (1957) found alcoholism rates in fathers of probands with bi-polar disorder significantly higher than in controls. Winokur (1972b) had identified that probands with affective disorder very often had relatives that were diagnosed as bipolar disorder, whereas relatives of alcoholics primarily had relatives with depressive features, without mania. Winokur (1972a; 1972b) reported that when depression was identified as a "secondary disorder" it was in reference to a primary disorder diagnosed as alcoholism.
Clair and Genest (1987) assessed depression-proneness on ACoA adjustment measures. Students from a university in Canada completed the Depression-Proneness Rating Scale (Zemore, 1983), designed to assess the propensity for experiencing moderate depressive episodes. Results yielded a greater proneness for ACoA's to experience depression than controls. The study indicated that depression-proneness for the ACoA's was negatively correlated with growth and seeking emotional support, and positively correlated with self-blame, (Barnes, Benson, & Wilsnack, 1979).

Associated with depression, the literature has identified self-esteem and shame issues within the ACoA population. Ackerman (1987) states that ACoA's tend to have low self-esteem, possibly because (1) the familial alcoholism may divert interest away from the child of the alcoholic, (2) the child may be falsely blamed for the chaos and dysfunction within the family, (3) the child may feel stigmatized by the alcoholism and consequently feel less than others, and/or (4) the child has not learned how to form healthy relationships due to unhealthy role models within the family, suggesting a perception of feeling unworthy of others' involvement or liking. Brown (1988) characterizes shame etiology by pointing out that ACoA's experience embarrassment and humiliation from their inebriated or hostile parents in childhood. Kaufman (1989) adds that addictive (alcoholic) parents themselves tend to experience
shame; in turn, their offspring inevitably internalize images of their parents. Berkowitz and Perkins (1988) reported that women of alcoholic fathers were significantly more likely to acknowledge negative feelings or self-depreciation about themselves than women with alcoholic mothers. Daughters, however, of alcoholic mothers reported no different levels of self-esteem than women from non-alcoholic families.

In their review of the literature, Russell, Henderson, and Blume (1985) also concluded that offspring of alcoholics typically possess lower self-esteem and, interestingly, a more external locus of control (LOC), suggesting a perception that feeling good about oneself is perceived to be out of reach. In addition to issues surrounding depression and shame, the literature of adult children of alcoholics points to dynamics of acting out, manifested in aggressive and antisocial behavior.

Social and Behavioral Characteristics

Aggressive behavior and sociopathy commonly span the ACoA literature. In addition to coexisting in individuals who themselves abuse alcohol (e.g., Schuckitt & Morrissey, 1979; Stabenau & Hesselbrock, 1984), sociopathic behavior has been identified in family pedigree students (e.g., Cloninger & Reigh, 1983; Cloninger, Reich, & Wetzel, 1981; Schuckit, Rimmer, Reich, & Winokur, 1970). The offspring
probands in studies where sociopathy is the primary independent variable are predominantly male.

McKenna and Pickens (1983) examined a group of 1,929 ACoA's on measures of psychopathology who were themselves chronic-stage alcoholics, as defined from a criteria of 31 symptoms; 73% were males. The mean years of age of the males was 40.6 and of the females was 41.0. College graduates comprised 35% of the males and 28% of the females.

Using the Minnesota Multiphasic Personality Inventory (MMPI), the study examined the relationship between the number of alcoholic parents and personality measures. McKenna and Pickens (1983) noted distinct significant measures of aggression with both sexes of the probands. Men and women alike with two alcoholic parents tended to be more aggressive than probands with only one or no alcoholic parents.

In a separate analysis of the probands with one alcoholic parent, there was no main effect for the sex of the parent nor an interaction of the sex of subject by sex of parent. There is some evidence in the literature that males are more disturbed with alcoholic fathers than alcoholic mothers (El-Guebaly & Offord, 1979). Interestingly, the number of alcoholic parents was negatively related measures of proband depression. This suggests that among alcoholic ACoA's with one or more alcoholic parents, there is slightly less depression but
significantly more characterological problems such as aggression.

In another study, Merikangas, et al. (1985) examined offspring of parents with secondary alcoholism to primary depressives. The offspring of the secondary alcoholics showed to have a risk of developing an antisocial personality five times more than depressives without alcoholism, although offspring of the depressives only exuded higher rates of antisocial characteristics than controls with no psychiatric history. Even the children of the secondary alcoholic depressives had an increased rate of conduct disorders compared to the depressive controls, suggesting aggression associated with familial alcoholism begins in childhood and emanates into adulthood.

In a Finnish study, Virkkunen (1979) compared alcoholism in parents of criminals with antisocial personality disorder to parents of other criminals with personality disorders, other than antisocial. The fathers of the antisocial group tended to behave violently while under the influence of alcohol where the control fathers were noted to have no behavioral abnormalities while drinking alcohol. The question remains equivocal as to whether this generational behavior is genetically induced or, on the other hand, if it is imitated from parent role modeling. Implicitly, this study suggests an association
between parental alcoholism or heavy drinking and male offspring having tendencies to be antisocial.

Werner's (1986) longitudinal study of Hawaiian CoA's revealed that at age 18, 30 percent of the probands with alcoholic parents had either engaged in serious crimes or were repeat offenders in the criminal justice system. In the same study, 25 percent were in either in- or outpatient mental health treatment, suggesting the possibility of poorer coping skills. This number reportedly was three times as high as the offspring of the controls from non-alcoholic families. Werner (1986) reported that 41% of the 49 ACoA's did indeed exhibit serious problems with coping, reflected by problems in the home, school, at work, and/or in the community. During their teens, 37% of the probands had contacts with either the Department of Social Services or the Department of Mental Health, compared to the seven percent of the controls who had contacts with these systems. The proportions of CoA's in this study with psychosocial problems were similar to reports in both Miller and Jang (1977) and Rydelius (1981).

Locus of Control

This study will also consider the association of locus of control to coping. A limited degree of research on the construct of locus of control has been completed on this population. Prewitt, Spence and Chaknis (1981) examined locus of control with children of alcoholics. They found
that CoA's tended to exhibit an external locus of control. One possible explanation for this finding is that CoA's live in an environment where an inconsistent and contradictive style of communication is projected (Black, 1981). Thus, the CoA becomes confused and unable to predict a sense or order in his/her world. However, the results are based on a sample of only 15 children and should be interpreted with caution.

An external locus of control has been associated with stress, depression, and anxiety (Morrison & Schuckit, 1983), implying poor coping resources. In the ACoA subjects they examined, the authors found no significant differences of locus of control between ACoA's and non-ACoA's. Again, the size of this sample was small (n=25).

Lamontagne (1984) examined the relationship of locus of control to preoperative coping behavior in children. Coping was classified along a dimension of coping termed "avoidant-active." The results indicated that the children who were active copiers exhibited a more internal locus of control compared to the avoidant copers. This suggests that successful coping may be compromised if an external locus of control exists.

McGovern and Caputo (1983) noted that inpatient alcoholics in a detoxification program demonstrate greater treatment success if they have an orientation toward an internal locus of control. One possible explanation for
this is that individuals with an internal locus of control may take more control over life, hence coping more effectively.

O'Gorman (1975) found that children of alcoholics had a more external locus of control. This, as with Black's (1981) findings, raises the issue of less nurturant parenting from alcoholism, leading to feelings of having little control over the immediate environment. In a controlled study, Callan and Jackson (1986) compared functioning and adjustment of children of drinking alcoholics with children of recovering alcoholics who were not drinking. In this study, all three groups scored an internal locus of control, suggesting a more adaptive development, although the CoA's of recovering alcoholics indicated they were more happy with their lives than CoA's with actively drinking parents.

Werner (1986) dichotomized CoA's into two groups of (1) serious coping problems and (2) adaptive resilient skills. She found that the CoA group with coping problems had an external locus of control where the adaptive CoA group exhibited an internal locus of control. The literature on locus of control pertaining to children of alcoholics is inconsistent; however, the majority of the studies appear to favor an external locus of control for the offspring of alcoholics.
Coping Resources

The literature on coping resources of the offspring of alcoholics is limited. The majority of the studies on this population examine coping indirectly, as indicated by various emotional and behavioral problems in the above review of the literature. Research on domains of coping within this population is lacking; emphasis in this area tends to examine coping on the constructs of problem-focused coping and emotional-focused coping.

For example, one study indicates that individuals of internal locus of control tend to use problem-focused coping, whereas externally oriented individuals tend to use emotional-focused coping (Blanchard-Fields & Irion, 1988). Werner (1986) compared characteristics of alcoholic offspring who (1) had serious coping problems and (2) did not have serious coping problems. She found that only 30 percent of her CoA subjects with coping problems were females. In the same study, gender of both the child and the parent who was alcoholic made a difference in the development of coping problems. Girls and the offspring of alcoholic mothers had less coping problems compared with males and the offspring of alcoholic mothers. It was documented that the more resilient CoA's received greater attention from their caretakers during the first year of life, compared to the CoA’s with more serious coping problems.
ACoA Use of Alcohol

The literature reveals excessive use of alcohol by ACoA's, suggesting yet another indicator of ineffective coping. The offspring of alcoholics tend to be at high risk for developing alcoholism themselves (Amark, 1951; Booz-Allen & Hamilton, 1974; Goodwin, Schulsinger, & Molter, 1974; Robbins, 1966; Schuckit, 1972). In studies spanning the past 50 years, about one third of any sample of alcoholics will contain parents who were themselves alcoholic (Cotton, 1979). Family pedigree studies reflect a prevalence rate for alcoholism in first degree relatives of alcoholics of about 30 to 40%; this compares to 5 to 10% within the general (non-alcoholic) population (Goodwin & Guze, 1974; Hirsch, 1955; Mirin, Weiss, Sollogub, & Michael, 1984). Lucero, Jensen, and Ramsey (1971) found that if there is one alcoholic in the family, then 82% of the time there is at least one another alcoholic within the same family. However, as Cotton (1979) states, not all alcoholics in the literature (47% to 82%) come from families where there is one or more alcoholics in the family.

Some research (Cloninger & Reich, 1983; Lewis, Rice & Helzer, 1983) indicates that simultaneous alcoholism and antisocial personality disorder increases the risk for alcoholism in the offspring of alcoholics, male and female ACoA's alike. Phil, Peterson, and Finn (1990) indicate that children of alcoholics who manifest aggression and
hyperactivity in childhood are likely candidates for alcoholism in their adult years.

In a national study, Black, Bucky, and Wilder-Padilla (1986) looked at the adult outcome in terms of drinking of 409 male and female alcoholic offspring. Almost 73% of the probands reportedly were alcoholic, compared to only 9.5% of the control group (n=179). Of the ACoA sample, 40% of the probands' mothers were alcoholic and 85% of the probands' fathers were alcoholic. The percentage of adult children of alcoholics who had two alcoholic parents was not reported. This study also indicated that ACoA's marry alcoholics significantly more than nonalcoholics (20.5% vs 12.9%, respectively), reflecting what other researchers have found (James & Goldman, 1971; Nici, 1979).

Vaillant and Milofsky (1982) reported that ethnicity and number of alcoholic relatives account for the majority of variance in adult alcoholism. McKenna and Pickens (1983) suggest that personality variables mediate the link of ethnicity and number of alcoholic parents to the drinking patterns of adults, although the question of the personality variables being influenced by genetics or conversely, environmental aspects, remains equivocal. Others (e.g., Frances, Timm, & Bucky, 1980; Goodwin, Schulsinger, Knop, Mednicck, & Guze, 1977) argue that genetic factors play a significant part in the etiology of male alcoholism, whereas
in females, developmental and/or environmental factors are determinants of alcoholism.

Rotman and Vestre (1964) as well as Apfeldorf (1978) cite that objective personality measures indicate the number of alcoholic parents may be related to only primary alcoholism, however, not secondary alcoholism. Cadoret and Gath (1978) examined alcoholism in a group of adoptees. Similarly, these authors conclude that primary alcoholism, unlike secondary alcoholism, was associated with alcoholism in biological parents.

In a matched control group design, Miller and Jang (1977) examined lower socioeconomic status (SES) ACoA's across a twenty-year period. Since the probands were in their mid 20s, the authors reportedly did not consider alcoholism to be a realistic condition that could have developed (p. 28); consequently, they examined patterns of "heavy drinking" (defined as drinking five or more drinks per occasion) within the subjects. Indeed, ACoA's were heavier drinkers than non-ACoA's. Thirty-six percent of the adult children of alcoholics were heavy drinkers, 50 percent were classified as moderate drinkers, and only 14 percent abstained from alcohol. By contrast, heavy drinkers in the control group comprised only 16 percent; 62 percent were moderate drinkers and 22 percent reportedly abstained altogether.
Finally, Merikangas, Weissman, Prusoff, Pauls, and Leckman (1985) compared the rates of psychiatric illness and alcoholism among the offspring of psychiatric patients with primary major depression and secondary alcoholism to controls. They found that the adult offspring of the secondary alcoholics had a threefold greater risk of alcoholism than did the patients with depression alone. Sex differences were found in the study. In the offspring, the females had disorders of major depression and anxiety, whereas the male offspring had greater rates of alcoholism and antisocial personality disorder. Interestingly, the offspring of parents who were both alcoholic had a twofold greater risk of developing alcoholism and a threefold greater risk of developing alcoholism than did the offspring with only one alcoholic parent. In addition, a sixfold increased risk of developing alcoholism emerged when compared to the nonalcoholic parent controls.

The literature overall suggest that ACoA's by and large tend to experience maladaptive psychosocial development, compounded by ineffective ways of coping. In their review of the ACoA literature, Russell et al. (1985) concluded that this population possesses greater social maladjustment and lower self-esteem than controls, or non-ACoA's. ACoA's tend to have problems with (1) identifying feelings and expressing them openly, (2) being aware of personal needs, (3) taking on too much responsibility for themselves, as
well as for other people, (4) trusting others, (5) identification, (6) believing they are helpless, (7) depression, and (8) their own chemical dependency issues, including actual use (Beletsis & Brown, 1981; Cermak & Brown, 1982; Greenleaf, 1982).

Ackerman (1986) claims that the key to surviving an alcoholic family is to learn to adapt behavior to minimize the dysfunctional effects of the alcoholism. He states that in alcoholic homes maladaptive coping mechanisms are developed by the non-alcoholic members, even if the alcoholism is denied. The coping methods can be either verbal or behavioral in attempts to provide a sense of relief (Ackerman, 1986) or control (Black, 1981).

Ackerman (1986) states that if the coping method chosen by the non-alcoholic family members is one of a verbal strategy, one of two outcomes usually exist. First, the verbal method is usually perceived as negative or aggressive by the alcoholic, as a result of the "nagging" or threatening nature of the concerns about drinking. Second, if the non-alcoholic family members attempt to verbally interact with one another regarding concerns of the alcoholic member, the discussions usually are not far reaching since most alcoholic families attempt to deny the alcoholism and silence "validates" the absence of any problems. In addition, Black (1984) states that ACoA’s are
less likely to reach out to others than non-ACoA’s do as evidenced from a matched control group of non-ACoA’s.

Ackerman (1986) describes the behavioral coping strategy commonly used as one which centers directly on the use of alcohol. The non-alcoholic members in this situation will hide the alcohol, refuse to buy it for the drinker, mark the bottles to gauge how much is being drank; avoid the alcoholic, stay away from home, or go into isolation. As the drinking becomes more abnormal, the coping behavior then also becomes more abnormal. Ultimately, as the drinking progresses, the non-alcoholic family members socially disengage from each other, friends, the community, and finally themselves as implied by denial, repression, or their own use of substances. Ackerman (1987) and Black (1981) cite that behavioral acting out is a common coping mechanism, starting in childhood and cultivating in a self-destructing pattern of behavior as time goes on. On the other hand, humor may be used as an active coping mechanism, although this, too, may become maladaptive since the humor doesn’t tend to be regulated well and the end result is that the person demonstrating this behavior is not taken very seriously overall (Wegscheider-Cruse, 1983).

On the contrary, a few studies have provided evidence that some offspring of alcoholics appear to achieve adaptive functioning in adulthood. For example, Werner (1986) conducted a longitudinal study which suggested that not all
children of alcoholics displayed the typical symptomatic disturbances or problems noted in CoA’s, such as deviant behavior, dependency, inappropriate emotional expression, disturbed feelings, hostility, and identity disturbances. Children of alcoholics in the study were interviewed at age 18. Of 49 CoA’s interviewed, 29 showed no significant problems relative to growing up in an alcoholic family.

Benson (1980) reported that the most important variable in adjustment of female ACoA’s was not the nature of parental problems but the degree of social support encountered. However, the role that social support played in the study was not addressed. Ackerman (1987) provides the concept of "offsetting factors" to explain the variations of the psychosocial outcomes of ACoA’s. According to Ackerman (1987), offsetting factors consist of either a person, such as a relative or friend, or an institution, such as the school, which has had a positive influence over the ACoA’s life. Inherent within offsetting factors can be emotional support, positive role-modeling, meaningful activities, a sense of belonging, or a needed diversion from the family, according to Ackerman (1987). This implies that external factors in the milieu of the alcoholic offspring can serve to validate the self-worth and self-value of the individual. Obuchowska (1974) found that well-adjusted ACoA’s differentiated maladjusted ACoA’s by
perceiving their non-alcoholic parent as an effective and well-functioning parent.

El-Guebaly and Offord (1977) speculate that CoA's may compensate or excel in areas outside of the home, e.g., school, to make up for problems at home. In addition, Stark (1987) notes that CoA's may strive to be over-achievers in their outside world instead of dealing with internal feelings and problems.

Despite selected literature indicating adaptive outcomes of ACoA's, some researchers such as Black (1981) and Wegscheider-Cruse (1983) suggest that by virtue of CoA's working hard to appear competent and over-achieving, internal problems still prevail, such as feelings of inadequacy, hurt, loneliness, anger, and confusion. Black (1981) reports that model CoA's who may try to be perfect end up taking too much responsibility to the degree that they rely strictly upon themselves for most of their emotional needs since they cannot count on their parents in many cases. Hence, these CoA's tend to be overly responsible, take life too seriously, replace childhood experiences with adult-like attitudes and behaviors, and maintain a sense of perpetual control over their world. Brown (1988) states that "children [of alcoholics] believe that they can cope with conflict and chaos by controlling themselves and others" (p. 48). These studies implicate that CoA's, no matter if they engage in deviant behavior or
are over-achievers, tend to live a life of distress, marked with coping difficulties.

**Summary**

Overall, the literature implicates that adult children of alcoholics tend to have difficulty coping in life, relative to non-ACoA's. For example, Russell, Strasburger, Welte, and Blume (1982) noted female ACoA's reported significantly more emotional distress than non-ACoA controls including depression (63% vs. 37%), anxiety (58% vs. 39%), and loneliness due to difficulty making friends (57% vs. 22%). Emotional disturbance, typically characteristic of ACoA's, may be premised on Beletsis and Brown's (1981) observations that ACoA's experience distress as a result of eventually separating from their families, and consequently perceiving the separation as emotional or physical abandonment, or both. Black, Bucky, and Wilder-Padilla (1986) examined the perceptions of children raised in an alcoholic home to children raised in a non-alcoholic home. They found that the ACoA's reported via questionnaire more emotional and psychological problems than the control group. Specifically, the ACoA's felt depressed more often than the non-ACoA's, had significantly greater difficulty with trusting, were overly responsible (including believing they were responsible for the parents' conflict), had problems expressing feelings and communicating, and had difficulty
with developing intimacy. This finding lends support to others' (Beletis & Brown, 1981; Cermak & Brown, 1982; Gravitz & Bowden, 1986) reports of these probands receiving inconsistent physical and emotional care as children, having unresolved emotional bonds with the family, role confusion, lack of trust and avoidance of intimacy, and having a propensity to assume too much responsibility. In a similar vein, locus of control has been documented to some extent to suggest that it plays a significant role in outcomes and coping.

There remain three crucial empirically neglected problems within the observations of the work identifying the roles and characteristics of ACoA's as coping mechanisms. First, the noted observations on ACoA's are generalizations. Therefore, the clinical community may tend to conceptualize most, if not all, ACoA's into one treatment population without acknowledging individual differences with regard to aspects of coping. Secondly, the identified behavioral roles (e.g., Black, 1981; Wegscheider-Cruse, 1983), as ways of coping, are not empirically treated. Hence, it remains to be seen if these roles as coping mechanisms and their related characteristics necessarily and significantly delineate effective ways of coping relative to this syndrome. Thirdly, no empirical research data is known to exist in examining the degree of which ACoA's use the domains of emotional, behavioral, spiritual, cognitive, and
social modalities to copy in daily living. Here, it is presumed that different individuals will either intentionally or unintentionally use different methods and degrees of coping.

It is the aim of this study to examine the kind and degree of domains used in daily coping by female adult children of alcoholics. The specific domains to be examined will be (1) emotional, (2) behavioral, (3) spiritual/philosophical, (4) cognitive, and (5) social measures of coping as measured by the Coping Resources Inventory (CRI) (Hammer, 1988).
CHAPTER III
Methodology

Research Setting
The subjects in this study were obtained from urban and suburban areas in Columbus, Ohio, and adjacent areas. Subjects provided information for this study via group format at two locations in Columbus. One site was at a commuter college campus in urban Columbus, Ohio, and the other site was in an office in northwest Columbus.

Sample
All the ACoA and control subjects in this study are adult females. Adult children of alcoholics of this sex typically identify themselves in significantly greater numbers than their male counterparts. Similarly, more females than males in treatment tend to acknowledge problems associated with being raised within an alcoholic environment.

Due to financial limitations and subject availability, a total randomized sample was not utilized. Subjects voluntarily came forward in reaction to hearing about this study from one of three sources: (1) word of mouth, (2)
self-help ACoA support groups, and (3) newspaper advertisements. The newspaper advertisement read as follows:

"Volunteers needed for research project. Adult females, 18-55 years who are children of alcoholic parents. Information valuable in understanding the effects of being raised in alcoholic environment."

This study contains 100 subjects in the quasi-experimental (ACoA) group. Some evidence (Ackerman, 1987) suggest ACoA personality characteristics (coping methods) arising from developmental issues associated with growing up in an alcoholic household may not be significantly noticeable by the age of 56. However, additional research on subjects within this population 56 years of age and up is lacking. The control group also contains 100 adult females who indicate they were not raised in an alcoholic environment nor have an alcoholic parent(s) or caretaker(s).

**Procedures**

A list of 113 potential subjects for the ACoA group and 122 subjects for the Non-ACoA group were gathered for this study. Then, 100 ACoA’s from the ACoA list were randomly selected and assigned to the quasi-experimental group. In addition, 100 non-ACoA’s were randomly selected from the non-ACoA list. At that point, they were scheduled for data acquisition. All subjects in this study were contacted by
telephone or in person to apprise them of time and location for the information gathering phase.

As subjects responded with interest to participate in this study, they were told about the procedure of answering paper and pencil type instruments and the estimated time of involvement. The nature and type of instruments were explained before they were completed. The subjects were also told that they would be apprised of the result of this study if they wish. Anonymity and confidentiality were clearly emphasized to them relative to all aspects of their involvement in this study.

Participants were also told, of course, that they could choose to terminate their involvement in this study at any time if they wished without any problem or negative consequences. They were also encouraged to convey any emotional or mental discomfort, had they experienced any, to the researcher at any time during their involvement in this study; hence, a referral would have been made to an appropriate treatment source if they so desired. The subjects completed a demographic questionnaire in addition to the instruments employed in this study.

Information and demographics were obtained via self-report measures from the subjects in this study. There is some evidence to support the accuracy of self-reported information relative to parental alcoholism. O'Malley, Carey, and Maisto (1986) examined the correlation between
college students' reports of their parental drinking practices and their parents' reports of drinking. In a sample of 49 students at Vanderbilt University (mean age was 22.6 years and 51% were females) quantity, frequency of consumption and problems related to parents' alcohol use were assessed. The students' and parents' reports were found to be highly correlated. The students' reports also tended to reflect a propensity to have some degree of false negatives; that is, to underrate the frequency and degree of parental alcohol use.

The instruments were administered according to their respective test manual. All information remains confidential in terms of subject identity.

Permission for Investigation

Before this study began with respect to data collection, permission to proceed was obtained from the Human Subjects Review Committee at The Ohio State University. Each participating subject signed an Ohio State University research consent form before engaging in this study. A copy of this form can be found in Appendix A.

Instrumentation

Objective assessment instruments were employed in the study. The Children of Alcoholics Screening Test (C.A.S.T.) (Pilat and Jones, 1984), the Coping Resources Inventory
(CRI) (Hammer & Marting, 1987), and Rotter's Locus of Control Inventory (LOC) (Rotter, 1966) instruments were the primary assessment tools used in this study. The subjects also completed an 11-item demographic questionnaire. The items were the following: (1) income, (2) occupation, (3) age, (4) education level, (5) marital status, (6) number of times married, (7) age of subject when parent(s) began to drink, (8) number of siblings, (9) subject's own alcohol/drug use, (10) parents' marital status when subject left home, and (11) ethnic origin. A copy of the demographic questionnaire can be found in Appendix B.

Children of Alcoholics Screening Test

The Children of Alcoholics Screening Test (CAST) (Pilat and Jones, 1984), was used to differentiate subjects with alcoholic parents from controls without alcoholic parents. The CAST is a 30-item self-report CoA assessment instrument used to identify individuals who have alcoholic parents.

Scoring

Six or more items answered "Yes" indicate the respondent is the offspring of an alcoholic. This instrument is employed as a general screening device to identify children of alcoholics. The CAST measures feelings, attitudes, perceptions, and experiences relative to parents' drinking behavior.
Validity

Significant validity of the CAST is reflected by the finding that all 30 items successfully discriminate offspring of alcoholics from control group subjects as statistically determined by chi-square analysis. Children of alcoholics score significantly higher on the CAST than non-CoA's. Jones (1982a, 1982b) correlated the two groups with the total CAST scores and yielded a validity coefficient of .78 (p <= .0001). The CAST test items were developed from actual reports and published case studies from real-life experiences and group psychotherapy of children of alcoholics (Jones, 1981a; Jones, 1981b). The CAST also shows face validity in that the 30 items reflect an obvious content relative to having an alcoholic parent. For instance, an example item reads: "Did you ever think your father was an alcoholic?"

Reliability

The reliability on the CAST is very high. A cutoff score of six or more "yes" answers has identified 100 percent of (1) CoA's that were clinically diagnosed as CoA's, and (2) probands who were self-reported as children of alcoholic parents (Jones, 1982b). In another study, the CAST examined reliability on adult CoA's, aged 18 to 37 (Jones, 1981b). Out of a sample of 91 adults, five of the adults indicated they had one or both parents who were alcoholic. These five ACoA's had significantly higher
scores (M=12.8, SD=9.7) than the non-ACoA subjects (M=4.4, SD=7.2), \( t(79)=2.5, p<.01 \). A Spearman-Brown split half (odd vs. even items) reliability coefficient equal to .98 was obtained on the CAST (Jones, 1981a; Jones, 1981b).

**Coping Resources Inventory**

The Coping Resources Inventory (CRI) (Hammer & Marting, 1987) was developed to identify resources available to individuals for managing stress. The CRI emphasizes measures of health rather than pathology of deficits. This instrument provides a standardized measure for coping research and has been used extensively in clinical and educational settings. For purposes of this study, coping resources are defined as "those resources inherent in individuals that enable them to handle stressors more effectively, to experience fewer or less intense symptoms upon exposure to a stressor, or to recover faster from exposure" (Hammer, 1988, p. 2).

The CRI is a 60-item instrument that measures coping resources across five domains: (1) cognitive (nine items), (2) social (13 items), (3) emotional (16 items), (4) spiritual/philosophical (11 items), and (5) physical (11 items). The CRI also provides a total scaled score for all

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domains together (60 items). Hammer (1988) defines the five scales of the CRI below.

Definitions of scales

Cognitive (COG):
"The extent to which individuals maintain a positive sense of self-worth, a positive outlook toward others, and optimism about life in general." A representative item is "I feel as worthwhile as anyone else."

Social (SOC):
"The degree in which individuals are imbedded in social networks that are able to provide support in times of stress." A representative item is "I am part of a group, other than my family, that cares about me."

Emotional (EMO):
"The degree to which individuals are able to accept and express a range of affect, based on the premise that a range of emotional response aids in ameliorating long-term negative consequences of stress." A representative item is "I can cry when sad."

Spiritual/Philosophical (S/P):
"The degree to which actions of individuals are guided by stable and consistent values derived from religious, familial, or cultural tradition or from personal philosophy. Such values might serve to define the meaning of potentially stressful events and to prescribe strategies for responding effectively. The content domain for this scale is broader than traditional western religious definitions of
spirituality." A representative item is "I know what is important in life."

**Physical (PHY):**

"The degree to which individuals enact health-promoting behaviors believed to contribute to increased physical well-being. Physical well-being is thought to decrease the level of negative response to stress and to enable faster recovery. It may also help to attenuate potentially chronic-stress-illness cycles resulting from negative physical responses to stressors that themselves become major stressors." A representative item is "I exercise vigorously 3-4 times a week."

**Scoring and Interpretation**

The CRI respondents use a four-point scale on each test item to indicate how often they have engaged in the behavior of the item over the past six months. Scale scores are the sums of the item responses for each scale. When scoring, six specific items with negative wording must be reversed before determining each scale score. Besides the five domain scores, a Total Resource score (overall coping) is derived by summing the five scale scores. As with each domain, the higher the scale score, the higher the resource used in coping.

Raw scores on the CRI are converted to standard scores with a mean of 50 points and a standard deviation of 10.
points. Scores are interpreted through profiles. There is a separate profile for each sex.

The normative group on the CRI was comprised of 818 individuals; 327 were males and 491 were females. Since only females are in this study, only the female norms are given below. Each scale has a norm group mean (M) and standard deviation (SD), as well as means and standard deviations for each sex.

The female norms are as follows. The Cognitive scale has a M of 27.45 with a SD of 4.64 and a confidence interval band value (CIVB) of 4.2. The Social scale has a mean of 41.03 with a SD of 5.57 and a CIBV of 5.3. The Emotional scale has a M of 47.46 with a SD of 7.21 and a CIBV of 5.8. The Spiritual/Philosophical scale has a M of 32.48 with a SD of 6.17 and a CIBV of 5.3. The Physical scale has a M of 28.58 with a SD of 5.43 and a CIBV of 5.5. The overall Total scale has a M of 176.96 with a SD of 21.71 and a CIBV of 12.8. In addition, 95 percent confidence intervals have been provided on the scales of the norm group, including the specific female norms.

Reliability

Reliability estimates were performed through three separate methods: item-to-scale correlations, internal consistency, and test-retest. The item-to-scale correlates across the scales range from .22 to .67. The only exception of a lower coefficient is a .11 of an item on the Physical
scale as endorsed by a high school sample; the same item is correlated .29 in the adult sample and .40 in the college sample.

Internal consistency reliabilities were estimated by using Cronbach's alpha. This type of reliability yields a range from .73 to .83 across the scales and yields a total scale reliability of .91 for the female sample.

Test-retest reliability yields a range from .60 to .78. However, the only sample subjected to this type of reliability analysis was based on a high school sample, suggesting a limited pool of knowledge for test-retest reliability.

Validity

The CRI purports predictive, convergent, discriminant, and concurrent validity. The CRI also gives evidence of face validity in that it provides construct support to others' (e.g. Gough, 1957; Haan, 1977; Lazarus, 1966; Meichenbaum & Jeremko, 1982; Pearlin & Schooler, 1978) formulations of constructs of coping.

Predictive Validity

To examine the predictive validity the CRI was administered to 108 junior high school students in the beginning of their spring semester, along with a measure of life events ([Elkind's Stress Test for Children] [Elkind, 1981]). Twelve weeks later, the students completed the Personal Stress Symptom Assessment (PSSA; Numeroff, 1983), an instrument that measures frequency of physical and
psychological symptoms across the six scales of cognitive, emotional, physical, use of stimulants, interpersonal, and behavioral measures; a total symptom score is also derived.

A hierarchial multiple regression analysis was used to partial out the effects of the variance from life events. The Total CRI resource score significantly predicted stress symptoms (p<.0001). The CRI Total resource score and the number of life events accounted for 32 percent of the variance in symptoms. In addition, the five individual CRI scale scores were analyzed with life events, accounting then for 46 percent of the variance in symptoms.

Convergent Validity

In establishing convergent validity, a multitrait-multimethod procedure (Campbell & Fiske, 1959) was employed. The five scales of the CRI were defined as the traits using this statistical model. Two methods were employed in this study: (1) respondents completed the CRI per se; (2) 84 adults were given a short description of each construct, or domain on the CRI and asked to rate where they fell on each scale, from very high to very low. The ratings were on a nine-point scale of each of the five scales completed by 84 adults. Correlations of the two methods (the CRI and self-ratings) yielded the convergent validity values across the five CRI scales. The validity coefficients ranged as follows: Spiritual/Philosophical = .61; Social = .63; Emotional = .67; Cognitive = .75; Physical = .80.
Discriminant Validity

Various studies of target and control groups were conducted in establishing discriminant validity. Several factors were considered in selecting the various groups in validating this instrument: selection factors operating on group membership, depletion of resources due to stress, life events or illness, and/or participation in training programs designed to enhance or improve resources.

Several groups were used in establishing discriminant validity on the CRI. These groups were college students with perceived high stress, cardiac/pulmonary rehabilitation patients, stress center clients, counseling center clients, college resident advisors, and high school peer counselors.

The college student group were divided into healthy and unhealthy conditions. In this group the conditions of current stress and recent (in the past six months) stress served as a moderator variable. In the current stress condition, subjects who were healthy discriminated on the CRI between students who were physically ill from stress. The healthy students exhibited higher mean scores than the ill students on all the scales except for the Emotion scale. In the recent stress condition, the two groups discriminated significantly on all scales of the CRI.

The cardiac and pulmonary patients (n=86) all showed significant differences in the deviant direction than the controls (n=323) on the following scales: Cognitive
(p<.01); Emotional (p<.001); Physical (p<.001); and Total scale score (p<.001). The norm group also had significantly higher scale scores on the Physical (p<.001) and Emotional (p<.05) domains.

In the stress center client study, where clients were attending stress-reduction workshops, the randomized sample of adults (n=33) exhibited significantly higher resource scores on the Social (p<.04) and Physical (p<.03) CRI domains.

In the counseling center study, the counseling center was a college facility for its students. The client group scored lower on all the scale scores than the control group, however, only significantly lower on the Cognitive (p<.001) and the Total resource scores (p<.01). Being that group sizes were only 14, and presumably exhibiting low statistical power, these specific results are not interpreted with a great degree of confidence.

The next study, using college student resident advisors, (n=26) was at a mid-western university. The resident advisors were compared to a control sample (n=42) of college students from the same university on the CRI. As anticipated, the resident advisors scored higher on the CRI presumably due to selection factors that attract individuals to that type of position and also training experiences they had. Specifically, the resident advisors scored significantly higher (p<.05) on the Social,
Spiritual/Philosophical and Total scale scores; the authors do not report on the other scale scores of the Cognitive, Emotional, and Physical scales.

In the high school peer counselor study, a small group (n=15) of school peer counselors was compared on the CRI with other students (N=61) in the same school. The CRI discriminated the two groups on the Cognitive (p<.01), Social (p<.001), Emotional (p<.01), Spiritual/Philosophical (p<.01), and Total scales (p<.01).

It is hypothesized that the CRI will discriminate ACoA's from non-ACoA's due to alcoholic offspring being identified commonly from symptomatic behavior of weakened coping resources, such as cognitive, emotional, social, and spiritual shortcomings in the literature. Specifically, experimental subjects in this dissertation will predictively have significantly less levels of coping resources than the control group.

**Concurrent Validity**

In establishing concurrent validity of the CRI the construct of social desirability in relation to respondents on the CRI was examined. Scores of the five domains on the CRI were correlated with the score on the revised Marlow-Crowne Social Desirability Scale [(MC-SDS) (Crowne & Marlow, 1960)]. A sample of 52 college students revealed no significant correlation between any of the CRI scales and the MC-SDS. Although, as with many instruments, inflating
responses on the CRI in the form of significantly high resources across all domains can possibly suggest a need for the respondent to appear in a favorable light.

Concurrent validity of the CRI has been addressed with various instruments. The relevant instruments investigated for concurrent validity with the CRI are: (1) the Personal Stress Symptom Assessment [(PSSA) (Numeroff, 1983)], (2) the Health and Daily Living Form [(HDLF) (Billings & Moos, 1981)], and (3) the Beck Depression Inventory [(BDI) (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961)].

There are six categories as well as a total score comprising the PSSA: Physical, Emotional, Cognitive, Stimulants, Interpersonal, and Behavioral. Taken by 108 adolescents, this instrument yielded negative correlations on all six measures of the CRI (including Total scale score), ranging from -.03 to -.55. The Cognitive and Physical scales were the most negatively correlated with the CRI.

The Health and Daily Living Form (HDLF; Billings & Moos, 1981) presented positive correlations to the CRI as could be expected. The HDLF contains 11 categories: Number of Friends, Satisfaction with Friends, Number of Close Friends, Satisfaction with Close Friends, Number of Clubs, Activities, Logical Analysis, Seek Information, Problem Solving, and Emotional Discharge. Specifically, (1) the number of friends and (2) problem solving proclivities were
the most highly correlated with the CRI. Number of Friends correlated from .24 to .50; Problem Solving ranged from .34 to .63. The lowest correlation, yet in a positive direction, was Activities, ranging from .02 to .22 with, interestingly, the Total CRI score being -.02.

The Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Moch & Erbaugh, 1961) yielded negative correlation coefficients on all five scales of the CRI in addition to the Total scale score. The nature of the correlations range from -.39 to -.62, with the Total scale correlation being -.66.

Overall, the CRI reflects evidence of reliability and validity. The investigations were performed over a variety of populations and with a variety of instruments in the validation of the CRI. The CRI focuses on seemingly pure domains of general functioning. Knowledge obtained from the employment of this instrument would appear to (1) foster a greater understanding of this syndrome, in terms of the type and extent of resource domains used on coping, (2) provide specific assessment information of diagnostic utility which addresses the needs and issues of ACoA's, (3) guide future research within this population in more meaningful and applicable directions, (4) provide empirical data to create a standardized measure of coping within this population as measured by the Coping Resources Inventory (CRI; Hammer,
1988), and (5) provide knowledge relative to this syndrome for prevention programming.

Rotter Locus of Control Scale

As a moderator variable, locus of control was examined in the sample of this study as measured by Rotter's Locus of Control Scale (LOC) (Rotter, 1966). "Locus of control" is a construct developed by Rotter (1966) whereby individuals are postulated to differ in terms of environmental reinforcers being perceived to be under personal control. Specifically, a person is deemed to have either an "internal" or "external" locus of control. Individuals with an internal LOC tend to perceive environmental reinforcers as events being under their personal control; individuals with an external LOC tend to perceive environmental reinforcers as being the result of luck, chance, fate, powerful others, or that events are unpredictable.

Gilmore (1978) found that locus of control is an instrumental mediator in adaptive functioning in children and adolescents. O'Gorman (1975) found that children of alcoholics exhibited a more external locus of control than children of non-alcoholics. Werner (1986) also found in her longitudinal study that children of alcoholics with serious coping problems tended to adopt an external LOC, although some CoA's with less severe coping problems had an internal LOC. These findings appear to have merit as Gilmor (1978) suggests that more positive attitudes and behavior from
parents are associated with a more internal locus of control in both adolescents and adults. This may imply that children raised in chaotic, tense, and/or violent environments may adopt perceptions that they have little control over their outcomes, i.e., external LOC. Prewett and Spence (1981) concluded similar results in that children from alcoholic homes exhibited more of an external LOC than non-CoA’s. This suggests that offspring of alcoholics may indeed exhibit poorer coping resources than individuals who were not raised in an alcoholic household.

As stated previously, locus of control in this study was measured by Rotter’s (1966) Internal-External (I-E) Locus of Control Scale. The Rotter I-E LOC scale is a 29-item, forced choice, self-report instrument. The LOC scale includes six filler items to make the instrument somewhat more ambiguous. The instrument is designed to be a measure of generalized expectancy for internal versus external locus of control reinforcement. The score on the LOC scale is the total number of external choices indicated by the respondent. A score of 12 or greater will be considered to reflect an external locus of control for purposes of this study. For females, the mean score is 8.42 with a SD of 4.06. The mean for males is 8.15 with a SD of 3.88. Reliability and validity estimates have been well documented on this instrument.
Reliability

The internal consistency estimates of the LOC scale appear stable. Rotter (1966) points out that the reliability estimates are only moderately high for a scale of this length. He indicates that the scale items are not directly comparable to one another due to the diversity of different situations they reflect, suggesting the reliability estimates tend to underestimate the internal consistency.

Test-retest reliability was assessed with samples of male and female college students and male prisoners. The reliability estimates of the test-retest samples ranges from .49 to .83. The coefficients for the females only range from .61 to .83. Rotter (1966) also subjected the LOC scale to the Spearman-Brown and Kuder-Richardson methods of reliability. Across female samples, the Spearman-Brown method yielded a coefficient of .79, where the Kuder-Richardson samples yielded coefficients of .70 and .76 respectively.

Correlations of Marlow-Crowne Social Desirability Scale (MCSD) range between -.07 to -.35 as reported by Rotter (1966). The social desirability coefficients on sample females alone range from -.12 to -.35. Most of the samples in determining social desirability were performed on a college population. The one reported exception is a sample run on 80 male federal prisoners aged 18 to 26 with a mean
reading level of eighth grade. The social desirability coefficient of that sample is -.41. Rotter (1966) speculates that the coefficient in the prisoner sample is relatively high due to manipulative tendencies of the sample employed, hence, a need to be seen in a favorable light.

Validity

The LOC instrument gives evidence of construct validity when scores below and above the median relative to internal LOC and external LOC are compared (Rotter, 1966). Scale scores above the median indicate an external orientation; likewise scores below the median suggest an internal orientation. Sample validation scores have also been correlated with behavioral criteria. There is strong support (Rotter, 1966) for the hypothesis that internal oriented individuals (who believe they have a significant degree of control over their lives) are likely to be (1) more aware of information in their environment which can aid them in the future; (2) take action to improve their environmental situation or condition; (3) be cognizant of the value on skill or achievement reinforcements in their lives; and (4) resist subtle attempts to be influenced. This suggests that internals tend to cope with a greater degree of success.

Johnson and Sarason (1978) found that locus of control orientation may be a moderator variable between a negative life change and affect disorder and/or anxiety. They state
that locus of control may serve to mediate the effects of stress on the individual, again further evidence that LOC may moderate coping.

Rotter (1966) argues that the LOC scale of measurement has discriminant validity in that the scale has low relationships with such variables as intelligence, social desirability (as mentioned before), and political liberalness.

**Statistical Analysis**

The primary statistical procedures for data analysis used in this study are discriminant analysis, step-wise multiple regression, and (multiple) t-tests. Discriminant analysis distinguishes the underlying domains (as measured by the Coping Resources Inventory) that define the dependent variables. "Discriminant scores" were computed through discriminant analysis in order to predict which group each (case) fell into. Discriminant analysis yielded accurate predictions of which group each case was in.

Step-wise multiple regression analysis simultaneously examined the effect of being an ACoA on measures of coping while controlling for selected demographic variables. Multiple regression analysis was used to explain variation in demographic variables across the CRI coping domains.

T-tests were conducted on the demographic variables to determine whether significant coping differences between the
two independent measures (ACoA and non-ACoA groups) are a function of specific demographic variables. The t-tests, however, do not control for the effects of other intervening factors.

The effects of locus of control measures in relation to the coping domains were ascertained via Step-wise multiple regression analysis.

Summary

This chapter includes discussion of the research setting of this study, subject pool and selection procedure, the methodology of data collection, the specific instrumentation used in generating the data, the type of data analysis used, and the specific demographic questionnaire used. The instruments employed in this study are (1) the Children of Alcoholics Screening Test, (2) the Coping Resources Inventory, and (3) Rotter’s Locus of Control scale. All the instruments yield adequate validity and reliability estimates.

The next chapter (Chapter IV) includes the results of the data. Chapter V discusses the conclusions of this study and its limitations. Research recommendations are also presented.
CHAPTER IV

Results

This chapter presents the results of the statistical analyses employed in this study. In review, the following research and hypotheses questions were asked:

(a) Do female ACoA’s use any one particular coping domain to a greater degree?
(b) Is there a significant relationship between specific demographic variables and specific domains used in coping?
(c) Does locus of control orientation reflect a significant difference in the coping domains used in coping?
(d) Do female ACoA’s and female non-ACoA’s significantly differ in locus of control orientation?
(e) Is the female ACoA population differentiated from female non-ACoA’s in terms of specific coping domains used?

The following hypothesis were presented.
Hypothesis #1: There is no statistically significant relationship between coping domains used among female ACoA's as measured by the CRI.

Hypothesis #2: There is no statistically significant relationship between demographic variables and the Cognitive coping domain of the CRI.

Hypothesis #3: There is no statistically significant relationship between demographic variables and the Social coping domain of the CRI.

Hypothesis #4: There is no statistically significant relationship between demographic variables and the Emotional coping domain of the CRI.

Hypothesis #5: There is no statistically significant relationship between demographic variables and the Spiritual/Philosophical coping domain of the CRI.

Hypothesis #6: There is no statistically significant relationship between demographic variables and the Physical coping domain of the CRI.

Hypothesis #7: There is no statistically significant relationship between demographic variables and the Total coping domain score of the CRI.

Hypothesis #8: There is no statistically significant relationship between locus of control and the Cognitive coping domain of the CRI.
**Hypothesis #9:** There is no statistically significant relationship between locus of control and the Social coping domain of the CRI.

**Hypothesis #10:** There is no statistically significant relationship between locus of control and the Emotional coping domain of the CRI.

**Hypothesis #11:** There is no statistically significant relationship between locus of control and the Spiritual/Philosophical coping domain of the CRI.

**Hypothesis #12:** There is no statistically significant relationship between locus of control and the Physical coping domain of the CRI.

**Hypothesis #13:** There is no statistically significant relationship between locus of control and the Total coping score of the CRI.

**Hypothesis #14:** There is no statistically significant difference between female ACoA's and female non-ACoA's on locus of control orientation.

**Hypothesis #15:** There is no statistically significant difference between female ACoA's and female non-ACoA's on the Cognitive scale of the CRI.

**Hypothesis #16:** There is no statistically significant difference between female ACoA's and female non-ACoA's on the Social scale of the CRI.
Hypothesis #17: There is no statistically significant difference between female ACoA’s and female non-ACoA’s on the Emotional scale of the CRI.

Hypothesis #18: There is no statistically significant difference between female ACoA’s and female non-ACoA’s on the Spiritual/Philosophical scale of the CRI.

Hypothesis #19: There is no statistically significant difference between female ACoA’s and female non-ACoA’s on the Physical scale of the CRI.

Hypothesis #20: There is no statistically significant difference between female ACoA’s and female non-ACoA’s on the Total score of the CRI.

Analyses

This chapter is divided into two sections: (1) descriptive statistics and demographic characteristics for the sample, and (2) tests of null hypotheses encompassing the relationship of specific coping domains and locus of control, relative to female adult children of alcoholics. The total sample was differentiated into two groups (ACoA’s and non-ACoA’s) by use of the Children of Alcoholics Screening Test [(C.A.S.T.) (Pilat & Jones, 1984-1985)].

C.A.S.T. Group Differentiation

The two groups (ACoA’s and non-ACoA’s) were examined separately. Each group (ACoA and Non-ACoA) contained 100
adult females ranging in ages of 18 to 55 years of age. Initially, each subject was given the Children of Alcoholics Screening Test (CAST) to discriminate ACoA's from non-ACoA's. A cutoff score of six or more "yes" responses was definitive of adult children of alcoholics. Conversely, protocols with five or less "yes" responses were defined as non-ACoA's. Jones (1982) determined that the cutoff score of six or more does in fact reliably discriminate ACoA's from non-ACoA's. Other analyses have been performed on the CAST. Using stepwise discriminant analysis, Martin (1988) used CAST cutoff levels of 5 through 12 affirmative item responses scored in the alcoholic direction. The results yielded nearly an identical result as the suggested cutoff criteria of six by the author of the CAST. A cutoff score of six affirmations or "yes" responses is a reliable discriminator between ACoA's and non-ACoA's. Table 1 shows the frequencies of the CAST scores for ACoA's and non-ACoA's.
Table 1

Frequencies and Percents of Individual C.A.S.T. Scores

<table>
<thead>
<tr>
<th>Score</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>74</td>
<td>37.0</td>
<td>37.0</td>
</tr>
<tr>
<td>1</td>
<td>10</td>
<td>5.0</td>
<td>42.0</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>3.0</td>
<td>45.0</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>1.5</td>
<td>46.5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>2.0</td>
<td>48.5</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>1.5</td>
<td>50.0</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0.0</td>
<td>50.0</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>1.5</td>
<td>51.5</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>1.0</td>
<td>52.5</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0.0</td>
<td>52.5</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>1.0</td>
<td>53.5</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>1.0</td>
<td>54.5</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>1.0</td>
<td>55.5</td>
</tr>
<tr>
<td>13</td>
<td>6</td>
<td>3.0</td>
<td>58.5</td>
</tr>
<tr>
<td>14</td>
<td>3</td>
<td>1.5</td>
<td>60.0</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>1.5</td>
<td>61.5</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td>1.5</td>
<td>63.0</td>
</tr>
<tr>
<td>17</td>
<td>5</td>
<td>2.5</td>
<td>65.5</td>
</tr>
<tr>
<td>18</td>
<td>6</td>
<td>3.0</td>
<td>68.5</td>
</tr>
<tr>
<td>19</td>
<td>4</td>
<td>2.0</td>
<td>70.5</td>
</tr>
<tr>
<td>20</td>
<td>5</td>
<td>2.5</td>
<td>73.0</td>
</tr>
<tr>
<td>21</td>
<td>10</td>
<td>5.0</td>
<td>78.0</td>
</tr>
<tr>
<td>22</td>
<td>7</td>
<td>3.5</td>
<td>81.5</td>
</tr>
<tr>
<td>23</td>
<td>10</td>
<td>5.0</td>
<td>86.5</td>
</tr>
<tr>
<td>24</td>
<td>9</td>
<td>4.5</td>
<td>91.0</td>
</tr>
<tr>
<td>25</td>
<td>2</td>
<td>1.0</td>
<td>92.0</td>
</tr>
<tr>
<td>26</td>
<td>9</td>
<td>4.5</td>
<td>96.5</td>
</tr>
<tr>
<td>27</td>
<td>1</td>
<td>.5</td>
<td>97.0</td>
</tr>
<tr>
<td>28</td>
<td>0</td>
<td>0.0</td>
<td>97.0</td>
</tr>
<tr>
<td>29</td>
<td>4</td>
<td>2.0</td>
<td>99.0</td>
</tr>
<tr>
<td>30</td>
<td>2</td>
<td>1.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(n = 200)

Table 2 shows the means and standard deviations for the CAST. The ACoA group yielded a mean of 19.82 affirmative responses with a standard deviation of 5.95. The non-ACoA
group averaged .62 "yes" responses with a standard deviation of 1.27.

Table 2
Means and Standard Deviations for the C.A.S.T.

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACoA</td>
<td>100</td>
<td>19.82</td>
<td>5.95</td>
</tr>
<tr>
<td>Non-ACoA's</td>
<td>100</td>
<td>.62</td>
<td>1.27</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>10.22</td>
<td>10.44</td>
</tr>
</tbody>
</table>

(n = 200)

Further analyses were conducted for both ACoA's and non-ACoA's. Following are analyses first, for the ACoA group, and then for the non-ACoA group.

Sample Characteristics

Adult Children of Alcoholics

The mean age of the ACoA's was 35.86 years with a standard deviation of 8.78. The model age category for ACoA's was 29-34 years of age, comprising 27% of ACoA respondents. The least frequent age category for ACoA's was 18-22 years, followed by 50-55 years (4% and 7% respectively). The range of ages in this group was 21 to 55
years. Table 3 depicts the frequencies and percents of age for ACoA's.

Table 3

Frequencies and Percents of ACoA Subjects by Reported Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-22</td>
<td>4</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>23-28</td>
<td>19</td>
<td>19.0</td>
<td>23.0</td>
</tr>
<tr>
<td>29-34</td>
<td>27</td>
<td>27.0</td>
<td>50.0</td>
</tr>
<tr>
<td>35-39</td>
<td>12</td>
<td>12.0</td>
<td>62.0</td>
</tr>
<tr>
<td>40-44</td>
<td>17</td>
<td>17.0</td>
<td>79.0</td>
</tr>
<tr>
<td>45-49</td>
<td>14</td>
<td>14.0</td>
<td>93.0</td>
</tr>
<tr>
<td>50-55</td>
<td>7</td>
<td>7.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 shows the degree of acquired education for ACoA's in this sample appear to be highly educated. The majority of ACoA respondents fell into the category of "some training or college beyond high school" (47%). No ACoA respondents reported an educational level of less than a high school graduate. In fact, 93% of ACoA respondents reported having some sort of education beyond high school
Forty-four percent of the ACoA's had either a college or graduate degree.

Table 4

Frequencies and Percents of ACoA Subjects by Reported Level of Education

<table>
<thead>
<tr>
<th>Education</th>
<th>Valid Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Than 9th Grade</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9th-12th Grade</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>9</td>
<td>9.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Some Training/College</td>
<td>47</td>
<td>47.0</td>
<td>56.0</td>
</tr>
<tr>
<td>College Graduate</td>
<td>13</td>
<td>13.0</td>
<td>69.0</td>
</tr>
<tr>
<td>Some Grad School</td>
<td>12</td>
<td>12.0</td>
<td>81.0</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>19</td>
<td>19.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 5 reflects occupation levels for the ACoA group. The majority of ACoA respondents reported they were professionals (36%), followed secondly by clerical (19%). Both managerial and skilled workers tied at 13%, whereas 10% of ACoA respondents indicated they were unskilled. Eight percent of ACoA respondents reported being unemployed.
Income level in the ACoA group yielded a wide range, as can be seen in Table 6. Nearly one-half (49%) of the ACoA's reported their annual household income to be between $20,000 and $49,999, while 12% earned under $7,000 and 17% earned more than $50,000 annually.

Table 5
Frequencies and Percents of ACoA Subjects by Reported Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Valid Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>36</td>
<td>36.4</td>
<td>36.4</td>
</tr>
<tr>
<td>Managerial</td>
<td>13</td>
<td>13.1</td>
<td>49.5</td>
</tr>
<tr>
<td>Clerical</td>
<td>19</td>
<td>19.2</td>
<td>68.7</td>
</tr>
<tr>
<td>Skilled</td>
<td>13</td>
<td>13.1</td>
<td>81.8</td>
</tr>
<tr>
<td>Unskilled</td>
<td>10</td>
<td>10.1</td>
<td>91.9</td>
</tr>
<tr>
<td>Unemployed</td>
<td>8</td>
<td>8.1</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

1 Miss

100 100.0
Table 6

Frequencies and Percents of ACoA Subjects by Reported Level of Income

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3,000</td>
<td>7</td>
<td>7.0</td>
<td>7.0</td>
</tr>
<tr>
<td>3,000-6,999</td>
<td>5</td>
<td>5.0</td>
<td>12.0</td>
</tr>
<tr>
<td>7,000-13,999</td>
<td>10</td>
<td>10.0</td>
<td>22.0</td>
</tr>
<tr>
<td>14,000-19,999</td>
<td>12</td>
<td>12.0</td>
<td>34.0</td>
</tr>
<tr>
<td>20,000-29,999</td>
<td>25</td>
<td>25.0</td>
<td>59.0</td>
</tr>
<tr>
<td>30,000-49,999</td>
<td>24</td>
<td>24.0</td>
<td>83.0</td>
</tr>
<tr>
<td>50,000-74,999</td>
<td>13</td>
<td>13.0</td>
<td>96.0</td>
</tr>
<tr>
<td>75,000 or more</td>
<td>4</td>
<td>4.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 7 shows the frequencies and percents of race distribution in the ACoA group. Three different races comprised the ACoA group. The majority of ACoA respondents were Caucasian (59%), African American (5%), and Native American (4%). There were no Asian/Pacific Islanders nor Hispanics in this group.

Table 8 shows the number of siblings that ACoA’s reported having. The majority of ACoA’s reported having four siblings (21.2%), followed closely by three siblings
(20%). ACoA subjects having two siblings made up 17.6% whereas ACoA's who reported one sibling totalled 15.3%.

Table 7

Frequencies and Percents of ACoA Subjects by Reported Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>59</td>
<td>86.7</td>
<td>86.7</td>
</tr>
<tr>
<td>African American</td>
<td>5</td>
<td>7.4</td>
<td>94.1</td>
</tr>
<tr>
<td>American Indian/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alaskan Native</td>
<td>4</td>
<td>5.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>missing</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 8
Frequencies and Percents of ACoA Subjects by Reported Number of Siblings

<table>
<thead>
<tr>
<th>Number of Siblings</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>4</td>
<td>4.7</td>
<td>4.7</td>
</tr>
<tr>
<td>One</td>
<td>13</td>
<td>15.3</td>
<td>20.0</td>
</tr>
<tr>
<td>Two</td>
<td>15</td>
<td>17.6</td>
<td>37.6</td>
</tr>
<tr>
<td>Three</td>
<td>17</td>
<td>20.0</td>
<td>57.6</td>
</tr>
<tr>
<td>Four</td>
<td>18</td>
<td>21.2</td>
<td>78.8</td>
</tr>
<tr>
<td>Five</td>
<td>7</td>
<td>8.2</td>
<td>87.1</td>
</tr>
<tr>
<td>Six</td>
<td>6</td>
<td>7.1</td>
<td>94.1</td>
</tr>
<tr>
<td>Seven</td>
<td>3</td>
<td>3.5</td>
<td>97.6</td>
</tr>
<tr>
<td>Eight or More</td>
<td>2</td>
<td>2.4</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

The categories of "four or more" male siblings and female siblings were combined for the data analysis. Thus, ACoA's who reported having eight or more siblings (2.4%) may in fact be slightly under-represented. A total of 4.7% of ACoA's reported no siblings. Step-siblings and half-siblings were included in the analysis of siblings.
Marital status was also analyzed for the ACoA group. The majority of ACoA subjects were either single/never married (30%) or married (32%). Thirty-six percent of ACoA's reported being either divorced and non remarried (23%) or divorced and remarried (13%). Table 9 shows this distribution.

Table 10 shows the number of times ACoA subjects indicated they were married. Of the married ACoA's, nearly half (45%) indicated they had been married only once. As stated previously, approximately one third of ACoA subjects were never married (30%). One quarter of ACoA subjects indicated they have been married two or more times.
<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>32</td>
<td>32.0</td>
<td>32.0</td>
</tr>
<tr>
<td>Never Married</td>
<td>30</td>
<td>30.0</td>
<td>62.0</td>
</tr>
<tr>
<td>Divorced/Single</td>
<td>23</td>
<td>23.0</td>
<td>85.0</td>
</tr>
<tr>
<td>Divorced/Remarried</td>
<td>13</td>
<td>13.0</td>
<td>98.0</td>
</tr>
<tr>
<td>Widowed</td>
<td>1</td>
<td>1.0</td>
<td>99.0</td>
</tr>
<tr>
<td>Legally Separated</td>
<td>1</td>
<td>1.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 10

Frequencies and Percents of ACoA's by Reported Number of Times Married

<table>
<thead>
<tr>
<th>Number of Times Married</th>
<th>Frequency</th>
<th>Percent</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>30</td>
<td>30.0</td>
<td>30.0</td>
</tr>
<tr>
<td>One</td>
<td>45</td>
<td>45.0</td>
<td>75.0</td>
</tr>
<tr>
<td>Two</td>
<td>18</td>
<td>18.0</td>
<td>93.0</td>
</tr>
<tr>
<td>Three</td>
<td>6</td>
<td>6.0</td>
<td>99.0</td>
</tr>
<tr>
<td>Four or more</td>
<td>1</td>
<td>1.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The subjects' age when their parents began to drink was also assessed. The ACoA's were instructed to indicate their age when they first recognized their parent(s) or caretaker(s) were drinking. Table 11 shows this age range.
Table 11
Frequency and Percent of ACoA Subjects by Reported Age When Parents Began Having Drinking Problems

<table>
<thead>
<tr>
<th>Age</th>
<th>Valid Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3</td>
<td>57</td>
<td>58.2</td>
<td>58.2</td>
</tr>
<tr>
<td>4-7</td>
<td>10</td>
<td>10.2</td>
<td>68.4</td>
</tr>
<tr>
<td>8-12</td>
<td>22</td>
<td>22.4</td>
<td>90.8</td>
</tr>
<tr>
<td>13-18</td>
<td>6</td>
<td>6.1</td>
<td>96.9</td>
</tr>
<tr>
<td>19 or older</td>
<td>3</td>
<td>3.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

This study also examined reported substance used by ACoA's within the past year. Alcohol, stimulants, depressants, narcotics, hallucinogens, marijuana, and inhalants were included in this analysis. The frequency of use was broken down into the following categories: (1) never, (2) once a year or less, (3) once a month or less, (4) once a week, and (5) daily.

Nearly half (48%) of the ACoA respondents indicated they used alcohol "once a month or less", while 20% reported they used alcohol "once a week". Only 4% of ACoA respondents indicated they used alcohol daily. More than
one fifth (21%) of ACoA respondents reported "never" using alcohol (see Table 12).

Table 12
Frequencies and Percents of ACoA Subjects by Reported Use of Alcohol

<table>
<thead>
<tr>
<th>Use of Alcohol</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>21</td>
<td>21.0</td>
<td>21.0</td>
</tr>
<tr>
<td>Once a Year or Less</td>
<td>7</td>
<td>7.0</td>
<td>28.0</td>
</tr>
<tr>
<td>Once a Month or Less</td>
<td>48</td>
<td>48.0</td>
<td>76.0</td>
</tr>
<tr>
<td>Once a Week</td>
<td>20</td>
<td>20.0</td>
<td>96.0</td>
</tr>
<tr>
<td>Daily</td>
<td>4</td>
<td>4.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

For all drugs other than alcohol, ACoA subjects reported a pattern of conservative use. As Table 13 indicated, over three fourths (78%) of the ACoA’s reported they "never" used marijuana where 10% indicated they used marijuana "once a year or less". Six percent of ACoA’s reported using marijuana "once a month or less", where 5% indicated using this substance "once a week". Only one percent of ACoA’s reported using marijuana "daily".
Table 13

Frequencies and Percents of ACoA Subjects by Reported Marijuana Use

<table>
<thead>
<tr>
<th>Use of Marijuana</th>
<th>Valid Frequency</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>78</td>
<td>78.0</td>
</tr>
<tr>
<td>Once a Year or Less</td>
<td>10</td>
<td>88.0</td>
</tr>
<tr>
<td>Once a Month or Less</td>
<td>6</td>
<td>94.0</td>
</tr>
<tr>
<td>Once a Week</td>
<td>5</td>
<td>99.0</td>
</tr>
<tr>
<td>Daily</td>
<td>1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Greater than 90% of ACoA subjects responses in each remaining drug category indicated they "never" used the respective substance. As indicated in Table 14, 91.9% of ACoA's reported "never" using stimulants. Only 3% of ACoA's indicated using stimulants once a year or less, while 2% use once a month or less. One percent of ACoA's declared using stimulants weekly and 2% reported using on a daily basis.

The percentage of those who reported using stimulants (and subsequent substances in this group) is minimal, indicating ACoA's used the particular substance only sporadically. Table 14 (and remaining substance use tables) is dichotomized into "Never" and "Infrequent" use.
Table 14
Frequencies and Percents of ACoA Subject by Reported Use of Stimulants

<table>
<thead>
<tr>
<th>Use of Stimulants</th>
<th>Valid Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>91</td>
<td>91.9</td>
<td>91.9</td>
</tr>
<tr>
<td>Infrequent Use</td>
<td>8</td>
<td>8.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td>missing</td>
</tr>
</tbody>
</table>

Table 15 depicts ACoA’s reported use of depressants. More than 90% of ACoA’s reported "never" using this substance. For those ACoA’s who acknowledged using this substance, 3.1% indicated using once a year or less; another 3.1% reported using once a month or less. Two percent of ACoA’s reported using once a week and only 1% reported daily use.
Table 15
Frequencies and Percents of ACoA Subjects by Reported Use of Depressants

<table>
<thead>
<tr>
<th>Use of Depressants</th>
<th>Frequency</th>
<th>Valid</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>89</td>
<td></td>
<td>90.8</td>
<td>90.8</td>
</tr>
<tr>
<td>Infrequent Use</td>
<td>9</td>
<td></td>
<td>9.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 16 describes ACoA's use of narcotics. As in other drug classes, very few ACoA's indicated using this substance. Over 93% reported "never" using narcotics. Similarly, no ACoA's indicated using narcotics on a "once a month or less" basis. Two percent of ACoA's reported using once a year or less and 3% indicated using once a week. Only 1% of ACoA's reported using narcotics on a daily basis. Overall, for purposes of this study, narcotic use among ACoA respondents is considered as "infrequent".

In the ACoA group approximately 5% of the subjects reported using hallucinogens in various frequencies. While nearly 95% of the ACoA's reported "never using hallucinogens, 1% of ACoA respondents indicated using this substance in each of the following categories: "once a year or less", "once a month or less", and "daily". Two percent
of ACoA's indicated using hallucinogens once a week. Table 17 presents substance use of hallucinogens for ACoA’s.

Table 18 reports infrequent use of inhalants among ACoA respondents. Only 2% of ACoA respondents indicated use, whereas 98% reported "never" using this substance. The ACoA subjects who acknowledged use, reported its frequency on a "once a year or less" basis.

**Table 16**

**Frequencies and Percents of ACoA Subjects by Reported Use of Narcotics**

<table>
<thead>
<tr>
<th>Valid Frequency</th>
<th>Cumulative Percent</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of Narcotics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>93</td>
<td>93.9</td>
</tr>
<tr>
<td>Infrequent Use</td>
<td>6</td>
<td>6.1</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 17
Frequencies and Percents of ACoA Subjects by Reported Use of Hallucinogens

<table>
<thead>
<tr>
<th>Use of Hallucinogens</th>
<th>Valid Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>94</td>
<td>94.9</td>
<td>94.9</td>
</tr>
<tr>
<td>Infrequent Use</td>
<td>5</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>missing</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 18
Frequencies and Percents of ACoA Subjects by Reported Use of Inhalants

<table>
<thead>
<tr>
<th>Use of Inhalants</th>
<th>Valid Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>97</td>
<td>98.0</td>
<td>98.0</td>
</tr>
<tr>
<td>Infrequent Use</td>
<td>2</td>
<td>2.0</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>missing</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Based on literature regarding parental impact on the development of the child's sense of security and coping (Bowlby, 1980; Cermak & Brown, 1982; Miller, 1981), the parental marital status at the time the subject left home was explored. Research indicates that families where both parents are married and living together tend to foster a familiar environment that reflects an emotional tie to the child, compared to broken marriages. Sixty percent of the ACoA's parents were married to each other at least up until the time when subjects left home. Twenty percent of parents were divorced. Fourteen percent of the subjects indicated being raised by a single parent due to the death of the other parent. Two percent of ACoA's reported parents to be legally separated. Two percent of the ACoA's parents were both deceased, thus care-takers other than the parents raised the subjects. One percent of the subjects indicated their parents were living together in common law. Table 19 shows this breakdown.

ACoA's self assessment of their general health was also addressed. The majority (96.8%) of ACoA's reported their health to be either "good" or "very good". Table 20 depicts general health status.

ACoA's also provided information on perceived level of stress at the time of data collection. Level of stress was determined via self-assessment. The stress categories were (1) "very low stress", (2) "low stress", (3) "high stress", 

and (4) "very high stress". The majority of ACoA respondents (56%) reported they were experiencing low stress. Thirty-seven percent of ACoA's reported high stress (37.4%), very high stress (4.4%), and very low stress (2.2%), in descending order of frequency. Table 21 shows the frequencies and percents of stress levels in the ACoA group.

Table 19
Frequencies and Percents of ACoA Subjects by Reported Marital Status of Parents When Subjects Left Home

<table>
<thead>
<tr>
<th>Parents' Marital Status</th>
<th>Valid Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married to Each Other</td>
<td>60</td>
<td>60.6</td>
<td>60.6</td>
</tr>
<tr>
<td>Divorced</td>
<td>20</td>
<td>20.2</td>
<td>80.8</td>
</tr>
<tr>
<td>One Parent Deceased</td>
<td>14</td>
<td>14.1</td>
<td>94.9</td>
</tr>
<tr>
<td>Legally Separated</td>
<td>2</td>
<td>2.0</td>
<td>96.9</td>
</tr>
<tr>
<td>Living in Common Law</td>
<td>1</td>
<td>1.1</td>
<td>98.0</td>
</tr>
<tr>
<td>Both Deceased</td>
<td>2</td>
<td>2.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Foster Parents</td>
<td>0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>missing</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 20

Frequencies and Percents of ACoA Subjects by Reported Health Status

<table>
<thead>
<tr>
<th>Health Status</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Poor</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Poor</td>
<td>2</td>
<td>2.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Good</td>
<td>47</td>
<td>51.0</td>
<td>54.3</td>
</tr>
<tr>
<td>Very Good</td>
<td>42</td>
<td>45.7</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>missing</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 21

Frequencies and Percents of ACoA Subjects by Reported Level of Stress

<table>
<thead>
<tr>
<th>Degree of Stress</th>
<th>Valid Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Low</td>
<td>2</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Low</td>
<td>51</td>
<td>56.0</td>
<td>58.2</td>
</tr>
<tr>
<td>High</td>
<td>34</td>
<td>37.4</td>
<td>95.6</td>
</tr>
<tr>
<td>Very High</td>
<td>4</td>
<td>4.4</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>missing</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

ACoA's locus of control orientation was examined. Locus of control was dichotomized as being "internal" or "external". Nearly two thirds (66%) of ACoA's scored in the internal direction whereas the remaining ACoA's (34%) scored in the external direction. Table 22 depicts locus of control for ACoA's.
Table 22

Frequencies and Percents of ACoA Subjects by Locus of Control Orientation

<table>
<thead>
<tr>
<th>Locus of Control</th>
<th>Valid Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td>66</td>
<td>66.0</td>
<td>66.0</td>
</tr>
<tr>
<td>External</td>
<td>34</td>
<td>34.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Adult Children of Non-Alcoholic Parents

The reported age range for non-ACoA's was between 18 and 54 years of age. The mean age for this group was 30.25 with a standard deviation of 9.56. The modal age category was 18-22 years of age, comprising 27% of the subjects in this group. The least frequent reported age category for non-ACoA respondents was the range of 50-55 years of age, followed by the category of 45-49 years (4% and 5% respectively). Table 23 shows this distribution.
Table 23
Frequencies and Percents of Non-ACoA’s Subjects by Reported Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-22</td>
<td>27</td>
<td>27.0</td>
<td>27.0</td>
</tr>
<tr>
<td>23-28</td>
<td>24</td>
<td>24.0</td>
<td>51.0</td>
</tr>
<tr>
<td>29-34</td>
<td>16</td>
<td>16.0</td>
<td>67.0</td>
</tr>
<tr>
<td>35-39</td>
<td>12</td>
<td>12.0</td>
<td>79.0</td>
</tr>
<tr>
<td>40-44</td>
<td>12</td>
<td>12.0</td>
<td>91.0</td>
</tr>
<tr>
<td>45-49</td>
<td>5</td>
<td>5.0</td>
<td>96.0</td>
</tr>
<tr>
<td>50-55</td>
<td>4</td>
<td>4.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 24 shows the degree of education acquired for non-ACoA respondents. Non-ACoA subjects, similar to ACoA subjects, reflect being highly educated. The majority (48%) of non-ACoA respondents had "some training or college beyond high school". Twenty-one percent of non-ACoA’s reported they had a graduate degree. Fourteen percent of non-ACoA’s had a college degree. No non-ACoA’s reported having less than a ninth grade education. Overall, 91% of non-ACoA’s had at least some training or college beyond high school.
Table 24

Frequencies and Percents of Non-ACoA Subjects by Reported Level of Education

<table>
<thead>
<tr>
<th>Education</th>
<th>Valid Frequency</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Than 9th Grade</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9th-12th Grade</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>6</td>
<td>6.0</td>
</tr>
<tr>
<td>Some Training/College</td>
<td>48</td>
<td>48.0</td>
</tr>
<tr>
<td>College Graduate</td>
<td>14</td>
<td>14.0</td>
</tr>
<tr>
<td>Some Grad School</td>
<td>8</td>
<td>8.0</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>21</td>
<td>21.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 25 depicts the frequency and percentage of occupational category of non-ACoA’s. Occupation of non-ACoA’s showed moderate variability. The model category was "clerical" work, (42%). The next most frequent occupational category was "professional" positions, (35%). The remaining percentage of employed non-ACoA’s was minimal; 6% in skilled work, 4% in managerial, and 2% in unskilled labor. Eleven percent of non-ACoA’s reported being unemployed.
Table 25

Frequencies and Percents of Non-ACoA Subjects by Reported Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>35</td>
<td>35.0</td>
<td>35.0</td>
</tr>
<tr>
<td>Managerial</td>
<td>4</td>
<td>4.0</td>
<td>39.0</td>
</tr>
<tr>
<td>Clerical</td>
<td>42</td>
<td>42.0</td>
<td>81.0</td>
</tr>
<tr>
<td>Skilled</td>
<td>6</td>
<td>6.0</td>
<td>87.0</td>
</tr>
<tr>
<td>Unskilled</td>
<td>2</td>
<td>2.0</td>
<td>89.0</td>
</tr>
<tr>
<td>Unemployed</td>
<td>11</td>
<td>11.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 26 shows the income distribution for non-ACoA respondents. Those earning between $20,000 and $29,999 totalled 28%, for the modal category. Twenty-five percent of the non-ACoA's indicated earning between $30,000 and $49,999 per year. Eighteen percent of the non-ACoA's reported earning $50,000 or more on an annual basis. Only 2% earned less than $3,000 per year.
Table 26

Frequencies and Percents of Non-ACoA Subjects by Reported Level of Income

<table>
<thead>
<tr>
<th>Income</th>
<th>Valid Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3,000</td>
<td>2</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>3,000-6,999</td>
<td>7</td>
<td>7.0</td>
<td>9.0</td>
</tr>
<tr>
<td>7,000-13,999</td>
<td>6</td>
<td>6.0</td>
<td>15.0</td>
</tr>
<tr>
<td>14,000-19,999</td>
<td>14</td>
<td>14.0</td>
<td>29.0</td>
</tr>
<tr>
<td>20,000-29,999</td>
<td>28</td>
<td>28.0</td>
<td>57.0</td>
</tr>
<tr>
<td>30,000-49,999</td>
<td>25</td>
<td>25.0</td>
<td>82.0</td>
</tr>
<tr>
<td>50,000-74,999</td>
<td>11</td>
<td>11.0</td>
<td>93.0</td>
</tr>
<tr>
<td>75,000 or more</td>
<td>7</td>
<td>7.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 27 shows the distribution of race for non-ACoA respondents. The majority of non-ACoA's (85%) of race were Caucasian, followed by African American (11.3%). Asian/Pacific Islanders comprised 2.5% of the non-ACoA respondents. Only 1.3% of non-ACoA's indicated being of "Other" race. There were no American Indians or Hispanic subjects among the non-ACoA's.
Table 27
Frequencies and Percents of Non-ACoA Subjects by Reported Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>68</td>
<td>85.0</td>
<td>85.0</td>
</tr>
<tr>
<td>African American</td>
<td>9</td>
<td>11.3</td>
<td>96.3</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>2</td>
<td>2.5</td>
<td>98.8</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>0</td>
<td>0.0</td>
<td>98.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0</td>
<td>0.0</td>
<td>98.8</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1.2</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
<td><strong>missing</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 28 shows the number of siblings that non-ACoA subjects reported. The modal number for non-ACoA's was two siblings (27.2%), followed by four siblings (21.3%). Non-ACoA's who reported being an only child totalled 3.7%.

As with the ACoA group, those with "eight or more" siblings may be slightly under-represented since both sexes of siblings with "four or more" were combined in the analysis. Again, step- and half-siblings were included in this analysis.
Table 28

Frequencies and Percents of Non-ACoA Subjects by Reported Number of Siblings

<table>
<thead>
<tr>
<th>Number of Siblings</th>
<th>Valid Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>3</td>
<td>3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>One</td>
<td>13</td>
<td>16.1</td>
<td>19.8</td>
</tr>
<tr>
<td>Two</td>
<td>22</td>
<td>27.1</td>
<td>46.9</td>
</tr>
<tr>
<td>Three</td>
<td>12</td>
<td>14.8</td>
<td>61.7</td>
</tr>
<tr>
<td>Four</td>
<td>17</td>
<td>21.0</td>
<td>82.7</td>
</tr>
<tr>
<td>Five</td>
<td>4</td>
<td>5.0</td>
<td>87.7</td>
</tr>
<tr>
<td>Six</td>
<td>2</td>
<td>2.4</td>
<td>90.1</td>
</tr>
<tr>
<td>Seven</td>
<td>3</td>
<td>3.7</td>
<td>93.8</td>
</tr>
<tr>
<td>Eight or More</td>
<td>5</td>
<td>6.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 29 shows the current marital status of non-ACoA subjects. Nearly one-half (47.%) of non-ACoA’s reported they had never been married. Approximately one third (33.%) of non-ACoA’s reported being in their first marriage. Sixteen percent of non-ACoA’s indicated they were divorced and currently single. Four percent of non-ACoA’s indicated being divorced and currently remarried.
Table 29  
Frequencies and Percents of Non-ACoA Subjects by Reported Marital Status

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never Married</td>
<td>47</td>
<td>47.0</td>
<td>47.0</td>
</tr>
<tr>
<td>Divorced/Single</td>
<td>16</td>
<td>16.0</td>
<td>63.0</td>
</tr>
<tr>
<td>Divorced/Remarried</td>
<td>4</td>
<td>4.0</td>
<td>67.0</td>
</tr>
<tr>
<td>Widowed</td>
<td>0</td>
<td>0.0</td>
<td>67.0</td>
</tr>
<tr>
<td>Married</td>
<td>33</td>
<td>33.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

On a similar note, non-ACoA subjects were asked to report the number of times they had been married. Approximately 47% of non-ACoA respondents indicated they had never been married. Of non-ACoA's who were married, 43.4% indicated they have only been married once, whereas 8% reported being married twice. Only 1% of the non-ACoA's indicated being married three or more times. Table 30 illustrates the number of times non-ACoA subjects had been married.
Table 30
Frequencies and Percents of Non-ACoA Subjects by Reported Number of Times Married

<table>
<thead>
<tr>
<th>Number of Times Married</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>47</td>
<td>47.5</td>
<td>47.5</td>
</tr>
<tr>
<td>One</td>
<td>43</td>
<td>43.4</td>
<td>90.9</td>
</tr>
<tr>
<td>Two</td>
<td>8</td>
<td>8.1</td>
<td>99.0</td>
</tr>
<tr>
<td>Three</td>
<td>1</td>
<td>1.0</td>
<td>100.0</td>
</tr>
<tr>
<td>missing</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Reported alcohol use within the past year was also examined. Over 85% of non-ACoA's reported using alcohol moderately. The majority (42.9%) of non-ACoA's indicated drinking "once a month or less". Another 30.6% of non-ACoA's reported using "once a week", while only 2% indicated drinking on a daily basis. Non-ACoA's drinking "once a year or less" totalled 13.3% while 11.2% reported they "never" drink. Table 31 shows these results.
Table 31
Frequencies and Percents of Non-ACoA Subjects by Reported Use of Alcohol

<table>
<thead>
<tr>
<th>Use of Alcohol</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>11</td>
<td>11.2</td>
<td>11.2</td>
</tr>
<tr>
<td>Once a Year or Less</td>
<td>13</td>
<td>13.3</td>
<td>24.5</td>
</tr>
<tr>
<td>Once a Month or Less</td>
<td>42</td>
<td>42.8</td>
<td>67.3</td>
</tr>
<tr>
<td>Weekly</td>
<td>30</td>
<td>30.7</td>
<td>98.0</td>
</tr>
<tr>
<td>Daily</td>
<td>2</td>
<td>2.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The majority (71.4%) of non-ACoA's reported never using marijuana (Table 32). The remaining of non-ACoA subjects reported using marijuana in the following percentages. Non-ACoA's who reported using marijuana "once a year or less" totalled 16.3%. Non-ACoA's using "once a month or less" totalled 10.2%. Only 2% of non-ACoA's reported using marijuana on a daily basis.
### Table 32

**Frequencies and Percents of Non-ACoA Subjects by Reported Use of Marijuana**

<table>
<thead>
<tr>
<th>Use of Marijuana</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>70</td>
<td>71.4</td>
<td>71.4</td>
</tr>
<tr>
<td>Once a Year or Less</td>
<td>16</td>
<td>16.4</td>
<td>87.8</td>
</tr>
<tr>
<td>Once a Month or Less</td>
<td>10</td>
<td>10.2</td>
<td>98.0</td>
</tr>
<tr>
<td>Once a Week</td>
<td>2</td>
<td>2.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Daily</td>
<td>0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>missing</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

As with the ACoA group analysis, the non-ACoA subjects reported using the remaining illicit substances predominately on an infrequent basis. In addition, non-ACoA's who reported using these substances comprised only a small percentage of the group. Thus the remaining drug use tables are dichotomized into "never" and "infrequent use" patterns to illustrate the limited use of these substances.

Table 33 depicts the reported use of stimulant drugs. The majority of non-ACoA's (93.9%) indicate "never" using this substance, 6.1% of the responses point to occasional use.
Table 33

Frequencies and Percents of Non-ACoA Subjects by Reported Use of Stimulants

<table>
<thead>
<tr>
<th>Use of Stimulants</th>
<th>Valid Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>92</td>
<td>93.9</td>
<td>93.9</td>
</tr>
<tr>
<td>Infrequent Use</td>
<td>6</td>
<td>6.1</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>missing</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

The non-ACoA's reported use of depressant drugs yielded 90.7% in the "never" category. The remaining 9.3% were "infrequent" users, as shown in Table 34 below.
Table 34

Frequencies and Percents of Non-ACoA Subjects by Reported Use of Depressants

<table>
<thead>
<tr>
<th>Use of Depressants</th>
<th>Valid Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>88</td>
<td>90.7</td>
<td>90.7</td>
</tr>
<tr>
<td>Infrequent Use</td>
<td>9</td>
<td>9.3</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td><em>missing</em></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

As can be seen in Table 35, the reported use of narcotics by non-ACoA respondents was also minimal. The majority (94.9%) of non-ACoA's indicated they "never" use this drug, whereas only 5.1% reported occasional use (once a month or once a year or less).
Table 35

Frequencies and Percents of Non-ACoA Subjects by Reported Use of Narcotics

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Use of Narcotics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>93</td>
<td>94.9</td>
<td>94.9</td>
</tr>
<tr>
<td>Infrequent Use</td>
<td>5</td>
<td>5.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Only three non-ACoA subjects (3.1%) indicated using hallucinogen drugs, whereas the remaining 96.9% reported "never" using this substance. Table 36 shows reported use for hallucinogens among non-ACoA's.

Among non-ACoA's, the use of inhalant drugs was reported to be used the least of any of the illicit drugs. Only 1.3% of non-ACoA's indicated using this drug, whereas the remaining 99.7% reported they "never" use inhalants. Table 37 shows the use of inhalants by non-ACoA respondents.
Table 36
Frequencies and Percents of Non-ACoA Subjects by Reported Use of Hallucinogens

<table>
<thead>
<tr>
<th>Use of Hallucinogens</th>
<th>Valid Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>95</td>
<td>96.9</td>
<td>96.9</td>
</tr>
<tr>
<td>Infrequent Use</td>
<td>3</td>
<td>3.1</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>missing</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 37
Frequencies and Percents of Non-ACoA Subjects by Reported Use of Inhalants

<table>
<thead>
<tr>
<th>Use of Inhalants</th>
<th>Valid Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>97</td>
<td>99.0</td>
<td>99.0</td>
</tr>
<tr>
<td>Infrequent Use</td>
<td>1</td>
<td>1.0</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>missing</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

As with the ACoA group, the parental marital status when the subject left home was explored among non-ACoA's.
Table 38 shows the majority (69.1%) of non-ACoA’s reported their parents or care-takers were married to each other and another 2.2% were reported to be living together in common-law. Divorced parents of non-ACoA’s made up 17.5% and another 3.8% were legally separated. Only 1.1% of non-ACoA’s indicated being raised by foster parents. Seven percent of non-ACoA’s reported being raised by one parent due to the other parent being deceased.

Non-ACoA’s also reported their perceived state of physical health. The four possible responses were: (1) very poor, (2) poor, (3) good, and (4) very good. The majority (58%) of non-ACoA’s thought they were in "very good" health, followed by 40.9%, who reported to be in "good health". Only 1.1% of non-ACoA’s indicated they were in "poor" health and no one in this group reported to be "very poor" health. Table 39 presents the health status for the non-ACoA’s.

Non-ACoA subjects also reported the level of stress they were experiencing at the time of data collection. Over one-half (56.5%) of non-ACoA respondents reported experiencing "low" stress. Only 7.1% and 2.4% of the non-ACoA’s perceived "very high" stress or "very low" levels of stress, respectively, as indicated by Table 40.
Table 38

Frequencies and Percents of Non-ACoA Subjects by Reported Marital Status of Parents When Subject Left Home

<table>
<thead>
<tr>
<th>Parent’s Marital Status</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married to Each Other</td>
<td>67</td>
<td>69.1</td>
<td>69.1</td>
</tr>
<tr>
<td>Divorced</td>
<td>17</td>
<td>17.5</td>
<td>86.6</td>
</tr>
<tr>
<td>Legally Separated</td>
<td>3</td>
<td>3.1</td>
<td>89.7</td>
</tr>
<tr>
<td>Living in Common Law</td>
<td>2</td>
<td>2.1</td>
<td>91.8</td>
</tr>
<tr>
<td>Both Deceased</td>
<td>0</td>
<td>0.0</td>
<td>91.8</td>
</tr>
<tr>
<td>Foster Parents</td>
<td>1</td>
<td>1.0</td>
<td>92.8</td>
</tr>
<tr>
<td>One Parent Deceased</td>
<td>7</td>
<td>7.2</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>missing</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>
Table 39
Frequencies and Percents of Non-ACoA Subjects by Reported Health Status

<table>
<thead>
<tr>
<th>Health Status</th>
<th>Valid Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Poor</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Poor</td>
<td>1</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>Good</td>
<td>36</td>
<td>40.9</td>
<td>42.0</td>
</tr>
<tr>
<td>Very Good</td>
<td>51</td>
<td>58.0</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>missing</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
Table 40

Frequencies and Percents of Non-ACoA Subjects by Reported Stress Level

<table>
<thead>
<tr>
<th>Degree of Stress</th>
<th>Valid Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Low</td>
<td>6</td>
<td>7.1</td>
<td>7.1</td>
</tr>
<tr>
<td>Low</td>
<td>48</td>
<td>56.5</td>
<td>63.5</td>
</tr>
<tr>
<td>High</td>
<td>29</td>
<td>34.1</td>
<td>97.6</td>
</tr>
<tr>
<td>Very High</td>
<td>2</td>
<td>2.4</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>15 (missing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Finally, locus of control was assessed for the non-ACoA subjects. Eighty percent of the non-ACoA group were assessed to be internally oriented and the remaining 20% of non-ACoA's were externally oriented. Table 41 shows this dichotomy.
Table 41

Frequencies and Percents of Subjects by Locus of Control Orientation

<table>
<thead>
<tr>
<th>Locus of Control</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td>80</td>
<td>80.0</td>
<td>80.0</td>
</tr>
<tr>
<td>External</td>
<td>20</td>
<td>20.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Sample Characteristics

All Subjects

The means and standard deviations of the coping domain scores follow. Assessment of coping domains was conducted first across all subjects, and then across both the ACoA group and the non-ACoA group separately.

Each domain had a different range of possible raw scores. The Cognitive domain ranged from 9 to 36; the Social domain ranged from 13 to 52; the Emotional domain ranged from 16 to 64; and both the Spiritual/Philosophical domain and the Physical domain ranged from 11 to 44. The Total domain range of scores spanned from 60 to 240.

The raw score means and standard deviations were converted into standardized scores. Table 42 shows the
standardized means and standard deviations of CRI scores for the total subjects sample.

Table 42
Total Subjects by Means and Standard Deviations of Coping Domains

<table>
<thead>
<tr>
<th>Domains</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>48.70</td>
<td>12.39</td>
</tr>
<tr>
<td>Social</td>
<td>48.77</td>
<td>12.15</td>
</tr>
<tr>
<td>Emotional</td>
<td>47.37</td>
<td>12.55</td>
</tr>
<tr>
<td>Spiritual/Philosophical</td>
<td>50.02</td>
<td>9.43</td>
</tr>
<tr>
<td>Physical</td>
<td>47.43</td>
<td>10.71</td>
</tr>
<tr>
<td>Total Domain Scores</td>
<td>171.59</td>
<td>27.86</td>
</tr>
</tbody>
</table>

(n=200)

In the results of the total sample, the Spiritual/Philosophical domain yielded the largest mean relative to the remaining domains, whereas the Emotional and Cognitive domain means were the smallest. The Social domain was higher than the Emotional and Cognitive domains.

Table 43 shows the standardized means and standard deviations separately for the ACoA group and the non-ACoA group. Coping scores were attained from the subject’s
responses relative to their experiences within the past six month period at the time of completing the instrument. Non-ACoA subjects scored higher across all five domains in addition to the Total coping score (see Table 43 below).

Table 43
Means and Standard Deviations on Coping Domains for ACoA’s and non-ACoA’s

<table>
<thead>
<tr>
<th>DOMAINS</th>
<th>ACoA’s</th>
<th>S.D.</th>
<th>Non-ACoA’s</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>44.17</td>
<td>12.69</td>
<td>53.23</td>
<td>10.31</td>
</tr>
<tr>
<td>Social</td>
<td>46.88</td>
<td>12.27</td>
<td>50.66</td>
<td>11.78</td>
</tr>
<tr>
<td>Emotional</td>
<td>44.17</td>
<td>12.73</td>
<td>50.58</td>
<td>11.56</td>
</tr>
<tr>
<td>Spiritual/Philosophical</td>
<td>49.04</td>
<td>9.98</td>
<td>51.01</td>
<td>8.79</td>
</tr>
<tr>
<td>Physical</td>
<td>45.37</td>
<td>10.36</td>
<td>49.49</td>
<td>10.71</td>
</tr>
<tr>
<td>Total</td>
<td>164.17</td>
<td>27.92</td>
<td>179.01</td>
<td>25.87</td>
</tr>
</tbody>
</table>

Domains of Coping Used by Female ACoA’s

Hypothesis 1 states there is no statistically significant difference between coping domains used among female ACoA’s as measured by the CRI. T-tests of significance were performed on the ACoA’s to determine the magnitude of coping across domains. Table 44 shows results
of paired t-tests of significance across the domains for the female ACoA's.

Table 44
T-Tests of Significance of Coping Domains for Female ACoA's

<table>
<thead>
<tr>
<th>DOMAINS</th>
<th>Means</th>
<th>S.D.</th>
<th>S.E.M.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>44.17</td>
<td>12.69</td>
<td>1.26</td>
</tr>
<tr>
<td>Social</td>
<td>46.88</td>
<td>12.27</td>
<td>1.22</td>
</tr>
<tr>
<td>Emotional</td>
<td>44.17</td>
<td>12.73</td>
<td>1.27</td>
</tr>
<tr>
<td>Spiritual/Philosophical</td>
<td>49.04</td>
<td>9.98</td>
<td>.99</td>
</tr>
<tr>
<td>Physical</td>
<td>45.37</td>
<td>10.36</td>
<td>1.03</td>
</tr>
</tbody>
</table>

The data revealed a significant difference between magnitude of domains used by female ACoA's in coping. The Spiritual/Philosophical domain was clearly significant over all other domains. The Social domain was found to be significant, however only over the Cognitive and Emotional domains. These results lead to the rejection of Hypothesis 1, that there is no statistically significant difference between coping domains used among female ACoA's.

Relationship of Demographic Variables to Coping Domains

Hypothesis 2 - 7 assert that no significant relationship between demographic variables and coping
domains exists. Step-wise multiple regression was performed on each coping domain to test hypotheses 2 - 7. The variables controlled for across all coping domains were: (1) illicit substance use other than marijuana and alcohol, (2) the group to which a subject belonged was an ACoA v.s. Non-ACoA, (3) number of siblings, (4) age of subject, (5) degree of stress the subject currently felt to be under, (6) highest level of education completed, (7) marital status, (8) locus of control, (9) use of marijuana, (10) occupation, and (11) number of times married.

Table 45 shows the Pearson Product-Moment Correlation Coefficients for each variable.
Table 45

Correlational Matrix for Demographic Variables and Coping Domains

<table>
<thead>
<tr>
<th></th>
<th>COG</th>
<th>SOC</th>
<th>ENO</th>
<th>SPH</th>
<th>PHY</th>
<th>TOT</th>
<th>GROUP</th>
<th>OCCUP</th>
<th>EDUC</th>
<th>MARITAL</th>
<th>TIMES</th>
<th>MARIJ</th>
<th>LOC</th>
<th>STRESS</th>
<th>YEARAGE</th>
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<td>-.05</td>
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<td>-.06</td>
<td>-.27**</td>
<td>-.05</td>
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<td>-.20**</td>
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<td>.19t</td>
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<td>.19**</td>
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<td>.00</td>
<td>.03</td>
<td>.04</td>
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<tr>
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<td>-.14*</td>
<td>-.15*</td>
<td>-.15*</td>
<td>-.21**</td>
<td>-.21**</td>
<td>-.00</td>
<td>.23t</td>
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<td>-.07</td>
<td>-.10</td>
<td>.45t</td>
<td>.04</td>
<td>.03</td>
<td>.05</td>
<td>.05</td>
<td>1.00</td>
</tr>
</tbody>
</table>

* - p < .05  
** - p < .01  
† - p < .001
Initially, step-wise multiple regression analysis was conducted to examine the relationship among 17 different variables. Several variables showed minimal correlations in accounting for sample variance and hence were eliminated from the final run of multiple regression analysis. The variables eliminated were: (1) income; (2) age of subject when parents began having drinking problems; (3) subject's own use of alcohol; (4) marital status of parents when subject left home; (5) health; and (6) race. At that point the Enter method of multiple regression analysis was performed on 11 variables including the coping domains of the CRI. In this method all variables minus one are combined and are simultaneously analyzed until all combinations (minus one different variable) have been subjected to the method.

Hypothesis 2 - 7 were all rejected in the null form. The data provided evidence that a statistically significant relationship of mild to moderate strength between specific demographic variables and coping domains existed.

The correlation of the Cognitive domain was the strongest \( r = 0.38, p < 0.001 \). Four demographic variables were significant for the Cognitive domain: (1) group \( t = 4.95, p < 0.001 \); (2) number of siblings \( t = -2.01, p < 0.05 \); (3) stress \( t = 3.26, p < 0.01 \); and (4) locus of control \( t = -2.25, p < 0.05 \).
The Social domain yielded a correlation of marginal strength (r = .18, p < .0045). The demographic variable of stress was significant on the Social domain (t = 2.98, p < .01). The Emotional domain exhibited a correlation of moderate strength (r = .24, p < .0001). For this domain Group (t = 3.29, p < .01) and stress (t = 3.24, p < .01) were significant.

The Spiritual/Philosophical domain gave the weakest correlation (r = .15, p < .0235). The demographic variables of stress (t = 2.07, p < .05) and use of marijuana (t = -1.98, p < .05) were significant on the Spiritual/Philosophical domain. The Physical domain yielded a moderate correlation of r = .26 (p < .0001). Stress was significant on the Physical domain (t = 2.69, p < .01). The Total score of all domains combined also yielded a moderate correlation (r = .34, p < .0001) with demographic variables. Similarly to the Emotional domain, group (t = 3.69, p < .001) and stress (t = 3.83, p < .001) were significant on the Total coping domain score.

Table 46 shows the variance and significance levels for each coping domain for all subjects.
Table 46
Variance and Significance for Coping Domains for All Subjects

<table>
<thead>
<tr>
<th>CRI Domain</th>
<th>R Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>.38496</td>
<td>7.3401**</td>
</tr>
<tr>
<td>Social</td>
<td>.18376</td>
<td>2.6400*</td>
</tr>
<tr>
<td>Emotional</td>
<td>.24833</td>
<td>3.8742**</td>
</tr>
<tr>
<td>Spiritual/Philosophical</td>
<td>.15273</td>
<td>2.1139*</td>
</tr>
<tr>
<td>Physical</td>
<td>.26435</td>
<td>4.2141**</td>
</tr>
<tr>
<td>Total</td>
<td>.34460</td>
<td>6.1659**</td>
</tr>
</tbody>
</table>

*p < .01

**p < .001

Relationship of Demographic Variables to Group

T-tests of significance were performed to determine whether the means of the demographic variables between the ACoA and non-ACoA groups were significantly different. Three of the demographic variables were significant. These variables were: (1) Use of Inhalants (F = 1.96, p < .001), (2) Use of Other Substances [stimulants, depressants, narcotics, and/or hallucinogens] (F = 2.02, p < .001), and (3) Age of Subject (F = 1.90, p < .002). All three variables showed a higher mean in the ACoA group. Other than these
three variables, both groups were equivalent across the demographic variables.

**Relationship Between Locus of Control and Coping Domains**

Hypothesis 8 - 13 assert there is no relationship between locus of control and specific coping domains. Multiple regression analysis was performed to determine if such a relationship exists. Results indicate a mild to moderate correlation between locus of control and each of the coping domains (see these correlations in Table 45 above). Locus of control was significant in the Cognitive domain regression equation ($t = -2.25, p < .05$). Therefore Hypothesis 8, that there is no significant relationship between locus of control and the Cognitive coping domain on the CRI, is rejected in the null form. Hypothesis 9 through 13 cannot be rejected in the null form.

**Relationship Between Group and Locus of Control**

Hypothesis 14 states there is no statistically significant difference between female ACoA’s and female non-ACoA’s on locus of control. Paired t-tests of significance revealed no significant difference among group on locus of control. Therefore, Hypothesis 14 could not be rejected.
Relationship Between Group and Coping Domains

Hypothesis 15-20 assert there is no statistically significant difference between female ACoA's and non-ACoA's use of specific coping domains. Multiple regression analysis revealed group differences among the Cognitive domain \(t = 4.95, p < .001\), the Emotional domain \(t = 2.39, p < .01\), and the Total coping domain score \(t = 3.69, p < .001\).

Discriminant function analysis was performed on the entire sample to determine the effectiveness of the coping domains in predicting whether or not the subject was an offspring of an alcoholic or not. The sample contained 100 subjects that identified their parent(s) as alcoholic and 100 subjects who reported no alcohol problems in either parent or care-taker.

Analysis of the group differences were conducted by examining univariate statistics. See Table 43 above for the means and standard deviations and Table 47 below for the summary of the analysis.

One discriminant function was calculated and was significant \(p < .001\). The Wilk's \(\Lambda\) corresponded to .837 and indicated that 100% of the variance was accounted for by subject grouping. The group centroids were -.43758 and .43758 for the ACoA group and the non-ACoA group, respectively. Table 48 shows that all domains, with the exception of Spiritual/Philosophical, were significant. The
strongest predictor was the Cognitive domain. The remaining domains showed significant prediction, albeit weak. The Total domain score did not pass the Tolerance Test of discriminant functioning. Hence the Total score was excluded from the canonical discriminant functional analysis.

Table 47
Discriminant Function Analysis on the CRI With All Subjects

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized Discriminant Function Coefficient</th>
<th>Wilks' ( \Lambda )</th>
<th>( F )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>1.17</td>
<td>.865</td>
<td>30.690***</td>
</tr>
<tr>
<td>Social</td>
<td>-.36</td>
<td>.975</td>
<td>4.930*</td>
</tr>
<tr>
<td>Emotional</td>
<td>.30</td>
<td>.934</td>
<td>13.890***</td>
</tr>
<tr>
<td>S/PH</td>
<td>-.44</td>
<td>.989</td>
<td>2.191 n.s.</td>
</tr>
<tr>
<td>Physical</td>
<td>.01</td>
<td>.962</td>
<td>7.643**</td>
</tr>
<tr>
<td>Total</td>
<td>N/A</td>
<td>.925</td>
<td>15.980***</td>
</tr>
</tbody>
</table>

*\( p < .05 \)
**\( p < .01 \)
***\( p < .001 \)
n.s. = non-significant
Hypothesis 15 (Cognitive), 16 (Social), 17 (Emotional), and 19 (Physical) were all rejected. Hypothesis 18, that there is no significant difference between ACoA's and non-ACoA's on the Spiritual/Philosophical scale of the CRI, was unable to be rejected.

Hypothesis 20, that there is no significant difference between female ACoA's and non-ACoA's on the Total scales score, was rejected. However since it did not pass the Tolerance Test, the Total domain score cannot be used as a discriminant predictor between the ACoA and non-ACoA groups.

Table 48
Hit Rates Using Discriminant Functional Analysis to Predict Which Subject Had Alcoholic Parents

<table>
<thead>
<tr>
<th>Predicted Group Membership</th>
<th>Actual Group</th>
<th>ACoA's</th>
<th>Non-ACoA's</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACoA</td>
<td>No.</td>
<td>65</td>
<td>35</td>
<td>100</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>65.0</td>
<td>35.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Non-ACoA</td>
<td>No.</td>
<td>28</td>
<td>72</td>
<td>100</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>28.0</td>
<td>72.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

n = 200
Discriminant analysis was employed to predict which group the subjects fell into by virtue of their domain scores. As can be seen in Table 48, 65% of the ACoA's were accurately predicted as belonging to their group where as 72% of the non-ACoA's were predicted to belong to their respective group. Across both groups the overall accuracy rate for prediction was 68.50%.

Summary

This chapter analyzed data relative to the coping proclivities of female ACoA's across five specific domains. Specific relationships of demographic variables and locus of control to coping domains were examined. Group differences among female ACoA's and female non-ACoA's were also investigated. The following chapter discusses the data results, draws conclusions, acknowledges limitations of this study, and offers recommendations for future research.
CHAPTER V

Conclusions, Limitation, and Future Research

Conclusions

This chapter contains conclusions from the analysis of the data, limitations of this study, and recommendations for further research. This study examined coping domains of cognitive, social, emotional, spiritual/philosophical, and physical constructs utilized by female adult children of alcoholics.

The analysis of the data for this sample indicates female ACoA's overall do not cope as well as female non-ACoA's in terms of the magnitude of the five coping domains investigated. The literature relative to the offspring of alcoholics supports this finding. Emotional, cognitive, physical, and social maladaptive consequences of being raised in an alcoholic environment have been well documented in the research literature.

The variable "stress" was related to all coping domains examined. Stress may serve as a motivator to seek out coping modalities, leading to the development of coping strategies. Cohen and Lazarus (1979), for example, consider coping to be a subcategory of defense in response to stress.
The strategies and methods of coping used may, or may not, be healthy or adaptive. However, for purposes of this study, coping domains are irrespective of adaptation; they are mediums through which strategies (healthy or unhealthy) are conducted.

**Domains of Coping Used by Female ACoA's**

Female adult children of alcoholics in this sample indicated they use some aspect of spirituality or philosophy as a primary domain in developing coping strategies. It is not known what the impetus is for this. One possibility is that ACoA's in a "12-step" support group recovery program may be accustomed to the spiritual-like focus on a higher power as they cope. Another possible explanation may be that some ACoA's use substances to alter their mind and hence raise their consciousness in a philosophical or spiritual way. For both sample groups use of marijuana was significantly correlated with the Spiritual/Philosophical domain. The use of inhalants, stimulants, depressants, narcotics, and hallucinogens were significant for the ACoA group, as discussed below.

**Relationship of Demographic Variables to Coping Domains**

This section addresses the relationship between specific demographic variables and coping domains for all subjects. A significant relationship was determined between
certain demographic variables and coping domains. Overall, five demographic variables were significant for coping domains utilized. These variables were (1) parental alcoholism [group], (2) stress, (3) number of siblings, (4) use of marijuana, and (5) locus of control orientation.

The variable "stress" was significant for all domains, suggesting that this variable acts as a motivator to access modes of coping. This parallels research in the area (Ackerman, 1987; Black, 1981) indicating that offspring of alcoholics tend to be raised in chronic stressful environments as long as parental drinking prevails.

Number of siblings and locus of control were negatively related to the cognitive domain. The data from this study suggests that the fewer siblings, the greater degree of cognitively oriented coping. It may be that in childhood individuals with fewer siblings resort to internal means when under stress and think of ways to cope, since the child does not have sibling resources in which to confide. Conversely, individuals with more siblings may not withdraw into cognitive based coping since there is the availability of brothers or sisters to interact with.

Subjects who scored in the internal direction of locus of control used cognitively oriented coping strategies more than those who scored in the external direction. This finding coincides with other data in this area (Davis and Phares, 1967; Phares, 1968; Seeman and Evans, 1962).
Internal locus of control oriented individuals tend to seek out more information in situations, problems, and tasks than individuals with an external focus, hence a cognitive orientation.

The majority of subjects in this study presented an internal locus of control. One possible explanation for this is that the solicitation for participants in this study stimulated interest, hence cognition, in this research study. Lefcourt (1972) claims that better educated groups tend to have an internal locus of control orientation. The sample was well educated, reflecting the notion that more well educated individuals have an internal orientation.

An alternative explanation for the majority of internals is that the female ACoA’s who came forward were aware of the ACoA syndrome as a result of information-seeking and reading on the subject prior to this study. Hence they may have wanted to learn more about "their" syndrome as a participant. Conversely, externals may tend to focus on priorities other than self-help or growth-oriented activities.

Stress was positively and significantly related to the Social domain. As with the other four coping domains measured, a social approach to coping was indicated in response to the aspect of stress. Hence while under stress, female ACoA’s may tend to either: (1) surround themselves
with people for support-gathering reasons; or (2) attempt to problem-solve through human resources.

For the Emotional domain, alcoholic parents ("group") and stress were significant variables. Individuals with non-alcoholic parents had a stronger emotional coping orientation than female ACoA’s. Black (1981) states that ACoA’s tend to repress their feelings in general, at least before receiving treatment. This implies that, especially under stress, a domain of coping other than emotional would be used to cope.

For the Spiritual/Philosophical domain, stress was positively related to coping. As level of stress rose, coping in this domain also increased. Individuals identifying with this domain may focus on a "Higher Power" a spiritual nature when feeling stressed. Or they may look at life philosophically, especially when perceiving having little or no control in a stressful situation, thinking for example that "life is unfair" or "problems are inevitable".

In addition, use of marijuana was positively related to the Spiritual/Philosophical domain. It may be that those who use marijuana do so to acquire an altered state of consciousness, similarly to a state of religiosity via prayer. Marijuana may heighten the senses for some individuals who are sensitive, facilitating a greater sense of the "meaning of life" for them.
Relative to the physical domain, stress was positively related. This suggests that subjects who are stressed may cope by performing physical behaviors. Black (1981) and Wegsheider-Cruse (1976) recognize the role of the "Acting Out" child, where often the child will behaviorally act out in a negative sense when unhappy or angry. In adulthood these same behaviors may occur. Or the individual in this domain may exercise and use physical activity to cope with stress.

The Relationship of Locus of Control to Coping Domains

Locus of control was correlated with all the coping domains in this study, with correlations ranging from -.14 to -.35. The Cognitive Domain was significantly related to locus of control. Individuals who were oriented to an internal locus of control utilized cognitive coping strategies. This finding is supported by the literature in the area of locus of control and cognition. "Internals" typically seek and attain more information cognitively (Davis & Phares, 1967; Seeman, 1963, 1967), which may lead to a greater degree of coping. Phares (1968) provided evidence that "internals" made better use of information utilization, once acquired.
The Relationship of Group (Female ACoA's versus Female Non-ACoA's) to Locus of Control

In this study paired t-tests of significance yielded no significant difference between ACoA and non-ACoA groups on locus of control measures. Both groups exhibited a predominance of an internal locus of control. It is possible that since subject recruitment was operationalized primarily by newspaper advertisements and word-of-mouth, those with a sense of control over the consequences of their behavior sought out participation in this study. An alternative explanation rests on the educational attainment of the sample in general. The majority of subjects were well educated, reflecting an attitude of assertion and need for achievement. Therefore the subjects may have been more likely than "externals" to seek out information about themselves.

The Relationship of Coping Domains to Group Type

This area examined the relationship between female ACoA's and female non-ACoA's among the five coping domains. Female adult children of alcoholics differed significantly from female non-adult children of alcoholics on two coping domains. The female non-ACoA's utilized greater coping than the female ACoA's among the Cognitive and Emotional domains, whereas ACoA's tend to use the Spiritual/Philosophical domain over the other domains investigated. Further, female
non-ACoA's scored significantly higher on the Total domain scale than the ACoA's.

Female ACoA's, then, do not appear to cope as well in general as female non-ACoA's across the domains examined in this study. The female ACoA's in this study were likely to use illicit substances (such as narcotics, hallucinogens, stimulants, and depressants) significantly more than female non-ACoA's. Marijuana was also more likely to be used by female ACoA's than female non-ACoA's.

Emotional and cognitive coping by female non-ACoA's may be the anthesis to using drugs for coping by female ACoA's due to the fact that drugs adversely affect both cognition and mood (emotions). Black (1981) recognizes that ACoA's tend to be uncomfortable with their own feelings and tend to avoid them. Female adult children of alcoholics in this study appear to cope through means which run counter to information-seeking and feeling. As the data analysis in this study indicates, the construct of locus of control has no statistical bearing on female ACoA's compared with female non-ACoA's. Overall coping appears to be less adaptive for female ACoA's than non-ACoA's.

Limitations of the Study

Several aspects of this study limit the generalizability of the results. Therefore the findings should be viewed with caution. The following section
addresses such limitations. The most crucial limitation of this study is that the subjects were not randomly selected. The subjects took part in this investigation via word-of-mouth, announcements at support groups, and responding to newspaper classifieds. In an attempt to approach randomization, two lists of respondents were comprised initially. Then, the subjects from the two group lists were randomly selected as 100 subjects were chosen from each list.

In a related vein, all subjects came forward on their own volition and thus the subject pool may have been biased on this alone. ACoA's who otherwise may not have, or could not have, participated were not employed in this study, such as incarcerated and probated individuals who are typically either asocial or antisocial.

It was not determined if the subjects received psychological treatment of any kind, either currently or previously to this study. This factor alone may have an effect on coping propensities. In addition, psychological and emotional assessments were not conducted on the subjects. Hence personality disorders and mood disorders were not controlled for between and within the groups. Therefore the results on coping domain utilization may be confounded by treatment and/or uncontrolled personality factors.
This study involved female subjects only. It would be empirically dangerous to generalize these results to males since sex differences were not controlled. Ackerman (1987) indeed found sex differences among personality characteristics of ACoA's. As well, in the present study the majority of subjects were white, middle class women from the central Ohio area. This also limits the generalizability since race and solid-economic status was not represented equally in this study. Thus, it may be possible that ACoA's who did not parallel the sample employed herein emitted characteristics discrepant to the findings of this study. For example, ACoA's who (1) are minorities, (2) have significant age differences, and (3) have very positive off-setting factors may appear to cope differently than the sample in this study. In addition, since males are not employed in this study, generalizing the results to include males is prohibitive.

Another variable that was not controlled for was sex of the parent who drank. This variable may yield dramatic differences in the coping mechanisms of the alcoholic offspring, depending on either the sex of the subject or the sex of the parent, or both. Another related consideration that was not controlled for was the number of parents or care-takers who drank. Two parents or care-takers being alcoholic may have dramatic differences on coping compared to only one alcoholic parent or care-taker. Ackerman (1987)
reports that 1) the quality of parenting varies upon number of alcoholic parents in the family; and 2) age of recognition of parental alcoholism depends on the number of parents who are alcoholic.

A critical unknown variable in this study is the amount, frequency, and duration of alcohol ingestion of the parent(s) consumption for each ACoA subject. This caveat applies to the prenatal, perinatal, and postnatal development of the offspring. Variations in chronic or acute alcohol consumption by a parent may affect resiliency or coping of the child, as previously discussed relative to fetal alcohol syndrome. Also, recovery periods for the alcoholic parents were not controlled. It is not known if any of the alcoholic parents were in recovery; and if they were, the ages of the subjects upon the onset of parental recovery were not assessed in determining this aspect in coping.

Another possible limitation of this study is that the sample is highly skewed in terms of education and income. The majority of the respondents were well-educated and in upper income levels. It may be that ACoA's of a lower social economic strata cope dramatically different than the subjects in this study.

Age was a significant difference which existed between the groups. The ACoA's yielded a mean age of 35.86 years where the non-ACoA's averaged 30.25 years of age. Since
This five year age difference is in the early thirties, a true psychosocial developmental difference between the groups may have been present, which could have confounded the results somewhat. Black (1981) indicates that ACoA's do not really become aware of their issues until at least their middle twenties. Therefore in the present study it may have been more appropriate to match age across both groups.

Another limitation centers around the reliability of subjects' reports of their parents' alcoholism. It is not known how accurate the information provided by the female ACoA's was about their parents' drinking. Each ACoA subject was administered the C.A.S.T., however the responses on the instrument are vulnerable to subjects' memory and perceptions. Similarly, the "non-ACoA" subjects' responses were not screened for denial of alcoholism in their families.

Even though the control group was reliably screened for non-problematic drinking by their parents or care-takers, other factors were not controlled for in the comparison group. For example, the non-ACoA subjects may have been raised in a type of dysfunctional family system other than alcoholism, thus failing to represent an adequate healthy functioning family. Some family situations which may have been present are incest, abuse, illicit drug abuse, and mental illness. These situations may potentially mimic the
alcoholic family system in terms of pathology not accounted for in this study.

Finally, female ACoA’s generally did not appear to cope as well as the female non-ACoA’s in this study. However this conclusion should be made with caution since the manner in which coping proclivities were measured is only one of the many ways coping could have been assessed. It could be that on any other given construct of coping, female ACoA’s may have fared much better than the female non-ACoA’s.

Recommendations for Future Research

In spite of the limitations, this study has provided useful information which depicts approaches to coping by female adult children of alcoholics. This study supports the bulk of the literature relative to ACoA coping deficits. Several recommendations are offered relative to future research in this area of study. It is recommended that this study be replicated, using a larger sample size, with different sub-groups of ACoA’s as well. The sub-groups suggested are males, offspring of alcoholics under the age of 18 and over the age of 55 using both sexes, and a controlled study of psychological treatment. These factors may account for degrees of variances in coping proclivities. Further studies in this area could explore more specific assessments of both the subjects and their parents. For example, it would be more accurate to document the types
of parental alcoholism in terms of intensity, duration, and frequency of alcohol use to the type of coping in the offspring. In addition to alcohol, parental drug (besides alcohol) use could also be assessed in future studies.

In terms of the ACoA subjects themselves, it would be interesting to assess psychopathology prior to measuring indices of coping. This may provide clinical information regarding specific coping domain potential. In addition, other ways to operationalize coping proclivities could be explored to identify adaptive strengths of ACoA’s as a group.

Finally, it would be useful to correlate coping domains utilized by female (or male) ACoA’s with various specific coping strategies used. In other words, matching specific coping domains with actual coping behaviors.

Research with this population should be extended due to the documented growth needs through this syndrome. The existence of adult children of alcoholics tends to be a lifetime of recovering from a dysfunctional psychosocial history. It is vital that enough knowledge be generated to help promote a future of adaptation and growth within this population.
Summary

This chapter discussed the conclusions of the data analysis, delineated limitations of this study, and provided recommendations for future research.

The present study provided knowledge which supports the notion that adult children of alcoholics have difficulty coping, especially when compared with adult children of non-alcoholics. This study investigated the proclivities of female adult children of alcoholics across specific coping domains, which function as a preliminary step to developing coping strategies or techniques. The relationship of locus of control orientation relative to specific coping domains was also explored.

Female ACoA’s tended to use a Spiritual/Philosophical domain as a genotypic approach to actual coping strategies, whereas female non-ACoA’s indicated using emotional and cognitive means for coping strategies.
List of References


Alcohol and the brain: Chronic effects (pp. 217-244). New York: Plenum Press.


Appendix A

THE OHIO STATE UNIVERSITY

CONSENT FOR PARTICIPATION IN SOCIAL AND BEHAVIORAL RESEARCH

I consent to participating in (or my child’s participation in) research entitled:

COPING RESOURCES UTILIZED BY ADULT CHILDREN OF ALCOHOLICS

Donald J. Tosi, Ph.D. ________ or his/her authorized (Principal Investigator)
representative has explained the purpose of the study, the procedures to be followed, and the expected duration of my (my child’s) participation. Possible benefits of the study have been described as have alternative procedures, if such procedures are applicable and available.

I acknowledge that I have had the opportunity to obtain additional information regarding the study and that any questions I have raised have been answered to my full satisfaction. Further, I understand that I am (my child is) free to withdraw consent at any time and to discontinue participating in the study without prejudice to me (my child).

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

Date: ____________________ Signed: ___________________

(Participant)

Signed: ____________________ Signed: __________________
(Principal Investigator
or his/her Authorized Representative) (Person Authorized to Consent for Participant-if required)

Witness: __________________________

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Appendix B

Demographic Information

Please answer the following 11 questions. Check the space(s) which is (are) accurate for each question. This information will remain anonymous and confidential. Do NOT put your name on this form.

1. Annual household income is:
   ___ a) less than $3,000
   ___ b) $3,000-6,999
   ___ c) $7,000-13,999
   ___ d) $14,000-19,999
   ___ e) $20,000-29,999
   ___ f) $30,000-49,999
   ___ g) $50,000-74,999
   ___ h) $75,000 or more

2. My occupation type is:
   ___ a) professional
   ___ b) managerial
   ___ c) clerical
   ___ d) skilled
   ___ e) unskilled
   ___ f) unemployed

3. My age is:
   ___ a) 18-22
   ___ b) 23-28
   ___ c) 29-34
   ___ d) 35-39
   ___ e) 40-44
   ___ f) 45-49
   ___ g) 50-55

4. Highest education completed:
   ___ a) less than 9th grade
   ___ b) 9th - 12th
   ___ c) high school graduate
   ___ d) some training or college beyond high school
   ___ e) college graduate
   ___ f) some graduate school
   ___ g) graduate degree

5. My marital status is:
   ___ a) never married
   ___ b) divorced/single
   ___ c) divorced/remarried
   ___ d) widowed
   ___ e) married

6. The number of times I have been married is:
   ___ a) none  ___ b) 1  ___ c) 2  ___ d) 3  ___ e) 4 or more

7. My age when my parent(s) began having drinking problems was:
   ___ a) 0-3
   ___ b) 4-7
   ___ c) 8-12
   ___ d) 13-18
   ___ e) 19 or older

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8. I have the following number of brothers and sisters (include step-
and half-brothers and sisters):

Sisters: __ a) none __ b) 1 __ c) 2 __ d) 3 __ e) 4 or more

Brothers: __ a) none __ b) 1 __ c) 2 __ d) 3 __ e) 4 or more

9. I use the following substances:

**Alcohol:**
- a) never __ b) once per year or less
- c) once per month or less __ d) once per week
- e) daily

**Stimulants (speed, amphetamines, cocaine, crack):**
- a) never __ b) once per year or less
- c) once per month or less __ d) once per week
- e) daily

**Depressants (tranquilizers, quaaludes, sedatives):**
- a) never __ b) once per year or less
- c) once per month or less __ d) once per week
- e) daily

**Narcotics (heroin, codeine, morphine):**
- a) never __ b) once per year or less
- c) once per month or less __ d) once per week
- e) daily

**Hallucinogens (PCP, LSD, mescaline):**
- a) never __ b) once per year or less
- c) once per month or less __ d) once per week
- e) daily

**Marijuana:**
- a) never __ b) once per year or less
- c) once per month or less __ d) once per week
- e) daily

**Inhalants (solvents, glue, paint thinner):**
- a) never __ b) once per year or less
- c) once per month or less __ d) once per week
- e) daily

10. At the time I left home my parents were:
- a) married to each other
- b) divorced
- c) legally separated
- d) living together in common-law
- e) both deceased, so others raised me
- f) I had foster parents or did not live at home
- g) One parent deceased and the other one living

11. Ethnic Origin
- a) American Indian/Alaskan Native
- b) Hispanic
- c) Asian/Pacific Islander
- d) White (non Hispanic)
- e) African American (non Hispanic)
- f) Other (please specify) ____________________________