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PSYCHOSOCIAL OUTCOMES AMONG UNIVERSITY STUDENT OFFSPRING OF ALCOHOL ABUSING FATHERS

By

Robert Moreas

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ABSTRACT

PSYCHOSOCIAL OUTCOMES AMONG UNIVERSITY
STUDENT OFFSPRING OF ALCOHOL ABUSING FATHERS

By

Robert Moreas

The negative effects of parental alcoholism on family processes put children of alcoholics (COAs) at risk for intellectual impairment, emotional and interpersonal functioning, and a propensity to alcoholism. The main objective of this study was to examine outcomes of a population of university students operating under the assumption that processes and functioning in families with alcohol abusing fathers would be a risk factor for these offspring.

This study compares university student offspring of alcohol abusing fathers with students from families without parental alcohol abuse on variables of self-esteem and quality of health and daily living. The relationship between the students' perceptions of their family environment and the psychosocial outcomes is examined. Data for this study were obtained from students ages 18-23 at a major midwestern university who were assessed by the following self-report measures: Family Environment Scale (FES: Moos, 1986); Children of Alcoholics Screen Test (CAST:

Jones, 1982); Tennessee Self-Concept Scale (TSCS: Roid and Fitts, 1988); and the Health and Daily Living Youth Form (HDLY: Moos, Cronkite, Billings, and Finney, 1985). Seventeen male and 24 female COAs and 34 male and 33 female non-COAs completed the survey material. ANOVA was conducted on the variables indicated.

The results indicated that the COAs group's perceptions of their families were consistent with results from previous studies using FES descriptors of alcoholic families: lower cohesion, independence, and active-recreation orientation, but higher conflict. Analysis of TSCS subscales revealed no group differences in self-esteem or self-criticism, both variables for which COAs are often cited as being at risk. However, the personality disorder subscale revealed a significant difference between the two groups, identifying the COAs at risk. Therefore, this study lends support to the view that COAs' problems may be manifested with the advent of adult stressors. Other factors found to be of interest were: 1. COAs sibships were functioning at age appropriate levels without chemical dependency problems, and 2. While 68% of the COAs sample reported episodes of family violence during parental drinking, they demonstrated generally positive psychosocial outcomes. Future research should investigate entire sibships, with multivariate models analysis.

This dissertation is dedicated to
my Mother, a true, great spirit,
and
Leo, a true friend.

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OVERVIEW OF THE PROBLEM

Alcohol promotion, use, and misuse is ubiquitous in our society. It is estimated that 14.7 million Americans are problem drinkers with an annual increase of .4 million (Fein, 1984). A 1983 National Institute of Mental Health survey indicated that 13.6% of all adults could be evaluated to be clinically dependent or alcohol abusing at some time in their lives, alcohol abuse or dependence therefore being the most prevalent of emotional disorders (Fein, 1984).

The use and misuse of the only legal mood altering substance in our society, alcohol, is well suited for examination from a human ecosystem perspective. Following the model of Bubolz, Eicher, and Sontag (1979), the human ecosystem consists of environments interacting with the human environed unit (HEU), a single individual or group of individuals. The HEU interrelates with three environments: 1. the natural environment (NE) with space-time, physical, and biological components, 2. the human constructed environment (HCE), the production of humans meeting their physical biological and social needs, and 3. the human behavioral environment (HBE), the arena of biophysical, psychological, and social behaviors.

A key concept of an ecosystem is interaction, "... a relationship of reciprocal influence among a system's components. Interaction in an ecosystem occurs when any part of an ecosystem influences or acts on any other part and is influenced or acted on in return." "Interaction also takes place within the environed unit, among the environments, and between the environed unit and environment" (Bubolz, p. 30). In the process of alcohol abuse, the alcoholic (HEU) interfaces and influences his family (HBE), the community and work place (HCE), and at a macrolevel equivalent to the ecosystem model's natural environment (NE), the Gross National Product.

The financial cost to society (NE) due to alcohol misuse is estimated to be $116 billion annually (Nace, 1987). Subsumed in that figure is $65 billion in reduced employee productivity. Additionally, although only 5-10% of alcohol abusers seek treatment or support (Midanik, 1983), the cost of intervention is $14 billion (Nace, 1987). Alcoholism contributes to various medical complications. Alcohol specific and related medical conditions generate $23 billion in health care costs (Fein, 1984).

The social costs of alcoholism to the community (HCE) are also high. Mortality figures indicate that alcoholism and alcohol abuse may be the third leading cause of death (Fein, 1984). Almost one-half of automobile fatalities are alcohol related, half of which include intoxicated alcoholic

drivers, the remainder being drivers with high blood alcohol levels at the time of the accident (Nace, 1987).

Families (HBE) with alcohol abuse problems experience a 40% divorce rate, and 5.7 million episodes a year of family violence related to alcohol abuse episodes (Fein, 1984).

The individual (HEU) who chronically ingests excessive amounts of alcohol suffers systemic medical complications. Nace (1987) provided an extensive overview of the damaging effects of alcohol on the organs of the body. In summary:

1. The liver processes 90% of the hepatoxic alcohol which damages hepatic cells and liver cell regeneration ability. The pathogenesis of alcoholic liver disease begins with fatty liver, proceeds to alcoholic hepatitis, and if alcohol consumption continues, results in cirrhosis, the sixth leading cause of death nationally.

2. The entire gastrointestinal system is adversely affected. Reflex esophagitis, carcinoma of the esophagus, acute hemorrhagic gastritis, and malabsorption of the small intestine result in nutritional deficiencies and accompanying weakness and weight loss.

3. Cardiovascular and hematologic insult are manifested by damaged small intramyocardial arteries resulting in cardiomyopathy, a cause of congestive heart failure. For certain individuals, even moderate alcohol use may contribute to elevated blood pressure. Depressed red blood cell formation, anemia, and impaired clotting mechanisms in turn cause other systemic problems.

4. Deleterious effects on the nervous system are manifested by peripheral neuropathy with decreased reflexes, sensory loss, and pain. Autonomic system impairments may include lack of sweating, hypotension, hypothermia, impotence, urinary retention, and incontinence. Organic neurological - cognitive degeneration is irreversible in the Wernicke-Korsakoff syndromes.

The deleterious effects of alcohol abuse on the human physiology demonstrates the ecosystems and general systems theory concept of interrelatedness and of subsystem modification affecting the whole system. The individual alcoholic, his or her family, and the individual members, the immediate community, and society at large suffer because of alcoholism. The human ecosystem model and family systems theory are the theoretical perspectives of this study.

Need

It is estimated that there are approximately 10 million alcoholics in the United States, 73% of them married. Seventy-six percent of problem drinkers are males. In 20% of these homes, both spouses are alcoholics (Ackerman, 1986). It has been estimated that there are 6.6 million children of alcoholics (COAs) under the age of 18, and 22 million adult children of alcoholics (ACOAs). With a number of almost 29 million, the result is that one of eight Americans is a child of an alcoholic (Russell, Henderson, and Blume, 1985).

The literature is replete with references regarding age specific and life-long negative effects of parental alcoholism on children. Children born to women who drink during pregnancy (specific harmful levels are not as yet determined) are at risk for an identifiable birth defects cluster known as "fetal alcohol syndrome," which includes growth impairment, mental retardation, facial features anomalies, and major organ or systemic malfunctions (Warner & Rosett, 1975). Wilson and Orford (1978) cited COAs as having a higher incidence of school problems, difficulty concentrating, school truancy and conduct problems, and emotional problems such as anxiety and depression. El-Guebaly and Offord (1977) noted difficulties in personality and peer relationships, low self-esteem, manipulative and rebellious behaviors, hyperactivity and school problems. Baraga (1978) and Woititz (1976) reported lower self-esteem for COAs. Chafetz, Blane, and Hill (1971) found increased incidences of serious illness, accidents, school problems, and police and court involvement. Higher levels of suicide attempts were found among adolescents of alcoholic fathers, while increased lethality of the suicide attempts was related to heavy parental alcohol consumption and family dysfunction, including physical abuse (Tishler and McHenry, 1982). Roberts and Brent (1982) reported increased diagnoses of trauma and stress related diseases in alcoholic families including gastrointestinal, endocrine,

neurotic and psychological disorders. Barnes (1977) concluded that the child raised by an alcoholic parent has a parent that is a "... grossly inadequate role model for the developing child."

The problems of youth and adolescence for COAs continue into adulthood. Wegscheider's (1981) clinical observations indicate that familial behavioral roles that children adopt as coping mechanisms don't serve well in youth and become problematic for the ACOAs. Black (1981) concurs that even ACOAs who are competent are plagued by marital problems, interpersonal difficulties, depression, and a general sense of worthlessness, irrespective of achievement. These adults have developed rigid coping mechanisms in childhood which no longer serve them well. Woititz (1983) identified traits which portray ACOAs as insecure and confused about intimate relationships, social skills, and their abilities in general. An overly self-critical stance is coupled with an inappropriate need for approval and affirmation.

One way ACOAs cope with their feelings of worthlessness, anxiety, and lack of a sense of meaning in their lives is to seek the relief of mood altering substances. This is one mode of intergenerational transmission of alcoholism. This is a major legacy to COAs; irrespective of issues of genetic predisposition, assortative mating, learning models, environment, and

interaction of these variables, findings repeatedly indicate that COAs are at greater risk for alcoholism (Cotton, 1979, and Goodwin, 1985). Black (1981) considers 50-60% of alcoholics as having had at least one alcoholic parent to be a low estimate. Russell (1990) indicates that COAs are "consistently found to have higher rates of alcoholism and alcohol-related problems" than non-COA's (p. 32), with the magnitude of the studied group differences reported as ranging from 9:1 to 1.5-3:1 between COAs and non-COA's (p. 33).

While it is commonly agreed that COAs are at risk, some researchers feel there has been a failure "... to recognize or give adequate weight to variability in adjustment among COAs" (Clair and Genest, 1987, p. 345). While Black (1981) saw the forced adaptive roles and age inappropriate responsibilities of COAS as ultimately a factor in problematic psychosocial outcomes, Wilson and Orford (1978) saw parent-child role reversals with COAs assuming household management tasks as possibly representing "... an advantage rather than a disadvantage of having an alcoholic parent" (p. 132). Kammeier (1971) found minimal differences in adolescents on measures of personality and intellectual functioning. Other studies indicating minimal differences include Clair and Genest (1987) who found COAs functioning at normal and above normal levels, and Werner (1986) who in

regard to cognitive deficits indicated only some of the children performed less well than controls. However, there seems to be a consensus regarding methodological problems in COAs research such as a lack of suitable control or comparison groups. Jacob and Leonard (1986) point to a lack of sound and consistent assessment procedures, an overrepresentation of multiproblem families, and an absence of psychiatric comparison groups to differentiate parental alcoholism effects from other special familial circumstances.

Concomitant to the valid comment by Johnson and Rolf (1990) that, "... the emerging findings of psychosocial studies of COAs have yet to present a consistent picture of collective risk and individual vulnerabilities" (p. 162), COAs are at risk for a broad range of psychosocial-developmental outcomes. Williams (1990) states that:

> A surprising consistency in the description of characteristics of children from alcoholic homes has emerged, suggesting convergent validity from...diverse studies. ... The differences can be summarized as follows. ... COAs experienced more psychosocial deficits than children from nonalcoholic homes. They displayed lower levels of self-esteem, greater impulsivity and hyperactivity, greater external locus of control, more illness, accidents and psychosomatic complaints, and more conduct disorders and academic problems than did children from nonalcoholic homes.

> Environmental risk factors for these children were also elevated. Alcoholic families were more likely to be disrupted by divorce, separation, absence of parent or removal of child from the home, and greater financial instability. Higher prevalence of sexual and physical abuse, as well as neglect and inadequate parenting, were also reported, and children appeared to develop fewer support systems to mitigate some of these effects (p. 195).

The perspective of this study is that alcoholism and alcohol abuse negatively affect family processes, which in turn contribute to less than optimal developmental environment for children. Moos and Moos (1984) indicated that since "... recovered alcoholics and their spouses were functioning about as well as their matched community counterparts, these findings show that some recovered alcoholics and their partners can attain normal personal and family functioning" (p. 116). Walsh (1985) administered the MMPI to 43 identified patients and codependents before and after a 20-week family treatment program. There were significant differences between pre and post test scores for both patients and codependents in the desired direction, i.e., less disturbance. The changes were on the same scales, in the same direction, and with essentially the same magnitude. These two studies support the view that with the abatement of substance abuse, many, if not all, problems dissipate.

Several authors (Clair and Genest, 1987; Kammeier, 1971; Moos and Billings, 1982; and Wilson and Orford, 1978)

have also noted that while their studies may at present indicate minimal group differences, COAs subjects may "... as they grow, ... begin to exhibit more notable differences" (Jacob and Leonard, 1986, p. 379). In addition to continued interest in alcoholic family processes, there is expressed interest in the influence of the gender of the alcoholic parent in family processes and COAs outcomes. Wilson and Orford (1978) ask about "the effects of an alcoholic father as opposed to an alcoholic mother ..." (p. 139), and Williams and Klerman (1984) state, "... studies should collect and analyze data separately by the sex of the parent and child" (p. 307). Brown (1988) cites the interest in learning about "... the impact on children if the father is an alcoholic, if the mother is, or both? What are the differences?" (p. 79).

Purpose

The purpose of this study is to examine familial variables and individual outcomes in ACOAs and comparison groups to aid in understanding possible outcome differences in an overtly homogenous population. While the ACOAs group may perceive that they were raised in families with problematic parental alcohol use, there may have been sufficient "protective" factors present to result in positive outcomes. The present study will view admission to a major state university as a positive adjustment outcome.

This examination of processes in families with an alcohol abusing parent assumes less than optimal familial functioning as a risk factor in poorer outcomes for ACOAs. This study will also question the primacy of parental alcoholism versus family processes as mediating variables. The question being, can quality family processes promote quality outcomes, or does the presence of any situation impeding optimal family processes contribute to a reduction in qualitative outcomes.

The Research Questions

I. Which of the following dimensions of family processes as measured by the Family Environment Scale are most affected by the presence of an alcoholic parent:

1. Relationships, measured by cohesion, expressiveness, and conflict subscales;

2. Personal growth, measured by independence, achievement orientation, intellectual-cultural orientation, active-recreational orientation, and moral-religious emphasis subscales; and

3. System maintenance, measured by organization and control subscales.

How will these family processes differ between the alcoholic families and the comparison families?

II. Does the presence of an alcoholic parent result in a lower sense of self-esteem, as measured by the Tennessee

Self-Concept Scale, compared to young adults without alcoholic parents?

III. Is the qualify of life of ACOAs, as measured by the Health and Daily Living Youth Form, comparable to young adults who did not grow up in alcoholic families? Five indices are to be examined: distressed mood, health-risk behaviors, self-confidence, activities with families, and social integration in school.

IV. Among the ACOAs sample group, will there be a difference in outcome measures and perceptions of family environment by sex-of-child and sex-of-parent (father)?

Theory

Historical Perspective

Joan Jackson's article, The Adjustment of the Family to the Crisis of Alcoholism (1954), appeared at a time when alcoholism was still largely studied from the unidirectional perspective of the addictive personality. Contemporaneous psychological studies (Futterman, 1953, Price, 1945, and Whalen, 1953) focused on the wives of alcoholics, and concluded that these women encouraged and contributed to the husbands' alcoholism, and that some women marry alcoholics to meet unconscious needs.

As Jackson states, "The studies of the wives of alcoholics impute psychological traits to the wife as judged from her behavior after her husband has reached an advanced

state of alcoholism, and posit that these psychological traits would have been found prior to the onset of drinking. None of the articles conceptualizes the behavior of the wife, or the personality traits inferred from this behavior, as reaction to a cumulative crisis in which the wife experiences progressively more stress" (p. 563). The authors Jackson cites neither possessed the conceptualizations or vocabulary to discuss either alcoholism and the effects on the codependent spouse, nor the interactional family systems view to understand that the "neurotic" traits they attributed to these women.

Regarding the wives' behaviors, Jackson was able to conceptualize that "When viewed in the context of what is best for the husband, such behavior might be viewed as dysfunctional; viewed in the context of the rest of the family, it might appear to be functional" (p. 564). When Jackson further states, "None of the studies deals with the way in which the family as a unit attempts to adjust to an alcoholic parent. None views these adjustments on a time continuum" (p. 563), she demonstrated that while she may have lacked the not yet evolved theoretical vocabulary, she understood the family processes she described from a family systems perspective. Her family adjustment stages and subsequent research questions are still being examined. Jackson's suggestions for further research included clearer delineation of the factors affecting the rate of transition

through the stages, and identification of familial factors that facilitate or impede sobriety, and explanation of problems due to variations in drinking patterns and drinking behaviors.

The above observations, conceptualizations, and research suggestions anticipated the work that would be done in alcohol family studies, but to be couched in family systems theory constructs. Jackson described alcoholism in the family as a process wherein people react and change in response to events and behaviors of others. The family unit's interactions and functioning modifications evolve over time. She moved from an intrapsychic, deterministic explanation of human behavior, toward a systems view of the family. Much of the early research which would become the foundations of family systems theory and therapy began to appear shortly after her landmark article.

Family Systems Research

Much of the early family systems research efforts examined interactional patterns in families with schizophrenic patients (Jackson, 1965/1977; Lidz, Cornelison, et al., 1957; Weakland, 1969/1977; Wynne, Ryckoff, Day, and Hirsch, 1958). Lidz, et al., (1957) noted two recurring patterns in the family structures of schizophrenics, marital schism and marital skew. In marital schism, the parents' conflicts degenerate into an ongoing, hostile relationship in which the children are sought for

support and loyalty by one parent to use against the other. In the skewed relationship, the dominant partner incorporates one or more of the children in the service of unfulfilled needs and diminishes the worth of the passive spouse. In both patterns the generational boundaries are transgressed and the children, rather than realizing their own potential, are forced into constraining assigned roles.

Wynne et al. (1958) described families of schizophrenics as participating in pseudo-mutuality, "... a predominant absorption in fitting together, at the expense of the differentiation of the identities of the persons in the relation" (p. 207). Wynne et al. perceived humans as inately object-related and continuously striving for a sense of personal identity. The mechanisms of these two functions are forms of relatedness; mutuality, nonmutuality, or pseudo-mutuality. The pseudo-mutual relation "... involves a characteristic dilemma: divergence is perceived as leading to the disruption of the relation and therefore must be avoided; but if divergence is avoided, growth of the relation is impossible" (1958, p. 207). Optimal personal growth is not possible in a family structure that preassigns roles and negates self-actualization in order to maintain a family myth or rule, e.g., "We are always a happy family."

Jackson (1965/1977) stated that "... the major assertion of the theory... [of the relationship level of communication] ... is that the family is a rule-governed

system: that its members behave among themselves in an organized, repetitive manner and that this patterning of behaviors can be abstracted as a governing principle of family life" (p. 6). He further stated that, "these relationship agreements, ...rules ..., prescribe and limit the individuals' behaviors over a wide variety of content areas, organizing their interactions into a reasonably stable system" (p. 9). Ford (1983) viewed rules as the stuff of family systems interactions, communication, and the connection between family process, human behavior, and personality development. The rules maintain family myths, are historical, redundant through several generations, and implicit - "they have the attributes of secret, i.e., they give power over others and induce guilt" (p. 135).

Ferreira (1966/1977) saw rules as "...known only by inference, and to the extent to which they are translated into family myths, i.e., the beliefs and expectations which the family members entertain about each other and the relationship" (p. 51). Family myths may be viewed as intergenerational covert supra-rules of the family relationships, which promote homeostasis and the stability of the relationships.

Homeostatic mechanisms, interactional patterns, according to Jackson (1977), can be viewed as behaviors which delimit family norms and the range of other familial behaviors.

Speer (1970) addressed the issue of homeostasis in the thinking of family therapists. He asked whether one chooses "... to emphasize homeostatic or nonhomeostatic process principles in one's conceptual approach to families in general" (p. 263). He provided the traditional definition of negative feedback as a process wherein "input information from outside the system indicat[es] a discrepancy, incongruence, or divergence between the system's behavior and some preprogrammed environmental goal state" (p. 265). Negative feedback regulates a morphostatic, error-activated, deviations counteractivity function which results in homeostasis, maintaining change resistant geared system activity.

Positive feedback, a deviation amplifying process, induces "subsequent effector operations [that] do not act to reduce the discrepancy but rather act to increase the divergence between the system's or member's status and the original goal or standard values" (Speer, 1970, p. 267). Some quality of positive feedback process is viewed as essential for social systems to maintain their viability. They must be capable of morphogenic (structure changing) process in order to grow, create, and survive.

Speer (1970) pointed to the deficiency of homeostasis as an adequate concept to deal with the process of the asymptomatic, growth oriented family. Only disturbed families invest energy in constant homeostasis and can be

described as morphostatic. Asymptomatic families are more viable and receptive to divergence and can be described as morphogenic.

Kantor and Lehr (1975) in their in-the-field observations of families found that "family systems, like all social systems, are organizationally complex, open, adaptive, and information processing systems" (p. 10). Family members are reciprocally influencing, and the family system is at least minimally open and adaptive due to the interchange with the environment. Families are also information processing systems of "distance-regulation" information with which family members monitor the relationships among themselves, and influence and are influenced by negative and positive feedback loops.

In the Kantor and Lehr systems model family processes are described as follows: "Through the transmission of matter and information via energy through time and space, family members regulate each other's access to the targets of affect, power, and meaning." Family systems boundaries can either be open, closed, or random. "In the closed-family system, stable structures (fixed space, regular time, and steady energy) are relied upon as reference points for order and change" (p. 119) in the family. "Stability within and across all six dimensions of family process (space, time, energy, and affect, power and meaning) is the core purpose of the closed type family"

(p. 144). The open-style family is more receptive to examining new information and possibilities, and to some degree adapting and changing as a unit, and tolerating variety in individual members needs and behaviors. The random-type family's energy is expended toward individual free exploration.

Jerry M. Lewis' (1976) systems oriented investigation of families yielded disturbed, mid-range, and optimally functioning family categories. Five family qualities viewed as important in developing "capable, adaptive, healthy individuals" were appropriate balances of: power structures; degree of family individuation (sense of each member's autonomy); acceptance of member separation and loss; perception of reality, and demonstrable affect. His disturbed or dysfunctional families had a higher incidence of schizophrenia, while mid-range families exhibited more neurotic and behavior disorder functioning. The optimally functioning families did manifest more shared power, promotion of individuation, toleration of separation due to life cycle events, perception of reality shared by outsiders, and expressive affect.

Olson (1979), in developing his Family Adaptability and Cohesion Evaluation Scales (FACES), reviewed the family systems and therapy research and described conceptual clustering of dimensions of family behavior and dynamics. He reviewed Lidz's (1957) "violation of generational

boundaries," "marital schism and skew," Bowen's (1960), "undifferentiated ego mass," "emotional fusion," "emotional divorce," Wynne's (1958) "pseudo-hostility," "pseudo-mutuality," Minuchin's (1974) "rigid and diffuse boundaries," "disengagement and enmeshment," and Kantor and Lehr's (1975) "bounding." These terms, irrespective of their research base, all described the phenomenon of degrees of dysfunctional enmeshment or disassociation among family members, variables indicative of an inappropriate balance of emotional interaction, i.e., the level of cohesion.

Olsen (1979) proposed that appropriate levels of cohesion, along with adaptability, were most conducive to optimal marital and family development. He defined family cohesion as "the emotional bonding members have with one another and the degree of individual autonomy a person experiences in the family system" (p. 5). The extremes of cohesion are enmeshment and disengagement. Adaptability was defined as "the ability of a ...family system to change its power structure, role relationships, and relationship roles in response to situational and developmental stress." The extremes of family adaptability capacities range from chaotic to rigid.

When the concepts of cohesion and adaptability are coupled with interactional-communication family theory (Jackson, 1965/1977; Watzlawick, Jackson and Beavin, 1967) and family systems studies (Kantor and Lehr, 1975), Lewis,

1976), families may be conceptualized as entities with communication and relationship rules, assigned family member roles, and with limits in their flexibility in responding to internal and external stimuli. When families are morphostatic in their responses to family developmental stages, crisis, or stress, they do not learn or develop from these situations as a unit or individuals. They are not morphogenic. Family power, rules, and role interactions remain static, and solutions are repetitive, predictable, and they are eventually inadequate. These are the traits of dysfunctional and mid-range families as opposed to optimal functioning families. Olson (1979, p. 12) stated that "The most viable family systems are those that maintain a balance between both morphogenesis and morphostasis."

Family Systems Assessment

Moos and Moos (1976) stated that "Although everyone agrees that the family environment is crucial in shaping the developing child, relatively few attempts have been made to systematically assess the social climate of families" (p. 357). The Family Environment Scale was developed in order to identify homogeneous types of families. There are many attributes or dimensions of family environment which characterize family processes and would be related to differential family outcomes. Relationship dimensions were assessed by the subscales: Cohesion - degree of commitment

and support family members provide each other; Expressiveness - the level of permission and encouragement to express feelings; Conflict - the level of family members' openly expressed anger, aggression, and conflict.

Personal Growth Dimensions included the subscales: Independence - a measure of assertiveness, self-sufficiency, and autonomous decision making; Intellectual-Cultural and Active-Recreational Orientation - the degree of moral-religious emphasis; and the degree of emphasis on competition or Achievement Orientation.

Family System Maintenance dimensions were assessed by the subscales: Organization - the degree to which activities and family management responsibilities are structured; and Control - the extent to which set rules and procedures run family life.

Moos and Moos (1976) posited that being able to accurately assign the 100 sample families to one of six clusters reflecting the ten subscales indicated that conceptualizations about family environments and processes should not be oversimplified. Relationship and System Maintenance variables along with, and in combination with Personal Growth variables, may be more reflective of the complexities of family processes and outcomes. The work of Moos and Moos (1976) along with Olson (1979) and Lewis provides measures wherein family systems concepts are operationally defined, and applicable to research with identified problematic as well as nonclinical families.

The above survey of major family systems concepts and assessments will facilitate the presentation of contemporary alcoholic family systems research. These systems constructs will also provide a theoretical framework for the findings of nonsystems oriented research and sundry data.

Family Systems and Alcoholism

Peter Steinglass focused on alcoholism research from a family systems perspective. His book, The Alcoholic Family (1987), addressed family growth and development from the family life cycle view, and the issue of intergenerational transmission of alcoholism. Three core systems theory concepts are applied to the "life history model" of the alcoholic family: organization, morphostasis (internal regulation), and morphogenesis (controlled growth).

The term "alcoholic family" clearly suggests that the entire family has alcoholism; not that each member is an alcoholic, but rather that the entire family system's regulatory functions respond to alcoholism. This profoundly affects the family's and individual members' long term growth because the family system responds repeatedly to the needs for short-term stability. The result is "developmental distortions" as resiliency and adaptability capacities are not fully cultivated. Concomitant to these processes is the development of a "family identity," a shared system of beliefs. What Steinglass viewed as important here was the question, "At what point does a

family 'decide' to become alcoholic?", i.e., decide to expend the family's regulatory system's energies, myths and rules, and interactional processes for the parent who abuses and is dependent on alcohol.

There are three phases in the family life cycle when the family identity issue can be addressed: the "early phase" with the task of establishing family generational boundaries and identity formation; the "middle phase" of commitment and stability; and the "late phase" with the process of clarification and legacy. During the family life cycle "normative" families form an identity, proceed to orderly growth with an appropriate repertoire of thematic specialization, and conclude with the ability to clarify and transmit the family identity. The alcoholic family suffers distortions via thematic overspecialization, developmental arrest, and premature developmental closure. The family process is morphostatic and the result is degeneration, as opposed to morphogenesis and familial regeneration.

The individual family member's life cycle development is also distorted in alcoholic families because tasks of growth and individuation are submerged to the family process of alcoholism. From a family systems perspective, the normative family processes described above are distorted and dysfunctional in alcoholic families, and thus impede optimal development for COAs.

LITERATURE REVIEW

Introduction

Wilson and Orford's (1978) examination of families with an alcoholic parent in the context of the literature on children of alcoholics (COA) led to conclusions about the future direction of such research. These suggestions included: the effects of the gender of the alcoholic parent; the effects of parental drinking on family members' moods and the atmosphere of family life, and in turn the impact of these mood states on family members; role and family task rearrangements and their influences on children; identification of the variables which affect an environment that may impair a child's social, psychological or intellectual functioning; and, the need to develop a theoretical direction which includes the many disciplines of child and family studies. Subsequently, much of the research enterprise has moved in these suggested directions.

Previously, Joan Jackson (1954) uniquely described the stages of family adjustment to an alcoholic spouse-parent. Implicit in her analysis was a family systems perspective which attended to the influences of paternal alcoholism on family members' functioning and adaptations at one stage, and in turn how these processes affected subsequent familial responses.

Steinglass and associates (1971) explicitedly used a systems model which also included the psychodynamic and sociological-interactional approaches to shift their research to a "drinking system" perspective. Initial observational research indicated that periods of alcohol abuse had a stabilizing and predictable aspect in interactional processes. Subsequent research by Steinglass et al. focused on the alcoholic process in the family life cycle and identified stages of progression and patterns of alcohol abuse (1980), as well as types of alcoholism and the structuring of daily family routines (1981). Other researchers associated with Steinglass investigated familial transmission of alcoholism by studying the role alcohol abuse played in disrupting family rituals (Wolin et al., 1980), and the effects of association of new conjugal couples with their alcoholic families of origin (Bennett, Wolin, Reiss, and Teitelbaum, 1987). Steinglass's systems approach to studying the alcoholic family revealed discrete, functional, and predictable aspects of alcoholic process and behavior in the family.

Rudolf Moos of the Social Ecology Laboratory at Stanford University, using various Social Climate Scales that he developed, examined alcoholics in the process of recovery. In a series of studies (1979, 1981, 1982, 1982, 1984) Moos and associates examined recovered alcoholics, their families, spouses, and children, and compared them to

community control families, and families of relapsed alcoholics. Repeatedly, in these studies and others using the Family Environment Scales (FES), active alcoholic families had lower cohesion, organization, expressiveness, and active recreational orientation, but greater level of conflict. The recovered alcoholic families experienced more positive and fewer negative life events, manifested fewer physical and emotional symptoms, and generally matched community controls in outcomes.

The importance of Moos' work is his development of operationally defined family systems constructs and objective measures. Also significant is his development of scales such as the Work Environment Scale, the Health and Daily Living Scales which, when used in conjunction with other measures such as stress, coping, life-change events, and social-environ-resources, reflect a family ecosystem perspective.

Some findings from the "recovery process" studies are:

1. Spouses of alcoholics are affected by their partners' drinking patterns, with greater alcohol abuse associated to poorer outcomes;

2. Children in the relapsed alcoholic families were more depressed and anxious than recovering and control families, with a "tendency" for more physical problems;

3. While children in the recovered families were less depressed than controls, and their family functioning was

the same as controls, long term effects of parental alcoholism cannot be determined;

4. Recovered alcoholics and spouses can attain adequate personal familial functioning; and

5. The adequacy of functioning of one member of the family in one area affects other members or the entire family system in other areas. This clearly reflects the systems perspective of family processes.

Moos and Moos (1984) concluded that, "We cannot argue that the characteristics of the alcoholic or of the spouse 'cause' a certain type of family functioning any more than a supportive family environment 'causes' good treatment outcome. Future research should develop conceptual models to probe the interrelationships between the characteristics of each of the marital partners and the functioning of the family unit" (p. 117).

Black (1981), Wegscheider (1981), and Brown (1988) use family systems concepts to describe COAs and ACOAs outcomes based on their clinical experiences with this population. They maintain strongly that the negative effects of parental alcoholism affect all children, is a life-long issue, and problems may manifest at any time. When alcohol abuse becomes the main organizing principle for the family, resulting family myths and rules necessitate behavioral roles and role reversals for the children which confuse authentic emotions and impede the development of personal identity formation. The alcoholic family processes can be

described as dysfunctional, with family energies devoted to the homeostatic mechanisms directed by the family myths and rules of denial and enabling. The rigid coping mechanisms of youth become problematic in adulthood as marital problems, difficulties with intimate relationships, depression, and a general sense of worthlessness manifest, irrespective of personal achievement.

There are few COA studies which attend to sex-of-child by sex-of-parent outcomes. McKenna and Pickens (1983) found no parent-child interaction effects. Schuckit (1984) found no subject gender differences other than more drug misuse in sons of alcoholic mothers. While Ackerman (1987) found that having an alcoholic parent of the same gender had the least effects on selected personality characteristics of ACOAs, Warner (1986) observed that females of alcoholic fathers had better outcomes than males of alcoholic mothers. Jacob and Leonard (1986) noticed no gender differences of alcoholic fathers' offspring. Most studies indicate minimal, if any, gender differences.

Baraga (1978) and Woititz (1976) found COAs to have poorer self-concepts than control groups. Clair and Genest (1987) found no differences in 18-23 year old ACOAs and controls on self-esteem, and Callan and Jackson (1986) found adolescents of alcoholics, recovered alcoholics, and controls to be similar in self-esteem.

The major questions in COAs outcome research are, does the presence of parental alcoholism bring about negative

outcomes, or are negative outcomes the result of alcoholism in combination with other factors? Do the effects of alcoholism on family processes "cause" problematic outcomes for these offspring? Why are the ranges of outcomes for COAs so broad, and often within the same sibship? Increasingly, the interactionistic perspective containing biopsychosocial factors is brought to COA studies (Zucker, 1990). When, for example, genetic predispositions to alcoholism, endowed individual temperament, family processes, nonshared environments and extra-familial supports, and individual coping mechanisms are considered in a developmental model, the study of COAs could serve as a paradigm for behavioral research (Steinglass, 1987).

Family Process

Joan Jackson's classic study (1954) was one of the first to examine alcohol addiction in terms of its effects on family processes and the individual family members. Over a three-year period Jackson participated in an Alcoholics Anonymous Auxiliary group for women whose husbands were "excessive drinkers", irrespective of their Alcoholics Anonymous membership status. Through her contact with 50 women who were group members at various points in their adjustment to their spouses' alcoholism, Jackson reported the following family adjustment stages:

1. Attempts to deny the problem - husband and wife don't attend to other problems in an effort to avoid provoking drinking.

2. Attempts to eliminate the problem - familial social isolation and an inappropriate emphasis on family processes considered to contribute to the husband's drinking or that are a response to his drinking. The wife begins to manifest codependency symptoms.

3. Disorganization - the family's energies are devoted to tension release rather than long term plans. Children's disturbances become evident, and the wife's self-confidence decreases.

4. Attempts to reorganize in spite of the problem - the wife takes on more family responsibilities, her self-confidence improves, the family structure begins to change.

5. Efforts to escape the problem - if resources permit, the wife will leave her husband, otherwise she becomes increasingly self-reliant.

6. Reorganization of part of the family - mother and children reorganize without father. Loyalty issues and confusion continue for the children.

7. Recovery and reorganization of the whole family - husband's recovery requires yet another family reorganization and facing the problem of his assuming former family responsibilities.

Jackson saw the family as enmeshed in a cumulative crisis with each member's actions influenced by his previous personality, role and status in the family, and the effects on the personality of each phase of the crisis, which in turn contributes to the quality of the family's response to each evolving stage.

Jackson's observations captured essential systems - interactional theory tenets including reciprocal influences and behaviors (or reciprocally influencing behaviors), and family life cycle issues. They also encompassed the implicit: that the family's struggle was in large part an effort to maintain family system homeostasis in lieu of broader options of growth experiences available to the more morphogenic family. Jackson cites limitations of her study as not having reports from the husbands; having no measures to validate actual from reported behaviors; and, that her sample was limited to families that sought help for the husbands' alcoholism. Also, these findings could not be generalized to families with wife-mother alcoholics.

Steinglass and Associates: The Alcoholic Family

Steinglass, Weiner, and Mendelson (1971) suggested that a systems research model would avoid an unideterministic view of alcoholic behavior, shift clinical research focus from the "individual alcoholic to the individual drinking system," and would promote direct observation of the alcoholic system in its natural environment rather than

relying on data from an isolated member or subgroup of the system. By observing two pairs of alcoholic brothers during periods of experimentally induced intoxication, the authors concluded that the alcohol abuse served to stabilize the observed "dyadic system which might otherwise be expected to be characterized by chaos" (p. 401). The use of a systems model would contain both the psychodynamic and sociological-interactional approach to studying alcohol and the family and help to understand the many manifestations of drinking behaviors.

Steinglass's continued research of alcoholic families revealed the adaptive function of alcoholism to maintain homeostasis in the marital dyad and family system. His life history model of the alcoholic family (1980) addressed the long-range developmental implications of alcoholism for the family, i.e., "The family is presumed to have a life cycle or life history that can be divided into a series of recognizable stages, each stage in turn associated with a series of developmental tasks. ...it is postulated that the family must also pass sequentially through this series of stages and that inability to manage successfully the tasks associated with an earlier stage will compromise family resources in dealing with subsequent stages" (p. 212).

It is in the early marriage period that alcohol use becomes a recognizable pattern, and invades important family behaviors and rituals. As the family tries to learn to live

with alcoholism to establish stability, it makes the transition from a family with an alcoholic member to that of an "alcoholic family," "...alcohol use has become incorporated into the homeostatic mechanisms of the family" (p. 216).

During the "mid-life plateau" phase, the alcoholic family is subjected to the same internal and external stressors and life events as normative families. In the alcoholic family the response to these events may be an increase in alcohol use, or a cessation of drinking, either of which cause an instability in a previously homeostatic system. With the event of increased drinking, the "stable-wet" family becomes "unstable-wet." Steinglass describes a mid-life pattern for most alcoholic families consisting of alternating phases of stable-wet, transitional, stable-dry, transitional, stable-wet, etc. For the "late resolution" period, Steinglass describes four family level solutions: 1. Stable-wet, the steady-state solution continues with an unchanging quality; 2. Stable-dry Alcoholic, the conversion to the dry state has been maintained, but with the alcoholic family identity still intact to some degree depending on their rigidity of adaptation in order to sustain abstinence; 3. Stable-dry Nonalcoholic, alcohol has been eliminated in physical and emotional sense. There is little concern about alcohol as a recurring problem; and 4. Stable controlled drinking,

nonalcoholic, the successful return to controlled social drinking. This is a controversial issue, but a reality for certain individuals. Steinglass points to the important role that alcohol plays in the homeostatic mechanisms of alcoholic families, evidenced in part by the clinical failures when attempting to remove alcohol without understanding its role in the family process; "...these families may place such a high value on stability as to be willing to trade long-term growth for short-term stability" (p. 224).

In a home observational study, Steinglass (1981, 1987) examined the patterns of interaction in dry, wet, and transitional stages of alcoholism. The focus of this study was the "correlationships between types of alcoholism and the different styles families evidence in structuring daily routines" (1987, p. 181). Three drinking patterns were identified: stable-wet (SW), drinking occurs on a regular and predictable basis; alternator (ALT), unpredictable binge drinking of several weeks or months with alternating dry periods; and stable dry (SD), drinking has ceased. Home behavior of 31 families (10 SW, 7 ALT, and 14 SD) was assessed using the Home Observation Assessment Method (HOAM), an instrument "specifically designed to collect accurate data on interactional behavior in the home as it unfolds in a real-time framework" (1987, p. 192). Each spouse is observed on seven aspects of behavior: physical

location, people in the room with them, physical distance of family members, physical and verbal interaction rates, content of verbal exchange regarding decision making, affective levels of the verbal exchange, and their outcomes. The HOAM indices were described with dimensions: intrafamily engagement, distance regulation, extrafamily engagement, structural variability, and content variability.

The rationale for this study was that, "although often far less dramatic and therefore easily overlooked, the family's pattern of organizing its daily life proves an excellent measure of how the family regulates its own environment" (1987, p. 196). The results indicate that the HOAM can tap the differences of the three family types' "temperamental characteristics"; the authors claim if all they know about an alcoholic family is their HOAM measures, they can predict with 75% accuracy whether the family is SW, ALT, or SD. These are middle-phase families that have "committed" themselves to alcoholism; their daily routines and drinking behaviors fit in a mutually reinforcing pattern. This research revealed that during intoxicated interactional states families are often more energized, expressive, and have a predictable response to necessary problem solving. The assumed chaos to the observer has a regulating function in these family systems. There is a stability of family process, albeit one that does not allow for optimal change and growth.

Wolin, Bennett, Norman, and Teitelbaum (1980, cited in Steinglass, 1987) investigated disrupted family rituals as a factor in the intergenerational transmission of alcoholism. Maintaining family rituals is viewed as an important dimension in early-phase options, a quality of life factor for middle-phase families, and ultimately serves in the process of transmission of alcoholism. Alcoholic middle-phase families must choose whether or not alcoholic drinking and behavior will be kept out of important family rituals.

The subject pool consisted of 25 middle and upper-middle class white families. Family heritage to three generations and six areas of family life were explored: dinners, holidays, evenings, weekends, vacations, and visitors in the home. Comparisons of preonset of and heavy drinking periods of the alcoholic parent, and the family's plans and responses during rituals were coded.

Two patterns emerged comparing pre- and heavy drinking periods. In the first type little change in family rituals was observed, indicating families kept drinking behavior distinct from ritual life. These were identified as "distinctive" families. In the second type considerable change in family rituals was observed, suggesting the family ritual events were subsumed by the consumption of alcohol. These were identified as "subsumptive" families. "For these subsumptive families, where there was once a tradition, a

gap now exists" (Steinglass, 1987, p. 236). The subsumptive pattern fixes the alcoholic family identity and the family suffers the loss of the valuable resource of heritage and tradition.

For the purpose of studying intergenerational transmission of alcoholism, a third group was designated as intermediate families, those in which only half the rituals had been changed by alcohol. The research premise was that distinctive families, in spite of chronic alcoholism, were able to send a different message about alcohol to the children than did the subsumptive families. Also, that a quality of family life had been preserved, providing positive memories and tradition.

The results are interesting: the eight distinctive families had five offspring identified as "no alcohol problem," three with some "difficulties" with heavy drinking, and none identified as having "alcoholic drinking behavior." The seven subsumptive families had four alcoholics, two heavy drinkers, and one "no problem drinker." The ten intermediate families had two alcoholic and two heavy drinker offspring, but six with "no alcohol problems." The authors concluded that nontransmitting families were able to offer some protection from alcoholism for their offspring when they directly rejected alcohol and drink behavior from their family rituals.

Bennett, et al, (1987) studied couples at risk for transmission of alcoholism by investigating why "some early phase families who have one or more alcoholic families of origin seem not to develop alcoholic identities, while other families with quite comparable heritages carry the alcoholic tradition into the next generation" (Steinglass, 1987, p. 129). The subjects were siblings (with in-marrying spouses) of parents of whom at least one was alcoholic. The focus of the study was "ritual practices" in the family of procreation compared to family of origin. The question studied was, is there a deliberateness in the subject families in selecting one family of origin as a model over the other in their efforts to form a family identity? The areas of inquiry included family demography, nuclear family relations, extended family relations, alcohol history (three generations), dinner time, holidays, and family structure.

The findings indicated that for early-phase couples, "deliberateness in family-ritual development, and extent of contact with the alcoholic origin family not only set the tone for family-identity formation; they also ... are linked to whether or not the couple perpetuates the alcoholism from the previous generation" (Steinglass, 1987, p. 139). Minimized contact with the alcoholic family of origin and deliberate selection of family rituals seem to protect couples from recurrence of alcoholism. The authors posit

"that early phase is an ideal time for couples to face issues of family-identity formation, as well as concerns over repeating an alcoholic family legacy" (Steinglass, 1987, p. 139).

Moos and Associates: Family Processes and Recovery from Alcoholism

In a series of studies examining the process of recovery from alcoholism, Rudolf Moos and associates reported on the family processes and functioning of the children, spouses, and of former alcoholic patients in recovery or relapse. The two groups were compared to community controls with no history of alcohol problems. Variables examined throughout the four studies included drinking patterns, mood and health-related functioning, social and occupational functioning, personal responses, life change events, and social environmental resources. The Family Environment Scale was used in each study.

Moos, Finney and Chan (1981) in comparing married recovered and relapsed alcoholics with matched community controls concluded that recovered alcoholics were similar in functioning to nonalcoholic community subjects. Recovered alcoholics differed slightly with less social activities, and experienced higher levels of anxiety and somatic complaints. Positive and negative life events were similar to the nonalcoholic neighbors. Relapsed alcoholics functioned "considerably more poorly in all areas than either recovered alcoholics or community controls" (p. 398).

The authors specify that these differences were not due to sociodemographic factors.

The family environment as measured by the FES indicated that except for the controls greater emphasis on the active-recreational orientation, they were similar to recovered alcoholics. The relapsed alcoholics showed greater conflict, and less cohesion, expressiveness, organization, and active-recreational orientation than either group. Recovered alcoholics showed a high agreement with their spouses on their perceptions of the family characteristics. The authors state that, "The successfully treated alcoholics have managed to create relatively benign circumstances which may contribute to their continued recovery" (p. 399).

Moos, Finney and Gamble (1982) compared spouses of recovered and relapsed alcoholics with spouses of matched community controls. Spouses of recovered alcoholics were similar to controls except for less alcohol use, fewer social contacts, and less family emphasis on active recreational orientation. The spouses of relapsed alcoholics, however, drank more alcohol (although in normal ranges), experienced more negative life events, and had fewer social activities and less family cohesion. The spouses of alcoholics who returned to heavy drinking had greater depression, drank more, and complained of medical conditions. To restate the FES measures, spouses of

relapsed alcoholics perceived less family cohesion than recovered and control groups, and both recovered and relapsed groups perceived a less family active-recreational orientation than the community controls.

The authors conclude that "... spouses of alcoholics are affected by the current functioning of their partners" (p. 902). Partners with drinking problems had spouses report anxiety, depression and somatic complaints. The spouses' mood and physical symptoms were related to the alcoholic partners' anxiety, depression and physical symptoms. Regarding implications for personality, stress, and coping perspectives, Moos et al. state, "The most parsimonious conclusion is that spouses of alcoholics are basically normal people who are trying to cope with disturbed marriages and behaviorally dysfunctional partners" (p. 905). The continuing research issue here is can one make the same conclusion about developing children and their exposure to manifestations of alcoholism in parents. While "normal" adult spouses may enjoy the recovered state with their partners, do COAs have the developmental ego integrity and life experience to resume qualitative functioning when their parents recover, or when they extricate themselves from an alcoholic family at age appropriate life cycle stages.

Moos and Moos (1984) compared functioning in families of relapsed and recovered alcoholics, and matched community

controls. In exploring three "domains" of family functioning (family environment, role functioning, and husband-wife congruence), the authors concluded: families of recovered alcoholics were functioning like the community control families but with more joint household tasks and with fewer arguments. This was attributed to the recovery process and the effort to avoid conflicts and tension. The lower activity-recreational orientation can be understood as an effort to avoid social settings where alcohol may be served. Family environment indicators were such that the recovered families were not higher in conflict or lower in cohesion, expressiveness, and organization than controls.

The relapsed families indicated less cohesion, expressiveness, active recreational orientation, and agreement about the family environment than controls. In the families where there was a return to heavy drinking, there was more conflict and less organization. Generally the family functioning among the relapse group was poorer than the recovered and control groups. The authors conclude that, "... some recovered alcoholics and their partners can attain normal personal and family adaptation" (p. 116).

Moos and Billings (1982) compared children of relapsed and recovered alcoholic patients with children of matched community controls regarding their psychological and physical functioning. While the data on the parents' functioning was acquired from measures used throughout this

series of studies, the functioning of the children was determined from the mothers' reports.

The children from the relapsed families were more depressed and anxious than controls, while children of recovered families were less depressed than controls. The family environments of the relapsed alcoholics differed from controls while those of the recovered families did not; relapsed families reported less cohesion and expressiveness, and less emphasis on independence, achievement, moral-religious, intellectual - cultural, and active recreational orientation. Differences on individual physical problems were not statistically significant for the three groups, but the composite measure of physical problems indicated a "tendency" for the relapsed families offspring to have more such problems than the control group ($p < .10$)

The authors concluded that the health and functioning of children from families of relapsed alcoholics were related to the emotional, physical, and occupational functioning of their parents, and not of the quality of the recovered and control family children. Negative effects on family members due to parental alcohol abuse need not continue, but the effects on children over time has not yet been determined. Since the relapsed parents had more emotional problems, negative life change events, avoidance coping style, and perceived their families as characterized by conflict, their children's needs and behaviors may have

been perceived as yet another stressor. Objective measures and children's self-reports, as the authors themselves indicate, would have been preferable.

Other studies using the FES describe families with alcohol problems similarly to the recovery process studies cited above. Moos and Moos (1976), in an effort to develop a typology of family social environments, found that 100 sample families were clustered across six distinct descriptors: Expression-Oriented, Structure-Oriented, Independence-Oriented, Achievement-Oriented, Moral/ Religious-Oriented, and Conflict-Oriented. Thirty-two of the families responded that they were "frequent drinkers," and were recorded for each cluster. These families were "disproportionately" represented in the Conflict-Oriented cluster (55.2%), and also first in the Expression-Oriented cluster (33.3%), while being last in the Structure- Oriented cluster (12.5%).

In examining family characteristics, Moos, Bromet, Tsu, and Moos (1979) found that alcoholic patients showed better treatment outcomes coming from families which were higher in cohesion, active-recreation orientation, and organization, while lower in conflict and control. Filstead, McElfresh, and Anderson (1981), in comparing the family environments of alcoholics and "normal" families, reported alcoholic families perceive less cohesion, expressiveness, and organization, and more conflict than the normative sample.

Psychosocial Outcome Studies

One trend in COAs outcome studies is that while COAs are seen as at risk for developmental and psychosocial variables, often when compared to controls the differences are less substantial and more varied than expected.

Kammeier (1971) compared 20 boys and 45 girls from families with identifiable alcohol problems against same number and gender high school students from families without identifiable alcohol related problems. The Minnesota Counseling Inventory (MCI) and the Personal Orientation Inventory (POI) were used to measure personality factors, and the Iowa Test of Educational Development and the Lorge-Thorndike Intelligence Tests measured cognitive levels. On the POI only the self-actualization scale indicated a significant difference between the two groups, with the nonproblem group scoring higher. The MCI scores indicated differences for only the 9th and 10th grade problem family girls who showed more distress on the emotional stability, family relationships, social relationships, conformity, mood, and leadership scales. No other grade or gender subgroup demonstrated differences. Kammeier concludes that the lack of differences, "in general," seem to indicate that parental alcohol abuse was not a direct cause of problems for this group of adolescents. This sample from a Catholic high school where 92% of the problem group had intact families is clearly

different than usual 50% or greater divorce rate for alcoholic families. The intact families could serve as a protective factor. Kammeier notes that, "peer group pressure to conform during the teens temporarily masks other personality problems already well developed during the preadolescent years" (p. 370).

Jacob and Leonard (1986) investigated 134 families - 43 alcoholic fathers, 46 controls, and 45 depressed fathers, which included 296 children almost equally distributed by groups and gender. The Achenbach Child Behavior Checklist was completed by the parents. Teachers responded via the Myklebust Pupil Rating Scale, and the Conners Teaching Rating Scale. Factors such as social competency, conduct, hyperactivity, communication competency and the like could be analyzed.

The findings indicated that the children of alcoholic and depressed fathers were more problematic than controls, but a very small group were significantly impaired. For the more impaired children there was higher levels of parental alcoholism, and greater psychopathology for both parents. (Interaction of effects of alcoholism and pathology was not investigated.) Daughters of depressed fathers were reported by parents as having greatest degree of impairment, while the teacher reports did not differentiate among sons or daughters of the three groups. The authors recognize that these sample children, aged 12-18, may manifest serious

problems when older and plan to continue the project to this cohort.

The authors "encourage efforts to examine bidirectional effects involving the alcoholic and his family - in particular, the impact of parental alcoholism on the psychosocial functioning of spouse and offspring together with the role that the spouse's psychiatric and coping status play in diluting the adverse effects that alcoholism can exert on marital and parent-child interactions" (p. 379).

Callan and Jackson (1986) examined 21 adolescent children of recovered alcoholic fathers and 19 children of alcoholic fathers and were compared with 35 socio-demographically matched children on aspects of family and personal adjustment, the parent-child relationship, and perceptions of alcoholism. The rationale for this study was that "little is known about the functioning of children in families where the alcoholic parent becomes abstinent" (p. 180).

Results indicated the following: 1. Children of alcoholic fathers viewed their families as more tense, moody, unreliable, strict and less nurturing. Controls and recovered group felt they had happier, more responsive families. 2. There were no significant differences regarding relationship with parents. 3. In their personal lives children of recovered fathers were "happier" than

COAs. 4. Controls viewed alcoholics as weak and lacking willpower, which differed from the other two groups. COAs more often rated alcoholics as dangerous.

COAs of the recovered fathers rated their lives as happy along with controls, and happier than the children whose fathers still drank. But all three groups were similar regarding self-esteem and locus of control; "Having an alcoholic parent affected the quality of their lives rather than how they felt about themselves" (p. 182).

This study lends support to the view that families with recovering alcoholics do quite well compared to controls, as well as again indicating that most often alcohol fosters personal pathology and familial difficulties, rather than pathological persons and systems routinely gravitating to alcohol abuse. Interestingly, the three groups did not differ in the reported relationships with their fathers or mothers.

In a prospective study Werner (1986) monitored 26 males and 27 females to age 18. Thirty-eight had fathers who were alcoholics, 6 mothers with "serious drinking problems," and 5 had both problem drinking parents. Socioeconomic status, educational stimulation, emotional support, and stressful life events were rated as an assessment of the home environment. The children were assessed by the California Psychological Inventory, Locus of Control Scale, scholastic achievement scales, and interviews regarding family crisis

history, attitudes towards family and friends, personal aspirations, and self-perception.

While risk was greater for the COAs to develop learning and coping difficulties, "approximately 59% of the 49 offspring of alcoholics had not developed such problems by age 18" (p. 36). The "resilient" group received more primary caretaker attention during the first year of life, and were more likely to be perceived as "cuddly and affectionate." Also, their parents demonstrated no remarkable conflict during the first two years of life, and no new sibs were born during that time. Throughout the tracking the "resilients" did better in school, had a greater sense of well being, were more socialized, and had a more internal locus of control. Analysis by gender revealed the following: "Males and the offspring of alcoholic mothers had higher rates of psychosocial problems in childhood and adolescence than females and the offspring of alcoholic fathers" (p. 34).

The characteristics of the resilient COAs, and the early care-giving environment, (along with other research) provides "empirical evidence for a transactional model of human development that takes into account the bidirectionality of child/care-giver effects" (p. 39).

While Werner points to endowed temperament, its effects on the care-giver, and predisposed resilience, it would have been interesting to also analyze the data by sibship. As

there always is the question of why doesn't the entire sibship of the same environment develop the same positive or negative behaviors, syndromes, etc., such an analysis would have given even more insight to the issues of temperament, nonshared environment, and external supports for COAs.

Clair and Genest (1987) state that COAs research ignores positive adjustment and fails to address the variability in adjustment among ACOAs, while it is well recognized that some children do quite well and others can become dysfunctional. In this study parental alcoholism was "not treated as a stressor in itself, but as a risk factor" (p. 346) which could be moderated by family variables, social support, and variations in coping behavior.

Thirty offspring of alcoholic fathers and 40 control group, 18-23 years of age, were asked to respond to the following measures regarding their 13th to 18th year: Family Environment Scale, Dimensions of Social Support Scale, The Ways of Coping, Depression - Proneness Rating Scale, and the Tennessee Self-Concept Scale. Results: 1. Family environment - offspring group had higher conflict scores, and lower cohesion and intellectual-cultural orientation scores than controls. 2. Social support - informational support was lower for ACOAs, emotional support similar for both groups. 3. Appraisals and coping - only 6.8% of ACOAs viewed family problems as controllable and had greater tendency to use emotion-focused rather than

problem-focused coping responses. ACOAs also were inclined to use avoiding strategies (drinking, smoking, denial).
4. Adjustment - offsprings were more inclined to depression-proneness, but did not differ on self-esteem. However, the authors indicate COAs range of scores was higher than the controls. The authors noted that depression-proneness was related to tendency to self-blame regarding familial problems, and self-esteem was higher when families maintained cohesion and subjects engaged in problem-focused coping responses.

ACOAs are viewed by the authors as developing in higher risk family setting with more stress and less support. Their greater tendency to emotion-focused coping and avoidant strategies may be a basis for intrafamilial transmission of alcoholism. Notice is made of many ACOAs who function well or above nonalcoholic family children. Support and other resources may diminish the risk of living in a dysfunctional family. A small sample size and an overrepresentation of females (34 control and 28 ACOAs) make it difficult to generalize to sons of alcoholics, but the authors call for further research regarding protective moderating variables to develop interventions which enhance systems that counteract risk factors.

Parker and Harford (1987) examined parental drinking and the alcohol-related problems of adult children, as well as occupational status of adult children "that may be

involved in the development of alcoholism" (p. 265). Four hundred seventy-four men and 552 women were questioned about their parents' drinking and their current occupation. Drinking categories were nondrinker, light drinker, moderate drinker, heavy drinker, or very heavy drinker. (The frequency of heavy and very heavy drinking mothers was so low the data was not analyzed.)

The results indicated that adult children of heavy-drinking parents have higher percentages of dependent problem drinking than those without heavy-drinking parents, but not higher percentages of nondependent problem drinking. The authors conclude that ACOAs are at greater risk for alcoholism, but not for problem drinking. The interaction effects of parental drinking and occupational status indicate that those subjects with heavy-drinking parents and blue-collar jobs were at elevated risk for alcohol abuse and related problems.

Family Process and Outcomes - The Clinical View

Several authors who work clinically with alcoholic families, COAs, and ACOAs view the effects of alcohol abuse on the family system so damaging that they conclude, "All children raised in alcoholic homes need to be addressed. All children are affected" (Black, 1981, p. 27).

Wegscheider (1981) points to the family rules that develop as substance abuse becomes the major organizing principle of the family system: 1. Alcohol is not the cause

of the family's problem. 2. The alcoholic is not responsible for the dependency. 3. The status quo must be maintained at all costs. 4. No one may discuss what is really going on in the family, with one another or with outsiders. 5. No one may say what he is really feeling. 6. Everyone in the family must be an "enabler." The family rules of coping with the problem of alcohol dependency forces members into "enabling" roles.

The behaviors identified with each role are often shared, or members may switch periodically, but in larger families, Wegscheider had noticed a recurring pattern. The spouse of the alcoholic becomes the Enabler, who protects the dependent from consequences, assumes more family responsibilities, eventually becomes physically and emotionally drained, and engages in self-blame and guilt regarding the spouses addiction and the dysfunctional state of the family. The role of the Hero usually belongs to the oldest child, who participates in parental responsibilities at an early age, and feels compelled to do especially well in school or sports to provide the family with a point of pride. The second child becomes the Scapegoat, who needing attention and feeling limited ways to express anger and frustration in the family, participates in acting out behavior. This is the child who becomes the scapegoat for the family's problems, and may even be told that if it weren't for their behavior the parent might not have to

drink. The third child becomes the Lost Child, overshadowed by the hero and scapegoat, and taken for granted by the parents as he or she finds their own way to cope with the family difficulties. Wegscheider views this child as a candidate for suicide attempts. Finally, there is the Mascot, who often as the youngest is not able to understand the distorted family process, nor is it explained to him. He becomes overprotected from the family's pains and secrets, and as a mode of belonging continues the behaviors which initially provided attention for the "baby" of the family; being cute and entertaining. The family rules and subsequent roles impose demands and limitations on each person, and Wegscheider discusses the various losses of emotional, social, mental, and spiritual potential for each role.

Black (1981) also found the development of identifiable roles in alcoholic families. She believes that COAs who become identifiable behavioral problems are the exception, and that most COAs quietly engage in their roles as they attempt adaptation to the family alcohol abuse. Initially, there may even be positive aspects to the behaviors each role requires. For the "Responsible One" (the Hero), learning to take on responsibilities at an early age and excelling in arenas that would please the parents, provides self-esteem and leadership qualities. The "Adjuster" escapes the responsibilities of the hero, and responds to

the specific family tenor at any given time. They become flexible and easily adapt in most social situations. The "Placater" smooths over familial conflicts and helps others to adjust and feel comfortable, thereby developing sensitivity and listening skills which may help with social popularity.

Black states that the adaptive measures of youth remain in adulthood where continued behavioral roles are no longer effective. The "responsible" children grow up continuing to excel, but work alone and are inept in intimate relationships. The "placaters" don't recognize their own needs and without understanding become unable to express anger or assertiveness because of the fear of anger from others. They can feel chronically depressed. The "adjusters" continue to allow themselves to be manipulated and lose self-esteem and the feeling of power in their lives. The "acting out" child enters adulthood with difficulties due to academic deficits, legal problems, progressing addiction, and poor social skills. For ACOAs the gaps in emotional and psychological development manifest in early adulthood and affect intimate relationships, lead to depression, continuance in an alcoholic or other problematic relationship or marriage, and/or the progression of alcoholism (p. 64).

Woititz (1983) identified thirteen traits of ACOAs who: 1. guess at what normal behavior is, 2. have difficulty

following a project through conclusion, 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 they are different than other people, 11. are super responsible or irresponsible, 12. are extremely loyal even in the face of evidence that the loyalty is undeserved, and 13. are impulsive, don't consider alternative behaviors, which leads to confusion, self-loathing, and loss of control over their environment (p. 4-5). Clearly, these behaviors, tensions, and self-doubts, experienced on a daily basis and readily alleviated by alcohol, can lead to problematic alcohol use or dependence, thus perpetuating the alcoholism into the next generation.

M. Duncan Stanton and associates have done extensive work regarding family systems and alcoholism and other addictions. In summarizing differences between drug abusers' families and other dysfunctional families Stanton (1985) indicates the following regarding family process: 1. Higher frequency of multigenerational chemical dependency (especially alcohol among males), and propensity for other addiction-like behaviors (gambling, TV). 2. More primitive and direct expression of conflict. 3. Overt

alliances between the addict and the overinvolved parent. 4. Mothers of addicts display "symbiotic" child rearing practices further into the life of the child, and manifest greater symbiotic needs than mothers of schizophrenics and normals. 5. Greater frequency of premature and unexpected deaths, and generally a preponderance of death themes.

Children of Alcoholics Outcomes Examining Gender of Parent and Child

Some of the above cited studies attend to the variable of the gender of parent and the child. Ninety-seven percent of the Kammeier (1971) COAs came from homes where the father was identified as the alcohol abuser. Kammeier noted that only the 9th and 10th grade COAs girls subgroup showed significant negative outcomes, and that the "slight trend" of COAs having adolescent adjustment problems was more evident in the girls. Jacob and Leonard (1986) noted no gender differences among the alcoholic fathers' offspring. Werner (1986) observed that the females of alcoholic fathers had better outcomes than males of alcoholic mothers.

McKenna and Pickens (1983) examined 518 female and 1411 male alcoholic patients regarding "the relationship between the number of alcoholic parents and measures of personality functioning in alcoholics" (p. 689). They considered the possibility that "... the sex of an alcoholic parent contributes to psychopathology in children, either as a main

effect or by interaction with the sex of the child" (p. 689). The alcoholic patients were grouped by having had no alcoholic parents, an alcoholic father, an alcoholic mother, or both parents alcoholic. Using the MMPI and variant scales, the authors found no differences between subjects of only an alcoholic mother or only alcoholic father, or any sex-of-child by sex-of-alcoholic-parent interactions. Increased levels of aggression and psychopathology in alcoholic children were associated with the number of alcoholic parents.

Schuckit (1984) explored the relationship between the sex of an alcoholic parent and the course of primary alcoholism in 453 males. The subjects were categorized into four groups: I (N=144) had an alcoholic father, II (N=29) had an alcoholic mother, III (N=27) had two alcoholic parents, and IV (N=255) had no alcoholic parents. Information was received through interviews with the patients and up to two resource persons concerning background, drinking patterns and problems, early antisocial life patterns, and major depressive episodes. Patients with first-degree alcoholic relatives had the most early life problems and alcohol related difficulties, while those with no alcoholic parents (Group IV) the least early life and alcohol-related difficulties. The major difference between subjects of alcoholic fathers and alcoholic mothers was the tendency toward more drug misuse in sons of the alcoholic

mothers. The sons with two alcoholic parents had more alcoholism in their sibship, with brothers at greater risk with alcoholic fathers, but sisters were not at increased risk with alcoholic mothers.

In a major study of 504 ACOAs and similar number of offspring of nonalcoholic parents, Ackerman (1987) explored ACOAs personality characteristics and examined gender differences. Responses to "the most commonly agreed upon personality characteristics found in ACOAs" (p. 24) were compared by sex-of-child and sex-of-parent. Score results of the different personality characteristics indicate that having two alcoholic parents had greater impact for daughters than having an alcoholic father, and least impact when having an alcoholic mother. For sons, having an alcoholic mother had the greatest impact, followed by two alcoholic parents, and then by having an alcoholic father. Thus, for these ACOAs, having an alcoholic parent of the same gender had the least impact. Sons and daughters of alcoholic fathers had the same highest three personality characteristics, though to different degrees: taking oneself very seriously, judging oneself without mercy, and constantly seeking approval and affirmation. Where the mother was the alcoholic parent, the three major concerns differed for the offspring. The daughters scored highest on: taking oneself very seriously, being extremely loyal, and overreacting to change. The sons' three major issues

were: constantly seeking affirmation and approval, being either super responsible or irresponsible, and having difficulty with intimate relationships.

Williams (cited in Ackerman, 1987) examined the effects of the gender of the alcoholic parent on the quality of child care, the level of family stability, and the incidence of child abuse and neglect. When both parents were alcoholics quality of child care was lowest and child abuse highest. When the father was the alcoholic, mothers were able to maintain higher levels of child care and family stability, and low levels of child abuse and neglect. When mothers were the alcoholics, family stability was low and child neglect high. This indicates that the gender of the alcoholic parent can influence the family environment and the type of support the child receives.

METHOD/DESIGN

Sample

One hundred eight subjects, aged 18 to 23 years, were recruited at Michigan State University. Students were solicited in the following three ways. 1. One professor provided extra credit for students who stayed after class to complete the questionnaire. 2. Two instructors provided class time for students to participate in a research experience with no incentive or reward. 3. Students in introductory psychology courses are required to participate in department screened and posted experiments and research projects of their choosing. Failure to attain "subject" credits results in lower course grades.

Since adequate numbers of comparison subjects were available from the other classes, only men and women psychology students who felt they grew up with alcoholic fathers were asked to participate. Three students volunteered. When a $5.00 incentive was announced, 13 students presented for the next testing session. (Students from the first session were then offered $5.00.) Six men and 10 women were obtained in this manner.

Class wide testing resulted in 11 men ACOAs and 14 women ACOAs. All completed male questionnaires of the comparison group were used. For females, 84 test packets

were completed and 33 were randomly selected for analysis. It should be noted that three of the classes were predominantly female (approximately 85%), and that male COAs and comparison subjects were at a premium.

Inclusion requirements were college attendance, maximum age of 23, and for the index subjects (ACOAs) a score of 6 or more on the Children of Alcoholics Screening Test (CAST), and a positive response to CAST item number 22.

The ACOAs group consisted of 41 subjects, 24 female (58.5%) and 17 males (41.5%). Sixty-eight percent were Catholic or Protestant, with no Jewish students. Six (14.6%) were African-Americans. The comparison group consisted of 67 students, with 33 females (49%) and 34 males (51%). Seventy percent were Catholic and Protestant, and 10% were Jewish, with 20% responding "other". There were two (2.9%) African-Americans.

The social-economic status of the students' parents was determined by the Two Factor Index of Social Position (Hollingshead, 1957). Education and occupation are each given a score value and multiplied by a factor weight to derive a social position score. The range of computed scores is divided to designate a social class with (I) being the highest, and (V) the lowest. In the comparison group, 64% of the fathers were in the class (I) and (II), whereas in the index group, only 31% were in the upper two levels of social occupational prestige.

A chi-square analysis was performed to determine whether the groups differed significantly on socio-occupational prestige. The groups were found to differ significantly ($p = .0009$) with the comparison group having a higher overall socio-occupational prestige index. Thirty (44.8%) of the comparison mothers had college or graduate degrees. In the Hollingshead index the 1957 housewife, as opposed to the current elevated respect for "home managers", was considered unemployed and consequently assigned the lowest level occupational status. Therefore, the social occupational prestige level for comparison mothers is somewhat higher than scored, since 5 (7.5%) of the level IV and V mothers had college or graduate degrees. For the ACOA group 11 (26.8%) of the mothers had college degrees, including only 1 (2.4%) level IV, and no level V mothers.

Table 1

Social Occupational Prestige - Father

SOCIAL CLASS	INDEX	COMPARISON
I	6 (14.6%)	25 (37.3%)
II	7 (17.0%)	18 (26.9%)
III	13 (31.7%)	14 (20.9%)
IV	8 (19.5%)	10 (14.9%)
V	7 (17.0%)	-
TOTAL	41 (100%)	67 (100%)

Table 2

Social Occupational Prestige - Mother

SOCIAL CLASS	INDEX	COMPARISON
I	-	4 (6.0%)
II	6 (14.6%)	21 (31.3%)
III	13 (31.8%)	11 (16.4%)
IV	13 (31.8%)	16 (23.9%)
V	9 (22.0%)	15 (22.4%)
TOTAL	41 (100%)	67 (100%)

The comparison students can be viewed as growing up in families with higher social-occupational prestige and the concomitant higher content of living.

The mean length of marriage for index fathers and mothers was 21.3 years, and for comparison fathers and mothers 24.5 and 25.1 years respectively. Two index and two comparison subjects indicated they were responding about their stepfathers rather than the biological fathers. While the number of divorces in the comparison group (N = 4 or 6%) was less than the index group (N = 12 or 29.3%), for both groups the parental divorce rate was well below the national average for the general population and families with alcohol related problems.

The fathers' alcohol use was identified in four ways: 1. positive subject response on CAST item number 22; 2. a

CAST score of six or more; 3. inpatient or outpatient substance abuse treatment; and 4. Alcoholics Anonymous attendance.

Data Collection

All questionnaires were completed in college classrooms. Students were given a brief explanation of the content of the study and given the opportunity to ask questions.

Given the possibility that demographic or CAST items may promote personal issues for some of the ACOAs subjects, students were advised of campus and community helping resources. Once the packet was completed, the researcher was available for discussion but no students felt the need to respond to the offer.

Subjects were given instructions regarding questionnaire completion, and asked to respond to the TSCS and HDL in the present. For the FES and CAST, subjects were asked to consider their family life while they still lived at home and were more intensely involved with their families, and answer accordingly.

The Psychology Department requires all researchers using its student subject pool to provide a brief instruction period regarding human subject research generally, and the specific project. This was done for psychology students after the questionnaires were completed.

Measures and Instruments

Demographics, Paternal and Subject Alcohol Use self-report questionnaires were used to collect data regarding family social-economic status, paternal and personal alcohol use history.

In this study measures of the fathers' drinking patterns and history, and those designated as alcohol abusing and alcoholic, are based on the reports of the subjects. Research regarding the validity of young adults' reports of parental drinking habits indicate that students, irrespective of their misjudgments, tend to underestimate both the frequency and quantity of parental alcohol use (O'Malley, Carey, and Maisto, 1986), as well as fail to identify parental alcoholism (Thompson, Orvashel, Prusoff, and Kidd, 1982). While minimizing and underreporting parental alcohol abuse can be understood as in the service of the process of denial, other family dynamics, or ignorance of actual parental alcohol consumption, there is no recognition why subjects would overreport alcohol abuse or alcoholism.

Children of Alcoholics Screening Test (CAST)

The Children of Alcoholics Screening Test (CAST) (Jones, 1982) was used to identify the index group and to measure the students' subjective reaction to personal and familial events specifically related to parental alcohol use. This instrument is a 30 item self-report inventory

whose "yes" or "no" items reflect the child's interaction with parents during drinking periods, the child's psychological-emotional state, and from the child's perception identify parental alcoholism, e.g., item 22, "Did you ever think your father was an alcoholic?"

The instrument was designed to identify latency age, adolescent, or adult COAs. Two to five positive responses indicate "problem drinkers - possible alcoholic," and six or more indicate an "alcoholic parent." In a sample of 215 children of clinically-diagnosed alcoholics, self-reported COAs, and controls for a validity study, 100% of the children of clinically-diagnosed alcoholics and self-reported COAs were identified with a CAST score of six or more.

Following Roosa, Sandler, Gehring, Beals, and Cappo (1988), the subjects in this study designated as the index group had a score of six or more on the CAST, and answered positively regarding item 22, "Did you ever think your father was an alcoholic?" The average mean CAST score for index males and females was 15.85, and for comparison group, .33, with only two comparison subjects responding yes to item 1, "Have you ever thought one of your parents had a drinking problem?" For the purpose of this study, the CAST "...does seem to have a high content validity as a measure of the child's concern or distress about his or her parent's drinking" (Roosa et al., 1988).

Family Environment Scale (FES)

The FES is one of several "social climate" scales developed by Rudolf Moos and associates, and measures the social-environmental characteristics of the family with 90 true-false items. Three dimensions of family process are measured by 10 subscales:

1. Relationship - cohesion, expressiveness, and conflict;

2. Personal growth - independence, achievement orientation, intellectual-cultural orientation, active-recreational orientation, moral-religious emphasis;

3. System maintenance - organization and control.

In this study the Real Form (Form R), which measures perceptions of one's conjugal or nuclear family's actual functioning, was used.

Internal consistency (Cronbach Alpha) for each of the ten FES subscales range from moderate to substantial. Test-retest reliability is reported in the acceptable range of .68 to .86 for all 10 subscales. Family profile scores stability correlations for families tested at 4 and 12 months apart indicate that Form R profiles are stable for time intervals as long as one year. The above information was extracted from the FES manual (Moos and Moos, 1986). Roosa and Beals (1990) have questioned the reliability and validity of certain FES subscales (see Chapter V, p 148).

Health and Daily Living - Youth Form (HDL)

The HDL assesses psychological and physical functioning in the social environment of adolescents of "approximate age range 12-18 years" (Moos et al., 1985). This questionnaire is based on the HDL-Adult Form, but school activity and peer interaction are examined. The Stanford University Social Ecology Laboratory was consulted regarding use of the HDL with college students up to age 23. Given the school and peer setting, and adolescent attributes of college students, the HDL was viewed as appropriate for this study.

The HDL consists of six emotional and physical health related indices (self-confidence, positive mood, distressed mood, physical symptoms, medical condition, and health risk behaviors), and three indices regarding social functioning (family activities, activities with friends, and social integration in school). The youth form was developed for a research project on depressed patients. The Cronbach Alpha for internal consistency for the health related indices range from .43 to .79 for control children, and .64 to .83 for children of depressed patients. For the social functioning indices the alpha score ranged .59 to .62, and .60 to .65 for controls and index scores respectively.

The HDL requires subjects to respond to yes-no, or Gutman scale items. Of the nine HDL indices, five were used in this study: distressed mood, health-risk behaviors, self-confidence, activities with friends, and social

integration in school. Two other items were considered, number of friends and grade point average. Therefore, the mean average HDL scores in this study are not computed on a possible total HDL score.

Several studies report on HDL adult form indices (Moos, Cronkite, Billings, and Finney, 1985) but only one reports on HDL youth form indices, Billings and Moos, 1983. In an addendum to the HDL manual, Moos stated, "...the evidence gathered thus far indicates that the HDL indices generally are reasonably valid measures of the domains they purport to assess" (Moos, 1986, June, p. 4).

Tenneseee Self-Concept Scale (TSCS)

The TSCS was designed to measure the multidimensional aspects of self-concept, a major component of the total personality and highly influential in the person's general behavior; i.e., those persons who view themselves as unworthy, undesirable, or worthless act accordingly, or certainly in some arena are self-limiting.

The instrument consists of 100 self-descriptive statements which call for five point Likert type scale responses (1 = completely false; 2 = mostly false; 3 = partly true and partly false; 4 = mostly true; and 5 = completely true.)

While there is only one response format, the clinical and research scoring and profiling form (Form C & R) used in

this study provides 29 scores as opposed to 14 basic scores on the counseling form. For this study the following scales were scored:

1. Self-criticism; mildly derogatory statements or "common frailities" most people would admit to when responding candidly.

2. Total score; reflects the overall level of self-esteem.

3. Family self; reflects the individual's feelings of adequacy, worth and value as a family member.

4. General maladjustment; differentiates psychiatric patients from nonpatients, but not one patient group from another.

5. Personality disorder; pertains to people with basic personality defects and weakness as distinguished from psychotic states or the neurotic reactions.

6. Neurosis; identifies neurotic patients.

7. Personality integration; identifies well-adjusted, high-functioning individuals from other groups of individuals.

The TSCS has been used extensively in educational and social science research. The psychometric properties regarding reliability and validity are established and reported in detail in Roid and Fitts (1988). Cronbach alpha coefficients predominantly range from .70 to .87, with the Total Scores for adolescent samples having a value of .91,

adults .94, and total samples .94 (p. 65). Test-retest reliability coefficient for the Total Score was .92, and for the major scales ranged from .67 to .92 (p. 66).

These instruments were selected because they tap aspects of the eco-system, family interactional perspective of this study. The FES and HDL are measures of family environment and individual functioning in several social arenas. Both instruments are a product of Rudolf H. Moos of the Social Ecology Laboratory at Stanford University. The CAST was designed to identify COAs and ACOAs. Several of the questions reflect specific familial and parent-child interactions. The TSCS provides several scales measuring psychological functioning, as well as the self-concept score and self-criticism scale, two variables frequently addressed in COA outcome literature.

Design

The design of this study is a 2 x 2 (Gender x Group) factorial design with two levels of gender (male, female) and two levels of group membership (index - students with alcoholic parents; comparison - students without an alcoholic parent).

Research Hypotheses

The research hypotheses that follow were developed as a result of the author's interest in the main and interaction effects of the independent variables. While the list does

not exhaust all the possible hypotheses, it does represent the questions of greatest interest in this research. The hypotheses estimate the effects of sex and group membership as they influence the dependent measures.

Twenty-four hypotheses were developed and are presented here:

I. There will be significant differences between college students with no alcoholic parents and students with alcoholic parents, in their perceptions of the family dimensions of 1. relationships, 2. personal growth, and 3. family maintenance.

H_1. The comparison group will perceive their families to be significantly more cohesive than index group.

H_2. The comparison group will perceive their families as encouraging expressiveness to significantly greater degree than the index group.

H_3. The index group will perceive a significantly greater level of familial conflict than the comparison group.

H_4. The comparison group will perceive their families as tolerating member independence significantly more than the index group.

H_5. The comparison group will perceive a significantly greater familial achievement orientation than the index group.

H_6. The comparison group will perceive a significantly greater familial intellectual-cultural orientation than the index group.

H_7. The comparison group will perceive a significantly greater familial active-recreational orientation than the index group.

H_8. The comparison group will perceive a significantly greater familial moral-religious emphasis than the index group.

H_9. The comparison group will perceive a significantly greater sense of familial organization than the index group.

H_{10}. The comparison group will perceive a significantly greater sense of familial control than the index group.

II. There will be significant differences between college students with no alcoholic parents, and students with alcoholic parents on measures of self-concept.

H_{11}. The index group will have a significantly greater mean score on the self-criticism scale than the comparison group.

H_{12}. The comparison group will have a significantly higher total self-concept mean score than the index group.

H_{13}. The comparison group will have significantly higher mean score on the family-self scale than the index group.

H_{14}. The index group will have a significantly higher general maladjustment mean score than the comparison group.

H_{15}. The index group will have a significantly higher personality disorder mean score than the comparison group.

H_{16}. The index group will have a significantly higher neurosis mean score than the comparison group.

H_{17}. The comparison group will have a significantly higher personality integration mean score than the index group.

III. There will be significant differences between college students with no alcoholic parents and students with alcoholic parents in their quality of daily life.

H_{18}. The index group will have a significantly higher distressed mood than the comparison group.

H_{19}. The index group will have significantly more health risk behaviors than the comparison group.

H_{20}. The comparison group will have significantly higher self-confidence than the index group.

H_{21}. The comparison group will report participating in significantly more activities with friends than the index group.

H_{22}. The comparison group will report significantly more friends than the index group.

H_{23}. The comparison group will have significantly higher grade point averages than the index group.

H_{24}. The comparison group will have significantly greater mean on social interaction than the index group.

Analysis

Separate analyses of variance were performed across group membership and gender to determine if there were significant differences among the groups on the following variables:

1. Cohesion
2. Expressiveness
3. Conflict
4. Independence
5. Achievement orientation
6. Intellectual-cultural
7. Activity-recreation
8. Moral-religious
9. Organization
10. Control
11. Self-criticism
12. Total Self-concept
13. Family-self
14. General maladjustment
15. Personality disorder
16. Neurosis
17. Personality integration
18. Distressed mood
19. Health risk behavior
20. Self-confidence
21. Activities with friends

22. Number of friends

23. Grade point average

24. Social interaction

Chi-square analyses were performed on descriptive data to determine whether significant differences existed between the groups on such variables as: religion, race, socio-occupational prestige.

Summary

In an effort to examine the relationship between familial variables of families with parental alcoholism and possible negative psychosocial outcomes for their children, 41 university students with parental alcoholism and 67 students without reported parental alcoholism completed self-report measures. Variables of interest directed the choice of the following measures: the Family Environment Scale, the Tennessee Self-Concept Scale, the Health and Daily Living - Youth Form, and the Children of Alcoholics Screening Test. A 2 x 2 factorial design was used to explore the possible main and interaction effects in the variables of interest between groups of males and females and between index (ACOAs) and comparison (nonCOAs) groups. Hypotheses to be tested were concerned with group and gender differences regarding: 1. family environment; 2. self-concept and self-esteem; and 3. quality of daily living. ANOVA were conducted on the variables related to the hypotheses.

RESULTS

Introduction

The purpose of this study was to examine familial variables and individual outcomes of college students with an alcoholic parent and those students without an alcoholic parent. Specifically, the present study was concerned with the assumed negative effects of paternal alcoholism on family processes, which in turn would establish a less than optimal developmental environment, compared with those families where parental alcoholism was not a factor. This study examined the relationships among family systems theory constructs of family processes (relationship, personal growth, and family maintenance), subject perceptions of effects of paternal alcoholism, subject gender, and psychosocial outcomes of self-concept and quality of daily life.

Hypotheses were developed to explore the possible main and interaction effects in the variables of interest between groups of males and females and between index and comparison groups. Chapter IV presents these hypotheses and reports the relevant results. All hypotheses presented in this chapter will be in the null form as well as the directional form where hypothesized.

The hypotheses were tested using the .05 level of significance. The Statistical Package for the Social Sciences X, 3.1 Edition (SPSS-X, 1980) computer programs were used to analyze the data of the study.

Hypothesized Results

Family Environment Scale Variables

Research Question 1: There will be significant differences between college students with no alcoholic parents and students with alcoholic parents in their perceptions of the family dimensions of: 1. relationships, 2. personal growth, and 3. family maintenance.

Null Hypothesis 1: There will be no significant difference between index and comparison groups on family cohesion.

Directional Hypothesis 1: The comparison group will perceive their families to be significantly more cohesive than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on cohesion scores. An examination of the results revealed a statistically significant main effect for group on cohesion: $F(1,2) = 4.347$, $p = .040$ (see Table 3). An examination of cell means reveals that the comparison group's scores on cohesion were significantly higher than the index group (see Table 4).

This result indicated that students without alcoholic parents scored higher on cohesion than students with alcoholic parents. Therefore, the null hypothesis was rejected, and the directional hypothesis was accepted.

Table 3

Analysis of Variance for Cohesion (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	1116.927	2	558.464	2.197	.116
Group	1104.778	1	1104.778	4.347	.040*
Gender	41.869	1	41.869	.165	.686
2-Way Interactions	310.137	1	310.137	1.220	.272
Group x Gender	310.137	1	310.137	1.220	.272
Explained	1427.064	3	475.688	1.872	.139
Residual	26433.852	104	254.172		
Total	27860.917	107	260.382		

* p < .05
** p < .01
*** p < .001

Table 4

Cohesion: Means for Gender, Group and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	49.1176
Female	57	49.7895
Group		
Index	41	45.4390
Comparison	67	51.9403
Gender by Group		
Male Index	17	47.2941
Female Index	24	44.1250
Male Comparison	34	50.0294
Female Comparison	33	53.9091

Null Hypothesis 2: There will be no significant difference between index and comparison groups on family expressiveness.

Directional Hypothesis 2: The comparison group will perceive their families as encouraging expressiveness to a significantly greater degree than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on family expressiveness scores. An examination of the results revealed no significant main effect for group on family expressiveness: $F(1,2) = 2.378$, $p = .126$ (see Table 5). An examination of cell means revealed that the comparison group scores on family

expressiveness were not significantly greater than the index group scores (see Table 6).

This result indicated that students with and without alcoholic parents do not differ significantly on family expressiveness. Therefore, the null hypothesis is not rejected.

Table 5

Analysis of Variance for Expressiveness (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	473.003	2	236.502	1.194	.307
Group	471.095	1	471.095	2.378	.126
Gender	11.118	1	11.118	.056	.813
2-Way Interactions	1.118	1	1.118	.006	.940
Group x Gender	1.118	1	1.118	.006	.940
Explained	474.121	3	158.040	.798	.498
Residual	20601.546	104	198.092		
Total	21075.667	107	196.969		

* p < .05
** p < .01
*** p < .001

Table 6

Family Expressiveness: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	49.1373
Female	57	49.4035
Group		
Index	41	46.6342
Comparison	67	50.8955
Gender by Group		
Male Index	17	46.4118
Female Index	24	46.7917
Male Comparison	34	50.5000
Female Comparison	33	51.3030

Null Hypothesis 3: There will be no significant difference between index and comparison groups on family conflict.

Directional Hypothesis 3: The index group will perceive a significantly greater level of familial conflict than the comparison group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on family conflict scores. An examination of the results revealed a statistically significant main effect for group on family conflict: $F(1,2) = 6.905$, $p = .010$ (see Table 7). An examination of cell means reveals that the

index group scores on family conflict were significantly higher than the comparison group (see Table 8).

This result indicated that students with alcoholic parents scored higher on conflict than students without alcoholic parents. Therefore, the null hypothesis was rejected, and the directional hypothesis was accepted.

Table 7

Analysis of Variance for Family Conflict (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	949.238	2	474.619	3.948	.022*
Group	830.173	1	830.173	6.905	.010**
Gender	68.346	1	68.346	.568	.453
2-Way Interactions	5.121	1	5.121	.043	.837
Group x Gender	5.121	1	5.121	.043	.837
Explained	943.359	3	318.120	2.646	.053
Residual	12503.826	104	120.229		
Total	13458.185	107	125.777		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 8

Conflict: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	49.0196
Female	57	51.1228
Group		
Index	41	53.7805
Comparison	67	47.8955
Gender by Group		
Male Index	17	53.1765
Female Index	24	54.2083
Male Comparison	34	46.9412
Female Comparison	33	48.8788

Null Hypothesis 4: There will be no significant difference between index and comparison groups on family independence.

Directional Hypothesis 4: The comparison group will perceive their families as tolerating member independence significantly more than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on independence scores. An examination of the results revealed a statistically significant main effect for group on independence: $F(1,2) = 3.883$, $p = .051$ (see Table 9). An examination of cell means reveals that the comparison group scores on independence were significantly higher than the index group scores (see Table 10).

This result indicated that students without alcoholic parents scored higher on independence than students with alcoholic parents. Therefore, the null hypothesis was rejected, and the directional hypothesis was accepted.

Table 9

Analysis of Variance for Independence (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	1564.804	2	782,402	3.457	.035*
Group	878.769	1	878.769	3.883	.051*
Gender	548.047	1	548.047	2.421	.123
2-Way Interactions	40.444	1	40.444	.179	.673
Group x Gender	40.444	1	40.444	.179	.673
Explained	1605.248	3	535.083	2.364	.075
Residual	23537.937	104	226.326		
Total	25143.185	107	234.983		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 10

Independence: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	53.2941
Female	57	48.2456
Group		
Index	41	46.7073
Comparison	67	53.0298
Gender by Group		
Male Index	17	50.2941
Female Index	24	44.1667
Male Comparison	34	54.7941
Female Comparison	33	51.2121

Null Hypothesis 5: There will be no significant difference between index and comparison groups on family achievement.

Directional Hypothesis 5: The comparison group will perceive a significantly greater level of familial achievement orientation than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on achievement orientation scores. An examination of the results revealed no significant main effect for group on achievement orientation: $F(1,2) = .818$, $p = .368$ (see Table 11). An examination of cell means revealed that the comparison group scores on achievement

orientation were not significantly greater than the index group scores (see Table 12).

This result indicated that students with and without alcoholic parents do not differ significantly on achievement orientation scores. Therefore, the null hypothesis is not rejected.

Table 11

Analysis of Variance for Achievement Orientation (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	996.448	2	498.224	3.673	.029*
Group	110.902	1	110.902	.818	.368
Gender	935.565	1	935.565	6.896	.010**
2-Way Interactions	50.544	1	50.544	.373	.543
Group x Gender	50.544	1	50.544	.373	.543
Explained	1046.992	3	348.997	2.573	.058
Residual	14108.527	104	135.659		
Total	15155.519	107	141.640		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 12

Achievement Orientation: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	54.8236
Female	57	49.0878
Group		
Index	41	52.7561
Comparison	67	51.2090
Gender by Group		
Male Index	17	55.1765
Female Index	24	51.0417
Male Comparison	34	54.6471
Female Comparison	33	47.6667

Null Hypothesis 6: There will be no significant difference between index and comparison groups on family intellectual-cultural orientation.

Directional Hypothesis 6: The comparison group will perceive a significantly greater familial intellectual-cultural orientation than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on family intellectual-cultural orientation scores. An examination of the results revealed no significant main effect for group on family intellectual-cultural orientation: $F(1,2) = 2.290$, $p = .133$ (see Table 13). An examination of cell means revealed that

comparison group scores on family intellectual-cultural orientation were not significantly greater than the index group (see Table 14).

This result indicated that students with and without alcoholic parents do not differ significantly on family intellectual-cultural orientation scores. Therefore, the null hypothesis is not rejected.

Table 13

Analysis of Variance for Intellectual-Cultural (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	428.033	2	214.016	1.276	.284
Group	384.239	1	384.239	2.290	.133
Gender	69.882	1	69.882	.417	.520
2-Way Interactions	2.034	1	2.034	.012	.913
Group x Gender	2.034	1	2.034	.012	.913
Explained	430.067	3	143.356	.854	.467
Residual	17448.600	104	167.775		
Total	17878.667	107	167.090		

* p < .05
** p < .01
*** p < .001

Table 14

Intellectual-Cultural: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	49.2157
Female	57	50.4912
Group		
Index	41	47.5609
Comparison	67	51.3134
Gender by Group		
Male Index	17	46.8235
Female Index	24	48.0833
Male Comparison	34	50.4118
Female Comparison	33	52.2424

Null Hypothesis 7: There will be no significant difference between index and comparison groups on family activity-recreation orientation.

Directional Hypothesis 7: The comparison group will perceive a significantly greater familial activity-recreation orientation than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on family activity-recreation orientation scores. An examination of the results revealed a statistically significant main effect for group on family activity-recreation orientation: $F(1,2) = 7.944$, $p = .006$ (see Table 15). An examination of cell means reveals that

the comparison group scores on family activity-recreation orientation were significantly higher than the index group scores (see Table 16).

This result indicated that students without alcoholic parents scored higher on family activity-recreation orientation than students with alcoholic parents. Therefore, the null hypothesis was rejected, and the directional hypothesis was accepted.

Table 15

Analysis of Variance for Activity-Recreation (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	980.974	2	470.487	4.205	.018*
Group	926.619	1	926.619	7.904	.006**
Gender	21.120	1	21.150	.181	.671
2-Way Interactions	44.603	1	44.603	.382	.538
Group x Gender	44.603	1	44.603	.382	.538
Explained	1025.577	3	341.859	2.931	.037*
Residual	12130.673	104	116.641		
Total	13156.250	107	122.956		

* p < .05
** p < .01
*** p < .001

Table 16

Activity-Recreation: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	53.0000
Female	57	51.5740
Group		
Index	41	48.4390
Comparison	67	54.5820
Gender by Group		
Male Index	17	49.9412
Female Index	24	47.3750
Male Comparison	34	54.5294
Female Comparison	33	54.6364

Null Hypothesis 8: There will be no significant difference between index and comparison groups on moral-religious emphasis.

Directional Hypothesis 8: The comparison group will perceive a significantly greater familial moral-religious emphasis than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on familial moral-religious emphasis scores. An examination of the results revealed no significant main effect for group on familial moral-religious emphasis: $F(1,2) = .003$, $p = .955$ (see Table 17). An examination of

cell means revealed that comparison group scores on familial moral-religious emphasis were not significantly greater than index group scores (see Table 18).

This result indicated that students with and without alcoholic parents do not differ significantly on familial moral-religious emphasis. Therefore, the null hypothesis is not rejected.

Table 17

Analysis of Variance for Moral-Religious (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	87.854	2	43.927	.304	.739
Group	.464	1	.464	.002	.955
Gender	87.827	1	87.827	.607	.438
2-Way Interactions	74.309	1	74.309	.514	.475
Group x Gender	74.309	1	74.309	.514	.475
Explained	162.163	3	54.054	.374	.772
Residual	15036.837	104	144.585		
Total	15179.000	107	142.047		

* p < .05
** p < .01
*** p < .001

Table 18

Moral-Religious: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	50.1178
Female	57	48.3158
Group		
Index	41	49.1464
Comparison	67	49.1791
Gender by Group		
Male Index	17	48.9412
Female Index	24	49.2917
Male Comparison	34	50.7059
Female Comparison	33	47.6061

Null Hypothesis 9: There will be no significant difference between index and comparison groups on family organization.

Directional Hypothesis 9: The comparison group will perceive a significantly greater sense of familial organization than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on family organization scores. An examination of the results revealed no significant main effect for group on family organization: $F(1,2) = 1.568$, $p = .213$ (see Table 19). An examination of cell means revealed that

comparison group scores on family organization were not significantly greater than index group scores (see Table 20).

This result indicated that students with and without alcoholic parents do not differ significantly on family organization. Therefore, the null hypothesis is not rejected.

Table 19

Analysis of Variance for Organization (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	473.533	2	236.766	1.814	.168
Group	204.585	1	204.585	1.568	.213
Gender	226.262	1	226.262	1.734	.191
2-Way Interactions	56.178	1	56.178	.430	.513
Group x Gender	56.178	1	56.178	.430	.513
Explained	529.711	3	176.570	1.353	.261
Residual	13573.206	104	130.512		
Total	14102.917	107	131.803		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 20

Organization: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	52.5294
Female	57	49.3684
Group		
Index	41	48.9268
Comparison	67	52.0448
Gender by Group		
Male Index	17	49.5294
Female Index	24	48.5000
Male Comparison	34	54.0294
Female Comparison	33	50.0000

Null Hypothesis 10: There will be no significant difference between index and comparison groups on family control.

Directional Hypothesis 10: The comparison group will perceive a significantly greater sense of familial control than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on family control scores. An examination of the results revealed no significant main effect for group on family control: $F(1,2) = 1.972$, $p = .163$ (see Table 21). An examination of cell means revealed that comparison group scores on family control were not significantly greater than index group scores (see Table 22).

This result indicated that students with and without alcoholic parents do not differ significantly on family control scores. Therefore, the null hypothesis is not rejected.

Table 21

Analysis of Variance for Control (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	649.492	2	324.746	2.187	.117
Group	292.687	1	292.687	1.972	.163
Gender	414.367	1	414.367	2.791	.098
2-Way Interactions	125.027	1	125.027	.842	.361
Group x Gender	125.027	1	125.027	.842	.361
Explained	774.520	3	258.173	1.739	.164
Residual	15439.480	104	148.457		
Total	16214.000	107	151.533		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 22

Control: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	49.2549
Female	57	45.6140
Group		
Index	41	49.2195
Comparison	67	46.1791
Gender by Group		
Male Index	17	49.8824
Female Index	24	48.7500
Male Comparison	34	48.9412
Female Comparison	33	43.3333

Tennessee Self-Concept Scale Variables

Research Question 2: There will be significant differences between college students with no alcoholic parents and students with alcoholic parents on measures of self-concept.

Null Hypothesis 11: There will be no significant differences between index and comparison groups on self-criticism.

Directional Hypothesis 11: The index group will have a significantly greater mean on self-concept than the comparison group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on self-criticism scores. An examination of

the results revealed no significant main effect for group on self-criticism: $F(1,2) = 2.204$, $p = .141$ (see Table 23). An examination of cell means revealed that index group scores on self-criticism were not significantly greater than comparison group scores (see Table 24).

This result indicated that students with and without alcoholic parents do not differ significantly on self-criticism scores. Therefore, the null hypothesis is not rejected.

Table 23

Analysis of Variance for Self-Criticism (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	111.019	2	55.509	1.218	.300
Group	100.422	1	100.422	2.204	.141
Gender	17.192	1	17.192	.377	.540
2-Way Interactions	12.187	1	12.187	.267	.606
Group x Gender	12.187	1	12.187	.267	.606
Explained	123.205	3	41.068	.901	.443
Residual	4739.313	104	45.570		
Total	4862.519	107	45.444		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 24

Self-Criticism: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	51.6275
Female	57	50.9999
Group		
Index	41	52.4878
Comparison	67	50.5672
Gender by Group		
Male Index	17	53.4706
Female Index	24	51.7917
Male Comparison	34	50.7059
Female Comparison	33	50.4242

Null Hypothesis 12: There will be no significant difference between index and comparison groups on self-concept.

Directional Hypothesis 12: The comparison group will have a significantly higher total self-concept score than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on self-concept scores. An examination of the results revealed no significant main effect for group on total self-concept: $F(1,2) = 1.920$, $p = .169$ (see Table 25). An examination of cell means revealed that comparison group scores on total self-concept were not significantly greater than index group scores (see Table 26).

This result indicated that students with and without alcoholic parents do not differ significantly on total self-concept scores. Therefore, the null hypothesis is not rejected.

Table 25

Analysis of Variance for Total TSCS Score (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	219.625	2	109.812	1.101	.336
Group	191.415	1	191.415	1.920	.169
Gender	42.746	1	42.746	.429	.514
2-Way Interactions	2.713	1	2.713	.027	.869
Group x Gender	2.713	1	2.713	.027	.869
Explained	222.338	3	74.113	.743	.529
Residual	10369.292	104	99.705		
Total	10591.630	107	98.987		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 26

Total Self-Concept: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	48.6079
Female	57	49.6316
Group		
Index	41	47.5122
Comparison	67	50.1493
Gender by Group		
Male Index	17	46.5294
Female Index	24	48.2083
Male Comparison	34	49.6471
Female Comparison	33	50.6667

Null Hypothesis 13: There will be no significant difference between index and comparison groups on family-self.

Directional Hypothesis 13: The comparison group will have a significantly greater sense of family-self than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on family-self scores. An examination of the results revealed no significant main effect for group on family self: $F(1,2) = .125$, $p = .725$ (see Table 27). An examination of cell means revealed that comparison group

scores on family-self were not significantly greater than index group scores (see Table 28).

This result indicated that students with and without alcoholic parents do not differ on family-self scores. Therefore, the null hypothesis is not rejected.

Table 27

Analysis of Variance for Family-Self (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	224.131	2	112.065	1.101	.336
Group	12.668	1	12.668	.125	.725
Gender	219.147	1	219.147	2.154	.145
2-Way Interactions	29.787	1	29.787	.293	.590
Group x Gender	29.787	1	29.787	.293	.590
Explained	253.918	3	84.639	.832	.479
Residual	10581.045	104	101.741		
Total	10834.963	107	101.261		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 28

Family-Self: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	49.0392
Female	57	51.8421
Group		
Index	41	50.2439
Comparison	67	50.6866
Gender by Group		
Male Index	17	47.7647
Female Index	24	52.0000
Male Comparison	34	49.6765
Female Comparison	33	51.7273

Null Hypothesis 14: There will be no significant difference between index and comparison groups on general maladjustment.

Directional Hypothesis 14: The index group will have a significantly higher general maladjustment score than the comparison group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on general maladjustment scores. An examination of the results revealed no significant main effect for group on general maladjustment: $F(1,2) = 1.553$, $p = .216$ (see Table 29). An examination of cell means revealed that index group scores on general maladjustment were not significantly greater than comparison group scores (see Table 30).

This result indicated that students with and without alcoholic parents do not differ significantly on general maladjustment. Therefore, the null hypothesis is not rejected.

Table 29

Analysis of Variance for General Maladjustment (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	197.434	2	98.717	.963	.385
Group	159.258	1	159.258	1.553	.216
Gender	53.176	1	53.176	.519	.473
2-Way Interactions	115.565	1	115.565	1.127	.291
Group x Gender	115.565	1	115.565	1.127	.291
Explained	312.999	3	104.333	1.017	.388
Residual	10665.630	104	102.554		
Total	10978.630	107	102.604		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 30

General Maladjustment: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	53.9804
Female	57	52.7895
Group		
Index	41	54.8293
Comparison	67	52.4478
Gender by Group		
Male Index	17	57.2353
Female Index	24	53.1250
Male Comparison	34	52.3529
Female Comparison	33	52.5455

Null Hypothesis 15: There will be no significant difference between index and comparison groups on personality disorder.

Directional Hypothesis 15: The index group will have a significantly higher personality disorder score than the comparison group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on personality disorder scores. An examination of the results revealed a statistically significant main effect for group personality disorder: $F(1,2) = 5.384$, $p = .022$ (see Table 31). An examination of

cell means revealed that index group scores on personality disorder were significantly higher than comparison group scores (see Table 32).

This result indicated that students with alcoholic parents scored higher on personality disorder than students without alcoholic parents. Therefore, the null hypothesis was rejected and the directional hypothesis was accepted.

Table 31

Analysis of Variance for Personality Disorder (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	659.409	2	329.705	3.208	.044*
Group	553.403	1	553.403	5.384	.022*
Gender	153.184	1	153.184	1.490	.225
2-Way Interactions	15.763	1	15.763	.153	.696
Group x Gender	15.763	1	15.763	.153	.696
Explained	675.172	3	225.057	2.190	.094
Residual	10689.744	104	102.786		
Total	11364.917	107	106.214		

* p < .05
** p < .01
*** p < .001

Table 32

Personality Disorder: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	53.3529
Female	57	51.3685
Group		
Index	41	55.0732
Comparison	67	50.6120
Gender by Group		
Male Index	17	57.0588
Female Index	24	53.6667
Male Comparison	34	51.5000
Female Comparison	33	49.6970

Null Hypothesis 16: There will be no significant difference between index and comparison groups on neurosis.

Directional Hypothesis 16: The index group will have a significantly higher neurosis score than the comparison group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on neurosis scores. An examination of the results revealed no significant main effect for group on neurosis: $F(1,2) = 3.605$, $p = .060$ (see Table 33). An examination of cell means revealed that index group scores

on neurosis were not significantly greater than comparison group scores (see Table 34).

This result indicated that students with and without alcoholic parents do not differ significantly on neurosis scores. Therefore, the null hypothesis is not rejected.

Table 33

Analysis of Variance for Neurosis (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	464.393	2	232.196	2.189	.117
Group	382.324	1	382.324	3.605	.060
Gender	52.675	1	52.675	.497	.483
2-Way Interactions	4.199	1	4.199	.040	.843
Group x Gender	4.199	1	4.199	.040	.843
Explained	468.592	3	156.197	1.473	.226
Residual	11029.408	104	106.052		
Total	11498.000	107	107.458		

* p < .05
** p < .01
*** p < .001

Table 34

Neurosis: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	52.4118
Female	57	53.9999
Group		
Index	41	55.6098
Comparison	67	51.8059
Gender by Group		
Male Index	17	54.7059
Female Index	24	56.6250
Male Comparison	34	51.2647
Female Comparison	33	52.3636

Null Hypothesis 17: There will be no significant difference between index and comparison groups on personality integration.

Directional Hypothesis 17: The comparison group will have a significantly higher personality integration mean than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on personality integration scores. An examination of the results revealed no significant main effect for group on personality integration: $F(1,2) = .453$, $p = .502$ (see Table 35). An examination of cell means revealed that the comparison group scores on personality

integration were not significantly greater than index group scores (see Table 36).

This result indicated that students with and without alcoholic parents do not differ significantly on personality integration. Therefore, the null hypothesis is not rejected.

Table 35

Analysis of Variance for Personality Integration (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	117.197	2	58.598	.618	.541
Group	42.983	1	42.983	.453	.502
Gender	84.111	1	84.111	.887	.349
2-Way Interactions	35.440	1	35.440	.374	.542
Group x Gender	35.440	1	35.440	.374	.542
Explained	152.637	3	50.879	.536	.658
Residual	9864.576	104	94.852		
Total	10017.213	107	93.619		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 36

Personality Integration: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	49.3922
Female	57	51.0526
Group		
Index	41	49.5610
Comparison	67	50.7015
Gender by Group		
Male Index	17	47.6471
Female Index	24	50.9167
Male Comparison	34	50.2647
Female Comparison	33	51.1515

Health and Daily Living Scale Variables

Research Question 3: There will be significant differences between college students with alcoholic parents and students without alcoholic parents in their quality of daily life.

Null Hypothesis 18: There will be no significant difference between index and comparison groups on distressed mood.

Directional Hypothesis 18: The index group will have a significantly higher distressed mood than the comparison group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on distressed mood scores. An examination of

the results revealed no statistically significant main effect for group on distressed mood: F (1,2) = .002, p = .963 (see Table 37). An examination of cell means reveals that index group scores on distressed mood were not significantly greater than comparison group scores (see Table 38).

This result indicated that students with and without alcoholic parents do not differ significantly on distressed mood scores. Therefore, the null hypothesis is not rejected.

Table 37

Analysis of Variance for Distressed Mood (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	60.628	2	30.314	2.754	.068
Group	.024	1	.024	.002	.963
Gender	59.896	1	59.896	5.442	.022*
2-Way Interactions	2.990	1	2.990	.272	.603
Group x Gender	2.990	1	2.990	.272	.603
Explained	63.617	3	21.206	1.927	.130
Residual	1144.568	104	11.005		
Total	1208.185	107	11.291		

* p < .05
** p < .01
*** p < .001

Table 38

Distressed Mood: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	8.7256
Female	57	10.5790
Group		
Index	41	9.9756
Comparison	67	9.8060
Gender by Group		
Male Index	17	9.3529
Female Index	24	10.4167
Male Comparison	34	8.9412
Female Comparison	33	10.6970

Null Hypothesis 19: There will be no significant difference between index and comparison groups on health risk behaviors.

Directional Hypothesis 19: The index group will have significantly more health risk behavior than the comparison group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on health risk behavior scores. An examination of the results revealed no significant main effect for group on health risk behavior: $F(1,2) = .078$, $p = .780$ (see Table 39). An examination of cell means

revealed that index group scores on health risk behavior were not significantly greater than comparison group scores (see Table 40).

This result indicated that students with and without alcoholic parents do not differ significantly on health risk behavior. Therefore, the null hypothesis is not rejected.

Table 39

Analysis of Variance for Health Risk Behavior (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	.919	2	.459	.061	.941
Group	.590	1	.590	.078	.780
Gender	.251	1	.251	.033	.856
2-Way Interactions	9.252	1	9.252	1.226	.271
Group x Gender	9.252	1	9.252	1.226	.271
Explained	10.171	3	3.390	.449	.718
Residual	784.820	104	7.546		
Total	794.991	107	7.430		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 40

Health Risk Behavior: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	4.4510
Female	57	4.5614
Group		
Index	41	4.6097
Comparison	67	4.4478
Gender by Group		
Male Index	17	5.0000
Female Index	24	4.3333
Male Comparison	34	4.1765
Female Comparison	33	4.7273

Null Hypothesis 20: There will be no significant difference between index and comparison groups on self-confidence.

Directional Hypothesis 20: The comparison group will have significantly higher self-confidence than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on self-confidence scores. An examination of the results revealed no significant main effect for group on self-confidence: $F(1,2) = .684$, $p = .410$ (see Table 41). An examination of cell means revealed that the comparison

group scores on self-confidence were not significantly greater than the index group scores (see Table 42).

This result indicated that students with and without alcoholic parents do not differ significantly on self-confidence scores. Therefore, the null hypothesis is not rejected.

Table 41

Analysis of Variance for Self-Confidence (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	5.405	2	2.702	.343	.710
Group	5.379	1	5.379	.684	.410
Gender	.002	1	.002	.000	.986
2-Way Interactions	9.998	1	9.998	1.271	.262
Group x Gender	9.998	1	9.998	1.271	.262
Explained	15.403	3	5.134	.653	.583
Residual	818.264	104	7.868		
Total	833.667	107	7.791		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 42

Self-Confidence: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	13.9608
Female	57	13.9298
Group		
Index	41	13.6585
Comparison	67	14.1194
Gender by Group		
Male Index	17	14.1176
Female Index	24	13.3333
Male Comparison	34	13.8824
Female Comparison	33	14.3636

Null Hypothesis 21: There will be no significant difference between index and comparison groups on activities with friends.

Directional Hypothesis 21: The comparison group will report participating in significantly more activities with friends than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on activities with friends scores. An examination of the results revealed no significant main effect for group on activities with friends: $F(1,2) = .698$, $p = .405$ (see Table 43). An examination of cell means

revealed that comparison group scores on activities with friends were not significantly greater than the index group (see Table 44).

This result indicated that students with and without alcoholic parents do not differ significantly on activities with friends scores. Therefore, the null hypothesis is not rejected.

Table 43

Analysis of Variance for Activities with Friends (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	5.602	2	2.801	.670	.514
Group	2.917	1	2.917	.698	.405
Gender	3.189	1	3.189	.763	.384
2-Way Interactions	2.754	1	2.754	.659	.419
Group x Gender	2.754	1	2.754	.659	.419
Explained	8.355	3	2.785	.666	.575
Residual	434.645	104	4.179		
Total	443.000	107	4.140		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 44

Activities with Friends: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	6.0000
Female	57	6.3158
Group		
Index	41	5.9756
Comparison	67	6.2836
Gender by Group		
Male Index	17	5.5294
Female Index	24	6.2917
Male Comparison	34	6.2353
Female Comparison	33	6.3333

Null Hypothesis 22: There will be no significant difference between index and comparison groups on number of friends.

Directional Hypothesis 22: The comparison group will report significantly more friends than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on number of friends scores. An examination of the results revealed no significant main effect for group on mean number of friends: $F(1,2) = .175$, $p = .677$ (see Table 45). An examination of cell means revealed that comparison group mean scores on number of friends were not

significantly greater than the index group mean scores (see Table 46).

This result indicated that students with and without alcoholic parents do not differ significantly on mean number of friends. Therefore, the null hypothesis is not rejected.

Table 45

Analysis of Variance for Number of Friends (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	.369	2	.185	.366	.694
Group	.088	1	.088	.175	.677
Gender	.308	1	.308	.611	.436
2-Way Interactions	3.484	1	3.484	6.915	.010**
Group x Gender	3.484	1	3.484	6.915	.010**
Explained	3.853	104	1.284	2.549	.060
Residual	56.250	107	.526		
Total					

* p < .05
** p < .01
*** p < .001

Table 46

Number of Friends: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	3.1961
Female	57	3.2982
Group		
Index	41	3.2915
Comparison	67	3.2686
Gender by Group		
Male Index	17	2.8824
Female Index	24	3.4583
Male Comparison	34	3.3529
Female Comparison	33	3.1818

Null Hypothesis 23: There will be no significant difference between index and comparison groups on grade point average.

Directional Hypothesis 23: The comparison group will have a significantly higher mean grade point average than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on grade point average. An examination of the results revealed a statistically significant main effect for group on grade point average: $F(1,2) = 4.097$, $p = .046$ (see Table 47). An examination of cell means revealed that

index group's grade point averages were significantly higher than the comparison group (see Table 48).

This result indicated that students with alcoholic parents reported higher grade point averages than students without alcoholic parents. Therefore, the null hypothesis was rejected.

Table 47

Analysis of Variance for Grade Point Average (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	2.283	2	1.141	2.258	.110
Group	2.071	1	2.071	4.097	.046*
Gender	.346	1	.346	.685	.410
2-Way Interactions	.001	1	.001	.002	.961
Group x Gender	.001	1	.001	.002	.961
Explained	2.284	3	.761	1.506	.217
Residual	52.568	104	.505		
Total	54.852	107	.513		

* p < .05
** p < .01
*** p < .001

Table 48

Grade Point Average: Means for Gender, Group, and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	2.2456
Female	57	2.4210
Group		
Index	41	2.6341
Comparison	67	2.3582
Gender by Group		
Male Index	17	2.7059
Female Index	24	2.5833
Male Comparison	34	2.4118
Female Comparison	33	2.3030

Null Hypothesis 24: There will be no significant difference between index and comparison groups on social interaction.

Directional Hypothesis 24: The comparison group will have a significantly greater mean on social interaction than the index group.

A 2 (gender) x 2 (group) factorial analysis of variance was performed on social interaction scores. An examination of the results revealed no significant main effect for group on social interaction: $F(1,2) = .003$, $p = .960$ (see Table 49). An examination of cell means revealed that

comparison group scores on social interaction were not significantly greater than index group scores (see Table 50).

This result indicated that students with and without alcoholic parents do not differ significantly on social interaction. Therefore, the null hypothesis was not rejected.

Table 49

Analysis of Variance for Social Interaction (N = 108)

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG OF F
Main Effects	2.961	2	1.480	.535	.587
Group	.007	1	.007	.003	.960
Gender	2.956	1	2.956	1.069	.304
2-Way Interactions	2.327	1	2.327	.841	.361
Group x Gender	2.327	1	2.327	.841	.361
Explained	5.287	3	1.762	.637	.593
Residual	287.629	104	2.766		
Total	292.917	107	2.738		

* $p < .05$
** $p < .01$
*** $p < .001$

Table 50

Social Interaction: Means for Gender, Group and Gender by Group

VARIABLE	N	MEANS
Gender		
Male	51	1.7255
Female	57	2.7897
Group		
Index	41	2.5365
Comparison	67	2.6122
Gender by Group		
Male Index	17	2.1176
Female Index	24	2.8333
Male Comparison	34	2.4706
Female Comparison	33	2.5758

Unhypothesized Results

I. Regarding the Fathers' Alcohol Use

a. In response to the question, "How would you describe your father's alcohol use?", 23.8% of the comparison group responded abstaining, and 76.1% responded social drinker. In the index group two fathers were reported to be abstaining, four as recovering, and two as social drinkers. Index subjects reported 26.8% of the fathers were heavy drinkers, 12% were problem drinkers, and 39% were alcoholic. One subject described his father as a drunkard.

Table 51

Subjects' Description of Fathers' Alcohol Use

	INDEX	COMPARISON
Abstaining	2 (4.9%)	16 (23.9%)
Social Drinker	2 (4.9%)	51 (76.1%)
Heavy Drinker	11 (26.9%)	-
Problem Drinker	5 (12.2%)	-
Alcoholic	16 (39.0%)	-
Drunkard	1 (2.4%)	-
Recovering	4 (9.8%)	-
TOTAL	41 (100%)	67 (100%)

b. Has your father ever attended Alcoholics Anonymous meetings?

For the comparison group, three students responded in the affirmative, with one of the fathers attending currently. For the index group, eight have attended Alcoholics Anonymous meetings, three currently. However, 33 (80%) to the best of the respondents' knowledge, had never attended Alcoholics Anonymous meetings.

c. Has your father ever been treated for alcoholism?

The comparison group reported no treatment for their fathers, while the index group reported five inpatient and one outpatient treatment episode.

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d. How old were you when your father's drinking caused the most family problems?

In the comparison group, one subject indicated family problems due to father's drinking at his age 6-10 years old. In the index group, five reported family problems at their age of less than 5 years old, ten at 6-10 years old, 11 at 11-15 years old, 11 at 16 to current age, and four reported not applicable.

II. Subjects' Substance Use History

a. On the average, how often do you drink any kind of alcoholic beverage during a typical month? (See Table 56.)

The groups reported rather similar drinking patterns, with 15% of the comparison group rarely, to one time per month, and 57% 1-2 times a week to nearly every day. For the index group 30% drank rarely or one time per month, and 58% drank 2-3 times per month to nearly every day. For the 2-3 times per month, 12% of the index responded and 28% of the comparison group.

b. When you do drink any kind of alcoholic beverage, what was the average quantity you consumed; that is you consumed this amount nearly every time, or more than half the time you drank? (See Table 57.)

The quantity of alcohol consumed patterns by the two groups was almost identical, except that 14.6% of the index group consumed 7 to 10 or more drinks per session as opposed to 5.9% of the comparison group who drank 7-8 drinks per session, and none above that.

c. Have you ever been treated for substance abuse?

One of the comparison group reported currently being in outpatient treatment, as did one of the index group. One other index subject reported having had inpatient treatment.

d. Have you ever attended Alanon or Al-Ateen?

Four female and one male index subject indicated participating in these support groups. None of the comparison group subjects used either self-help group.

III. Index Subjects' Substance Abuse Treatment, and Sibs Substance Abuse and Treatment

Six female index subjects reported seven sibs as having substance abuse problems, while three male subjects reported five such sibs. Nine index subjects or 21.9% indicated familial substance abuse problems other than their father. However, only one (2.4%) actually received any kind of treatment. Only two index males, or 4.8% of the index group, reported receiving substance abuse treatment.

IV. Index Subjects' Responses to CAST Items 7, 9, and 31A, 31C (indicative of alcoholic parental abusive behavior)

In response to CAST item 7, "Has a parent ever yelled at or hit you or other family members when drinking?", 17 females and ten males (65.8% of total index subjects) responded in the affirmative. In response to CAST item 9, "Did you ever protect another family member from a parent who was drinking?", 12 females and 8 males (48.7% of the index sample) responded in the affirmative. Four females

and ten males (34.1% of the index group) indicated that the fathers became "mean, yelling and nasty" when drinking. Seventeen index subjects (15 females and 2 males) or 41.5% indicated their fathers were physically abuse when drinking, i.e., "slaps or hits and would not when not drinking," or for reasons not understood by the subject.

Table 52

Subject Birth Order, Substance Abuse Treatment, Sibs'

Substance Abuse Treatment

Female Index Subjects (N = 24)

SUBJECT	B.O./TOTAL SHIPSHIP	SIB SA	SIB TX	SUB TX
66	1 / 2	1	-	-
67	2 / 2	1	-	-
68	2 / 5	1	1	-
69	5 / 5	-	-	-
70	1 / 2	-	-	-
71	1 / 2	-	-	-
72	1 / 2	-	-	-
73	1 / 2	-	-	-
74	4 / 4	-	-	-
75	1 / 2	-	-	-
76	1 / 2	-	-	-
77	2 / 3	-	-	-
78	3 / 3	1	-	-
79	5 / 5	-	-	-
80	3 / 3	1	-	-
81	1 / 2	-	-	-
82	2 / 2	-	-	-
83	1 / 2	-	-	-
84	2 / 3	-	-	-
85	1 / 1	-	-	-
86	2 / 2	-	-	-
87	3 / 3	-	-	-
88	3 / 3	-	-	-
89	5 / 5	2	-	-
TOTALS		6 (7 Sibs) (25%)	1 (4%)	0

Table 53

Subject Birth Order, Substance Abuse Treatment, Sibs'

Substance Abuse Treatment

Male Index Subjects (N = 17)

SUBJECT	B.O./TOTAL SHIPSHIP	SIB SA	SIB TX	SUB TX
90	1 3	-	-	-
91	1 2	-	-	-
92	1 2	-	-	-
93	2 3	-	-	-
94	1 4	3	-	y
95	1 2	1	-	y
96	2 2	-	-	-
97	1 1	-	-	-
98	3 3	-	-	-
99	1 2	-	-	-
100	1 2	-	-	-
101	2 2	1	-	-
102	5 5	-	-	-
103	1 1	-	-	-
104	2 2	-	-	-
105	5 5	-	-	-
106	2 2	-	-	-
TOTALS		3 (5 Sibs) (17.6%)	0	2 (11.7%)
INDEX TOTALS		9 (21.9%)	1 (2.4%)	2 (4.8%)

Table 54

Responses to CAST Items 7, 9, and 31A and 31C
Female Index Subjects (N = 24)

SUBJECT	#7	#9	#31A	#31C
66	y	-	-	y
67	y	y	-	-
68	y	y	-	y
69	y	y	-	y
70	y	-	-	-
71	y	y	-	y
72	y	y	-	y
73	-	-	-	-
74	-	-	-	-
75	-	-	-	-
76	y	y	y	y
77	-	y	y	y
78	y	y	y	-
79	-	y	-	y
80	y	-	-	y
81	y	-	-	y
82	-	-	-	-
83	-	-	-	y
84	y	y	-	y
85	y	-	-	y
86	y	-	-	-
87	y	y	y	y
88	-	-	-	-
89	y	y	-	y
TOTALS	17 (70.8%)	12 (50%)	4 (16.6%)	15 (62.5%)

Table 55

Responses to CAST Items 7, 9, and 31A and 31C
Male Index Subjects (N = 17)

SUBJECT	#7	#9	#31A	#31C
90	-	-	-	-
91	-	-	-	-
92	y	y	y	-
93	y	y	y	-
94	y	-	y	-
95	-	-	-	-
96	y	y	y	-
97	-	-	-	-
98	-	y	y	-
99	y	y	y	-
100	y	-	-	-
101	y	-	-	-
102	-	-	y	-
103	y	y	y	-
104	y	y	y	y
105	y	y	y	y
106	-	-	-	-
TOTALS	10 (58.8%)	8 (47%)	10 (58.8%)	2 (11.7%)
INDEX TOTALS	27 (65.8%	20 (48.7%)	14 (34.1%)	17 (41.5%)

CONCLUSIONS

1. Family Environment: The offspring of alcoholic fathers perceived their families as being lower in cohesion and higher in conflict, while the comparison group's families emphasized independence and an active-recreational orientation. These findings are consistent with several studies that have used the FES to describe alcoholic and nonalcoholic families (Clair and Genest, 1987; Filstead, McElfresh, and Anderson, 1981; Moos and Billings, 1982; Moos, Bromet, Tsu and Moos, 1979; Moos, Finney and Chan, 1981; Moos, Finney and Gamble, 1982; Moos and Moos, 1976; and Moos and Moos, 1984).

2. Self-Esteem: Except for the personality disorder subscale, the index and comparison groups did not differ on any of the TSCS indices scores including total self-esteem or self-criticism. However, the COAs had a significantly higher mean score ($P<.001$) on the personality disorder subscale. While low self-esteem has been viewed as a risk factor for COAs (Baraga, 1978, and Woititz, 1976), other authors have not found self-esteem to be an issue (Claire and Genest, 1987, and Callan and Jackson, 1986). The identification of "personality disorder" for these ACOAs supports the view that psychological problems may be

manifested with the onset of adult stressors (Black, 1981, Moos, 1982, Wegscheider, 1981, and Winokur, 1970).

3. Health and Daily Living: The ACOAs group had a significantly higher grade point average ($p<.05$) than the comparison group. ACOAs daughters indicated that they had more "very good friends" than ACOAs sons, and male and female comparisons. There were no significant differences in distressed mood, health and risk behaviors, self-confidence, activities with friends, or social interactions. These findings speak to the positive outcome for COAs, and the "variability in adjustment among COAs" (Claire and Genest, 1987).

4. Gender Differences: There were no significant differences in outcomes for sex-of-child by sex-of-parent comparisons. This finding is attributed in part to the small sample size. Other studies have found no gender outcome differences for ACOAs (McKenna and Pickens, 1983; Schukit, 1984; and Jacobs and Leonard, 1986).

Discussion

Familial characteristics of the ACOAs sample used in this study may explain the apparent contradiction that lies in their current generally positive psychosocial functioning concomitant with their personality disorder identification on the Tennessee Self-Concept Scale (TSCS).

An examination of index group parents revealed that they are well below the national divorce rate for alcoholic

and nonalcoholic families, with only 12 (29.3%) divorces reported and a mean average length of marriage of 21.3 years. While Fein (1984) reports 1%, and Midanik (1983) reports 5%-10% of alcoholics seek treatment, 17% of COA fathers in the present study attended inpatient or outpatient treatment.[1] The two factors of commitment to marriage and willingness to participate in treatment may characterize an element of family stability which served as a protective factor for this ACOAs cohort.

Given the positive outcomes, the following questions might be raised concerning this sample: Were these fathers really alcoholics?, and was their alcohol use problematic to the family? Research regarding the validity of young adults' reports of parental drinking habits indicates that students, irrespective of their misjudgments, tend to underestimate both the frequency and quantity of parental alcohol use (O'Malley, Carey, and Maisto, 1986), as well as fail to identify parental alcoholism (Thompson, et. al, 1982). While minimizing or underreporting parental alcohol abuse can be understood as a process in the service of denial (other family dynamics, or ignorance of actual parental alcohol consumption), there is no identified reason

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[1]These figures are not cited to infer that all "alcoholics" require treatment, or that specific treatment protocols have been developed that affect a "cure" for alcoholism. These figures are provided to aid in characterizing the index sample's families.

why subjects would overreport parental alcohol abuse or alcoholism.

The index group's description of the fathers' alcohol use (See Table 51) indicates that only 9.8% of the subjects viewed the fathers as abstaining or social drinkers. In contrast, in the comparison group, none of the subjects reported the fathers as anything but abstainers or social drinkers. Given that one-third of the adult population reports as abstaining from alcohol use (O'Brien and Chafetz, 1982), and in combination with other questionnaire item responses, the 23.9% of comparison fathers described as abstaining most likely do not include recovering problem drinkers. However, for the index subjects, 90.2% felt their fathers were problematic, abusing drinkers.

To be identified in the ACOAs sample, the students had to respond in the positive to item 22 on the CAST, "Did you ever think your father was an alcoholic?", and five other items for a minimum score of 6. The average mean CAST score for the ACOAs males and females was 15.85, the range being 6 to 28. Clearly, these students had concerns regarding paternal alcohol abuse. The CAST items do seem to tap several areas of alcoholic family processes for COAs to respond to. An informal clustering of the items yielded categories such as: parental drinking defined, interaction with parents regarding drinking, interaction with parents during drinking, familial reactions, and the COAs

psychological well-being. These categories seem inclusive enough to consider that COAs and ACOAs responding positively to an average of 15 CAST items would be indicating that the paternal alcohol abuse was problematic.

In large part, on measures of health and quality of daily living, the COAs functioned as well as the comparison group. The two areas where they did differ, grade point average, and for female COAs, number of friends, were in the positive direction.

The two groups were not significantly different in the frequency or quantity of alcohol use. The patterns for frequency (See Table 56) were rather similar, but 30% of the ACOAs were light drinkers as opposed to 15% of the comparison group. Percentages for the more frequent drinkers, 1-2 times per week to nearly everyday, were similar for both groups (57%-58%). The amount of alcohol consumed per drinking episode (See Table 57) was also not significantly different and the patterns of drinking were similar for both groups. However, 14.6% of the ACOAs reported drinking seven to ten and more drinks per session, as opposed to 5.9% for the comparison group. Intergenerational transmission of alcoholism among the index group was not evidenced by these data. These findings reflect reports on male subjects that indicate alcoholism and major life problems don't manifest until the late 20's to mid-30's (Schuckit, 1984; Vaillant, 1983; and Vaillant and Milofsky, 1982).

Additional familial factors regarding possible associations of family influences and the current positive ACOAs outcomes were examined.

Table 56

Subjects' Alcohol Use - Frequency

	INDEX	COMPARISON
Rarely	5 (12.2%)	8 (11.9%)
1 Per Month	7 (17.0%)	2 (2.9%)
2-3 Per Month	5 (12.2%)	19 (28.4%)
1-2 Per Week	18 (44.0%)	28 (41.8%)
3-4 Per Week	5 (12.2%)	8 (11.5%)
Nearly Every Day	1 (2.4%)	2 (2.9%)
TOTAL	41 (100%)	67 (100%)

Table 57

Subjects' Alcohol Use - Quantity

	INDEX	COMPARISON
Rarely Drink	2 (4.9%)	4 (6.0%)
1-2 Drinks	8 (19.5%)	16 (23.9%)
3-4 Drinks	15 (36.6%)	27 (40.3%)
5-6 Drinks	10 (24.4%)	16 (23.9%)
7-8 Drinks	2 (9.9%)	4 (6.0%)
9-10 Drinks	3 (7.3%)	-
10 + Drinks	1 (2.4%)	-
TOTAL	41 (100%)	67 (100%)

Firstly, did subjects report a specific age period when the fathers' alcohol abuse had the greatest effect on the family? Of the 41 ACOAs subjects, five indicated that they were less than five years old, while the rest almost equally reported 6 to 10 years (10), 11 to 15 years (11), and 16 years to current (11), with four reporting "not applicable." It is clear that no one specific age range was overly represented; therefore, no statement regarding familial stressors at a specific developmental phase can be made.

Secondly, were these university students, who were functioning very similarly to the comparison group, unique in their sibship? Of the female ACOAs, six indicated sibs had chemical dependency problems (N = 7), and one had

chemical dependency treatment. Three male ACOAs reported five sibs with chemical dependency problems, and none in treatment. Two male ACOAs and no female ACOAs admitted to having had substance abuse treatment. All the sibs were reported to be age-appropriately employed or attending school (See Tables 52 and 53).

Thirdly, given the qualitative functioning of these subjects and their sibs, the possibility was considered that parental acts of violence or physical abuse combined with episodes of alcohol abuse were necessary for poorer outcomes. This raises the question: Was this cohort spared the stressful atmosphere and anxieties of family violence and the drinking style associated with it? Sixty-six percent of the ACOAs responded in the affirmative to CAST item 7, "Has a parent ever yelled at or hit you or other family members when drinking?," and 48.7% answered yes to CAST item 9, "Did you ever protect another family member from a parent who was drinking?" Additionally, 60.9% described their fathers as "mean" when drinking, with yelling, nasty, teasing, and ridiculing behaviors (See Tables 54 and 55).

Curiously, only 14.6% of these subjects described their father as "physically abusive." One possible explanation for this may be that the combination of the relatively good SES and longer term marriages are indicative of less physical abuse, with anger and/or intoxicated behaviors

rather displayed with yelling and threats. If these ACOA subjects were not victims or observers of physical abuse, they seemingly were not spared the drama and trauma of intense family arguments and verbal abuse.

The ACOAs group differed from the comparison by being identified on the personality disorder subscale ($p < .001$) of the TSCS. The TSCS Manual (Roid and Fitts, 1988) defines the personality disorder category as pertaining "...to people with basic personality defects and weakness as distinguished from psychotic states or the various neurotic reactions" (p. 5). The Diagnostic and Statistical Manual of Mental Disorders of the American Psychiatric Association (DSM-III: 1987) categorizes personality disorders as personality traits that have become "...inflexible and maladaptive and cause either significant functional impairment or subjective distress..." (p. 335). The problematic behaviors or traits are evident since early adulthood. Millon (1981) points to three features of behaviors which distinguish personality disorders:
1. adaptive inflexibility, manifested by a limited range of rigidly practiced behaviors for coping with stress and relating to people; 2. vicious circles, inflexible behaviors which intensify or perpetuate persistent problems; and 3. tenuous stability, with limited range of coping mechanisms, and stress reactivating the past resulting in pathological ways of coping.

The traits that Woititz (1983) has identified in her clinical work with ACOAs include difficulty with intimate relationships, a self-critical stance, overreacting to changes, seeking external approval and affirmation, a tendency to impulsivity, ultra responsible or irresponsible tendencies, and having "to guess at what normal behavior is" (p. 4). These traits mirror diagnostic features of the borderline, obsessive-compulsive, dependent, histrionic, or narcissistic personality disorders identified in the DSM-III (1987). Cermak (1986) advocated a new diagnostic category of "co-dependency" for ACOAs. The repetitive, maladaptive behaviors noted by Cermak included subordinating one's needs to those of others, a persistent need to control self, others, and one's feelings as an antidote to free-floating anxiety, and chronic depression and anxiety. Cermak also posited that ACOAs experienced a type of post-traumatic stress syndrome with equivalent symptoms such as, "1. a tendency to reexperience the trauma through obsessive thoughts about the family and compulsive reemergence of behaviors and feelings in response to symbolic equivalents of the trauma; 2. psychic numbing with a sense of isolation; 3. hypervigilance (anxiety); 4. survivor guilt (depression); and 5. intensification of symptoms by exposure to events that resemble the original trauma, such as withdrawal by others" (1986, p. 28).

It follows that the view of several authors that problems associated with having experienced an alcoholic family during childhood may manifest at a later date (Jacobs and Leonard, 1986; Kammeier, 1971; and Moos, 1982), or that all COAs have life-long problems (Black, 1981; Cermak, 1987, Woititz, 1983), may apply to this ACOAs sample cohort. The responses on the CAST, the reports of episodes of some level of family violence during paternal drinking, and the perception of their families as low in cohesion and higher in conflict, indicate that, in spite of their qualitative psychosocial outcomes, the ACOAs to some degree experienced the problematic aspects of living in an alcoholic family. Specifically, the vicissitudes of parental alcoholism, the negative effects on the family processes, and the need for COAs to suppress their individuation and subscribe to the alcoholic family's myths and rules, can promote a distorted developmental environment which manifests in adult maladaptive behaviors.

Limitations of this Study

Three aspects of the ACOAs sample families which could influence family process and subject outcomes were not addressed. First, paternal drinking related variables such as consumption pattern, duration, location of drinking, and factors regarding recovery efforts and processes. Second, moderating environmental variables which would serve as protective factors such as friends, relatives, older sibs

who could advise on how to cope with parental alcohol abuse, or serve as a model of alternate behaviors and support, were not investigated. (Only 5 [12.2%] of the index group reported having attended Al-Anon meetings.) Third, other family stressors such as chronic illness, financial issues, or other negative life events which would strain the family's adaptive and interactional processes and affect the developmental environment were not considered.

Regarding the sample, the subjects in this study were all volunteers, and were all provided with some incentive to participate in the project, such as monetary compensation or extra class credit. In the case of two classes, the instructor allowed the convenience of class time to provide a research participation experience for the students and almost all participated.

The classes from which the sample was drawn for survey completion were predominately female. Consequently, male subjects were at a premium. Additional recruitment efforts for males among the psychology subject pool proved disappointing. Though many students identified themselves as ACOAs when queried by the instructor, only a small percentage actually participated in the research project.

While the small male sample size may make it difficult to generalize study results to ACOA males, issue may also be taken with an all college student sample. Windle (1990) states that college student ACOAs samples may be

particularly problematic because COAs difficulties with academics reduce their presence in colleges. Therefore, this group of ACOA subjects can be viewed as having high coping skills in spite of having an alcoholic parent.

The small sample size may also be a contributing factor in the inability to discern any significant sex-of-child by sex-of-parent differences. Statistically significant global gender differences included: 1. index females had reported having a greater number of good friends than all other subjects; 2. all females had a higher level of distressed mood than all the male subjects; and 3. all males had a higher achievement orientation than all the female subjects. It is difficult to comment on these findings in the context of COA research. Questions regarding specific child by parent gender and influences on COA outcomes clearly require further investigation.

One point of information that would have been important to the findings in this study was subject and family history of individual or family counseling for personal or substance abuse issues. Inexplicably, this item was not asked of subjects.

Finally, Roosa and Beals (1990) have raised questions regarding the internal consistency reliability of the Family Environment Scale (Moos and Moos, 1986). They state that the limited testing of the psychometric properties of the FES may render "...the reliability of a measure like the FES

...different for different family structures ...or for families experiencing different levels of distress" (p. 192). Therefore, different reliabilities on different samples make comparison statements problematic.

The authors tested the properties of five subscales of the FES: cohesion, expressiveness, conflict, organization, and control. The subscales analyses consisted of calculating estimates of internal consistency reliability (Cronbach's alpha) and a confirmatory factor analysis. The results indicated that the internal consistency reliability for these subscales were lower than reported by Moos (1986). There was variability in the reliability estimates across the different family types, with reliability coefficients ranging from .36 to .78. The authors concluded that "...the subscale structure for this half of the FES is at least suspect and maybe inadequate for many research purposes in its current form" (p. 195). As a result of a second analytic procedure, the authors stated, "...there was considerable disagreement with the face validity of the items originally assigned to the subscales" (p. 195).

Two of the FES subscales reanalyzed by Roosa and Beals (1990) had significant values in this study. The index group indicated higher level of family conflict than the comparison group. Roosa and Beals found that the conflict subscale reliability coefficients were in the acceptable range (>.70) in three of the four family types, and for alcoholic families the coefficient was .72. The comparison

group in this study indicated higher levels of family cohesion than the index group. The cohesion subscale reliability coefficients ranged from .53 to .63 with a reliability coefficient of .58 for alcoholic and .63 for control families. Thus, for all intents and purposes, this study has validated previous research results on alcoholic families using the FES with regard to findings of higher levels of conflict for these families. At this time, the cohesion subscale is of more questionable validity.

Implications for Intervention and Treatment

The implications for intervention and treatment for COAs is fairly clear. Repeated reports of positive outcomes in the presence of parental alcoholism indicates that for low risk individuals educative intervention in the early years, with perhaps the availability of support groups such as Al-Anon or Alateen, could offset the negative aspects of growing up in an alcoholic family. Because of the current inability to identify low or high risk individuals, and reports that problems for COAs may not manifest until young adulthood or later, the evidence of positive outcome should not lead to the conclusion that interventions and treatments are not necessary.

Williams (1990) presents a range of interventions based on the current knowledge of COAs and ACOAs through their life cycle. Primary prevention programs that are community based and in school settings should be geared to inform and

educate, as well as identify low and high risk youngsters. As all students learn about alcohol and other substances, specific information tracks and interventions should be available for COAs.

Intervention programs consist of Al-Anon, Alateen, and ACOAs groups, and are designed to help counter co-dependency and enabling behaviors, and offset guilt and self-blame. Cutter and Cutter (1987) found that members of an observed ACOAs group reported less depression and more assertiveness, greater acceptance of self and of feelings, and decreased feelings of responsibility. The authors state that, "A common experience of parental alcoholism, and cognitive, affective, and behavioral antidotes to prior socialization in an alcoholic family contributed to the program's perceived helpfulness" (p. 29).

Continuing with Williams (1990), her recommendations for treatment include incorporating the stages of alcoholic family development as described by Steinglass (1987). When families present for treatment, consideration should be given to whether or not the parents are ACOAs, and the status and risk for the current COAs in the context of the following stages: 1. Early phase, familial identity-formation regarding alcohol; 2. Middle phase, consolidation of alcoholic family identity, and 3. Late phase, family heritage transmission.

Several authors have reported that overt problematic behaviors are not typical for COAs (Black, 1981), and that problems may not manifest until adult life (Black, 1981, Jacobs and Leonard, 1986, and Moos and Billings, 1982). Gravitz and Bowden (1984) indicate that clinicians most often are unable to diagnose and deal with ACOAs issues, which are often masked by depression and/or anxiety. Wolkind's (1987) report that 55% of people presenting for Employee Assistance Program (EAP) services are ACOAs speaks to a nonclinical arena wherein ACOAs present with life-long difficulties. While EAP's do deal with acute psychiatric and substance abuse problems, much of the presenting problems for the general employee population and ACOAs have to do with marital and relationship issues, work site problems, and career issues. However, the ACOAs are differentiated by their self-critical stance, tendency to workaholism, problems with intimacy with spouses and children, self-confidence in regard to peers and managers, and either an inability to enjoy their level of achievement, or an obsessive drive to achieve senior management positions in an unrealistic time frame. If the adult child of an alcoholic is unique in the sibship and is working at a higher occupational prestige level than the parents or sibs, there is often guilt and confusion about their relationship with their family of origin. (These are personal observations from five years of EAP work, and see Kelly and

Friel, 1987, Woititz, 1987.) Ackerman's (1987) report that 78.2% of surveyed ACOAs (N = 504) felt their lives were "highly affected" by parental alcoholism, coupled with above cited factors, speaks to the need for specific treatment interventions for ACOAs.

Implications for Research

Specific to this study, this ACOAs college student sample must be recognized for their exceptional qualities. The average age for the females was 20 years and for the males, 21 years, indicative of their upper class status. Not only did these students manage to avoid failing, or otherwise dropping out in the freshman or sophmore years, they are achieving higher grades than the comparison students. There were no significant differences between the two sample groups regarding activities with friends, number of friends, and social interaction. The ACOAs were not exceptional on measures of distressed mood, neurosis, or general maladjustment. Finally, contrary to the clinical literature on ACOAs, this cohort was not significantly different regarding self-confidence and self-esteem, or a self-critical stance. Clearly, there were protective factors for these ACOAs during their earlier developmental years. Understanding factors which mediate positive outcomes necessitates further research.

Beyond the scope of this study, there appears to be two major implications for future research. First, the study of

psychosocial outcomes for COAs could serve as a research paradigm for the human sciences. Windle and Searles (1990) highlight the themes and variables involved in COAs research. They call for a biopsychosocial model to aid in understanding which individuals are at low or high risk for alcoholism, examining the genetic and environmental interactions, and recognizing the endowed temperament which influences how the individual will mediate their environment. Which psychological variables, familial and nonshared environments that act as risk factors and contribute to alcoholism and other problematic psychosocial outcomes can be identified? From a health promotion perspective, what are the positive characteristics in these variables, and how may they serve as "protective" factors. Continued typological research would identify discrete subtypes regarding etiology and pathways to alcohol abuse and alcoholism, and in turn generate specific preventative interventions and treatments. A biopsychosocial focus which contained Steinglass's (1987) Family Life History model, coupled with a multidisciplinary life-span developmental perspective (Baltes and Schaie, 1973) could incorporate discrete research findings and contribute to a more unified theoretical position, one that is currently lacking. Windle and Searles (1990) indicate this type of research activity requires the use of multivariate statistical models, which would "facilitate the study of time-ordered structural

relations between multiple causes and multiple effects" (p. 229).

Zucker and Gomberg (1986) specify a biopsychosocial perspective for understanding etiological aspects of alcoholism, i.e., "a longitudinal-developmental framework that includes physiological, behavioral and sociocultural variables" (p. 783). Such an approach allows for a broader approach than simply asking, "Is alcoholism inherited?" (p. 790). The authors advocate examining causal pathways rather than simple time-lagged associations; precipitating influences at different developmental stages in the life cycle; differing levels of heritability and modes of transmission; specific types of alcoholism; and also exploring how alcoholism does <u>not</u> develop. These types of questions are particularly important in consideration of propensity to alcoholism for COAs because of the variable outcomes for these offspring, concomitant to their reported greater risk than the general population.

Zucker (1987, cited in Windle, 1990) has identified four alcoholic types based on current research:
1. antisocial alcoholism, where alcohol abuse is part of a personality and behavioral profile; 2. developmentally cumulative alcoholism, representing continuous abusive drinking since adolescence; 3. developmentally limited alcoholism, wherein early adulthood heavy drinking is reduced as adulthood responsibilities are assumed; and

4. negative affect alcoholism, associated with family history of unipolar affect disorder. The explicit recognition of multiple etiological pathways to alcoholism allows for the examination of "...commonalities and differences in alternative developmental pathways to alcoholism. [and the possibility of more specifically identifying] the ways in which risk factors, for example being the child of an alcoholic, are expressed and modified by personality attributes and a range of life conditions" (Windle, p. 156).

Second, and more specifically, given the biopsychosocial perspective, it follows that whenever possible entire sibships should be investigated. With this approach specific and cumulative trends and anomalies would be better understood as more of the biological and environmental variables would be more consistent for each sibship being investigated.

This study raises curious sibship findings. For example, one index subject from a sibship of five, with a high CAST score, and with affirmative responses to the CAST items regarding family violence, reported no substance abuse or treatment among the sibs or for herself. However, another index subject with three sibs and a lower CAST score reported the entire sibship as chemically abusing, and the subject as having had chemical dependency treatment. It is these differences in pathways to and away from alcoholism,

and other psychosocial outcomes that could be better understood if the entire sibship would be studied.

Zucker and Gromberg (1986) identify explicit and implicit factors which pertain to familial aspects of intergenerational transmission of alcoholism. First, they relate that ethnicity indicates more than norms about parent and child alcohol use. Ethnic differences "...also mark a wide range of individual and interpersonal differences in educational and occupational aspiration, cohesiveness of kinship networks, and cultural values about sexuality, marriage, and other elements of socialized behaviors" (p. 789). This approach to ethnicity reflects an ecosystemic perspective.

Second, Zucker and Gromberg (1986) state that "current peer influences on etiology has been insufficiently examined", and "its influence in triggering and maintaining abusive drinking patterns needs to be more thoroughly investigated" (p. 790). This line of research can be extended to the family. While the work of Steinglass and others have resulted in insight regarding the "alcoholic family", there needs to be investigation of the "drinking family", wherein the entire family participates in family rituals by consuming and abusing alcohol. How does such a familial environment transcend individual differences and render the entire kinship as "alcoholic"? In "drinking families", irrespective of the variation in genetic

endowment, the entire sibship abuses and/or is dependent on alcohol.

Currently, most research uses individual subjects from families. The use of entire sibships, as for example in COA studies, would more readily meet the goals of a biopsychosocial paradigm, as well as being consistent with the family ecosystem model. Andrews, Bubolz, and Paolucci (1980) state that, "An ecological perspective on the family offers the possibility of a reapproachment of the natural and social sciences to the study of the family, to which various disciplines can contribute their special concepts and methods of study and analysis. It provides a framework in which multidisciplinary study can be accommodated, and various approaches and theories utilized" (p. 31).

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APPENDIX

RESEARCH INSTRUMENTS

CONSENT FORM

I freely consent to participate in this study, which has been explained to me as investigating parental alcohol use and possible effects on the family.

The questionnaire will take approximately one hour to complete. My responses are anonymous, and therefore confidential.

This is the only phase of the research in which I will be asked to participate. I understand I may withdraw at any time with no consequences.

Should these questionnaires raise questions or concerns for me, I have been informed of appropriate services and agencies to contact for information or counseling.

_____
Signature

_____
Date

The data from this study will be used by Robert Moreas, M.S.W., toward the completion of a research dissertation as partial fulfillment of the requirements for the degree of Doctor of Philosophy, College of Human Ecology, Michigan State University.

A. GENDER: 1. Male ____ 2. Female ____

B. AGE: ____

C. RELIGIOUS PREFERENCE:
1. Catholic ____ 3. Hebrew ____
2. Protestant ____ 4. Other ____

D. RACE:
1. Afro-American ____ 3. Hispanic ____
2. Caucasian ____ 4. Other ____

The following items pertain to your
Father ____ Stepfather ____

E. What is your father's education level?
1. Less than High School ____ 4. College ____
2. High School ____ 5. Post College ___
3. Some College ____ 6. Graduate Degree ___

F. What is your father's job? _____

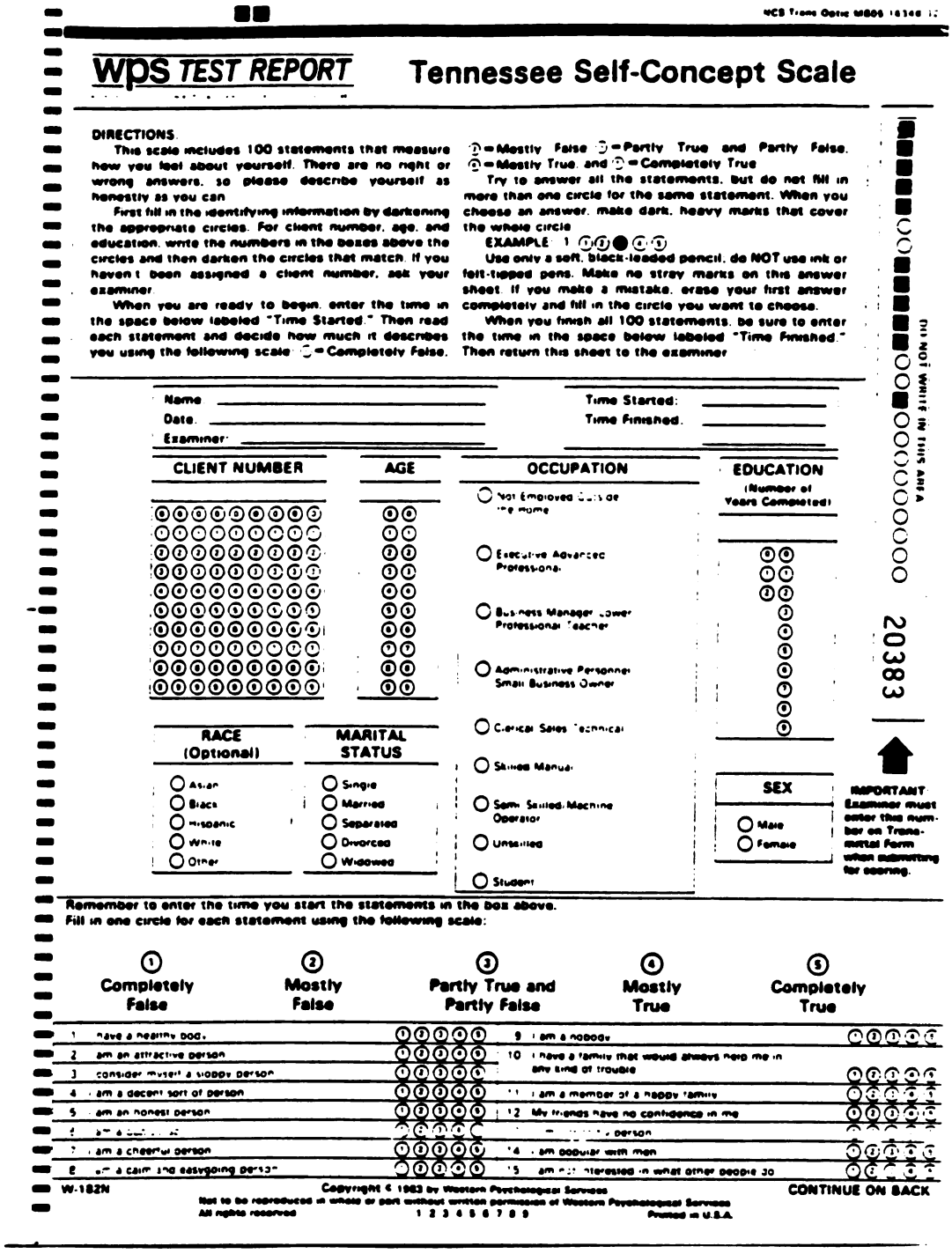
G. Marital History:
1. How long has your father been married to your mother? ____
2. How many times has your father been married? ____

The following items pertain to your
Mother ____ Stepmother ____

E. What is your mother's education level?
1. Less than High School ____ 4. College ____
2. High School ____ 5. Post College ___
3. Some College ____ 6. Graduate Degree ___

F. What is your mother's job? _____

G. Marital History:
1. How long has your mother been married to your father? ____
2. How many times has your mother been married? ____



WPS TEST REPORT

Tennessee Self-Concept Scale

DIRECTIONS

This scale includes 100 statements that measure how you feel about yourself. There are no right or wrong answers, so please describe yourself as honestly as you can.

First fill in the identifying information by darkening the appropriate circles. For client number, age, and education, write the numbers in the boxes above the circles and then darken the circles that match. If you haven't been assigned a client number, ask your examiner.

When you are ready to begin, enter the time in the space below labeled "Time Started." Then read each statement and decide how much it describes you using the following scale: ① = Completely False, ② = Mostly False, ③ = Partly True and Partly False, ④ = Mostly True, and ⑤ = Completely True.

Try to answer all the statements, but do not fill in more than one circle for the same statement. When you change an answer, make dark, heavy marks that cover the whole circle.

EXAMPLE: 1 ① ② ● ④ ⑤

Use only a soft, black-leaded pencil; do NOT use ink or felt-tipped pens. Make no stray marks on this answer sheet. If you make a mistake, erase your first answer completely and fill in the circle you want to choose.

When you finish all 100 statements, be sure to enter the time in the space below labeled "Time Finished." Then return this sheet to the examiner.

DO NOT WRITE IN THIS AREA

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Name: _____ Time Started: _____

Date: _____ Time Finished: _____

Examiner: _____

CLIENT NUMBER

AGE

OCCUPATION

- Not Employed Outside the Home
- Executive, Advanced Professional
- Business Manager, Lower Professional, Teacher
- Administrative Personnel, Small Business Owner
- Clerical, Sales, Technical
- Skilled Manual
- Semi-Skilled, Machine Operator
- Unskilled
- Student

EDUCATION (Number of Years Completed)

RACE (Optional)

- Asian
- Black
- Hispanic
- White
- Other

MARITAL STATUS

- Single
- Married
- Separated
- Divorced
- Widowed

SEX

- Male
- Female

IMPORTANT Examiner must enter this number on Transmittal Form when submitting for scoring.

Remember to enter the time you start the statements in the box above.
Fill in one circle for each statement using the following scale:

① Completely False	② Mostly False	③ Partly True and Partly False	④ Mostly True	⑤ Completely True

1	I have a healthy body.	9	I am a nobody.
2	I am an attractive person.	10	I have a family that would always help me in any kind of trouble.
3	I consider myself a sloppy person.	11	I am a member of a happy family.
4	I am a decent sort of person.	12	My friends have no confidence in me.
5	I am an honest person.	13	I am a friendly person.
6	I am a cheerful person.	14	I am popular with men.
7	I am a calm and easygoing person.	15	I am not interested in what other people do.

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1 2 3 4 5 6 7 8 9

CONTINUE ON BACK

Fill in one circle for each statement using the following scale:

① Completely False	② Mostly False	③ Partly True and Partly False	④ Mostly True	⑤ Completely True

16	do not always tell the truth	①	②	③	④	⑤
17	get angry sometimes	①	②	③	④	⑤
18	like to look nice and neat all the time	①	②	③	④	⑤
19	am troubled by aches and pains	①	②	③	④	⑤
20	am a weak person	①	②	③	④	⑤
21	am a virtuous person	①	②	③	④	⑤
22	am a moral failure	①	②	③	④	⑤
23	am a morally weak person	①	②	③	④	⑤
24	have a lot of self control	①	②	③	④	⑤
25	am a hateful person	①	②	③	④	⑤
26	am losing my mind	①	②	③	④	⑤
27	am an important person to my friends and family	①	②	③	④	⑤
28	am not loved by my family	①	②	③	④	⑤
29	feel that my family doesn't trust me	①	②	③	④	⑤
30	am popular with women	①	②	③	④	⑤
31	am mad at the whole world	①	②	③	④	⑤
32	am hard to be friendly with	①	②	③	④	⑤
33	Once in a while I think of things too bad to talk about	①	②	③	④	⑤
34	Sometimes when I am not feeling well I am cross	①	②	③	④	⑤
35	am neither too fat nor too thin	①	②	③	④	⑤
36	like my looks just the way they are	①	②	③	④	⑤
37	I would like to change some parts of my body	①	②	③	④	⑤
38	I am satisfied with my moral behavior	①	②	③	④	⑤
39	I am satisfied with my relationship to God	①	②	③	④	⑤
40	I ought to go to church more	①	②	③	④	⑤
41	I am satisfied to be just what I am	①	②	③	④	⑤
42	I am just as nice as I should be	①	②	③	④	⑤
43	I despise myself	①	②	③	④	⑤
44	I am satisfied with my family relationships	①	②	③	④	⑤
45	I understand my family as well as I should	①	②	③	④	⑤
46	I should trust my family more	①	②	③	④	⑤
47	I am as sociable as I want to be	①	②	③	④	⑤
48	I try to please others, but I don't overdo it	①	②	③	④	⑤
49	I am no good at all from a social standpoint	①	②	③	④	⑤
50	I do not like everyone I know	①	②	③	④	⑤
51	Once in a while, I laugh at a dirty joke	①	②	③	④	⑤
52	I am neither too tall nor too short	①	②	③	④	⑤
53	I don't feel as well as I should	①	②	③	④	⑤
54	I should have more sex appeal	①	②	③	④	⑤
55	I am as religious as I want to be	①	②	③	④	⑤
56	I wish I could be more trustworthy	①	②	③	④	⑤
57	I shouldn't tell so many lies	①	②	③	④	⑤
58	I am as smart as I want to be	①	②	③	④	⑤
59	I am not the person I would like to be	①	②	③	④	⑤
60	I wish I didn't give up as easily as I do	①	②	③	④	⑤
61	I treat my parents as well as I should (Use past tense if parents are not living)	①	②	③	④	⑤
62	I am too sensitive to things my family says	①	②	③	④	⑤
63	I should love my family more	①	②	③	④	⑤
64	I am satisfied with the way I treat other people	①	②	③	④	⑤
65	I should be more polite to others	①	②	③	④	⑤
66	I ought to get along better with other people	①	②	③	④	⑤
67	I gossip a little at times	①	②	③	④	⑤
68	At times I feel like swearing	①	②	③	④	⑤
69	I take good care of myself physically	①	②	③	④	⑤
70	I try to be careful about my appearance	①	②	③	④	⑤
71	I often act like I am all thumbs	①	②	③	④	⑤
72	I am true to my religion in my everyday life	①	②	③	④	⑤
73	I try to change when I know I am doing things that are wrong	①	②	③	④	⑤
74	I sometimes do very bad things	①	②	③	④	⑤
75	I can always take care of myself in any situation	①	②	③	④	⑤
76	I take the blame for things without getting mad	①	②	③	④	⑤
77	I do things without thinking about them first	①	②	③	④	⑤
78	I try to play fair with my friends and family	①	②	③	④	⑤
79	I take a real interest in my family	①	②	③	④	⑤
80	I give in to my parents (Use past tense if parents are not living)	①	②	③	④	⑤
81	I try to understand the other fellow's point of view	①	②	③	④	⑤
82	I get along well with other people	①	②	③	④	⑤
83	I do not forgive others easily	①	②	③	④	⑤
84	I would rather win than lose in a game	①	②	③	④	⑤
85	I feel good most of the time	①	②	③	④	⑤
86	I do poorly in sports and games	①	②	③	④	⑤
87	I am a poor sleeper	①	②	③	④	⑤
88	I do what is right most of the time	①	②	③	④	⑤
89	I sometimes use unfair means to get ahead	①	②	③	④	⑤
90	I have trouble doing the things that are right	①	②	③	④	⑤
91	I solve my problems quite easily	①	②	③	④	⑤
92	I change my mind a lot	①	②	③	④	⑤
93	I try to run away from my problems	①	②	③	④	⑤
94	I do my share of work at home	①	②	③	④	⑤
95	I quarrel with my family	①	②	③	④	⑤
96	I do not act like my family thinks I should	①	②	③	④	⑤
97	I see good points in all the people I meet	①	②	③	④	⑤
98	I do not feel at ease with other people	①	②	③	④	⑤
99	I find it hard to talk with strangers	①	②	③	④	⑤
100	Once in a while I put off until tomorrow what I ought to do today	①	②	③	④	⑤

Remember to enter the time you finish all the statements in the box on the other side of this sheet.

APPENDIX B: HEALTH AND DAILY LIVING - YOUTH FORM

This is your copy of the special family questionnaire. Please answer each question by placing an "X" in the box next to the answer that you choose or by writing in the space provided.

If for any reason you do not wish to answer a question, please circle the question so that we know you have decided not to answer it.

Please ignore the small numbers which appear by the boxes or in the margins. They are to help us record your answers. Thank you for your help with this important survey.

SOME FACTS ABOUT YOU

1. How old are you? _____ 1-2

2. Are you: 1☐ a boy 2☐ a girl 3

YOUR HEALTH IN THE LAST YEAR

1. In the LAST YEAR (12 months), have any of these happened to you?

Yes	No			Yes	No		
☐	☐	allergies	4	☐	☐	asthma	7
☐	☐	overweight (10 pounds or more)	5	☐	☐	stayed overnight in the hospital	8
☐	☐	underweight (10 pounds or more)	6				

2. In the LAST YEAR, how often have you had or done the following things?

	Never	Seldom	Sometimes	Fairly often	
	1	2	3	4	
a) upset stomach, indigestion....	☐	☐	☐	☐	9
b) headaches.....	☐	☐	☐	☐	10
c) nightmares or bad dreams.....	☐	☐	☐	☐	11
d) bite your nails.....	☐	☐	☐	☐	12
e) sore throats.....	☐	☐	☐	☐	13
f) colds or coughs.....	☐	☐	☐	☐	14
g) trouble going to sleep.....	☐	☐	☐	☐	15
h) acne or pimples.....	☐	☐	☐	☐	16
i) missed school due to illness..	☐	☐	☐	☐	17
j) visited the doctor.....	☐	☐	☐	☐	18

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YOUR HEALTH IN THE LAST MONTH

1. We have asked about your health in the last year, now we want to know how you have been feeling IN THE LAST MONTH. Check how often you have felt each of the following:

	Never 1	Seldom 2	Some-times 3	Fairly often 4	
a) alert.....	☐	☐	☐	☐	19
b) cheerful.....	☐	☐	☐	☐	20
c) relaxed.....	☐	☐	☐	☐	21
d) sad, blue.....	☐	☐	☐	☐	22
e) up-tight, tense.....	☐	☐	☐	☐	23
f) afraid of things.....	☐	☐	☐	☐	24
g) full of energy.....	☐	☐	☐	☐	25
h) happy.....	☐	☐	☐	☐	26
i) calm.....	☐	☐	☐	☐	27
j) restless.....	☐	☐	☐	☐	28
k) very tired.....	☐	☐	☐	☐	29
l) worried.....	☐	☐	☐	☐	30

2. IN THE LAST MONTH how often did you:

	Never 1	Seldom 2	Some-times 3	Fairly often 4	
a) exercise (like swim, jog or bike).....	☐	☐	☐	☐	31
b) take vitamins.....	☐	☐	☐	☐	32
c) drink wine.....	☐	☐	☐	☐	33
d) drink beer.....	☐	☐	☐	☐	34
e) drink hard liquor.....	☐	☐	☐	☐	35
f) smoke cigarettes.....	☐	☐	☐	☐	36
g) wear a seatbelt in the car.....	☐	☐	☐	☐	37

YOUR HEALTH IN THE LAST MONTH (cont.)

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3. People feel different ways about themselves. For each word, check the box which shows how well the word describes you:

	Not at all (1)	Some-what (2)	Fairly well (3)	Very well (4)	
a) intelligent.....	☐	☐	☐	☐	38
b) mature.....	☐	☐	☐	☐	39
c) dependable.....	☐	☐	☐	☐	40
d) confident.....	☐	☐	☐	☐	41
e) friendly.....	☐	☐	☐	☐	42
f) successful.....	☐	☐	☐	☐	43
g) athletic.....	☐	☐	☐	☐	44

YOUR FAMILY AND FRIENDS

1. DURING THE LAST MONTH, have you done, or attended, any of these activities? Answer TWICE for each activity.

	Together with another family member			Together with one or more friends		
	Yes (1)	No (2)		Yes (1)	No (2)	
a) ball game (like football or soccer).....	☐	☐	45	☐	☐	55
b) other sports (like skiing or tennis).....	☐	☐	46	☐	☐	56
c) hike or long walk.....	☐	☐	47	☐	☐	57
d) club meeting (like scouts, 4-H, or Y-club).....	☐	☐	48	☐	☐	58
e) card games or board games.....	☐	☐	49	☐	☐	59
f) had a long talk.....	☐	☐	50	☐	☐	60
g) helped out on some project.....	☐	☐	51	☐	☐	61
h) went to a party.....	☐	☐	52	☐	☐	62
i) went on picnic or to the beach.....	☐	☐	53	☐	☐	63
j) played a musical instrument or sang.....	☐	☐	54	☐	☐	64

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2. How many very good friends do you have?

☐ 1 none ☐ 2 1 or 2 ☐ 3 3 or 4 ☐ 4 5 or more 65

SOME QUESTIONS ABOUT SCHOOL AND WORK

1. Are you going to school?

1☐ Yes 2☐ No (If no, go to Item #5) 1

2. In general, how well do you get along with your teachers?

1☐ not well 2☐ fairly well 3☐ well 4☐ very well 2

3. What are your school grades?

☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	3
Excellent (Mostly A's)	Very Good (Mostly A's and B's)	Good (Mostly B's and C's)	Average (Mostly C's and D's)	Below Average (Mostly D's and F's)	

4. Have you done any of the following IN THE LAST YEAR?

Yes	No		
☐	☐	member of school sports team	4
☐	☐	took part in a school play or show	5
☐	☐	went to a school dance	6
☐	☐	helped a teacher after school	7
☐	☐	went to a meeting of a school club or group	8
☐	☐	worked on a school project	9
☐	☐	elected to some school or club office	10

5. Do you have a job outside your home for which you get paid? (Check all that apply)

1☐ No 2☐ Yes, part time 3☐ Yes, full time 4☐ Yes, summer job 11

If yes, what is this job?_____ 12

What is today's date? _____ 13-18

This is the last question on this form. Thank you for your help.

FAMILY ENVIRONMENT SCALE

FORM R

RUDOLF H. MOOS

INSTRUCTIONS

There are 90 statements in this booklet. They are statements about families. You are to decide which of these statements are true of your family and which are false. Make all your marks on the separate answer sheets. If you think the statement is *True* or mostly *True* of your family, make an X in the box labeled T (true). If you think the statement is *False* or mostly *False* of your family, make an X in the box labeled F (false).

You may feel that some of the statements are true for some family members and false for others. Mark T if the statement is *true* for most members. Mark F if the statement is *false* for most members. If the members are evenly divided, decide what is the stronger overall impression and answer accordingly.

Remember, we would like to know what your family seems like to *you*. So *do not* try to figure out how other members see your family, but *do* give us your general impression of your family for each statement.

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1. Family members really help and support one another.
2. Family members often keep their feelings to themselves.
3. We fight a lot in our family.
4. We don't do things on our own very often in our family.
5. We feel it is important to be the best at whatever you do.
6. We often talk about political and social problems.
7. We spend most weekends and evenings at home.
8. Family members attend church, synagogue, or Sunday School fairly often.
9. Activities in our family are pretty carefully planned.
10. Family members are rarely ordered around.
11. We often seem to be killing time at home.
12. We say anything we want to around home.
13. Family members rarely become openly angry.
14. In our family, we are strongly encouraged to be independent.
15. Getting ahead in life is very important in our family.
16. We rarely go to lectures, plays or concerts.
17. Friends often come over for dinner or to visit.
18. We don't say prayers in our family.
19. We are generally very neat and orderly.
20. There are very few rules to follow in our family.
21. We put a lot of energy into what we do at home.
22. It's hard to "blow off steam" at home without upsetting somebody.
23. Family members sometimes get so angry they throw things.
24. We think things out for ourselves in our family.
25. How much money a person makes is not very important to us.
26. Learning about new and different things is very important in our family.
27. Noboby in our family is active in sports, Little League, bowling, etc.
28. We often talk about the religious meaning of Christmas, Passover, or other holidays.
29. It's often hard to find things when you need them in our household.
30. There is one family member who makes most of the decisions.
31. There is a feeling of togetherness in our family.
32. We tell each other about our personal problems.
33. Family members hardly ever lose their tempers.
34. We come and go as we want to in our family.
35. We believe in competition and "may the best man win."

36. We are not that interested in cultural activities.
37. We often go to movies, sports events, camping, etc.
38. We don't believe in heaven or hell.
39. Being on time is very important in our family.
40. There are set ways of doing things at home.
41. We rarely volunteer when something has to be done at home.
42. If we feel like doing something on the spur of the moment we often just pick up and go.
43. Family members often criticize each other.
44. There is very little privacy in our family.
45. We always strive to do things just a little better the next time.
46. We rarely have intellectual discussions.
47. Everyone in our family has a hobby or two.
48. Family members have strict ideas about what is right and wrong.
49. People change their minds often in our family.
50. There is a strong emphasis on following rules in our family.
51. Family members really back each other up.
52. Someone usually gets upset if you complain in our family.
53. Family members sometimes hit each other.
54. Family members almost always rely on themselves when a problem comes up.
55. Family members rarely worry about job promotions, school grades, etc.
56. Someone in our family plays a musical instrument.
57. Family members are not very involved in recreational activities outside work or school.
58. We believe there are some things you just have to take on faith.
59. Family members make sure their rooms are neat.
60. Everyone has an equal say in family decisions.
61. There is very little group spirit in our family.
62. Money and paying bills is openly talked about in our family.
63. If there's a disagreement in our family, we try hard to smooth things over and keep the peace.
64. Family members strongly encourage each other to stand up for their rights.
65. In our family, we don't try that hard to succeed.
66. Family members often go to the library.
67. Family members sometimes attend courses or take lessons for some hobby or interest (outside of school).

68. In our family each person has different ideas about what is right and wrong.
69. Each person's duties are clearly defined in our family.
70. We can do whatever we want tc in our family.
71. We really get along well with each other.
72. We are usually careful about what we say to each other.
73. Family members often try to one-up or out-do each other.
74. It's hard to be by yourself without hurting someone's feelings in our household.
75. "Work before play" is the rule in our family.
76. Watching T.V. is more important than reading in our family.
77. Family members go out a lot.
78. The Bible is a very important book in our home.
79. Money is not handled very carefully in our family.
80. Rules are pretty inflexible in our household.
81. There is plenty of time and attention for everyone in our family.
82. There are a lot of spontaneous discussions in our family.
83. In our family, we believe you don't ever get anywhere by raising your voice.
84. We are not really encouraged to speak up for ourselves in our family.
85. Family members are often compared with others as to how well they are doing at work or school.
86. Family members really like music, art and literature.
87. Our main form of entertainment is watching T.V. or listening to the radio.
88. Family members believe that if you sin you will be punished.
89. Dishes are usually done immediately after eating.
90. You can't get away with much in our family.

C.A.S.T.

Please check (✓) the answer below that best describes your feelings, behavior, and experiences related to a parer alcohol use. Take your time and be as accurate as possible. Answer all 30 questions by checking either "Yes' "No."

Sex: Male___ Female___ Age:___

Yes	No	Questions
___	___	1. Have you ever thought that one of your parents had a drinking problem?
___	___	2. Have you ever lost sleep because of a parent's drinking?
___	___	3. Did you ever encourage one of your parents to quit drinking?
___	___	4. Did you ever feel alone, scared, nervous, angry, or frustrated because a parent was not able to stop drinking?
___	___	5. Did you ever argue or fight with a parent when he or she was drinking?
___	___	6. Did you ever threaten to run away from home because of a parent's drinking?
___	___	7. Has a parent ever yelled at or hit you or other family members when drinking?
___	___	8. Have you ever heard your parents fight when one of them was drunk?
___	___	9. Did you ever protect another family member from a parent who was drinking?
___	___	10. Did you ever feel like hiding or emptying a parent's bottle of liquor?
___	___	11. Do many of your thoughts revolve around a problem drinking parent or difficulties that arise because of his or her drinking?
___	___	12. Did you ever wish that a parent would stop drinking?
___	___	13. Did you ever feel responsible for and guilty about a parent's drinking?
___	___	14. Did you ever fear that your parents would get divorced due to alcohol misuse?
___	___	15. Have you ever withdrawn from and avoided outside activities and friends because of embarrassment and shame over a parent's drinking problem?
___	___	16. Did you ever feel caught in the middle of an argument or fight between a problem drinking paren and your other parent?
___	___	17. Did you ever feel that you made a parent drink alcohol?
___	___	18. Have you ever felt that a problem drinking parent did not really love you?
___	___	19. Did you ever resent a parent's drinking?
___	___	20. Have you ever worried about a parent's health because of his or her alcohol use?
___	___	21. Have you ever been blamed for a parent's drinking?
___	___	22. Did you ever think your father was an alcoholic?
___	___	23. Did you ever wish your home could be more like the homes of your friends who did not have a parent with a drinking problem?
___	___	24. Did a parent ever make promises to you that he or she did not keep because of drinking?
___	___	25. Did you ever think your mother was an alcoholic?
___	___	26. Did you ever wish that you could talk to someone who could understand and help the alcohol-related problems in your family?
___	___	27. Did you ever fight with your brothers and sisters about a parent's drinking?
___	___	28. Did you ever stay away from home to avoid the drinking parent or your other parent's reaction to the drinking?
___	___	29. Have you ever felt sick, cried, or had a "knot" in your stomach after worrying about a parent's drinking?
___	___	30. Did you ever take over any chores and duties at home that were usually done by a parent before he or she developed a drinking problem?

___ TOTAL NUMBER OF "YES" ANSWERS.

ADDITIONAL QUESTIONS TO THE C.A.S.T.

31. When your mother/father drinks does he or she get

A. Mean - for example

[ ] yelling

[ ] nasty, teasing, ridicules

B. Nice - for example

[ ] jokes with you

[ ] is relaxed and talks with you

[ ] gives you privileges you wouldn't usually ask for or get

C. Physically abusive - for example

[ ] slaps or hits you and would not ever when not drinking

[ ] slaps or hits you for punishment for things you have done wrong

[ ] slaps or hits you for no reason you understand

ALCOHOL USE HISTORY - FATHER

Again, are you answering about your
Father _____ Stepfather _____

K. How would you describe your father's alcohol use?
1. Abstaining ____
2. Social Drinker ____
3. Heavy Drinker ____
4. Problem Drinker ____
5. Alcoholic ____
6. Drunkard ____
7. Recovering ____

L. Has your father ever attended Alcoholics Anonymous meetings?
1. Never ____
2. Yes ____
3. Currently ____

M. How old were you when you first knew about your father's problematic drinking?
1. Your age was _____
2. Not applicable _____

N. How old were you when your father's drinking caused the most family problems?
Were you
1. Less than 5 years old ____
2. 6-10 years old ____
3. 11-15 years old ____
4. 16-Current ____
5. Not applicable

O. Has your father ever been treated for alcoholism?
1. No ____
2. Don't know ____
3. Inpatient facility ____
4. Outpatient program ____

YOUR SUBSTANCE USE HISTORY

U. On the average, how often do you drink any kind of alcoholic beverage during a typical month?
   1. Rarely ____
   2. About once a month ____
   3. 2 to 3 times a month ____
   4. 1 or 2 times a week ____
   5. 3 or 4 times a week ____
   6. Nearly every day ____
   7. 2 times a day ____
   8. 3 or more times a day ____

V. When you drank any kind of alcoholic beverage, what was the average quantity you consumed; that is, you consumed this amount nearly every time or more than half the time you drank?
   1. Rarely drank ____
   2. 1 to 2 drinks ____
   3. 3 to 4 drinks ____
   4. 5 to 6 drinks ____
   5. 7 to 8 drinks ____
   6. 9 to 10 drinks ____
   7. More than 10 drinks ____

W. Have you ever been treated for substance abuse?
   1. Inpatient ____
   2. Outpatient ____ Currently ____
   3. Never ____

X. Have you ever attended Alanon or Al-Ateen?
   1. Never ____
   2. How old were you? ____
   3. Do you attend meetings currently? ____

Y. List your brothers and sisters, by age, oldest first:

	Age	Current Job, Umemployed, or Grade in School	Alcohol/ Drug Abuse Yes	Alcohol/ Drug Abuse No	Substance Abuse Treatment Yes	Substance Abuse Treatment No
1.	____	_____	___	___	___	___
2.	____	_____	___	___	___	___
3.	____	_____	___	___	___	___
4.	____	_____	___	___	___	___
5.	____	_____	___	___	___	___
6.	____	_____	___	___	___	___
7.	____	_____	___	___	___	___
8.	____	_____	___	___	___	___
9.	____	_____	___	___	___	___