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The relationship between parental alcoholism and the vocational identity, occupational self-efficacy, and career decision-making status of university students

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The relationship between parental alcoholism and the vocational identity, occupational self-efficacy, and career decision-making status of university students

by

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DEDICATION

This dissertation is dedicated, with love, to

Brittany Lynn Isgro,

whose honesty, courage, and strength

embody all that is good.

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ABSTRACT

The main purpose of this study was to compare the vocational identity, occupational self-efficacy, and career decision-making status of Adult Children of Alcoholics (ACOAs) and Adult Children of Nonalcoholics. Approximately one thousand undergraduate students were administered measures of personal, social, and vocational functioning. Data were analyzed for a sample of 91 ACOAs and 180 non-ACOAs. No between-group differences in vocational functioning were found, although ACOAs reported a greater level of family dysfunction than their counterparts from nonalcoholic homes. Personal and demographic variables were modest predictors of vocational functioning for the sample as a whole. The results of this study raised questions regarding the validity of the ACOA concept. Furthermore, despite its high internal reliability, it appears that for a large number of respondents, the Children of Alcoholics Screening Test (CAST) may be tapping constructs or dimensions other than those originally intended. Contemporary research needs and directions are discussed.

INTRODUCTION

The purpose of the present study was two-fold: first, to compare the vocational identity, occupational self-efficacy, and career decision-making status of college students from alcoholic and nonalcoholic homes, while controlling for the effects of general family dysfunction, and second, to examine the role of variables likely to mediate the effects of parental alcoholism on the vocational development of offspring.

The need for this type of study is underscored by the high prevalence and devastating effects of alcoholism in this country. Although the most often cited estimate of the number of alcoholics in the United States is 10 million (Crespi, 1990; West & Prinz, 1987; Woititz, 1983), other figures are higher (Gravitz, 1985), with the number of cases increasing by approximately 500,000 per annum (Gravitz, 1985). As of 1985, alcoholism was considered to pose one of the largest health-related dilemmas within our borders, costing billions of dollars, and contributing to one death every 2 1/2 minutes (Gravitz, 1985).

Anywhere from 1 out of 6 (Crespi, 1990) to 1 out of 3 (Friel & Friel, 1988; Gravitz, 1985) families are affected by alcoholism. Current estimates of the number of adult children of alcoholics (ACOAs) in this country range from 21 million (Woodside, 1986, 1988a) to 34 million (Black, 1981), with an additional 7 million (Woodside, 1986, 1988a) to 15 million (Black, 1981; Crespi, 1990) children under the age of 18 currently residing in the home of an alcoholic parent. Potter-Efron (1987, p. 41) defines an ACOA, " . . . as a current adult who has experienced long-term stress in his family of origin related to the chemical dependency of his parents or grandparents, and who is currently having difficulty maintaining optimum functioning in his present life."

Although early research efforts were directed toward understanding the role of genetic factors in the transmission of alcoholism (Brown, 1988; Giglio & Kaufman, 1990), as well as identifying the psychopathological aspects of this disease (Brown, 1988), more recent studies have focused on examining the familial and interpersonal dynamics present within the

alcoholic home (Brown, 1988; Giglio & Kaufman, 1990). It is now recognized that alcoholism affects not only the alcoholic, but has long-lasting adverse consequences for the adjustment and functioning of all family members (Ackerman, 1983; Cermak & Brown, 1982; Giglio & Kaufman, 1990; Stark, 1987; Tharinger & Koranek, 1988).

The atmosphere in homes where parental alcohol use is the primary organizing factor of the family has been characterized as chaotic (Brown, 1988; Crespi, 1990; Miller & Tuchfeld, 1986; Vannicelli, 1989), tense (Brown, 1988; Gravitz, 1985; Vannicelli, 1989; Woititz, 1983; Woodside, 1988a), insecure (Cermak & Rosenfeld, 1987; Deutsch, 1985; Woodside, 1988a), hostile (Gravitz, 1985), aggressive (Hibbard, 1987; Richards, 1989), stressful (Brown, 1989; Cermak & Rosenfeld, 1987; Roosa, Gensheimer, Short, Ayers, & Shell, 1989; Wegscheider, 1981), inflexible (Deutsch, 1985), disorganized (El-Guebaly & Offord, 1977; Jacob, Favorini, Meisel, & Anderson, 1978), and overstimulating (Hibbard, 1987). Physical abuse (Black, 1990; Black, Bucky, & Wilder-Padilla, 1986; Giglio & Kaufman, 1990; Russell, Henderson, & Blume, 1985), sexual victimization (Black et al., 1986; Crespi, 1990; Giglio & Kaufman, 1990), neglect (Hibbard, 1987; Williams, 1990), and violence (Black, 1979; Crespi, 1990; Schwartzberg & Schwartzberg, 1990; Wilson & Orford, 1978) are not uncommon. These families are more apt to experience financial troubles (Schumrum & Hartman, 1988; Williams, 1990), marital separation and/or divorce (Black et al., 1986; Giglio & Kaufman, 1990; Williams, 1990), physical illness (Schumrum & Hartman, 1988), and injuries (Schumrum & Hartman, 1988). Fear (Woodside, 1988a), anxiety (Woititz, 1983), shame, and guilt (Brown, 1988; Potter-Efron, 1987; Woodside, 1988a) are usually felt by all members of the household.

One pervasive characteristic of the alcoholic home environment is parental inconsistency/unpredictability (Ackerman, 1983; Brown, 1988; Crespi, 1990; Woititz, 1978, 1983). The same behavior may be encouraged one minute and punished the next (Crespi,

1990; Priest, 1985; Stark, 1987), making it virtually impossible for children to reliably predict the consequences of their own and others' behavior (Cermak & Brown, 1982). Role conflict, confusion, reversal, and distortion are commonplace (Crespi, 1990; Nardi, 1981; Woititz, 1978). Neither parent is consistently available to meet the children's needs (Hibbard, 1987; Vannicelli, 1989) or models appropriate adult behavior (Nardi, 1981).

In addition, the emotional and physical boundaries between family members are blurred (Crespi, 1990; Richards, 1989). Arbitrary limit-setting (Brown, 1988), changing explanations (Brown, 1988), unrealistic expectations (Crespi, 1990; Gravitz, 1985), denial (Balis, 1986; Berlin, Davis, & Orenstein, 1988; Crespi, 1990; Gravitz, 1985; Tharinger & Koranek, 1988; Woodside, 1988a), isolation (Berlin, Davis, & Orenstein, 1988; Stark, 1987; Vannicelli, 1989; Wood, 1987), and unhealthy communication patterns (Balis, 1986; Wegscheider, 1981; Wilson & Orford, 1978) add to the confusion.

Rather than utilizing effective strategies for problem-solving and conflict resolution, family members (particularly the parents) are prone to argue with, blame, criticize, ridicule, and scapegoat one another (Crespi, 1990; Hyphantis, Koutras, Liakos, & Marselos, 1991; Tharinger & Koranek, 1988). As Tharinger and Koranek (1988, p. 168) state,

> A family with alcoholism ceases to provide the stable social and economic environment that the well functioning family provides for its members, an environment in which family members' roles and responsibilities are clear and appropriate and which provides for mutual love and esteem and the meeting of needs for dependency and independence.

Given the link between the quality of one's early home environment and subsequent psychological adjustment (Gravitz, 1985; Tharinger & Koranek, 1988; Werner & Broida, 1991), it is not surprising that individuals raised in an alcoholic home are at risk for a wide array of mental, physical, emotional, social, and behavioral problems (Giglio & Kaufman, 1990; Russell et al., 1985; Tharinger & Koranek, 1988; Woodside, 1988a). As children, they

are more likely than their peers to demonstrate low self-esteem (Deutsch, 1985; Williams, 1990), impulsivity (Williams, 1990), poor academic performance (Williams, 1990; Wilson & Orford, 1978), hyperactivity (Russell et al., 1985; Williams, 1990), and conduct-disordered behavior (Williams, 1990; Wilson & Orford, 1978). In addition, they are more apt to present with psychosomatic complaints (El-Guebaly & Offord, 1977; Robinson, 1989; Williams, 1990), be rated by instructors as "problem children" (El-Guebaly & Offord, 1977), suffer from chronic depression (Deutsch, 1985), and be socially withdrawn (Deutsch, 1985).

As adolescents, children of alcoholics (COAs) experience considerable difficulty mastering age appropriate developmental tasks such as establishing an identity (Morehouse, 1984; Woititz, 1983), separating from their family of origin (Berlin et al., 1988; Wood, 1987), and developing feelings of competence (Brown, 1988; Landers & Hollingdale, 1988).

The home environment to which these children are subjected in the earlier stages of development has been found to effect their functioning well into adulthood (Glenn & Parsons, 1989; Sher, 1991; Tharinger & Koranek, 1988; Wallace, 1990; Woodside, 1986). ACOAs are more likely than others to marry alcoholics (Berkowitz & Perkins, 1988; Black, 1981; Black et al., 1986; Cermak & Rosenfeld, 1987; Woititz, 1983, 1984) and become alcoholic themselves (Black, 1981; Black et al., 1986; Cermak & Rosenfeld, 1987; Giglio & Kaufman, 1990; Gravitz & Bowden, 1984; Woititz, 1983, 1984). They are at risk for the development of chronic anxiety (Brown, 1988; Haack & Alim, 1991), depression (Haack, 1990), compulsive behavior (Friel & Friel, 1988), and personality disorders (Hibbard, 1989; McKenna & Pickens, 1983), and may be prone to experience long-term emotional instability (Black, 1981), an overall dysfunctional lifestyle (Woititz, 1984), divorce and separation (Giglio & Kaufman, 1990; Parker & Harford, 1988), identity confusion (Friel & Friel, 1988; Landers & Hollingdale, 1988; Schumrum & Hartman, 1988), and problems in the workplace (Friel & Friel, 1988; Watkins, Rogers, & Morrow, 1989; Woodside, 1986, 1989).

Adult children of alcoholics may also lack the basic life skills necessary to function effectively in a wide variety of situations (Bepko, 1985). They may have difficulty making decisions (Black, 1990; Miller & Tuchfeld, 1986; Schumrum & Hartman, 1988; Woititz, 1984), generating behavioral options or alternatives (Black, 1990; Miller & Tuchfeld, 1986; Woititz, 1984), utilizing constructive problem-solving strategies (Black, 1990; Clair & Genest, 1987; Crespi, 1990), realistically evaluating life circumstances (Bepko, 1985; Crespi, 1990; Roosa et al., 1989), establishing priorities (Crespi, 1990), setting and achieving difficult long-term goals (Crespi, 1990), planning for the future (Woititz, 1983), and following a task or project through to completion (Crespi, 1990; Woititz, 1983).

These individuals, by virtue of their upbringing, may also lack the broad base of information, experience, and feedback required to make sound judgments and determinations (Bepko, 1985; Woititz, 1984). As Cermak (1990) notes, ACOAs have had limited exposure during the formative years to the modeling of appropriate behavior by mature adult figures, resulting in a failure to learn critical lessons:

> Deficits from underlearning are found at the cognitive, emotional, and identity levels. At the cognitive level, a client's knowledge base may contain random "empty categories"–gaps in what he knows about the world which most people his age would have filled naturally in the course of growing up in our society. At the emotional level, a client's experiential base may be incomplete; certain feelings generally shared throughout our culture may never be shared in highly chaotic families. At the identity level, developmental tasks necessary for maturation may never have been encountered, leading to an impoverished sense of self. (Cermak, 1990, p. 15)

Thus, ACOAs may have a limited awareness of their own general abilities, strengths, potential, aspirations, and likes/dislikes (Crespi, 1990). They are apt to lack confidence in their capacity to cope with future unknowns (Landers & Hollingdale, 1988), achieve success

(Landers & Hollingdale, 1988), and realize their dreams (Crespi, 1990). Landers and Hollingdale (1988) contend that young adults with an alcoholic family background are less able than their peers to accomplish the developmental tasks required of most college students, such as identifying a purpose, achieving autonomy, gaining a sense of competence, integrating numerous areas of living (vocational and nonvocational), and devising a plan of action.

Despite the recent upsurge of interest in ACOA issues, as well as the establishment of organizations devoted to the education and support of what is now regarded as a population deserving of specialized treatment, little empirical research on ACOAs has been conducted (Giglio & Kaufman, 1990; Plescia-Pikus, Long-Suter, & Wilson, 1988; Tharinger & Koranek, 1988). Most findings, to date, are descriptive, anecdotal, or based solely on clinical observations (Brown, 1988; Cartwright, McKay, & Stader, 1990; Ferstein & Whiston, 1991; Haack & Alim, 1991; Tweed & Ryff, 1991; Watters & Theimer, 1978). Where studies have been undertaken, they have typically addressed the adjustment of young children rather than adults (Benson & Heller, 1987; Cermak & Rosenfeld, 1987; Downing & Walker, 1987; Hibbard, 1989; Lyon & Greenberg, 1991).

Other criticisms of the literature include the predominant focus on clinical populations (Benson & Heller, 1987; Berkowitz & Perkins, 1988; Lyon & Greenberg, 1991; Werner, 1986; West & Prinz, 1987), infrequent use of control groups (Jacob et al., 1978; Nardi, 1981; Tharinger & Koranek, 1988; Tweed & Ryff, 1991), absence of theoretical guidelines (Crawford & Phyfer, 1988; Nardi, 1981; Tharinger & Koranek, 1988), lack of standardized assessment procedures (Crawford & Phyfer, 1988), and failure to examine gender effects (Berkowitz & Perkins, 1988; Lyon & Greenberg, 1991; West & Prinz, 1987; Wright & Heppner, 1991).

Furthermore, given that ACOAs are likely to experience problems similar to those of individuals whose home life was chronically stressful due to parental illness (Miller & Tuchfeld, 1986), abuse (Cartwright et al., 1990; Cermak & Rosenfeld, 1987), or maladjustment (Baker & Williamson, 1989; Goodman, 1987), it is presently unclear whether an alcoholic upbringing, per se, results in adverse effects above and beyond those accounted for by other forms of familial dysfunction. As Cermak and Rosenfeld (1987, p. 18) suggest, "It is precisely because of such parallels that the effects of being raised by an alcoholic parent ought to be more fully understood."

It appears, however, that not all ACOAs suffer ill effects (Stark, 1987; Tweed & Ryff, 1991; Werner, 1984; Woodside, 1988b). Relatively little attention has been paid to the "resilient" youth who have adjusted well despite having been raised in an unstable environment (Berkowitz & Perkins, 1988; Burk & Sher, 1988; Heller, Sher, & Benson, 1982; Wilson & Orford, 1978). What is needed are studies which empirically identify those variables likely to mediate or buffer the effects of parental alcoholism on children (El-Guebaly & Offord, 1977; Wright & Heppner, 1991), including the number of alcoholic parents in the household (Hibbard, 1989; Tharinger & Koranek, 1988), preservation of family rituals (Seilhamer & Jacob, 1990; Sher, 1991), degree of marital conflict (Stark, 1987; Tharinger & Koranek, 1988; Wilson & Orford, 1978), severity of parental alcoholism (Brown, 1988; Stark, 1987; West & Prinz, 1987), the child's age at onset of parental substance abuse (Ackerman, 1983; Brown, 1988; Wilson & Orford, 1978), stage of recovery (Giglio & Kaufman, 1990), availability of social support (Ackerman, 1983; Benson & Heller, 1987; Clair & Genest, 1987; Sher, 1991; Tharinger & Koranek, 1988; West & Prinz, 1987), number of siblings (Ackerman, 1983), and gender of the alcoholic parent and offspring (West & Prinz, 1987; Woodside, 1988b). Justification for this type of study is provided by Tharinger and Koranek (1988, p. 172) who believe that, "Focusing on variables that may

mediate developmental outcome is useful in that it provides the beginnings of a model from which to plan and evaluate research and suggests guidelines for identification, assessment, and intervention activities."

Lastly, but perhaps most importantly, to this writer's knowledge, no empirical investigations have specifically addressed the career development of collegiate ACOAs. The major purpose of the present study was to do so by systematically comparing the vocational identity, occupational self-efficacy, and career decision-making status of students raised in alcoholic and nonalcoholic homes.

Vocational identity, occupational self-efficacy, and career indecision were chosen among the vast number of work-related constructs available for study, based on the literature suggesting that children of alcoholics may have a relatively difficult time establishing a clear and stable self-concept, achieving a sense of mastery over age-appropriate developmental tasks, and acquiring the decision-making skills necessary to function effectively in problem-solving situations. It was reasoned that the problems experienced by ACOAs during the childhood, adolescent, and young adult stages of development would surface in all areas of potential growth and functioning, including the occupational realm. More specifically, it was hypothesized that the difficulty ACOAs may have establishing an unambiguous, firm, and independent sense of identity would be reflected in a relatively diffuse and unstable vocational self-image. Similarly, the lack of confidence, poor self-esteem, low intra-personal awareness, feelings of incompetence, and knowledge/skill deficits experienced by ACOAs were expected to result in lower feelings of occupational self-efficacy and greater career indecisiveness.

It was anticipated that the present study would make an additional contribution to the literature by utilizing standardized measures, controlling for the effects of general family dysfunction, examining the role of variables likely to mediate the effects of parental

alcoholism on offspring, and focusing attention on a university student, rather than clinical, population.

REVIEW OF THE LITERATURE

This review of the literature pertaining to adult children of alcoholics (ACOA) is organized into nine general sections as follows: Section 1 introduces the current controversy over the validity of the ACOA construct. Section 2 contrasts healthy with dysfunctional families, then describes the environment in alcoholic homes. Sections 3 through 5 discuss the effects of an alcoholic upbringing during the childhood, adolescent, and adult stages of development, respectively. Section 6 depicts resilient children of alcoholics. Section 7 examines variables likely to mediate the effects of parental alcoholism. Section 8 refers to contemporary research needs and directions. Section 9 summarizes the purpose of the present study and outlines the hypotheses.

Validity of the ACOA Construct

Woititz (1983), in her landmark publication Adult Children of Alcoholics, described a set of personality characteristics or traits commonly endorsed by ACOAs. Her report of the problems likely to be experienced by those raised in an alcoholic home has since received widespread support and recognition by the public, as well as by mental health professionals dedicated to the specialized treatment of this population.

Recently, however, researchers viewing the ACOA construct as empirically unsubstantiated have questioned its validity (Chambliss & Hassinger, 1990; Churchill, Broida, & Nicholson, 1990; Goleman, 1992; Seefeldt & Lyon, 1990; Tweed & Ryff, 1991; Wright & Heppner, 1991). Critics of the ACOA movement claim that its basic tenets are so sweeping and overinclusive as to be diagnostically and therapeutically meaningless (Goleman, 1992). Churchill et al. (1990) note that, although a fraction of ACOAs may experience problems directly attributable to parental alcohol use, at present, it is difficult to ascertain the role of other contributory factors (e.g., family dysfunction). Also, with regard to the harmful effects of labeling (e.g., self-fulfilling prophecy), the tendency of psychological service providers to perceive children of alcoholics as maladjusted simply by

virtue of their background led Burk and Sher (1990, p. 156) to conclude that, " . . . the possible bias of some clinicians toward assuming psychopathology in COAs can have potentially negative effects, ranging from stigmatization and decreased self-esteem to inclusion in intervention programs that can lead to adverse outcomes."

In defense, proponents of the movement call attention to the wide array of social, emotional, physical, and behavioral problems for which ACOAs are at risk (Black, 1981; Cermak & Rosenfeld, 1987; Giglio & Kaufman, 1990; Woititz, 1983; Woodside, 1988a). While acknowledging the need for ongoing empirical research, some clinicians emphasize the already existing body of scientific findings in support of their perspective (Goleman, 1992; Tharinger & Koranek, 1988). They also note that, until recently, the experience of mental health professionals treating ACOAs has been largely ignored by investigators whose primary focus has been the identification of hereditary factors in the transmission of alcoholism (Goleman, 1992). Where relevant clinical research has been conducted, only that portion of the ACOA population whose difficulties are severe and highly visible (those in treatment) has been studied (Black, cited in Goleman, 1992). Given that knowledge of the ways in which alcoholism is likely to affect family members, particularly adult children, is just now beginning to accumulate, the first order of business, according to Cermak (cited in Goleman, 1992), is to raise public awareness of the ACOA experience before addressing the more complex underlying issues.

Although the validity of the ACOA construct itself is controversial, what has been established is the overall link between early family environment and subsequent psychological adjustment/functioning (Tharinger & Koranek, 1988; Werner & Broida, 1991). The next section of this review lays the groundwork for a discussion of the atmosphere in alcoholic homes by comparing the general characteristics of a healthy and dysfunctional family environment.

Family Characteristics

The Healthy Home

Black (1990) characterizes the healthy family environment as one which promotes the free expression of feelings, recognition of individual differences, assumption of personal responsibility (for one's own actions), implementation of clear and flexible rules, and prioritization of people over performance. More often than not, the atmosphere in stable homes is joyous, loving, energetic, and relaxed (Black, 1990). The challenges of daily life are met through the use of effective strategies for stress management, the open discussion of (all) topics and concerns, and the application of appropriate behavioral consequences (Black, 1990).

Friel and Friel (1988) note that healthy families function to meet basic needs for survival (e.g., food, clothing, and shelter), nurturance, safety, affiliation (e.g., love and belongingness), and individual growth (e.g., independence and separateness). Rather than imposing control through punishment or criticism, family members enhance the esteem of self and others through praise and skillbuilding (Friel & Friel, 1988). In a well-functioning family, expectations for success are realistically tempered with permission to make mistakes (Friel & Friel, 1988). The demands of work are balanced with leisure activities and attention is paid to the fulfillment of spiritual needs (Friel & Friel, 1988).

One of the most prominent features of a wholesome family environment is the division of subsystems by clear and appropriate boundaries (Erekson & Perkins, 1989). A strong marital coalition serves to minimize parental role conflict, confusion, and inconsistency (Black, 1990).

In summary, Cermak (1990) considers the primary constituents of healthy family functioning to include an open pattern of communication, an emphasis on self-care, the

enactment of individualized roles, a regard for privacy, a sense of continuity, and an attentiveness to the childrens' needs.

The Dysfunctional Home

Dysfunctional families, by contrast, adhere to five basic rules: "1) Don't talk; 2) Don't feel; 3) Don't trust; 4) Don't think; 5) Don't ask questions." (Black, 1990, p. 12). Under these conditions, family members learn to protect their feelings through the use of rigid defense mechanisms, maintain secrets to avoid confrontation, comply with the needs, beliefs, and demands of the individual holding a dominant position in the family hierarchy, and place an inordinate emphasis on performance (Black, 1990). The atmosphere in dysfunctional homes is often marked by fear, anger, tension, frustration, disappointment, and pain (Black, 1990). Personal growth is discouraged, while control is imposed through the use of guilt, shame, and punishment (Black, 1990). Rules are ambiguous, inconsistent, and unyielding (Black, 1990).

One marked characteristic of an unstable home environment is the violation of interpersonal and subsystem boundaries (Erekson & Perkins, 1989). Dysfunctional families vacillate between two extremes of functioning–enmeshment and disengagement (Erekson & Perkins, 1989). Under the first of these conditions, individuality is downplayed and the demarcation between family members is diffuse and ill-defined (Erekson & Perkins, 1989). Because the parameters of personal responsibility are unclear, the roles of parent and child reverse, leaving family members to assume overlapping identities. In a disengaged state, the communication within and between subsystems is problematic and limited in scope (Erekson & Perkins, 1989). Members are distant and emotionally unavailable, crippling the safeguarding function of the collective unit (Erekson & Perkins, 1989).

In dysfunctional families, duties and roles are rigidly segregated and assigned (Friel & Friel, 1988). Unhealthy boundary states are maintained due to a fear of abandonment (Friel & Friel, 1988). Other characteristics of an unhealthy home environment include an inability

to tolerate weaknesses or faults, a rigidly held system of beliefs, the limited identification and expression of feelings, the formation of intrafamilial coalitions (triangulation), and a high threshold for emotional pain (Friel & Friel, 1988).

In a healthy family system, the basic needs of children (for structure, nurturance, and direction) are satisfied on a routine basis, laying the foundation for adaptive functioning in adulthood (Friel & Friel, 1988). In a dysfunctional family environment, these needs go largely unmet, as children enter the later phases of development lacking an inner sense of wholeness, security, trust, and confidence (Friel & Friel, 1988).

Dysfunction within the family system may vary by form and degree. Wholey (1988, p. 4) notes, however, that

> While the experts may debate an acceptable definition of the term "dysfunctional," they are quick to agree that dysfunctional homes are the families of alcoholism, physical and sexual abuse, physical neglect, compulsive gambling and eating disorders, workaholism, incest, legal and illegal drug addiction, and emotional abandonment.

The Alcoholic Home

The Marital Relationship

Alcoholic families are more likely than their nonalcoholic counterparts to suffer the effects of parental conflict and separation (Wilson & Orford, 1978). The marital relationship in alcoholic homes is characterized by escalating hostility, resentment, and disapproval, as attempts are made to cope with the progressive aspects of this disease (Erekson & Perkins, 1989). Communication between the alcoholic and his/her spouse has been found to be less flexible, productive, and cooperative than that between partners in a nonalcoholic relationship (Tharinger & Koranek, 1988). The nonalcoholic spouse in an alcoholic marriage may contend with his/her increasingly dysfunctional lifestyle by defending the alcoholic, becoming emotionally and/or physically unavailable to him/her, overprotecting the children,

or lashing out (Erekson & Perkins, 1989). He or she recognizes that there are problems, yet fails to attribute these to alcohol (Gravitz, 1985). Denial may take the form of minimizing, dismissing, or rationalizing the effects of the alcoholic's behavior on other family members (Gravitz, 1985). These methods of coping, however, serve only to perpetuate the addictive cycle by preventing the alcoholic from facing the consequences of his/her own behavior (Erekson & Perkins, 1989; Gravitz, 1985). As is the case in most dysfunctional partnerships, over time, the boundary between players becomes rigid or diffuse (Erekson & Perkins, 1989).

Thus, in alcoholic marriages, both spouses are impaired, one by virtue of substance abuse/dependence, and the other as a result of the stress generated by his/her persistent, yet unsuccessful, efforts to remediate the problems caused by excessive chemical use (Erekson & Perkins, 1989).

Co-dependency

Co-dependency is the term used to identify the maladaptive pattern of living adopted by family members (particularly the nonalcoholic spouse) to cope with the devastating effects of addiction (Mendenhall, 1989b). Descriptive of both individual and systemic functioning, co-dependency, a deeply-rooted and rigid means of interacting with the self and the environment, is learned from the family of origin (Cermak, 1984). Initially, it involves the nonalcoholic partner's tendency to assume his/her spouse's own distorted views (Cermak & Rosenfeld, 1987), thus allowing him/her to perceive an otherwise tenuous connection with the alcoholic as stable (Cermak, 1984). Along similar lines, Lyon and Greenberg (1991) liken co-dependency to Horney's conceptualization of morbid dependency, or the neurotic need to secure and preserve affection, even at the high price of maintaining one's involvement in a destructive relationship.

Brown (1988, p. 59) views co-dependency as follows:

In its broadest sense, codependence describes individuals who organize their

> lives–decision making, perceptions, beliefs, values–around someone or something else. In relation to alcohol, codependence describes the individual (adult or child) who has become submissive to or controlled by alcohol as the central organizing principle in the family and/or the dominance of the alcoholic.

Other writers use the term co-dependency in reference to a diagnostically significant set of affective and behavioral difficulties (Friel & Friel, 1988). For example, Potter-Efron and Potter-Efron (1989, p. 39) define a co-dependent person as,

> . . . an individual who has been significantly affected in specific ways by current or past involvement in an alcoholic, chemically dependent, or other long-term, stressful family environment. Specific effects include: (a) fear; (b) shame/guilt; (c) prolonged despair; (d) anger; (e) denial; (f) rigidity; (g) impaired identity development; and (h) confusion.

Additional symptoms of co-dependency (those commonly endorsed by ACOAs) include low self-esteem (Gravitz, 1985; Lyon & Greenberg, 1991; Whitfield, 1989), compulsive overcontrol (Cermak, 1984; Friel & Friel, 1988; Mendenhall, 1989b), fear of abandonment (Cermak, 1984; Friel & Friel, 1988), difficulty acknowledging, identifying, and expressing feelings (Cermak & Rosenfeld, 1987; Friel & Friel, 1988; Mendenhall, 1989a), anxiety (Cermak, 1984), the use of ineffective and self-defeating coping strategies (Friel & Friel, 1988; Whitfield, 1989), low self-confidence (Cermak, 1984), stress-related problems (Cermak & Rosenfeld, 1987; Friel & Friel, 1988), and the subordination of personal needs (Cermak, 1984; Cermak & Rosenfeld, 1987; Mendenhall, 1989a, 1989b). Persons caught up in a co-dependent lifestyle may appear depressed, have a high threshold for pain, mistreat or neglect themselves, have trouble forming or maintaining satisfactory interpersonal relationships, and become addicts themselves (Friel & Friel, 1988). The co-dependent spouse is likely to mistake emotional enmeshment for intimate contact (Cermak & Rosenfeld, 1987). He or she may neglect responsibilities to family, work, and friends, be reluctant to

seek outside support or assistance, and fail to appraise situations/events realistically (Mendenhall, 1989a).

When alcohol becomes the central organizing principle of family life, the psychological, emotional, and spiritual growth/functioning of family members is impaired (Cermak, 1984; Whitfield, 1989). One result of total compliance with the needs, wishes, and beliefs of the alcoholic is the diminished capacity of the spouse and children to develop an independent identity and responsiveness to the dictates of the inner self (Friel & Friel, 1988; Mendenhall, 1989a; Whitfield, 1989). As Brown (1988, p. 60) observes,

> Individuals caught in a dysfunctional codependent position experience a loss of self as a major accomodation. Quite simply, people who spend their days reacting to another rather than following their own inner voice, will lose, or never develop, a sense of independent self. Instead, a false sense of self develops–one tied to the needs or dictates of the dependent person, and thus not easily recognized or relinquished.

The co-dependent lifestyle of the nonalcoholic spouse effects the children as well. They, too, learn that in order to gain love and approval from significant others, the development of an authentic and independent self must be stifled (Tainey, 1988). Children in alcoholic homes struggle to rescue adults in the hope that they, in turn, will be parented (Mendenhall, 1989a). To survive, they must repress their own childhood needs, protect the status quo, and assume parental duties and responsibilities (Erekson & Perkins, 1989; Mendenhall, 1989a). The same maladaptive patterns of coping evident in the marital relationship are incorporated into the sibling subsystem (Erekson & Perkins, 1989). Erekson and Perkins (1989) report that children raised in alcoholic homes are more likely than their peers to engage in aggressive and socially inappropriate behavior, have temper outbursts, argue with siblings, experience difficulties in school, and become delinquent (Erekson & Perkins, 1989).

These children resent the nonalcoholic parent, most often the mother, for abusing or neglecting them, failing to meet their needs, losing control over the situation at home, using them as confidants, drawing them into marital conflicts, manipulating them through guilt, and abdicating responsibility for the care of younger siblings (Priest, 1985).

Parenting

Erekson and Perkins (1989) note that the marital problems experienced by spouses in an alcoholic relationship are reflected in the parental subsystem. Although few studies address the association between the two, there does exist a moderate literature pertaining to parenting practices in the alcoholic home (Erekson & Perkins, 1989). To date, findings suggest that the conflict and hostility between partners is transferred to or displaced upon their interactions with the children (Crespi, 1990; Erekson & Perkins, 1989). This results in poor limit-setting, ambivalence in decision-making, erratic discipline, familial disorganization, emotional unavailability, scapegoating, and/or parental overprotectiveness (Erekson & Perkins, 1989). Conflict within the marital subsystem disrupts functioning in all areas of domestic life, causing family members to depend on crises to periodically re-establish and maintain their sense of connectedness (Erekson & Perkins, 1989).

As problems escalate, the roles of (and boundaries between) parents and offspring become confused, distorted, blurred, and/or reversed, resulting in the children's assumption of parental and household duties (Crespi, 1990; Erekson & Perkins, 1989; Nardi, 1981). During times of stress or tension, family members may take on rigid/inflexible roles (Cermak, 1990), with the children having inadequate knowledge of those behaviors most appropriate to meet situational demands (Nardi, 1981).

Nardi (1981) observes that the ambiguous, conflicted, and distorted pattern of role functioning common in alcoholic families may adversely influence the gender identification and sex-role socialization processes crucial to the formation of self-regard and inner-

directedness in youngsters. These children experience bewilderment as their mother assumes a position of dominance and authority within the family hierarchy, and their father, the stance of a child (Woititz, 1978). Under these circumstances, the alcoholic, most often the paternal figure, models socially inappropriate and functionally maladaptive behavior for male offspring (Woititz, 1978). Moreover, given the fact that daughters of alcoholics are more likely than their peers to marry alcoholics themselves (Woodside, 1986), it is reasonable to assume that they have learned to associate masculinity and autonomy with the use of alcohol (Woititz, 1978).

Parental inconsistency and unpredictability are well-documented in the professional literature as primary characteristics of the family environment in alcoholic homes (Ackerman, 1983; Brown, 1988; Crespi, 1990; Richards, 1989; Woititz, 1978, 1983). Given that the same action may be punished one minute and rewarded the next, depending on whether the parent is drunk or sober (Crespi, 1990; Stark, 1987), as well as the fact that roles, limits, and rules are constantly changing (Brown, 1988; Cermak & Brown, 1982; Cermak & Rosenfeld, 1987), the child is unable to anticipate the consequences of behavior (Cermak & Brown, 1982). This makes it difficult, if not impossible, to achieve a firm, secure, stable, and functionally adaptive self-concept and view of the world (Wilson & Orford, 1978), or to devote energy and attention to one's own personal development (Brown, 1988).

Thus, in alcoholic homes, neither parent consistently performs those functions (e.g., providing a stable adult role model for identification and mirroring) crucial to the development of the child's self-esteem and sense of identity (128, 23). As Greenleaf (1985, p. 65) notes,

> Whether they are alcoholic or co-alcoholic, parents whose self-esteem is poor will set a low ceiling on self-esteem in their families; if they are unsure of their ability to cope, they will be threatened by another's competence; if they feel inadequate, they will be

envious of others' achievements; if they are confused, they will bestow confusion on those around them; and if their expectations of themselves are unrealistic, they will have unrealistic expectations of others. If they hate themselves, they will have little love to give. They cannot give to their children, or to each other, what they themselves do not have.

Because the alcoholic is prone to mislabel problems, set arbitrary standards, abdicate responsibility for his/her behavior, function poorly in close intimate relationships, maintain emotional distance, adhere rigidly to decisions, isolate from or invalidate others, and act without planning (Mendenhall, 1989b), he/she models an immature, egocentric, dependent, and unreliable approach to dealing with others (Gravitz, 1985). From the nonalcholic parent, who may have become intolerant, manipulative, reclusive, self-denegrating, melancholy, overly-critical, and preoccupied in his/her attempts to cope with an alcoholic lifestyle (Mendenhall, 1989b), the children learn to be apprehensive, inflexible, angry, controlling, and other-directed (Gravitz, 1985).

Woititz (1978) and others (Gravitz, 1985; Hibbard, 1987; Potter-Efron, 1987; Wegscheider, 1981) identify additional characteristics, frequently those of the alcoholic him or herself, likely to prevail in alcoholic households, including low self-esteem, the inability to cope with frustration, compulsivity, perfectionism, expansiveness or grandiosity, polarized/dichotomous thinking, and a tendency to challenge authority. COAs are taught, by example, to evaluate others in a harsh and unjust manner, avoid dealing openly with feelings, and refrain from discussing domestic matters outside the home. Frequently, they function without the benefit of proper socialization or knowledge of the benchmarks for normal behavior (Crespi, 1990; Nardi, 1981; Tharinger & Koranek, 1988).

The Alcoholic Family Environment

Alcoholic families are often those burdened by physical and/or sexual abuse (Black et al., 1986; Crespi, 1990; Giglio & Kaufman, 1990; Russell et al., 1985; Stark, 1987). Even in cases where family members are nonviolent, the domestic milieu may range from unpredictable (Brown, 1988; Vannicelli, 1989; Woodside, 1988a) to chaotic and perilous (Cermak, 1990; Gravitz & Bowden, 1984; Miller & Tuchfeld, 1986). These are families prone to gross disorganization (El-Guebaly & Offord, 1977), breakdown (Jacob et al., 1978), trauma and adversity (Rubio-Stipec, Bird, Canino, Bravo, & Alegria, 1991), financial instability (Schumrum & Hartman, 1988), medical illness/injury (Schumrum & Hartman, 1988), and parental absence or death (Schumrum & Hartman, 1988; Williams, 1990). Consequently, the domestic atmosphere in alcoholic homes is characterized by tension (Stark, 1987; Woititz, 1983; Woodside, 1988a), hostility (Gravitz, 1985), anxiety (Stark, 1987; Woititz, 1983), insecurity (Woodside, 1988a), confusion (Crespi, 1990; Stark, 1987), fear (Woodside, 1988a), secrecy (Cermak, 1990; Hibbard, 1987), pain (Potter-Efron, 1987; Woodside, 1988a), and rigidity (Deutsch, 1985).

The communication between family members in alcoholic households is conflicted (Tharinger & Koranek, 1988; Wilson & Orford, 1978), ranging from silence and defensive withdrawal (Balis, 1986; Stark, 1987) to violent quarreling (Hyphantis et al., 1991; Tharinger & Koranek, 1988), coercion (Crespi, 1990), and ridicule (Crespi, 1990). Children are discouraged from asking questions (Gravitz, 1985) or jeopardizing the family's privacy (secrets) by assuming a visible position outside the household (Woodside, 1988a).

The use of effective strategies for problem-solving and conflict resolution are also lacking (Crespi, 1990). Rather than settle disagreements through verbal negotiation and compromise, parents and children are prone to yell at, criticize, and blame one another (Crespi, 1990). Jacob, Krahn, and Leonard (1991) found "distressed" (depressed and

alcoholic) parent-child dyads to be less intent on working toward problem resolution, and less likely to initiate solution-oriented behaviors than controls.

Therefore, alcoholic fathers may be less apt than others to model effective problem-solving skills (Jacob et al., 1991). As Sher (1991, p. 158) reports,

> Strong relationships have been found between parental acceptance, empathy, and support, and adolescent ego development. Parents with greater awareness of self and appreciation of individual differences are likely to explain more to, and problem-solve with, their adolescent children. These types of interactions are presumed to be helpful in the development of autonomy and may well be absent in some alcoholic families.

As noted above, the relationship between family members in alcoholic homes is problematic at best (Hyphantis et al., 1991). Because the alcoholic is the primary focus of attention (Berlin et al., 1988; Cermak, 1990; Vannicelli, 1989; Woodside, 1988a) the children's needs are likely to go unmet (Crespi, 1990; Gravitz, 1985), leaving them to feel unloved, rejected, and insignificant (Woodside, 1988a). Again, Jacob et al. (1991) found the interaction between distressed fathers and their children to be less affable and relaxed than that of a nonclinical sample. Sibling relationships in alcoholic households, too, are disrupted, as youngsters vie for parental recognition (Berlin et al., 1988; Priest, 1985).

Also contributing to the dysfunctional nature of relationships within alcoholic homes is the repeated violation of interpersonal (emotional/physical) and subsystem boundaries (Crespi, 1990). In these families, there is little privacy or regard for individual differences (Cermak, 1990), and the interaction between individuals is characterized by marked intrusiveness or relative isolation, depending on the alcoholic's state of sobriety (Richards, 1989).

This overlap in emotional boundaries between family members makes it difficult for adolescents to separate from their family of origin (Brown, 1988). Protinsky and Ecker

(1990) note the tendency of COAs to demonstrate more emotional enmeshment and less individuation than their peers from nonalcoholic homes. As a result, they are less able to achieve a clear, well-developed sense of identity (Protinsky & Ecker, 1990) and self-esteem (Crespi, 1990).

Disturbed relationships and the violation of interpersonal boundaries are but two of the sources of strain experienced by alcoholic families (Cermak & Rosenfeld, 1987). Others include physical/mental illness, parental unpredictability, insufficient familial structure/control, the demodulation of inate drives toward sex and aggression, and the absence or loss of a parent (Cermak & Rosenfeld, 1987; Richards, 1989).

Not surprising, then, is the fact that these families are subject to greater stress than their nonalcoholic counterparts (Roosa et al., 1989). Cermak and Rosenfeld (1987) believe that the degree of stress experienced by COAs is generally underestimated and that symptoms of Post Traumatic Stress Disorder (PTSD) may develop if the stress is chronic, related to a series of incidents, associated with human contact, and occurring within the context of a closed social system (one restricting access to new information or options).

The trauma experienced by those in an alcoholic family meets all of these criteria. Adolescents raised by substance abusing parents report a higher incidence of undesirable life events, and depict these as more negative, than their peers from non-chemically-dependent households (Brown, 1989). Along similar lines, Roosa, Sandler, Gehring, Beals, and Cappo (1988) found COAs to report more negative, and fewer positive, life events than other children. In addition, scores on the life event scales (both positive and negative) were found to correlate with indices of anxiety and depression. These findings may explain, in part, why COAs are at greater risk than other youth for the development of stress-related disorders (Brown, 1989). As Roosa et al. (1989) note, an alcoholic family environment represents one of the most prevalent causes of stress/strain in children.

All youngsters raised by an alcoholic experience guilt (Woodside, 1988a) and shame (Brown, 1988), mistakenly assuming that they are responsible for causing or perpetuating the problem (Gravitz, 1985; Morehouse, 1984; Woodside, 1988a). Acutely aware of the social stigma attached to the uncontrolled use of substances, and accepting society's view of addiction as evidence of moral bankruptcy, they come to identify closely with the alcoholic parent and begin to internalize shame for him or her (Hibbard, 1987; Wood, 1987). Potter-Efron (1987) defines shame as the belief that one is defective, and guilt as an affective response to the violation of one's own personal standards. This author contends that,

> The most problematic shame issues are those which strongly affect identity and compassion for the self–a kind of compassion the adult child has likely never seen, and certainly not mastered. These guilt and shame issues are difficult to assess and to treat in a manner which allows a person to maintain self-forgiveness, forgiveness of others and a healthy sense of self over time. (Potter-Efron, 1987, pp. 41-42)

The guilt and shame felt by those in an alcoholic family serve to strengthen their use of denial as a major defense against reality (Potter-Efron, 1987). Brown (1988) notes that the behavior, perceptions, feelings, interactions, and identity of family members become predicated on their refusal to acknowledge alcohol addiction as the principle source of ongoing problems. This, in turn, leads to isolation from prospective outside means of information, assistance, and support (Wood, 1987).

Children raised in an alcoholic environment are reluctant to bring their friends home (Crespi, 1990; Priest, 1985; Stark, 1987). Because they are less likely than their peers to become involved in extracurricular activities, athletics, recreational events, social functions, and hobbies (Priest, 1985; Wilson & Orford, 1978), lack the social and informational support/instruction needed to offset the effects of a troubled family situation (Clair & Genest, 1987; Tainey, 1988; Williams, 1990), and are less apt to utilize human resources during

childhood (Black et al., 1986; Giglio & Kaufman, 1990), these youngsters are at heightened risk for maladjustment (Clair & Genest, 1987). As Black et al. (1986, p. 227) report,

> The reasons that may influence this lack of utilizing support systems are: (1) children feel ashamed and embarrassed about their parents' alcoholism; (2) the children may feel that they would be betraying their parent/family members; (3) they are confused and may not be able to identify the problem; (4) a significant family member (usually parent, older siblings) may have told them not to talk to others; (5) they believe circumstances at home may worsen if they talk about significant issues to others; (6) there may be no role models for clear and open communication; (7) the child's perceptions are rarely validated and may be discounted, leaving the child to feel fear, shame, and/or guilt; and (8) fear of rejection.

In summary, an alcoholic home environment has been shown to adversely effect the adjustment and functioning of children in a myriad of ways (Rubio-Stipec et al., 1991; Seilhamer & Jacob, 1990; Woititz, 1978). Discussed in the next section are the types of problems (e.g., developmental, cognitive, emotional, behavioral, and social) COAs experience as they attempt to cope with the devastating consequences of parental substance abuse.

The Effects of an Alcoholic Home Environment on Children

Children of alcoholics, compared with youngsters from nonalcoholic homes, view their families as less functional, cohesive, systematized, and intellectually-oriented (Clair & Genest, 1987). Unaccustomed to a home filled with fun and enjoyment, they are apt to regard their own family environment as less preferable than that of their peers (Wilson & Orford, 1978).

These children are distressed more by the conflict and tension between family members, than by the adult use of substances per se (Ackerman, 1983; Stark, 1987). As

Deutsch (1985) contends, in at least some cases (those in which physical abuse or neglect are inoperative), the detrimental effects of parental alcoholism are due more to the way children construe their caretaker's behavior, than to the behavior itself.

Children of alcoholics react to a disturbed, chaotic, and potentially dangerous home environment with anger, fear, and grief (Priest, 1985). Rage toward the alcoholic for his/her mistreatment of others and failure to recover, the co-dependent parent for refusing to acknowledge reality, and themselves for being helpless to rectify the situation, combined with sadness over the loss of a fully functioning parent, contributes to their perception of the world as an unsafe place (Priest, 1985). As Priest (1985) notes, these children are likely to develop a deeply ingrained fear of repudiation, abandonment, and injury.

Survival Mechanisms

Children, like adults, employ a host of psychological and behavioral defense mechanisms to cope with problematic situations. So it is with COAs. Because these youngsters react to parental alcoholism in different ways (Nardi, 1981), the self-protective methods they use may vary from denial (Stark, 1987), emotional indifference (Stark, 1987), and unquestioning silence (Black, 1979) to active avoidance (Clair & Genest, 1987), compulsive overachievement (Robinson, 1989), purposeful deception (Stark, 1987), and hollow boasting (Stark, 1987). While such strategies enable an individual to survive in a hostile, unpredictable, or otherwise threatening environment by directing attention away from internal processes and onto the environment, they are apt to result in a lessened capacity for growth through introspective self-exploration (Balis, 1986).

COAs also survive the devastating effects of parental substance abuse by assuming compensatory roles within the family system (Crespi, 1990; Nicholson, 1985; Wegscheider, 1981; Woititz, 1983). Black (1979, 1990) describes four such roles (the responsible child, the adjuster, the placater, and the acting-out child) as follows.

The responsible child functions as a parent to others. He/she provides structure, organization, continuity, and stability within the family system by making decisions and establishing goals. Although achievement-oriented and self-disciplined, children who assume the responsible role have unrealistically high expectations of themselves and others, have difficulty anticipating long-range consequences, and are reluctant to seek needed support or assistance.

The adjuster is the child who attempts to remain anonymous within the family setting, hesitating to become emotionally invested in domestic affairs. Youngsters assuming this role project a flexible and even-tempered facade in order to cope with parental unpredictability. Sometimes seen as aloof and withdrawn, they are apt to be indecisive, lacking in leadership skills, and unable to identify behavioral alternatives or options.

The placater is what Black (1990) calls "the household social worker", as this is the child best known for his/her nurturant and empathic approach to others. Intent on resolving conflicts, minimizing problems, and providing comfort where needed, this youngster is likely to be self-sacrificing, extraordinarily tolerant of unacceptable behavior, and apprehensive over the possibility of failure.

The acting-out child provides an outlet for the family's unwanted and forbidden impulses. He/she functions as the scapegoat for domestic problems, drawing attention away from the primary source of upheaval, parental alcohol use. While seen as rebellious, troublesome, irresponsible, noncompliant with instructions, lacking in social skills, and unable to work cooperatively with others, the child assuming this role is also innovative and unfettered by denial.

Friel and Friel (1988) identify other roles assumed by children of alcoholics including: (1) the do-er, who serves a regulatory function, (2) the enabler, who meets the family's need for love, acceptance, and affiliation, (3) the hero, who supplies others with a vicarious sense

of accomplishment/self-regard, (4) the mascot, who offers relief through humor, (5) the lost child, who represents the need for privacy and independence, and (6) the saint, who preserves the family's spiritual well-being.

Mucowski and Hayden (1988) discovered an association between learning style (e.g., avoidant and dependent) and two of the childhood roles identified by Black. Youngsters assuming the placater role were found to be dependent learners, requiring excessive guidance and direction, relying on others to structure their learning experience, and taking little responsibility for their own educational development. Children assuming the acting-out role displayed an avoidant learning style, refusing to become involved in academic activities and avoiding failure or loss by sabotaging their own chances for success.

Black (1979) and others (Balis, 1986; Miller & Tuchfeld, 1986; Tharinger & Koranek, 1988) contend that the coping skills used by children of alcoholics during childhood have adverse consequences for their adjustment and functioning as adults. Locked into rigid role behavior, ACOAs find themselves unable to take chances (Gravitz, 1985), express feelings honestly and openly (Nardi, 1981), behave in a spontaneous or flexible manner (Gravitz, 1985), make choices (Gravitz, 1985), find meaning/purpose in their lives (Black, 1979), and develop or maintain healthy intimate relationships (Black, 1979).

For example, as adults, responsible children have difficulty placing faith in others and, due to their exaggerated need for control, experience problems in social and occupational situations (Black, 1979). They may limit their interactions with the environment, becoming highly proficient/skilled in one area and cognitively and/or emotionally underdeveloped in others (Brown, 1988). In most cases, their sense of responsibility is outwardly directed (Balis, 1986). Balis (1986, p. 79), in reference to the adult child of an alcoholic, notes that, "When he focuses inward, toward himself and his own internal life, this intensely felt sense

of responsibility evaporates leaving him feeling helpless and victimized, blaming the environment, others, 'life' for his unhappy condition."

Problems During Childhood

Several decades of empirical research have shown support for the association between parental alcoholism and childhood psychopathology (Russell et al., 1985; West & Prinz, 1987). Children of alcoholics are at increased risk for a wide array of adjustment and mental health problems (Giglio & Kaufman, 1990; Roosa et al., 1989; Russell et al., 1985; Woititz, 1978), although findings are, at times, nonspecific and/or contradictory (El-Guebaly & Offord, 1977; Windle, 1990). While the adverse consequences of an alcoholic upbringing are most often psychological (Deutsch, 1985),

> Children who grow up in homes where alcohol and drugs are abused are at risk of developing physical, developmental, and/or psychological problems that may surface in school as attention-deficit disorders; in law enforcement agencies as child abuse, incest, or neglect; or at doctors' offices as fetal alcohol syndrome or other alcohol-related birth defects. (Towers, 1989, p. 15)

Richards (1989, pp. 94-95) identifies three categories of problems experienced by COAs as a result of what she terms parental role instability, parental undependability, environmental chaos, and emotional unavailability. These include "poor self-esteem" (e.g., "high tolerance for unacceptable behavior, compulsive overachievement"), "unclear personal responsibility" (e.g., "difficulty leaving home, pseudomaturity, people pleasing, unrealistic expectations of others") and an "impairment in the regulation of the instinctual drives, sex and aggression" (e.g., "controlling behaviors, attachment to chaos, low tolerance for feelings of loss, anger and disappointment"). Jacob et al. (1978, p. 1235) add to this list by citing ancedotal findings which suggest, " . . . that children of alcoholics reflect problems in identity formation, personality development, role performance, and the ability to form relationships."

Empirical research provides support for the relationship between parental alcoholism and childhood problems such as hyperactivity (Pihl, Peterson, & Finn, 1990; Russell et al., 1985; West & Prinz, 1987; Williams, 1990), attention deficit disorder (Brown, 1988; Pihl et al., 1990), poor concentration (Wilson & Orford, 1978), impulsivity (Williams, 1990), oversensitivity to auditory/visual input (Pihl et al., 1990), and neuropsychological impairments (Hibbard, 1989).

Other troubles to which children of alcoholics are prone include temper outbursts (Jacob et al., 1978), argumentativeness (Robinson, 1983), suicidal ideation and/or gesturing (Deutsch, 1985; Gravitz, 1985; Werner, 1986), eating disorders (Gravitz, 1985), drug and alcohol use (Werner, 1986), moodiness (Brown, 1988; Pihl et al., 1990), social isolation (Robinson, 1983), and a lack of self-assuredness (Stark, 1987). In addition, they are apt to have difficulty formulating long-range goals (Robinson, 1983), developing and utilizing effective problem-solving strategies (Priest, 1985), relinquishing control when appropriate (Miller & Tuchfeld, 1986), and trusting others, particularly authority figures (Jacob et al., 1978; Miller & Tuchfeld, 1986; Priest, 1985).

Compared to their peers, children of alcoholics are less likely to be in good health. They are more prone to illness (Priest, 1985), accidents (Williams, 1990), stress (Woititz, 1978), depression (Deutsch, 1985; Wilson & Orford, 1978), anxiety (Wilson & Orford, 1978; Woititz, 1978), emotional disturbance (El-Guebaly & Offord, 1977), somatic complaints (El-Guebaly & Offord, 1977; Robinson, 1989; Williams, 1990), and developmental disorders (Wilson & Orford, 1978), are seen more often at outpatient clinics (El-Guebaly & Offord, 1977), are more frequently hospitalized (Woodside, 1988a), require greater support (Woititz, 1978), utilize fewer productive strategies for coping (Wilson & Orford, 1978; Woititz, 1978), and have a poorer attendance record at school (Woititz, 1978).

Lastly, COAs are more likely than youngsters from nonalcoholic homes to exhibit problematic (El-Guebaly & Offord, 1977), delinquent (Hibbard, 1989; Woititz, 1978), conduct-disordered (Williams, 1990; Wilson & Orford, 1978), atypical (Woititz, 1978), and aggressive (Jacob et al., 1978; McKenna & Pickens, 1983) behavior, be sexually confused (Woititz, 1978), suffer from low self-esteem/acceptance (Deutsch, 1985; Williams, 1990; Woititz, 1978), and experience difficulties in school (Jacob et al., 1978; Williams, 1990; Wilson & Orford, 1978; Woititz, 1978).

School Performance

Children of alcoholics, from the start, face obstacles likely to compromise their chances for academic success (Towers, 1989). One such impediment may be what Towers (1989) terms educational neglect–a lack of parental interest in or support for the child's progress in school (e.g., attendance, completion of homework assignments).

Although COAs are more likely than other youngsters to perform poorly (Hyphantis et al., 1991; Wilson & Orford, 1978), and to achieve lower scores on measures of intelligence (West & Prinz, 1987), academic achievement (Marcus, 1986), verbal and nonverbal reasoning (Sher, 1991), spatial ability (Sher, 1991), and neuropsychological functioning (West & Prinz, 1987), some may become compulsive overachievers, in an attempt to generate affirmative feedback (Priest, 1985) and produce what they see as tangible evidence of their own self-worth (Crespi, 1990).

Priest (1985) identifies other problems apt to be experienced by COAs during their school years including truancy, attrition, low motivation, impaired concentration due to anxiety, feelings of hopelessness for the future, and a fragmented educational history caused by parental relocation. Although often performing at a level below that of which they are capable (Robinson, 1983), COAs are prone to learning disabilities (Brown, 1988; Gravitz, 1985; Stark, 1987; Werner, 1986) and have less occasion to develop or enhance their

abilities/interests (Robinson, 1983). These youngsters find it difficult to establish and maintain friendships (Woititz, 1983) or interact productively with peers (Wilson & Orford, 1978).

West and Prinz (1987, p. 210) conclude their review of the professional literature on the academic performance of COAs with the following statement:

> To summarize, we found that investigations of the relation between parental alcoholism and children's school performance suggest moderate adverse effects. . . . evidence indicates that children of alcoholics as a group may display increased rates of hyperactivity, conduct disorder, delinquency, and truancy and may be at increased risk for suffering from abuse and neglect, parental discord, divorce, and criminality. All these factors may contribute to poor school performance, making it difficult to detect the relative impact of parental alcoholism independent of these other influences.

Sons of Male Alcoholics

Sons of male alcoholics (SOMAs) are one subgroup of COAs receiving special attention in the literature. At heightened risk for the development of social, emotional, cognitive, and behavioral problems, these children may be genetically predisposed to substance abuse; show deficits in verbal, linguistic, abstract, and problem-solving ability; perform poorly in school; be resentful of authority figures; respond in an aggressive/oppositional manner; and be depicted as hyperactive and conduct-disordered (Pihl et al., 1990).

Knowles and Schroeder (1990) note a general elevation in the MMPI profiles of male COAs, particularly on those scales reflecting interpersonal/familial difficulties, somatic complaints, and peculiarities in sensory/motor functioning. The clinical observation of SOMAs (Jacob et al., 1978; Schulsinger, Knop, Goodwin, Teasdale, & Mikkelsen, 1986; Whipple & Noble, 1991) reveals them to be impulsive, dependent, socially withdrawn,

apprehensive, insecure, avoidant, and unlikely to anticipate consequences/events. These are youngsters more apt than their peers to experience a disorganized and chaotic family environment, be referred (within the school setting) for psychotherapeutic services, fail a grade, and attend more than one school (Knop, Teasdale, Schulsinger, & Goodwin, 1985).

Lastly, Tarter, Hegedus, Goldstein, Shelly, and Alterman (1984) compared the performance of young males from alcoholic and nonalcoholic homes on a variety of psychological measures. Sons of alcoholics were found to show deficits in memory, perceptual/motor functioning, linguistic ability, and reading comprehension, in addition to revealing more neurotic tendencies.

In summary, children of alcoholics experience a wide range of cognitive, social, emotional, and behavioral difficulties as a result of being raised in a dysfunctional and chaotic home environment. Due to the ongoing nature of these problems, the ability of COAs to master the critical developmental tasks of adolescence is impaired. As Crespi (1990, p. 17) states,

> The adaptive consequences of drinking and alcoholism, then, are simply enormous and the effect on children is devastating. Alcoholism, similar to other diseases, destroys many healthy parts of the affected person. For the children this means the parent cannot be trusted and that they become unpredictable. But, because children don't understand that these behaviors, in most cases, are a reaction to alcohol addiction, they cannot hope to cope with the effect on their own self-esteem. All they feel is the lack of love, the strength of the broken promises, and the destructiveness . . . So, for children who become adult children who have lived with alcoholism, the foundation upon which to build a new life is less than stable. It is one of the weakest foundations upon which to build a life.

The Effects of an Alcoholic Home Environment on Adolescents

The wide range of problems experienced by COAs during childhood continue on into the adolescent and young adult stages of development. Owing to the effects of an alcoholic environment, as these youngsters enter puberty, they are at increased risk for substance abuse (West & Prinz, 1987), delinquency (West & Prinz, 1987; Wilson & Orford, 1978), academic failure (West & Prinz, 1987), difficulties in adjustment (Towers, 1989), and characterological abnormalities (Wilson & Orford, 1978). COAs are more often the recipients of psychological, medical, judicial, and corrective services (Gravitz, 1985), and are more likely than their peers to be arrested or involved with the authorities (Wilson & Orford, 1978). As teenagers, they may appear self-sufficient, socially isolative, impulsive, oppositional, lacking in social skills, and unable to form satisfactory relationships with adults or peers (Priest, 1985; Russell et al., 1985).

Because COAs have yet to master the critical developmental tasks of infancy and childhood (described below), as adolescents, they experience considerable difficulty separating from their families of origin and developing an independent, well-integrated, and fully-functioning sense of self.

Stages of Psycho-Social and Personality Development

Friel and Friel (1988) use the theoretical framework developed by Erik Erikson to explain the effects of a dysfunctional family environment on the psychosocial functioning of children, adolescents, and adults. Erikson (cited in DiCaprio, 1974) identifies the initial four stages of personality development as follows: Trust versus Mistrust (birth to 1 year), Autonomy versus Shame and Doubt (1 to 3 years), Initiative versus Guilt (4 to 5 years), and Industry versus Inferiority (6 to 11 years).

If in the first stage, Trust versus Mistrust, the child's basic needs are met in a consistent and predicable fashion, he/she will come to view the environment (and those in it) as safe and

good (Friel & Friel, 1988). When, however, the child's caretakers are unable to provide warmth, nurturance, comfort, and security (as in the case of parental abuse or neglect), he/she will experience the world as a hostile and threatening place where one must struggle to survive (Friel & Friel, 1988).

The child's task during the second stage of development, Autonomy versus Shame and Doubt, is to achieve a sense of separateness and explore the environment while maintaining trust in others (Friel & Friel, 1988). Here, if the parent is critical, overprotective, lax in providing structure, or unavailable to safeguard him/her from harm, the child will develop feelings of inadequacy, shame, and doubt (Friel & Friel, 1988).

During the third stage, Initiative versus Guilt, the child begins to systematically manipulate the environment by initiating activities, influencing others, making choices, and testing his/her potential (Friel & Friel, 1988). If the youngster is discouraged from taking risks, harshly criticized for making mistakes, or required to sacrifice his/her needs in service of others, he/she will become indecisive, self-critical, and other-focused (Friel & Friel, 1988).

At the age of six, the child enters the fourth stage of personality development, Industry versus Inferiority. It is during this phase that the youngster learns cooperation and basic work skills (Friel & Friel, 1988). He/she must find a way to fulfill personal needs in a socially acceptable manner (Friel & Friel, 1988). Other critical tasks include the development of a sense of competence, productivity, self-esteem, self-efficacy, and pride in one's accomplishments (Friel & Friel, 1988). If the child is provided with effective role models (Friel & Friel, 1988) and is acknowledged/reinforced for his/her efforts (Robinson, 1989), he/she will become confident and industrious. In alcoholic or otherwise dysfunctional families, however, the child is kept from mastering these critical tasks by parental criticism, possessiveness, and inflexibility (Friel & Friel, 1988). When viewed as a failure in comparison to others, or given the message that he/she is inadequate, unacceptable, unloved,

or insignificant, the youngster develops feelings of low self-worth and inferiority which impede the process of identity formation and oftentimes result in a self-fulfilling prophecy (Ackerman, 1983).

Marking the transition from childhood to adolescence is the increasing capacity for abstract thought. Brown (1988, p. 180) describes this process as follows:

> The adolescent masters or attempts to control many of the emotional ambiguities and wide inconsistencies through the cognitive move into formal operations, the highest level of cognitive development which includes formal logic and abstract reasoning abilities. Most importantly, the advance to this level includes combinatorial thinking, the ability to merge apparently contradictory or polar opposites and therefore to integrate much more complex ideas and information about the self and the environment. In the affective sphere, the young adult can scan the range of feeling, determining what is real and integrate opposites.

During early adolescence, the individual enters the stage of development which Erikson (cited in DiCaprio, 1974) terms Ego Identity versus Role Diffusion (ages 12 to 20). Here, the primary task is to develop one's sense of identity as a separate and autonomous person. This stage is divided into two subphases (Erikson, cited in Friel & Friel, 1988). The first of these, *crisis*, involves the adolescent's questioning (and rejection) of parental beliefs, values, choices, and lifestyle. In the second subphase, *commitment*, he/she makes definite decisions regarding his/her own beliefs, standards, and preferences, and establishes an independent identity by acting upon them.

Marcia (1966, 1967, 1968) describes four possible outcomes of the identity formation process–identity achievement, moratorium, foreclosure, and identity diffusion–each characterized by the "presence or absence of crisis and extent of commitment in the two areas of occupation and ideology . . . " (Marcia, 1967, p. 119). The *identity achievement* status is

accorded those adolescents who, having undergone a period of crisis, make a firm and clear commitment to a particular occupation and set of beliefs. These individuals make choices based on their own interests, needs, and abilities. The term *moratorium* is used to denote the status of adolescents attempting to resolve the discrepancy between parental, societal, and self-expectations. These individuals are actively engaged in the occupational decision-making process, but have yet to make a firm vocational or ideological commitment. *Foreclosure* refers to the status of adolescents who, rather than facing the identity crisis, comply with long-standing parental expectations regarding their choice of career. *Identity diffusion* typifies the ego state of adolescents showing no desire or attempt to commit to a particular occupation or perspective (although they may or may not have undergone a period of crisis).

Thus, it is during adolescence that the individual must expand and integrate dimensions of the self (e.g., cognitive, social, emotional, and behavioral) to form a cohesive, mature, and independent sense of identity (Brown, 1988)

Theorists, researchers, and clinicians use the term identity in reference to the fundamental knowledge or beliefs one possesses regarding the self (Brown, 1988). Friel and Friel (1988, p. 123) provide a comprehensive definition of this construct as follows:

> By identity we mean one's self-definition. We mean self-knowledge of, and commitment to, a set of values, beliefs, behaviors, and lifestyle. Our identities include what we like and don't like, what risks we are willing to take, what we believe in, both religiously and philosophically, as well as politically and scientifically. Identity includes our sexual behaviors and feelings, our career choices, and satisfaction or dissatisfaction with them, whether we choose to be parents or not. Whether we choose to go to church or not. Whether we choose to be in a spouse or lover-type of relationship. What we like to do with our free time. Whether we are alcoholic or

cocaine addicted or sexually addicted or running addicts are also part of our identities, as is whether or not we are recovering from these addictions or are still acting them out.

As a by-product of early experience, the child begins to form a set of cardinal assumptions upon which to build a working knowledge of the self and the environment (Brown, 1988). Crucial to the individual's intellectual, emotional, and social development, and thus to the process of identity formation, is the nature and quality of his/her attachment to parental figures (Brown, 1988). Through imitation and identification, the child develops core beliefs regarding the self and others which are then used to organize and regulate his or her cognitive, affective, and behavioral experience in adolescence and adulthood (Brown, 1988).

Undependable and chaotic self-object relationships in infancy and childhood result in a multitude of problems during the later stages of development (Wallace, 1990). In alcoholic and other severely troubled families, the child assumes the lion's share of responsibility for parental dysfunction, attributing its cause to his/her own self-perceived inadequacies (Cermak & Rosenfeld, 1987). While the youngster then (mistakenly) feels that he/she can control what happens to him/her under traumatic, unpredictable, or potentially harmful circumstances (Cermak & Rosenfeld, 1987), the internalization of parental psychopathology is damaging to the developing psychic core (Wood, 1987). In reference to the clinical and psychiatric literature on personality development, Wood (1987, p. 38) states,

> The overwhelming conclusion of this body of theory is that the psychic core-be it ego or self-is profoundly influenced by the character of an individual's early relationships with significant others, especially parents. Through the processes of introjection and identification, others, parts of others, and crucial self-other interactions are taken into the psyche and become a part of its fundamental structure. To the extent that the others are "bad"–neglectful, abusive, unempathic, exploitative–the parts of the psychic structure that are linked to them are split off from the psychic core and from each other.

> This inhibits further growth and individuation and causes the individual to become stuck, or frozen, in pathological patterns of behavior and self-other relationships learned with parents. It also depletes self-esteem, interferes with the experience and expression of the "true" self, and stimulates feelings of fragmentation, unreality, and hopelessness. This syndrome of complaints neatly embodies the principal complaints of most adult children of alcoholics who enter treatment, and there is much to be gained by viewing their problems as impairments of core structures in the psyche.

In summary, theorists are in general agreement with Erikson (cited in Friel & Friel, 1988, and Towers, 1989) who contends that adaptive functioning in the later stages of adolescence and adulthood (e.g., the establishment of an independent identity, risk-taking, decision-making, and preparation for the future) depends on the mastery (and resolution) of critical developmental tasks/crises in childhood (Ackerman, 1983; Brooks, 1985; Windle & Searles, 1990).

Failure to Master the Critical Developmental Tasks of Adolescence

Because COAs experience a profound disturbance in their relationship with, and attachment to, parental figures during childhood, they are largely unequipped to master the developmental tasks of adolescence and early adulthood (Wallace, 1990). As Ackerman (1983, p. 67) states,

> For many children of alcoholics the crises confronted in successive stages are compounded by unresolved problems left over from previous stages, plus the continuing stresses caused by living with an alcoholic parent. This compounding effect can have detrimental consequences for adequate personality development.

Forced to assume responsibilities beyond their years, these children have little time or energy to devote to their own growth (Miller & Tuchfeld, 1986; Wood, 1987). Not uncommon, then, is the fact that COAs experience difficulty separating from their families of

origin, choosing and preparing for a vocation, making/honoring commitments, maintaining healthy intimate relationships, building a sense of competence, self-efficacy, and personal worth, and establishing an authentic, mature, and independent identity (Windle & Searles, 1990; Wood, 1987).

Identity Formation

Consistently documented in the literature is the failure of COAs to form a realistic, stable, autonomous, and well-integrated sense of identity (Brown, 1988; Crespi, 1990; Morehouse, 1984; Woititz, 1983). Because the alcoholic family environment is characterized by emotional enmeshment, boundary violations, conflicting and ambiguous messages, inadequate role modeling, denial, and parental unpredictability, the adolescent is unable to accurately assess situations, develop reasonable expectations of self and others, anticipate the consequences of behavior, or form a self-concept free of distortion (Brown, 1988; Crespi, 1990; Morehouse, 1984; Schumrum & Hartman, 1988; Woititz, 1983). As Brown (1988, p. 180) observes,

> The predominance of primitive defense mechanisms and adaptations in the alcoholic family–especially denial–interferes with the progression to these higher levels of cognitive development in areas of conflict. Denial limits the range of what can be recognized, explored, and ultimately integrated.

Also impeding the process of identity development in COAs are feelings of unimportance, inadequacy, self-loathing, and guilt (Crespi, 1990; Potter-Efron, 1987; Priest, 1985). These children learn to mistrust and invalidate their own perceptions, judgements, and abilities (Brown, 1988). They identify strongly with the alcoholic parent, who is often viewed as a failure (Brown, 1988), and are prone to experience a chronic fear of abandonment and disapproval (Potter-Efron, 1987). Also, as mentioned previously, in an effort to cope, COAs may assume compensatory roles within the family system which

preclude the development of a true and independent sense of self (Nardi, 1981; Schumrum & Hartman, 1988).

The quality of one's relationship with others is of major importance in the development of self-esteem (Priest, 1985). Because the interaction between family members in an alcoholic household is conflicted and/or impoverished (Priest, 1985), COAs may become overly dependent on their peers for nurturance, recognition, and a sense of identity (Morehouse, 1984). These friendships are likely to be strained, however, by the tendency of COAs to be hypersensitive, over-reliant, inflexible, and demanding (Morehouse, 1984).

Separation-Individuation

As mentioned above, one task of all adolescents is to separate from their family of origin by establishing a fully-functioning and autonomous sense of self. Hindered by extreme loyalty (Berlin et al., 1988), parental unpredictability in response to detachment (Morehouse, 1984), and a fear of potential or ongoing harm to remaining family members (Morehouse, 1984), children of alcoholics undergo a long, arduous, and often traumatic struggle in their attempt to achieve independence (Berlin et al., 1988; Wood, 1987).

Alcoholic families are likely to perceive the adolescent's requirement for separation-individuation as a sign of rejection, abandonment, or loss (Berlin et al., 1988). At the root of this problem is a disruption in the developmental groundwork needed to prepare the child for autonomous functioning in adulthood (Brown, 1988). Children of alcoholics lack firm, stable, and secure core attachments from which to separate without fear of misfortune (Brown, 1988). Given their unfulfilled needs for nurturance and protection (Morehouse, 1984), these youngsters are unable to achieve the emotional maturity (Brown, 1988), realistic self-perspective (Brown, 1988), and genuine sense of individuality (Wood, 1987) required to successfully negotiate the critical tasks of adolescence (separation and identity formation).

> Embarrassed and ashamed, they often enter adolescence isolated. As teenagers, they are unable to develop adequately the social skills and attitudes necessary for separating from the family and establishing their own identity. As they limp into adulthood, they often leave a trail of poor relationships and they have difficulty with intimacy. They often feel unable to meet life's challenges adequately, even when they are. They feel different; they feel frightened; they feel misunderstood. (Gravitz, 1985, pp. 15-16)

Berlin et al. (1988) identify six fantasies to which COAs are subject. These fantasies are likely to obstruct the separation process by precluding the development of more adaptive/realistic means for coping, perpetuating a distorted view of self and others, and replicating the dysfunctional patterns of interaction operative within the family system.

Nurturance fantasies cause the adolescent to become overly dependent on others for his/her own well-being, while *self-sufficiency fantasies* distance him/her from potential sources of assistance and support. *Incompetence fantasies* allow the youngster to assume the "victim" role by promoting others' view of him/her as weak, undependable, and helpless. *Perfectionistic fantasies* result in unrealistic expectations of self and others, an exaggerated need for control, and the appearance of invulnerability. *Revenge fantasies* channel the adolescent's time and energy in an unproductive direction by fostering an internal pre-occupation with hostile and retaliatory thoughts toward parental figures. *Corruption-redemption fantasies* represent the child's wish to magically transform self-perceived shortcomings (e.g., forbidden impulses, behavioral undercontrol, emotional disturbance) into virtues, reflecting the tendency of alcoholic family members to think in rigid and dichotomous terms (e.g., good vs. bad).

According to Berlin et al. (1988), children of alcoholics must learn to separate from their families of origin through *adaptive distancing*. This involves insulating one's core self from the effects of parental distress by utilizing human resources to cope, deprioritizing the

role of familial crises in one's life, establishing independent goals/objectives, and participating vigorously in outside activities/pursuits.

While adaptive distancing constitutes a healthy way of severing parental ties, unfortunately, many COAs attempt, instead, to accomplish this task through *active disengagement* (Berlin et al., 1988). This term is used to denote the adolescent's effort to cope with the effects of parental alcoholism by minimizing contact with others or affiliating with rebellious/wayward youth who substitute aberrant behavior for a more honest straightforward approach to dealing with feelings (Berlin et al., 1988). In cases where the young adult is unable or unwilling to further his/her own growth and development through increasingly adaptive and autonomous means, he/she will replicate dysfunctional patterns of behavior (e.g., self-isolation) in the workplace and be fearful of revealing his/her true nature to others (Woititz, 1983).

College Performance

College-age COAs constitute a largely neglected high-risk population in need of preventative treatment (Crawford & Phyfer, 1988; Downing & Walker, 1987). Given their difficulty progressing through the primary stages of childhood and adolescence, they are less prepared than their counterparts from nonalcoholic homes to master the fundamental tasks required of the typical college student (Crawford & Phyfer, 1988; Downing & Walker, 1987; Landers & Hollingdale, 1988). These include the development of competence, purpose, integrity, autonomy, and identity (Chickering, cited in Landers & Hollingdale, 1988).

ACOAs have difficulty trusting their capacity to achieve success, cope with the future, take chances, and accomplish goals (Landers & Hollingdale, 1988). Adding to this self-perceived lack of competence are identity confusion, feelings of inadequacy, an impoverished/immature self-concept, and unrealistic expectations of self and others (Landers & Hollingdale, 1988). Because they have been understandably unsuccessful in their attempt

to "cure" the alcoholic, ACOAs may doubt their ability to achieve other seemingly insurmountable tasks (Landers & Hollingdale, 1988).

These individuals also have difficulty establishing a purpose/plan, developing strategies for action, and engaging in those types of behaviors necessary for satisfactory career development (Landers & Hollingdale, 1988). Lacking in self-knowledge, and unable to function outside of those roles assumed during childhood and adolescence (Crawford & Phyfer, 1988), ACOAs are less able than their peers to identify intrapersonal strengths and limitations (Landers & Hollingdale, 1988). Unaware of their own leisure interests, they may also find it difficult to achieve a healthy balance between work and recreation (Landers & Hollingdale, 1988).

The development of integrity is the third college-age task discussed by Landers and Hollingdale (1988). Having lacked the opportunity to formulate an independent set of ideas, values, and standards, accustomed to invalidation (and therefore unable to trust their own thoughts, feelings, and perceptions), and fearful of revealing themselves to others, ACOAs may be less likely than their peers to develop or share their own beliefs (Landers & Hollingdale, 1988).

As previously mentioned, ACOAs have difficulty separating from their families of origin and developing an independent sense of self. Ongoing fear and anxiety regarding the welfare of other family members may hinder them from achieving autonomy by participating fully in college activities (Landers & Hollingdale, 1988).

A fifth primary task of college students is to select and prepare for a career. While noting that the tendency of ACOAs to have difficulty making sound occupational decisions often goes unnoticed, Schumrum and Hartman (1988) observed students with an alcoholic family background to demonstrate three major components of long-term career indecision–trait anxiety, identity confusion, and an externalized locus of control.

Because COAs are raised in an unpredictable, inconsistent, chronically stressful, and traumatic home environment, they may develop coping strategies similar to those of trait anxious persons who mitigate self-perceived threats by limiting their involvement/ interaction with the environment (Schumrum & Hartman, 1988). As a result, they may be less likely to utilize resources which aid in the development of effective decision-making skills (Schumrum & Hartman, 1988).

As Schumrum and Hartman (1988) note, choosing an occupation requires an individual to compare, contrast, and match job characteristics with personal attributes. This may be difficult for ACOAs who, without a clear sense of identity, are unaware of their own goals, abilities, interests, likes/dislikes, and potential (Schumrum & Hartman, 1988).

Having learned from their families of origin to deny reality, bury feelings, avoid conflict, and question their own experience, and, lacking the occupational information necessary to make sound choices, ACOAs may doubt their ability to select and manage a career (Schumrum & Hartman, 1988). As Eigen, Hartman, and Hartman (1987) contend, family systems characterized by (1) a flexible structure with sound interpersonal attachments, or (2) a more autocratic structure which nonetheless allows for personal autonomy, facilitate the development of vocational decision-making skills, while those marked by enmeshment (precluding individuation) or emotional disconnectedness (leaving the child without guidance and direction) do not.

COAs also learn from the alcoholic and co-dependent parent to be other-directed, attribute causality to extrinsic factors, and abdicate responsibility for behavioral consequences (Schumrum & Hartman, 1988). Schumrum and Hartman (1988) note that these lessons, along with the personality characteristics and behavioral mechanisms developed by COAs to cope with the adverse effects of parental alcoholism, are at the root of

problems in vocational decision-making. In reference to career indecisive ACOAs, these authors (pp. 123-124) state,

> When the time arrived to make a realistic decision, they were usually at a loss. A child who has learned to adjust by retreating to a private place restricts his interaction with the rest of the world. But it is only through the process of interacting with the real world and obtaining valid feedback from others that we learn to form an accurate perception of ourselves. If we withdraw from the interactional world, we miss opportunities to develop problem-solving skills that help us become aware of our likes and dislikes. Lacking reality based skills, these ACOAs develop unusual interests or unrealistic perceptions of their abilities and aptitudes. They tend to swing between the two extreme poles of magical thinking, alternating in their conviction either that anything is possible or that nothing is possible. Choosing a career that is self-enhancing involves looking inside and projecting onto the world of work who we are. ACOAs who have learned to cope by withdrawing look inside as adults and do not find anything to project. As a result they find both everything and nothing appealing.

In summary, ACOAs may be less prepared than others to meet the social and occupational demands of college life. As Downing and Walker (1987, p. 440) observe,

> These normal developmental challenges often seem more difficult for ACAs, who carry with them the increasingly dysfunctional coping patterns learned as children. Therefore, ACAs may be at greater risk for behavioral, social, and personal problems than is the general college population.

The Effects of an Alcoholic Home Environment on Adults

Despite the need for ongoing empirical verification of ACOA "traits" (Vannicelli, 1989), it is widely held that the adverse consequences of an alcoholic home environment extend beyond childhood and adolescence into adulthood (Ackerman, 1983; Giglio &

Kaufman, 1990; Priest, 1985; Sher, 1991), affecting all areas of functioning (Glenn & Parsons, 1989; Tharinger & Koranek, 1988; Woititz, 1984).

As adults, COAs are prone to a wide range of physical, psychological, social, emotional, interpersonal, and behavioral problems (Woodside, 1988a). Apt to experience an overall dysfunctional lifestyle, at increased risk for the development of psychiatric (Friel & Friel, 1988; Russell et al., 1985), characterological (Friel & Friel, 1988; Hibbard, 1987, 1989; Russell et al., 1985; Wallace, 1990), and stress-related (Friel & Friel, 1988) disorders, and likely to recreate the dynamics operative in their families of origin (Woititz, 1984), ACOAs report more mental health problems than their peers (Giglio & Kaufman, 1990). As Black (1981, p. 22) states,

> There's no such thing as an innocent bystander in an alcoholic's life–everyone he or she comes in contact with is involved, like it or not. This truism applies with a vengeance when it comes to children growing up with an alcoholic parent or parents.

Problems Experienced by ACOAs

Substance Abuse/Dependence

A vast amount of the research on ACOAs addresses the issue of substance abuse/dependence (Wright & Heppner, 1991). Although statistics may vary (Russell, 1990), ACOAs are consistently more likely than their peers to marry alcoholics or become alcoholic themselves (Black et al., 1986; Giglio & Kaufman, 1990; Gravitz & Bowden, 1984; Woititz, 1983, 1984). Individuals (both male and female) with a family history of substance abuse/dependence are more prone than others to abuse drugs and alcohol in adolescence and early adulthood (Pandina & Johnson, 1990). Tharinger and Koranek (1988) report that, regardless of gender, persons with a positive family history are four to six times more likely to become alcoholic. A family history of alcoholism has also been associated with the earlier onset and increased severity of alcohol use/abuse in offspring (Penick et al., 1987; Russell et

al., 1985). Nearly one third of alcoholics have had one or more alcoholic parents (Cotton, 1979). Although dependent on a number of variables (e.g., gender of the adult child, gender of the parent, and the drinking habits of both parents), Webster, Harburg, Gleiberman, Schork, and DiFranceisco (1989) found similarities in the drinking patterns of parents and their offspring.

While findings are contradictory (Engs, 1990), ACOA status has been linked to the increased incidence of substance abuse among college students (Claydon, 1987; Knoblauch & Bowers, 1989). In addition to alcohol, ACOAs may be more prone than their peers to abuse a variety of other substances (Johnson, Leonard, & Jacob, 1989). Claydon (1987) found both male and female ACOAs to have greater problems with alcohol, drug, and food abuse than their counterparts from nonalcoholic homes. An alcoholic upbringing may also play a significant role in the development of cocaine dependence (Wallace, 1990). Towers (1989, p. 32) describes the circumstances under which adolescents and young adults are apt to abuse substances as follows:

> The environmental factors that may cause young people to abuse drugs have long been linked to a lackadaisical or permissive attitude toward drugs or alcohol in the family. Add to this the lack of structure, failure to develop appropriate coping or social skills, fears and anxieties, and poor self-image, and the likelihood of using and becoming addicted to alcohol or drugs for a child in such a family can be great indeed.

Researchers emphasize the importance of both genetic and environmental influences in the transmission and development of alcohol dependence (Barnes & Welte, 1990; Haack, 1990; Tharinger & Koranek, 1988). Evidence for a hereditary component continues to mount (Haack, 1990). Alcoholism is more prevalent in some families than others (Woodside, 1988a). Sons of male alcoholics are four times more likely to become alcoholic than their peers, even when raised by adoptive parents (Gravitz, 1985).

Tarter, Alterman, and Edwards (1985) found the genetic predisposition toward alcoholism to be associated with particular temperamental characteristics in adult male offspring. More specifically, an impairment in the mechanisms responsible for regulating arousal and inhibitory control, a decreased attention span, a tendency to become easily agitated or upset, and a low "soothability" factor were identified.

In summary, the fact that, as adults, COAs are at heightened risk for alcohol abuse/dependence has been well-established (Burk & Sher, 1988; Parker & Harford, 1987; Schandler, Cohen, & McArthur, 1991).

Anxiety, Depression, and Low Self-Esteem

ACOAs are prone to anxiety and depression by virtue of the chronic stress to which they were subjected in childhood and adolescence (Friel & Friel, 1988; Haack & Alim, 1991; Schwartzberg & Schwartzberg, 1990). Research repeatedly has shown a significant correlation between alcoholism and individual/familial depression (Russell et al., 1985). Persons raised in an alcoholic home environment are at increased risk for a variety of affective (Giglio & Kaufman, 1990), depressive (Haack, 1990), and anxiety-related (Haack, 1990; Haack & Alim, 1991) disorders. ACOAs are also more likely than their peers to attempt and commit suicide (Gravitz & Bowden, 1984).

Cermak (1984) and others (Brown, 1988; Cermak & Rosenfeld, 1987) note the tendency of ACOAs to exhibit symptoms of Post Traumatic Stress Disorder including anxiety, depression, psychic numbing, social isolation, hypervigilance, excessive guilt feelings, and a resurgence of the thoughts/feelings associated with past trauma, upon exposure to symbolic events. In addition, they may be unable to achieve emotional separation from their families of origin (despite geographical distance), overreact to self-perceived rejection, become alienated from their own feelings and experience, and anticipate disaster, particularly when things are going well (Cermak & Rosenfeld, 1987). As Cermak

and Rosenfeld (1987, p. 23) note, " . . . their own co-dependent traits emerge whole cloth in the face of stresses which resemble alcoholic family dynamics (inconsistency, arbitrariness, denial, secrets, intrusion)."

Despite conflicting findings (Churchill et al., 1990), research, in general, supports the tendency of ACOAs to have a lower sense of self-esteem (Jacob et al., 1978; McNeill & Gilbert, 1991; Roosa et al., 1989) and greater external locus of control (Jacob et al., 1978; McNeill & Gilbert, 1991; Prewett, Spence, & Chaknis, 1981; Schumrum & Hartman, 1988; Windle, 1990) than their counterparts from nonalcoholic homes. Because these individuals internalize false negative feedback during childhood (Black, 1990), they are harshly self-critical (Bepko, 1985; Harman, 1991; Hobe, 1990; Woititz, 1983) and apt to regard themselves as unintelligent, incompetent, worthless, and inadequate (Black, 1990).

ACOA Characteristics

Woititz (1983, p. 4), in her landmark publication, Adult Children of Alcoholics, presented what has come to be a popular and widely cited list of ACOA characteristics as follows:

1. Adult children of alcoholics guess at what normal behavior is.
2. Adult children of alcoholics have difficulty following a project through from beginning to end.
3. Adult children of alcoholics lie when it would be just as easy to tell the truth.
4. Adult children of alcoholics judge themselves without mercy.
5. Adult children of alcoholics have difficulty having fun.
6. Adult children of alcoholics take themselves very seriously.
7. Adult children of alcoholics have difficulty with intimate relationships.
8. Adult children of alcoholics overreact to changes over which they have no control.
9. Adult children of alcoholics constantly seek approval and affirmation.

10. Adult children of alcoholics usually feel that they are different from other people.
11. Adult children of alcoholics are super responsible or super irresponsible.
12. Adult children of alcoholics are extremely loyal, even in the face of evidence that the loyalty is undeserved.
13. Adult children of alcoholics are impulsive. They tend to lock themselves into a course of action without giving serious consideration to alternative behaviors or possible consequences. This impulsivity leads to confusion, self-loathing, and loss of control over their environment. In addition, they spend an excessive amount of energy cleaning up the mess.

Added to this list is the tendency of adult children to experience role/identity confusion (Friel & Friel, 1988; Giglio & Kaufman, 1990), occupational dissatisfaction (Hibbard, 1987), a fear of abandonment (Black, 1990), guilt (Downing & Walker, 1987; Hobe, 1990; Schwartzberg & Schwartzberg, 1990), unhappiness (Crespi, 1990), emotional deprivation (Schwartzberg & Schwartzberg, 1990), and social isolation (Black, 1990). These individuals often undermine their own success despite a fear of failure (Hobe, 1990; Tainey, 1988), take a reactive, rather than proactive, stance (Black, 1990), perceive themselves as powerless (Ackerman, 1983), assume the "victim" role (Tainey, 1988), have poor parenting skills (Black, 1990), maintain secrecy (Downing & Walker, 1987), and engage in a variety of compulsive (Friel & Friel, 1988; Giglio & Kaufman, 1990; Harman, 1991; Tainey, 1988) and approval-seeking behaviors (Black, 1990; Hobe, 1990; Schwartzberg & Schwartzberg, 1990).

Well-established in the literature are the problems ACOAs experience developing and maintaining satisfactory interpersonal and intimate relationships (Black, 1990; Cermak & Rosenfeld, 1987; Hobe, 1990; Miller & Tuchfeld, 1986; Vannicelli, 1989). At heightened risk for divorce and separation (Giglio & Kaufman, 1990; Parker & Harford, 1988), they are unable to trust in themselves and others (Black et al., 1986; Cermak & Brown, 1982; Giglio

& Kaufman, 1990; Schwartzberg & Schwartzberg, 1990), express personal needs (Cermak & Brown, 1982; Giglio & Kaufman, 1990), communicate productively (Giglio & Kaufman, 1990), or differentiate between love and pity (Black, 1990).

ACOAs struggle with the issue of responsibility (Bepko, 1985; Hobe, 1990; Vannicelli, 1989; Woititz, 1983). Having learned to undertake those duties neglected by the alcoholic and co-dependent parent, confused by continuous role conflict and reversal, and without a clear sense of interpersonal boundaries (Cermak & Brown, 1982), they are likely to rescue (Schwartzberg & Schwartzberg, 1990), take care of (Schwartzberg & Schwartzberg, 1990), and assume responsibility for others (Black, 1990).

Denial is another prominent characteristic of the ACOA syndrome (Downing & Walker, 1987; Miller & Tuchfeld, 1986; Vannicelli, 1989). Used as a defense against feelings of rage, sadness, loss, and abandonment (Cermak & Brown, 1982), it allows the individual to avoid facing reality. As adults, those raised in an alcoholic home have difficulty accepting (Cermak & Brown, 1982) and expressing their emotions (Black et al., 1986; Crespi, 1990), are prone to affective distortions (Downing & Walker, 1987), and are likely to repress feelings of anger (Schwartzberg & Schwartzberg, 1990).

Dichotomous Thinking

ACOAs have been taught to think in rigid, dichotomous, and 'all or nothing' terms (Brown, 1988; Miller & Tuchfeld, 1986; Schumrum & Hartman, 1988; Woititz, 1983). Apt to characterize people, behavior, and events as good or bad, right or wrong, black or white, they lose the flexibility required for adaptive functioning (Ferstein & Whiston, 1991). As Ferstein and Whiston (1991, pp. 41-42) note, polarized thinking has its origins in early development:

> This dichotomous thinking is spawned in childhood where the same behavior of the child may be met with approval, rejection, or indifference from the alcoholic. Thus, the

child is given incompatible messages but searches for certainty. The desire for certainty can become so compelling that any judgment is seen as absolute, and a dichotomous view of self and others develops. ACOAs continue this absolutistic thinking in adulthood where they place themselves in the frustrating position of trying to force a "gray world" into their unrealistic black and white expectations. This characteristic also makes it difficult for ACOAs to see the parts that make up the whole. As a result, they find it difficult to reduce their problems into achievable steps which exacerbates their feelings of being overwhelmed and out of control.

These authors also identify (p. 42) a number of irrational assumptions/beliefs on which the cognitive framework of ACOAs is based. These include "I must be perfect or I'm worthless", "I must not trust myself", "I must not ask for help or I'm incompetent", and "I must take care of others' feelings and needs before my own".

Individuals raised in an alcoholic family environment find it difficult to generate options or alternatives, and, having been taught that there is only one right way to do things, may experience psychological and behavioral immobilization (Harman, 1991). Furthermore, because ACOAs approach difficult or complex tasks in an 'all or nothing' fashion (being unaware of the smaller steps into which they must be broken), and hold unrealistically high expectations for performance, they are apt to view any effort short of completion as insignificant, and any job less than perfect as a failure (Gravitz & Bowden, 1984).

Control

One of the primary characteristics of ACOAs is their compulsive need for control (Cermak & Brown, 1982; Cermak & Rosenfeld, 1987; Crespi, 1990; Miller & Tuchfeld, 1986; Schwartzberg & Schwartzberg, 1990). Because the alcoholic's sense of self-esteem is based on his/her struggle to manage addiction through the use of willpower and/or denial, children come to equate self-worth, right-mindedness, and mastery with control (Cermak &

Rosenfeld, 1987). Unable to admit vulnerability, yet aware of his/her failure to stop the parent from drinking, the child intensifies his/her efforts to heal the family, setting unrealistically high expectations for success and assuming ever greater responsibility for the well-being of others (Cermak & Rosenfeld, 1987). The child's attempt to exert control in an unpredictable situation serves as a safeguard against feelings of loss, dependency, abandonment, and deprivation (Cermak & Brown, 1982; Cermak & Rosenfeld, 1987). COAs use this same method of coping in adulthood, exhibiting an extraordinary need for control in relationships (Giglio & Kaufman, 1990). As Cermak and Rosenfeld (1987, p. 18) observe,

> ACAs commonly react to the interpersonal and intrapsychic complications of life by increasing their efforts to control both internal and external events. Whether the mechanism for maintaining control is mastery, manipulation, denial, or obsessing, the maintenance of control is unquestioned as a universal ideal; and the loss of control precipitates significant existential fears and self-deprecation.

ACOA Skill Deficits

ACOAs lack the solid base of information and experience necessary for skillbuilding (Miller & Tuchfeld, 1986; Woititz, 1984). Because, as children, they had few effective role models, were taught not to question, were subject to parental unpredictability, were isolated from potential sources of guidance and support, and experienced routine invalidation of their feelings and perceptions, they are without the information/knowledge required to make sound choices or judgments. As adults, COAs are unable to identify or generate behavioral options/alternatives (Black, 1990; Woititz, 1984), have difficulty anticipating consequences (Miller & Tuchfeld, 1986), are poor at planning (Robinson, 1989; Woititz, 1983), are unable to delay gratification (Robinson, 1989; Tainey, 1988; Woititz, 1983), are likely to subordinate their own needs, standards, and goals (Ackerman, 1983), and lack the flexibility required to alter their course of action when appropriate (Robinson, 1989; Tainey, 1988). In

reference to the adult child, Woititz (1983, p. 22) observes, "So there are a lot of things you are unfamiliar with, things that you simply don't know. Moreover, there are many things that you don't even know you don't know, so you don't even know what questions to ask."

Given a limited base of knowledge and experience, the ability of ACOAs to realistically, accurately, or objectively appraise situations and events is impaired (Bepko, 1985; Crespi, 1990; Roosa et al., 1989). They are likely to view consequences, not as by-products of behavior, but as evidence of their own self-perceived deficiencies (Brown, 1988). ACOAs are often unable to correctly process, evaluate, and profit from their experience (Miller & Tuchfeld, 1986). Like the alcoholic and other family members, they have learned to distort reality through denial (Cermak, 1984).

Thus, ACOAs are in need of accurate, realistic, and unbiased feedback (Bepko, 1985). Because they are lacking in self-knowledge and awareness, have difficulty placing faith in their own abilities, are unable to react spontaneously or creatively in new situations, and have had little opportunity for self-exploration (Crespi, 1990), they are unable to recognize, identify, or act upon their own (vocational and nonvocational) strengths, capacities, and potential (Black, 1990; Crespi, 1990; Towers, 1989; Woititz, 1983).

As adults, children raised in an alcoholic home environment have difficulty owning their accomplishments and believing in their capacity to realize hopes and dreams (Crespi, 1990). While healthy families prompt children to test their abilities, stretch their potential, explore opportunities, identify personal interests and preferences, develop aspirations for the future, and consider possibilities, COAs are discouraged from innovative self-investigation. Having been harshly criticized by the alcoholic, who bolstered his/her sense of self-importance by belittling others, ACOAs become cynical and defeatist in their approach to life (Crespi, 1990). Without a clear and positive self-image, they are likely to attribute their

success to good fortune (Crespi, 1990) and to feel that any achievement, no matter how great, falls short of the mark (Bepko, 1985). According to Wholey (1988, p. 22),

> The tragic consequence for tens of millions of adult children from unhappy homes is that they don't know who they are, what they are doing, or how to do it. They guess at what normal is, don't know how to take care of their own needs and feel good about themselves, and don't enjoy intimacy. These millions get involved in disastrous relationships, act impulsively, judge themselves without mercy, and constantly seek approval and security.

Because, as Argyris (1968, p. 164) states, " . . . the individual will tend to be free to focus on competence acquisition only to the extent that he feels his survival problems are resolved (i.e., they do not control his present behavior)", ACOAs may be at a distinct disadvantage relative to their peers. As adults, these children may feel incompetent (Woititz, 1983), having lacked the full range of experience required to master their environment (Prewett et al., 1981). Although they may be highly invested in presenting themselves as skillful, able, self-assured, and autonomous, this may reflect, " . . . a fragile compromise rather than a deep-rooted strength" (Balis, 1986, p. 75).

The adaptive functioning of COAs in adulthood may be further compromised by their inability to prioritize (Crespi, 1990), problem-solve (Black, 1990; Crespi, 1990), negotiate (Black, 1990; Brown, 1988; Gravitz & Bowden, 1984), complete tasks or projects (Hobe, 1990; Woititz, 1983), set realistic goals (Gravitz & Bowden, 1984), make sound decisions/choices (Woititz, 1984), and cope with stress (Roosa et al., 1989).

Alcohol is the central organizing factor in families characterized by ethanol abuse/dependence (Crespi, 1990). Children in these households observe adult role models who are unable to postpone gratification (Crespi, 1990), set healthy priorities (Crespi, 1990), complete what they have begun (Woititz, 1983), seek help/assistance (Black, 1990), cope

with adult responsibilities (Bepko, 1985), or problem-solve in difficult situations (Woititz, 1983). Thus, COAs are more likely than their peers to deal with predicaments by focusing on emotional content rather than problem-solving possibilities (Clair & Genest, 1987). Due to continuous involvement in immediate crises, they may learn to identify and utilize short-term problem-solving strategies, without acquiring the skills needed to develop long-range plans or tactics (Crespi, 1990).

This lack of skill in planning may be one reason why ACOAs experience difficulty following tasks through to completion. As Crespi (1990, p. 97) states,

> Once someone sees how stuck they are, it becomes somewhat easier to understand why they cannot complete projects, why they could not expel the alcoholic, why their problem-solving skills are not as strong as is desirable, and why they cannot complete projects according to "normal" time schedules. ACOA's don't grow up with normalized time schedules to begin with. It is alien. In fact, they usually grow up waiting for periods of sobriety.

ACOAs are noncognizant of the need to divide larger tasks into smaller more manageable parts, are unable to reliably gauge the amount of time needed to complete a project, and lack awareness of the appropriate steps to take (Woititz, 1983). Therefore, they are apt to avoid setting long-term goals (Crespi, 1990), are likely to hold unrealistic expectations for performance (Hobe, 1990; Tainey, 1988; Woititz, 1983), and approach major life decisions with uncertainty (Bepko, 1985).

COAs were not taught the decision-making skills required to function effectively in adulthood (Black, 1990; Towers, 1989). This is why, for those who seek treatment,

> The therapies of choice need to have a cognitive base. This is true because adult children do not have the data necessary to make considered, appropriate life decisions.

> They are missing the necessary tools for operating in their best interest in the workplace and with relationships including the one with oneself. (Woititz, 1984, p. 73)

Because ACOAs are unable to recognize, identify, or express their feelings (Black, 1990; Roosa et al., 1989), have little knowledge of the benchmarks for normal behavior (Hobe, 1990; Woititz, 1983), have difficulty developing and maintaining satisfactory interpersonal relationships (Bepko, 1985), are inept at social problem-solving (Black, 1990), and lack the skills needed to meet basic needs (Bepko, 1985), they are apt to cope poorly with stress (Roosa et al., 1989). Consistent with the approach used by alcoholics, ACOAs are more likely than their peers to deal with problems through avoidance and/or wishful thinking (Clair & Genest, 1987). Having learned from the alcoholic parent to cope in destructive and self-defeating ways (Ackerman, 1983), they are in need of practicing new and adaptive behaviors (Gravitz & Bowden, 1984).

ACOAs in the Workplace

Attention is just now turning to ACOA issues in the workplace (Woodside, 1989). According to Woodside (1986), a majority of employers are unaware of the ACOA experience and, therefore, noncognizant of its implications. Although a nationwide survey of Corporate Medical and Employee Assistance Program Directors (Woodside, 1989) revealed that all believed that COAs under the age of 18 suffer serious consequences, and that most believed that the adverse effects of parental alcohol abuse/dependence continue into the adult years, many respondents were unaware that ACOAs may adhere to maladaptive behavioral patterns on the job, and had little knowledge of the ways in which these problems may be manifest. This seems curious, in light of the fact that the majority of respondents considered ACOAs more prone than other workers to experience low self-regard, substance abuse problems, physical illness, and depression, and less likely to take chances or function effectively as part of a team.

Despite this lack of awareness on the part of employers, ACOAs constitute a subgroup of workers with special dilemmas, issues, and needs (Watkins et al., 1989). Woodside (1989) identifies six major problems likely to be experienced by ACOAs in the workplace including low self-esteem, disturbed interpersonal relationships, inflexibility, over-responsibility, an exaggerated need for approval, and feelings of depression. These individuals have difficulty realistically evaluating their potential, demonstrate little self-confidence, are perfectionistic, and tend to under-utilize intrapersonal strengths and resources (Woodside, 1989).

Their ability to identify personal needs, express thoughts and emotions, participate in cooperative endeavors, and develop or maintain satisfactory collegial relationships is hindered by a lack of trust in others, preference for solitary activities, excessive need for control, and behavioral inflexibility (Woodside, 1989). ACOAs have difficulty exploring alternatives, adapting to changes in the workplace, achieving a balanced perspective, accepting feedback, (negative or positive), and modifying directions or deadlines as needed (Woodside, 1989).

Because they are apt to take responsibility for those around them, set unreasonably high standards, and prioritize work above family, ACOAs are at increased risk for burnout (Woodside, 1989). Their great need for approval/acceptance may prompt them to stifle their creativity, safeguard the status quo, and maintain silence. Over the long haul, feelings of depression, decreased motivation, stress and anxiety, and an inability to take pleasure in success may impair work performance (Woodside, 1989).

Thus, the wide range of problems experienced by ACOAs may impede job performance in a variety of ways. ACOAs may be more likely than other employees to seek medical treatment, utilize health benefits, and take sick leave (Woodside, 1989). They may also be prone to long-term vocational indecision (Schumrum & Hartman, 1988), underemployment (Friel & Friel, 1988; Schumrum & Hartman, 1988), and work dissatisfaction (Friel & Friel,

1988; Watkins et al., 1989). These are individuals who frequently feel rejected, incomplete, and inadequate (Watkins et al., 1989). Not surprising, then, is the fact that they are more often referred to employee assistance programs than their peers (Cermak & Rosenfeld, 1987).

Watkins et al. (1989) contend that ACOA issues hinder reflective learning in the workplace. More specifically, dichotomous thinking, rigid role behavior, denial, and a reluctance to share thoughts and opinions may interfere with the ability to utilize information, profit from mistakes, alter maladaptive behavior, restructure thinking, and promote one's own ideas (Watkins et al., 1989).

Many of the occupational problems to which ACOAs are subject originate in childhood (Robinson, 1989; Woodside, 1986, 1989). Without treatment, these unresolved issues/dynamics are likely to be re-enacted in the work setting (Watkins et al., 1989).

Woodside (1989) notes that, when ACOAs continue to assume survival roles adopted in childhood, they may function poorly in the occupational arena. For example, the responsible individual may demonstrate superlative performance in select areas, yet set unrealistically high goals, be intolerant of failure, over-extend him/herself, and appear tense and joyless. Scapegoats may sabotage their own success by abusing substances in the workplace, performing below standards, acting in an unpredictable/unstable manner, avoiding responsibility, and distorting reality. Family favorites may demonstrate a low tolerance for stress and frustration, cope poorly in problematic situations, and seek constant attention, while avoiders may mask inner strengths, lack initiative, and refrain from contributing their expertise.

In addition to assuming rigid role behavior, COAs may also react to parental unpredictability, chaotic/conflicted interpersonal relationships, harsh criticism, double messages, and familial disorganization by becoming workaholic (Robinson, 1989). Robinson (1989) demonstrates how ACOA characteristics may result in an addiction to work. While

compulsive overachievement may become the means by which many adult children bolster their self-esteem, suppress emotional pain, fill an inner void, and achieve a semblance of control, a workaholic lifestyle may eventually destroy physical and mental well-being, result in self-neglect, and impair the individual's ability to function outside of the vocational setting (Robinson, 1989).

In summary,

> While most children of alcoholics do not become alcoholics, their childhood experience can result in marital and work related difficulties stemming from feelings of dissatisfaction, disappointment, failure, and depression. When they bring to the work environment some of the same coping behaviors used as survival techniques in childhood, they may find these techniques are no longer appropriate nor serve them well. (Woodside, 1986, p. 2)

Resilient Children of Alcoholics

Researchers and clinicians have identified a subgroup of children who appear well-adjusted despite having been raised in an alcoholic (Tweed & Ryff, 1991; Werner, 1986; Woodside, 1988b) or otherwise severely dysfunctional home environment (Werner, 1984). Terming them "vulnerable but invincible", Werner (1984) notes that, although exposed to extreme and chronic stress, these youngsters exhibit extraordinary steadiness, durability, and strength. Tweed and Ryff (1991, pp. 139-140) describe resilient ACOAs as,

> . . . cognitively complex individuals who are aware of and somewhat troubled by their experience of having grown up with an alcoholic parent, but who have nonetheless managed to find ways to be happy, feel good about themselves and show normal progressions of development.

Thus, children of alcoholics, on the whole, may constitute a heterogeneous population demonstrating varying degrees of adaptation and functioning (Wright & Heppner, 1991).

Given that some ACOAs appear to suffer few, if any, adverse effects from parental alcoholism, researchers emphasize the importance of evaluating/investigating positive, as well as negative outcomes (El-Guebaly & Offord, 1977; Nardi, 1981). Goodman (1987) cautions against inferring that all ACOAs react in similar ways, have experienced traumatic effects, or are in need of psychological treatment.

While the well-being/adjustment of a large number of children raised in alcoholic homes may be compromised, for some, adversity may stimulate the development of intrapersonal strengths and resources (Tweed & Ryff, 1991). By assuming certain roles and responsibilities within the family system, some COAs may acquire skills (e.g., in decision-making) apt to serve them well in adulthood (Berkowitz & Perkins, 1988; Nardi, 1981).

To date, the majority of studies have focused on the adverse consequences of parental alcoholism (Burk & Sher, 1988; El-Guebaly & Offord, 1977). Comparatively little research has sought to examine the coping mechanisms used by resilient children of alcoholics (Heller, Sher, & Benson, 1982), explore the reasons why some youngsters fare better than others (Woodside, 1988b), identify those factors responsible for increased/decreased susceptibility to the effects of alcoholic family dysfunction (Woodside, 1988b), or investigate positive aspects of the COA experience (Nardi, 1981).

El-Guebaly and Offord (1977), among others (Heller et al., 1982; Wright & Heppner, 1991) stress the need for empirical studies to identify intra- and extra-familial influences mediating the psychopathological effects of parental alcoholism on offspring, as well as the behavioral characteristics, strengths, and attributes of resilient COAs. As Miller and Tuchfeld (1986, p. 236) conclude,

> Much careful research needs to be conducted. One unanswered question with significant clinical implications is why some children of alcoholics seem to be immune to negative consequences of their background. As researchers and clinicians begin to

isolate subtypes of adult children of alcoholics, it may be possible to understand the dynamics that protect or buffer the immune child.

Werner (1984, 1986) notes that the ability of children from alcoholic and other troubled homes to adjust and function well depends on both constitutional (e.g., temperamental) and environmental factors.

This author (1984) cites research which suggests that resilient children are affectionate, even-tempered, easy to care for, independent, prosocial, self-sufficient, curious, fearless, able and willing to solicit guidance from adults, and actively engaged in hobbies or interests which bolster their self-esteem. In addition, these youngsters are compassionate, popular with peers, able to appreciate humor, androgynous in their orientation, and likely to draw a positive response from others (Werner, 1984). They enjoy school, make good use of their talents, are skilled at enlisting the aid of substitute parents, and maintain a positive, hopeful, and confident outlook toward the future (Werner, 1984).

Werner (1986), in a longitudinal study of children (0-18 years) from alcoholic homes found resilient youngsters, unlike those who developed marked psychosocial problems, to be self-directed, responsible, and benevolent. These children value achievement, have a healthy self-image, show no deficits in cognitive functioning, have satisfactory reading and writing abilities, tend to elicit a positive response from key parental figures, and are more internal in their locus of control (Werner, 1986).

The environment of resilient children from troubled homes is characterized by the presence of effective adult role models (e.g., extended family members), nurturance sufficient to promote trust during infancy, and extrafamilial support/assistance (Werner, 1984). Teachers, neighbors, and church leaders have been found to exert a significant positive influence on these youngsters (Werner, 1984). Their ability to cope is also strengthened by domestic structure, guidelines, and duties, a sense of meaning/purpose,

involvement in outside activities, periodic protection from hardship and stress, required helpfulness, and familiarity with people toward whom they can demonstrate love and commitment (Werner, 1984).

Those environmental factors associated with resiliency in children from alcoholic families include maternal employment during the younger years, a relatively nonproblematic relationship with their parents, and the absence of serious childhood illness and/or disability (Werner, 1986). Vulnerability to the effects of parental alcoholism is also lessened when the child receives sufficient attention from key attachment figures, is spared long periods of separation, is the only youngster born within a two year period, and fails to witness parental discord during the initial 24 months of life (Werner, 1986). As Werner (1986, p. 39) notes, the ability of children to cope depends on both intrapersonal and environmental factors:

> Thus it was not solely the risk of parental alcoholism, but the balance between that risk factor, the accumulation of stressful life events and protective factors within the child and his caregiving environment that accounted for the range of adaptive and maladaptive outcomes observed among the offspring of alcoholics in this study.

It seems then, that the psychosocial development of some COAs may be largely unaffected by parental alcoholism. As Balis (1986) notes, however, these children are expert at appearing responsible, properly adjusted, patient, adult-like, perceptive, and well-spoken. In addition, because society encourages competition and overaccomplishment, the initial signs of work addiction (occurring between the ages of 6 and 12) may be overlooked (Robinson, 1989). Therefore, the appearance of invulnerability may be an illusion (Robinson, 1989).

Black (1979) maintains that all COAs, even those who appear well-adjusted, are at risk. Because "resilient" children are unable to accept their own limitations, and struggle to remain

unassailable, the strength they portray may actually reflect a weak and tremulous sense of self (Balis, 1986). As Robinson (1989, p. 101) states,

> Many cases of invulnerability are disguised inner misery that children are compelled to hide. Since they are more adept at most things, it is only natural that they would be more skilled than most children in hiding their pain. These "resilient" kids may, in fact, be in greater need of help than kids who can reveal their vulnerability.

Factors Mediating the Effects of Parental Alcoholism on Offspring

At present, little is known of the factors which moderate/mediate the effects of parental alcoholism on offspring (Sher, 1991). It has been suggested, however, that the adverse psychosocial consequences of parental substance abuse/dependence are more severe when the child is male (Werner, 1986), when the mother, rather than father, is alcoholic (Ackerman, 1983; Giglio & Kaufman, 1990; Richards, 1989; Werner, 1986), and when both, rather than one, of the parents is a problem drinker (Giglio & Kaufman, 1990; Hibbard, 1989; Richards, 1989). Although gender may have a significant influence on outcome, to date, this variable has often been overlooked in the literature (Bradley & Schneider, 1990; West & Prinz, 1987).

Other mediating factors include the preservation of family rituals (Sher, 1991; Tharinger & Koranek, 1988), parental status in recovery (Tharinger & Koranek, 1988), degree of marital conflict (Stark, 1987; Tharinger & Koranek, 1988; West & Prinz, 1987; Wilson & Orford, 1978), and availability of social support/assistance (Sher, 1991; Tharinger & Koranek, 1988). Children of alcoholics are less vulnerable to the effects of parental substance abuse when the family's ritualistic behaviors (e.g., holiday observances) are uninterrupted (Seilhamer & Jacob, 1990), and when alternate sources of emotional and/or informational support are available (Ackerman, 1983; Benson & Heller, 1987; Clair & Genest, 1987; Richards, 1989; West & Prinz, 1987).

Research has shown the domestic environment of recovered alcoholics to be as well-adjusted as that of other families in the community (Moos & Moos, 1984). Moos and Moos (1984) found these households to be characterized by similar levels of cohesion, expressiveness, organization, and conflict. In addition, recovered alcoholics were found to participate as much as their nonalcoholic counterparts in the performance of household duties.

Spouses of active problem drinkers report experiencing more anxiety, depression, and physical illness, seek medical treatment more frequently, and are more subject to disturbances in mood than partners of recovered alcoholics and controls (Mendenhall, 1989a).

Adolescents from families in which the alcoholic has relapsed are less well-adjusted than those whose parents have recovered (Giglio & Kaufman, 1990). Children of active drinkers perceived less happiness in their lives than those of recovered alcoholics and controls, while no difference was found for the latter two groups (Callan & Jackson, 1986).

Although, (a) families of relapsed alcoholics have been shown to function more poorly than those of recovered alcoholics and controls (Moos & Moos, 1984), and (b) families of recovered alcoholics and controls report similar levels of adjustment/functioning (Callan & Jackson, 1986), Black (1979) contends that it may be years before families of recovered alcoholics are able to heal. She observes that recovery is a long-term process, requiring both the alcoholic and co-dependent parent to learn effective adult role modeling skills and confront their belief that all is well (denial) when their children show no visible signs of distress.

Severity (Ackerman, 1983; Brown, 1988; Stark, 1987; West & Prinz, 1987), duration (Wilson & Orford, 1978), and time of onset (Ackerman, 1983; Brown, 1988) are additional factors likely to mediate the effects of parental substance abuse on offspring. When drinking

is heavy during the early stages of the domestic life cycle, the foundation for subsequent familial/individual growth and development may be lacking (Brown, 1988). Furthermore, it is not yet certain whether the adverse consequences of parental alcoholism are greater for the young child (Richards, 1989; Towers, 1989) or adolescent (Giglio & Kaufman, 1990). In either case, the quality of the child's relationship with the nonalcoholic parent may influence outcome (Stark, 1987; Tharinger & Koranek, 1988; West & Prinz, 1987; Woodside, 1988b). Richards (1989) noted that when the nonalcoholic parent refrained from engaging in co-dependent behavior, the children were more apt to develop adequate reality-testing and social skills.

The child's temperament (Tharinger & Koranek, 1988), ordinal position (Ackerman, 1983; Woodside, 1988b), personality characteristics (Richards, 1989; Sher, 1991; Tharinger & Koranek, 1988), cognitive/intellectual ability (Sher, 1991; Tharinger & Koranek, 1988), academic progress (Tharinger & Koranek, 1988), strategies for coping (Sher, 1991), and level of self-esteem (Tharinger & Koranek, 1988) may all influence his/her response to parental alcoholism. First born children appear to suffer fewer, and only children, greater, psychopathological effects (Giglio & Kaufman, 1990).

Thus, more information is needed concerning those factors likely to buffer the impact of parental substance abuse on offspring. As Tharinger and Koranek (1988, p. 172) state, "Focusing on variables that may mediate developmental outcome is useful in that it provides the beginnings of a model from which to plan and evaluate research and suggests guidelines for identification, assessment, and intervention activities."

Contemporary Research Needs and Directions

To date, most studies have focused on the adverse consequences of alcoholism for the young child (Cermak & Rosenfeld, 1987; Downing & Walker, 1987; Hibbard, 1989),

co-dependent spouse (Tharinger & Koranek, 1988), or alcoholic him/herself (Tharinger & Koranek, 1988). Although this situation is changing (Downing & Walker, 1987; Giglio & Kaufman, 1990), comparatively little research has been conducted on adult children of alcoholics (Hibbard, 1989; Plescia-Pikus et al., 1988). Empirical verification is needed to support the claim that, as adults, these individuals suffer long-term negative effects from having been raised in an alcoholic household (Plescia-Pikus et al., 1988).

Also an issue at present is the extent to which the problems experienced by COAs stem from general family dysfunction, rather than the effects of parental alcoholism per se (Wright & Heppner, 1993). Alcoholic and other dysfunctional families may be similar in many respects (Black, 1990; Cermak & Rosenfeld, 1987; Tharinger & Koranek, 1988). The problems and characteristics of COAs have been found to parallel those of children from homes in which the parent(s) is (are) plagued by chronic mental or physical illness (Baker & Williamson, 1989; Goodman, 1987; Miller & Tuchfeld, 1986; Rubio-Stipec et al., 1991).

In addition, relatively little information is available concerning (1) those variables likely to moderate/mediate the effects of parental alcoholism on offspring (Crawford & Phyfer, 1988; Heller et al., 1982; Wright & Heppner, 1993), (2) the behavioral and temperamental characteristics differentiating resilient from nonresilient COAs (Crawford & Phyfer, 1988; Heller et al., 1982; Woodside, 1988b), (3) the degree of risk to which COAs are subject (Heller et al., 1982), and (4) the adjustment and functioning of COAs who, in addition to other family members, have failed to seek or receive treatment (Heller et al., 1982; Woodside, 1988b).

While this writer knows of no empirical studies addressing the vocational development of young adults from alcoholic homes, it may be reasonable to assume that the wide range of problems experienced by children of alcoholics will negatively affect their occupational growth and functioning.

What is needed, then, is research which focuses on young adult children of alcoholics, addresses their vocational development, examines the role of variables likely to buffer the effects of parental substance abuse/dependence, controls for the influence of general family dysfunction, and utilizes nonclinical samples.

The Present Study

The purpose of the present study was to (1) compare the vocational identity, occupational self-efficacy, and career decision-making status of young adults from alcoholic and nonalcoholic homes, controlling for the effects of general family dysfunction, and (2) examine the role of variables likely to mediate the effects of parental alcoholism on the vocational development of offspring.

Hypotheses

Controlling for the effects of general family dysfunction, it was hypothesized that:

1. ACOAs would achieve significantly lower scores on a measure of vocational self-identity (indicating a less clear and stable identity) than their peers from nonalcoholic homes.

2. ACOAs would achieve significantly lower scores on a measure of occupational self-efficacy (indicating a lesser degree of self-efficacy) than their peers from nonalcoholic homes.

3. ACOAs would achieve significantly higher scores on a measure of career indecision (indicating greater indecisiveness) than their peers from nonalcoholic homes.

Three exploratory regression analyses also were planned to determine the proportion of variance accounted for by seven predictor variables, and the unique contribution of each predictor, for ACOAs scores on measures of Vocational Identity, Occupational Self-Efficacy, and Career Indecision. The predictor variables were General Family Dysfunction, Participant's Gender, Gender of the Alcoholic Parent, Participant's Age At Onset of Parental

Alcohol Abuse, Length of Maternal Employment, Participant's Age at Onset of Maternal Employment, Academic Success, Self-Esteem, Birth Order, Social Support (received during childhood and adolescence), and History of (parental or familial) Treatment for Parental Substance Abuse/Dependence.

METHOD

Participants

The initial sample for this study consisted of 1, 011 participants. As described in the Procedure section, this number was reduced to 271 for the final sample. These 271 students, freshmen through seniors at a large midwestern state university, were primarily single (98.5%), White Americans (89.7%) between the ages of 18 and 20 (88.6%). One-hundred and nine (40.2 %) participants were male and 162 (59.8%) female. A wide range of academic majors was represented. Tables 1 and 2 provide detailed information concerning the personal and work-family characteristics of this sample. A description of the manner in which students were recruited can be found in the Procedure section of this chapter.

Instruments

Participants were administered a 115-item paper-and-pencil survey divided into nine sections (see Appendix A). General background, demographic, and familial information was requested in Section 1, Items 1-14. Sections 2 through 8 contained the Indecision Scale, a subscale of the Career Decision Scale (Section 2, Items 15-30); Self-Efficacy Ratings of General Occupational Themes (Section 3, Items 31-113); Vocational Identity Scale, a subscale of My Vocational Situation (Section 4, Items 1-18); Rosenberg Self-Esteem Scale (Section 5, Items 19-28); General Functioning Scale, a subscale of the Family Assessment Device (Section 6, Items 29-40); Social Provisions Scale (Section 7, Items 41-64); and Children of Alcoholics Screening Test (Section 8, Items 65-94). Section 9 (Items 95-102) contained items related to the participant's primary male and female caretakers, the participant's own perception of parental drinking patterns, and the receipt of treatment (within the family) for parental alcohol abuse/dependence.

Alternate forms of the questionnaire were not utilized, because the sequencing of scales included in the survey was predetermined by the one order most likely to minimize participants' bias in response to the measures. Items requesting background, demographic,

Table 1

Personal Demographics

Variable	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Gender				
Male	109	40.2	109	40.2
Female	162	59.8	271	100.0
Ethnicity				
African-American (Black)	12	4.4	12	4.4
Asian-American	6	2.2	18	6.6
Hispanic-American	7	2.6	25	9.2
Native-American	3	1.1	28	10.3
White-American	243	89.7	271	100.0
Age				
Seventeen	3	1.1	3	1.1
Eighteen	97	35.8	100	36.9
Nineteen	89	32.8	189	69.7
Twenty	54	19.9	243	89.7
Twenty-one	12	4.4	255	94.1
Twenty-two	10	3.7	265	97.8
Twenty-three	4	1.5	269	99.3
Twenty-four	2	0.7	271	100.0
Current Marital Status				
Never Married	267	98.5	267	98.5
Married	4	1.5	271	100.0
Current Year in College				
Freshman	155	57.2	155	57.2
Sophomore	69	25.5	224	82.7
Junior	34	12.5	258	95.2
Senior	13	4.8	271	100.0
Academic College				
Agriculture	18	6.6	18	6.6
Business Administration	56	20.7	74	27.3
Design	27	10.0	101	37.3
Education	37	13.6	138	50.9
Engineering	28	10.4	166	61.3
Home Economics	13	4.8	179	66.1
Science and Humanities	69	25.4	248	91.5
Other	23	8.5	271	100.0

(table continues)

Variable	Frequency	Percent	Cumulative Frequency	Cumulative Percent
High School GPA				
4.00 to 3.34 (A range)	132	48.7	132	48.7
3.33 to 2.34 (B range)	128	47.3	260	95.9
2.33 to 1.34 (C range)	11	4.1	271	100.0
College GPA				
4.00 to 3.34 (A range)	25	9.3	25	9.3
3.33 to 2.34 (B range)	116	43.1	141	52.4
2.33 to 1.34 (C range)	57	21.2	198	73.6
0.00 to 1.33 (F/D+)	2	0.7	200	74.3
Nonapplicable	69	25.7	269	100.0

Note. N of 271 varies slightly for College GPA due to missing data. GPA = Grade Point Average.

Table 2

Work-Family Demographics

Variable	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Birth Order				
First	124	45.8	124	45.8
Second	80	29.5	204	75.3
Third	39	14.4	243	89.7
Fourth	13	4.8	256	94.5
Fifth	10	3.7	266	98.2
Sixth	3	1.1	269	99.3
Seventh	2	0.7	271	100.0
Number of Siblings				
Zero	19	7.0	19	7.0
One	93	34.3	112	41.3
Two	88	32.5	200	73.8
Three	43	15.9	243	89.7
Four	15	5.5	258	95.2
Five	9	3.3	267	98.5
Six	3	1.1	270	99.6
Seven	1	0.4	271	100.0
Parents' Marital Status				
Never Married	6	2.2	6	2.2
Married	211	77.9	217	80.1
Separated	1	0.4	218	80.4
Divorced	50	18.5	268	98.9
Widowed	3	1.1	271	100.0
Step-Parent[a]				
Yes	50	18.5	50	18.5
No	221	81.5	271	100.0
Parental Income				
Poor	7	2.6	7	2.6
Low Middle	52	19.2	59	21.8
Middle	148	54.6	207	76.4
High Middle	57	21.0	264	97.4
Wealthy	7	2.6	271	100.0
Primary Female Caretaker				
Biological Mother	261	96.3	261	96.3
Step-mother	1	0.4	262	96.7
Adoptive Mother	4	1.5	266	98.2

(table continues)

Variable	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Grandmother	3	1.1	269	99.3
Other	2	0.7	271	100.0
Primary Male Caretaker				
Biological Father	238	87.8	238	87.8
Step-father	12	4.4	250	92.3
Adoptive Father	9	3.3	259	95.6
Brother	2	0.7	261	96.3
Grandfather	1	0.4	262	96.7
None	9	3.3	271	100.0
Length of Maternal Employment[b]				
Zero to Two	45	16.7	45	16.7
Three to Four	23	8.5	68	25.2
Five to Six	26	9.6	94	34.8
Seven to Eight	19	7.0	113	41.8
Nine to Ten	25	9.3	138	51.1
Eleven to Twelve	27	10.0	165	61.1
Thirteen to Fourteen	21	7.8	186	68.9
Fifteen to Sixteen	21	7.8	207	76.7
Seventeen	40	14.8	247	91.5
Nonapplicable	23	8.5	270	100.0
Participant's Age At Onset of Maternal Employment[c]				
Zero to Two	67	24.7	67	24.7
Three to Four	24	8.9	91	33.6
Five to Six	32	11.8	123	45.4
Seven to Eight	27	10.0	150	55.4
Nine to Ten	15	5.5	165	60.9
Eleven to Twelve	24	8.9	189	69.8
Thirteen to Fourteen	22	8.1	211	77.9
Fifteen to Sixteen	18	6.6	229	84.5
Seventeen to Eighteen	17	6.3	246	90.8
Nonapplicable	25	9.2	271	100.0

Note. N of 271 varies slightly for Length of Maternal Employment due to missing data. [a]Participant was asked to respond yes or no to the question, "Have you ever had a step-parent?". [b]Length of Maternal Employment = total number of years primary female caretaker was employed outside of the home during participant's first 17 years of life. [c]Participant's Age at Onset of Maternal Employment = participant's age at time that primary female caretaker first became employed outside of the home.

and general family information were placed at the beginning of the questionnaire to facilitate initial ease of involvement in the task. The three vocational scales were placed next, as these were relatively unlikely to arouse emotional discomfort or bias responses to subsequent instruments. The Rosenberg Self-Esteem Scale was placed before the two measures of family functioning (General Functioning Scale and Social Provisions Scale) so that response to the self-esteem items would be unaffected by the possible recall of negative family associations and/or events. The Children of Alcoholics Screening Test and other items pertaining to perceptions of parental alcohol abuse were positioned last, due to the (potentially) emotionally provocative nature of that material.

Career Decision Scale (CDS)–Indecision Scale

The Career Decision Scale (Third Revision), by Osipow, Carney, Winer, Yanico, and Koschier (1987), is a 19 item measure,

> . . . intended as a rapid and reliable instrument for surveying high school and college students about their status in the decision-making process. The scale provides an estimate of career indecision and its antecedents as well as an outcome measure for determining the effects of interventions relevant to career choice or career development. (Osipow, 1987, p. 4)

The CDS contains two subscales, the Certainty Scale (Items 1 and 2) and the Indecision Scale (Items 3 through 18). The Certainty Scale, " . . . provides a measure of the degree of certainty that the student feels in having made a decision about a major and a career", while the Indecision Scale is "a measure of career indecision" (Osipow, 1987, p. 4).

Items 1 through 18 are based on a 4-point Likert scale assessing the applicability of each item to the participant's own experience (1 = not at all like me, 2 = only slightly like me, 3 = very much like me, and 4 = exactly like me). Item 19 provides an open-ended

opportunity for the participant to clarify or elaborate upon their response to previous items (Osipow, 1987).

The CDS takes approximately 10 to 15 minutes to complete and may be administered individually or in groups (Osipow, 1987). The manual (Osipow, 1987) provides normative data for high school and college students, adults seeking continuing education, and women returning to college.

The raw score for the Certainty Scale is obtained by summing the participant's response to items 1 and 2, and the raw score for the Indecision Scale, by summing the participant's response to items 3 through 18. Raw scores are then converted to percentile scores by grade and sex. The higher the participant's percentile score on the Certainty Scale, the greater his/her certainty regarding choice of career and school major (Osipow, 1987). High percentile scores on the Indecision Scale indicate indecisiveness regarding choice of career. For the purpose of the present study, only the Indecision Scale was used. Scores were reported as the average item response.

The CDS manual (Osipow, 1987) reports test-retest reliability coefficients of .90 and .82 (utilizing two separate samples of college students) for the Indecision Scale. Evidence for the validity of the Indecision Scale is provided by four types of studies outlined in the manual (Osipow, 1987): (1) those examining group similarities/differences and correlations with other measures, (2) treatment studies, (3) research exploring the relationship between career indecision and other personality characteristics, and (4) investigations of the association between scores on the CDS and demographic variables.

Self-Efficacy Ratings of General Occupational Themes

An adaptation of the occupational self-efficacy measure originally designed by Betz and Hackett (1981), and modified by Lapan, Boggs, and Morrill (1989) was used in the present study.

Participants were requested to rate their level of confidence in their ability to master the educational requirements and job duties of 83 separate occupations by means of a Likert-type scale ranging from 1 (not at all confident) to 7 (completely confident). The 83 occupations listed represent the six General Occupational Themes (GOTs) on the Strong Campbell Interest Inventory (SCII). Six subscale scores (representing each of the GOTs) can be tabulated by adding the self-efficacy ratings for each GOT, respectively. However, for the purpose of the present study, scores were reported as the average item response for the total scale.

My Vocational Situation (MVS)–Vocational Identity Scale

My Vocational Situation (MVS), developed by Holland, Daiger, and Power, is a 20-item paper-and-pencil measure of three occupational dimensions: vocational identity, occupational information, and barriers to goal attainment (Holland, Daiger, & Power, 1980). Holland et al. (1980, p. 1) define vocational identity as, " . . . the possession of a clear and stable picture of one's goals, interests, personality and talents. This characteristic leads to relatively untroubled decision-making and confidence in one's ability to make good decisions in the face of inevitable environmental ambiguities."

Holland, Johnston, and Asama (in press) characterize individuals with high scores on the Vocational Identity scale as vocationally mature, socially competent, free of severe psychopathology, conscientious, hopeful, and responsible. By contrast, low scores are indicative of poor self-regard, neurotic tendencies, self-defeating beliefs, an unclear sense of identity, dependency, hopelessness, and inadequate problem-solving abilities (Holland et al., in press).

The Occupational Information score provides a measure of the participant's need for occupational information, while the Barriers score reflects the participant's perception of impediments to vocational goal attainment (Holland et al., 1980).

The MVS is easily administered to individuals or groups, requiring approximately ten minutes to complete (Holland et al., 1980). Normative data is provided for high school students, college students, full-time workers, and graduate students/faculty (Holland et al., 1980).

The scoring procedure is outlined by Holland et al. (1980) as follows: The total number of "false" responses to items 1 through 18 constitutes the Vocational Identity (V.I.) score; the total of "no" responses to the four statements comprising Item 19 determines the Occupational Information (O.I.) score; and the total of no responses to the four statements comprising Item 20 constitutes the Barriers (B.) score. High scores on all three scales are desirable. For the purpose of the present study, only the Vocational Identity Scale was used. Scores were reported as the average item response.

Unlike the Occupational Information and Barriers scales, the Vocational Identity Scale has been shown to be internally consistent (Holland, et al., 1980); the KR 20 for the Vocational Identity Scale is .89 for male college students and .88 for female college students. Test-retest reliability coefficients for the V.I. scale range between .63 and .93 for time intervals of up to two weeks (Holland et al., in press).

As Holland et al. (1980, p. 4) state,

> The construct validity of the MVS scales lies in the origins of the items, the scale development, and the following analyses performed to test multiple hypotheses about the relation of vocational identity to age, educational level, vocational aspirations, external ratings, and other criteria.

The Vocational Identity and Occupational Information scales are associated with a number of theoretically relevant variables (Holland et al., 1980). Scores on the V.I. and O.I. scales are positively correlated with age, and negatively correlated with number and variety of occupational aspirations (Holland et al., 1980). For the V.I. scale alone, scores are

correlated in the expected direction with external ratings of descriptors such as "well-organized", "at loose ends", "self confident", and "competent to handle life well" (Holland et al., 1980, p. 5). In addition, V.I. scale scores are negatively associated with an expressed need for help and positively associated with "age, training, and degree of specialization" (Holland et al., 1980, p. 6).

Holland et al. (in press) summarize evidence for the construct validity and practical utility of the V.I. scale, found in studies published between 1980 and 1992. These authors cite research which shows the V.I. scale to discriminate among criterion groups, predict outcome (e.g., attrition from college), and correlate in the expected direction with measures of vocational commitment, job satisfaction, interpersonal competence, indecision, self-esteem, and anxiety. In addition, a factor analysis conducted by these authors revealed the V.I. scale to be comprised of a single unitary factor.

Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem Scale is a 10-item Guttman scale designed by Morris Rosenberg (1989) for use in a large scale study of the adolescent self-concept. Rosenberg (1989, p. 31) defines self-esteem as follows:

> High self-esteem, as reflected in our scale items, expresses the feeling that one is "good enough." The individual simply feels that he is a person of worth; he respects himself for what he is, but he does not stand in awe of himself nor does he expect others to stand in awe of him. He does not necessarily consider himself superior to others . . . When we speak of high self-esteem, then, we shall simply mean that the individual respects himself, considers himself worthy; he does not necessarily consider himself better than others, but he definitely does not consider himself worse; he does not feel that he is the ultimate in perfection but, on the contrary, recognizes his limitations and expects to grow and improve.

> Low self-esteem, on the other hand, implies self-rejection, self-dissatisfaction, self-contempt. The individual lacks respect for the self he observes. The self-picture is disagreeable, and he wishes it were otherwise.

The Rosenberg Self-Esteem Scale was designed to be brief, unidimensional, and easily administered in a group context (Rosenberg, 1989). The endorsement of choice options marked for examiners with an asterisk are indicative of low self-esteem (see scoring procedure outlined in Rosenberg, 1989, pp. 325-327).

Rosenberg (1989) reports a reproducibility index (associated with test-retest reliability) of 93%, a scalability (for items) index of 73%, and a scalability (for individuals) index of 72%. Thus, the scale has satisfactory internal reliability. In addition, scores on the scale are associated in the expected direction with indices of depression, psychosomaticism, and peer group reputation, as summarized by Rosenberg (1989, p. 30):

> If the scale actually measures low self-esteem, then we would expect those with low scores to appear depressed to others and to express feelings of discouragement and unhappiness; to manifest symptoms of 'neuroticism' or anxiety; to hold a low sociometric status in the group; to be described as commanding less respect than others and to feel that others have little respect for them. The evidence supports these expectations.

For the purpose of the present study, the descriptors used by the original author of the test as anchors for the 4-point Likert-type response scale were reversed, so that 1 = strongly agree to 4 = strongly disagree, became 1 = strongly disagree to 4 = strongly agree. The purpose in doing so was to render the Likert scales for all measures included in the questionnaire consistent in direction, from negative to positive, and presented in a manner congruent with that to which most students are accustomed. Responses were reverse-scored

for negatively-stated items, so that higher scores were indicative of greater self-esteem. Scores were reported as the average item response.

Family Assessment Device (FAD)–General Functioning Scale

The Family Assessment Device (FAD) is a 60-item self-report screening instrument developed by Epstein, Baldwin, and Bishop for the Brown University/Butler Hospital Family Research Program. The FAD measures seven dimensions of family functioning: Problem Solving, Communication, Roles, Affective Responsiveness, Affective Involvement, Behavior Control, and General Functioning (Epstein, Baldwin, & Bishop, 1983). The General Functioning Scale, of interest in the present study, "assesses the overall health/pathology of the family" (Epstein et al., p. 173).

The FAD may be administered to persons over the age of 12, requiring approximately 15 to 20 minutes to complete (Epstein et al., 1983). The response format for each item is based on a 4-point Likert scale ranging from 1 = strongly agree to 4 = strongly disagree. Participants are requested to rate how well each item describes their family. Prior to calculating subscale scores, participants' responses to designated items are reverse-scored. Each subscale score is then derived by averaging the responses to items for that scale. All subscale scores lie on a continuum from 1 (healthy) to 4 (unhealthy).

Epstein et al. (1983) provide evidence for the concurrent and predictive validity of the previous 53-item version of the FAD. This instrument was found to predict clinical group membership, as well as a substantial proportion of the variance in scores on measures of marital satisfaction and morale.

Kabacoff, Miller, Bishop, Epstein, and Keitner (1990) recommend use of the 60 (rather than early 53) item version of the FAD. These authors conducted a factor analysis which "provided support for the hypothesized structure of the instrument" and suggested "the continued use and development of this test" (p. 438).

The General Functioning Scale is comprised of 12 items reflecting the dimensions of family functioning tapped by each of the other 6 subscales (Byles, Byrne, Boyle, and Offord, 1988). Byles et al. (1988, p. 103) contend " . . . that the GF scale can be used in survey research with confidence in its reliability and validity" and recommend its use when experimental objectives require an assessment of general family functioning. Byles et al. (1988) report an internal reliability coefficient (Chronbach's alpha) of .86 for the GF subscale.

Along similar lines, Kabacoff et al. (1990), in their analyses of the data from three separate samples (psychiatric, medical, and nonclinical), found that the GF subscale, relative to the other FAD subscales, produced the highest internal reliability coefficients, ranging from .83 to .86. In addition, the construct validity of the GF subscale can be inferred from the correlation between subscale scores and various aspects of deviant family functioning such as alcohol abuse, parental psychopathology, and marital conflict (Byles et al., 1988).

For the purpose of the present study, only the General Functioning subscale of the FAD was used. As with the Rosenberg Self-Esteem Scale, the descriptors used by the original authors of the test as anchors for the 4-point Likert-type response scale were reversed, so that 1 = strongly agree to 4 = strongly disagree, became 1 = strongly disagree to 4 = strongly agree. Again, the purpose in doing so was to render the Likert scales for all measures included in the questionnaire consistent in direction, from negative to positive, and presented in a manner congruent with that to which most students are accustomed. Responses were scored such that higher scores reflected greater family dysfunction, with scores ranging from one to four. Scores reported are the average item response.

Social Provisions Scale (SPS)

The Social Provisions Scale is a 24-item paper-and-pencil measure of social support (Cutrona & Russell, 1987). Separate subscales tap six dimensions (provisions) of social

support: Attachment, Social Integration, Reassurance of Worth, Reliable Alliance, Guidance, and Opportunity for Nurturance (Russell & Cutrona, 1984).

The item format for the Social Provisions Scale consists of a 4-point Likert-type scale ranging from 1 = strongly disagree to 4 = strongly agree. Response values for designated items are reversed before tabulating the subscale scores and total score. Higher scores indicate greater social support (Russell & Cutrona, 1984). For the purpose of the present study, scores were reported as the average item response for the total scale. Test items were modified from present to past tense in order to tap the participants' perception of social support received during childhood and adolescence.

An analysis of the data gathered from a large sample of college students, public school teachers, and nurses (Cutrona & Russell, 1987) yielded reliability coefficients sufficient for use of the measure in research studies (coefficients ranged from .65 to .76 for the individual subscales). The reliability coefficient for the total score was found to be .91.

As Cutrona and Russell (1987, p. 46) report, "Construct validity of the instrument is supported by findings concerning the relationship between the social provisions and measures of loneliness and interpersonal relationships." In addition, each item on the scale has been determined (by means of a factor analysis) to represent the dimension it was intended to tap (Cutrona & Russell, 1987).

Discriminant (convergent and divergent) validity was confirmed by the greater correlation of the Social Provisions Scale with alternate measures of social support than with instruments tapping theoretically divergent variables (Cutrona & Russell, 1987).

Children of Alcoholics Screening Test (CAST)

The Children of Alcoholics Screening Test (CAST) is a 30-item paper-and-pencil measure designed to identify individuals raised in an alcoholic home. Developed by Jones (1991), this instrument assesses children's,

a) psychological distress associated with a parent's drinking . . . b) perceptions of drinking-related marital discord between their parents . . . c) attempts to control a parent's drinking . . . d) efforts to escape from the alcoholism . . . e) exposure to drinking-related family violence . . . f) tendencies to perceive their parents as being alcoholic . . . g) desire for professional counseling. (Jones, 1991, pp. 5-6)

The CAST may be employed as an aid to clinical interviewing, as a diagnostic and/or therapeutic tool, or as a research measure (Jones, 1991). It is intended for use with persons age nine and up and may be administered on an individual or group basis.

The CAST is scored by summing the number of yes responses (Jones, 1991). The total score may range from 0 to 30. A score of 0 or 1 identifies children of nonalcoholics; 2 to 5, children of problem drinkers; and 6 or greater, children of alcoholics.

Jones (1991) reported a Spearman-Brown split-half reliability coefficient of .98 for three separate samples (latency-age and adolescent COAs, a random sample of latency-age and adolescent children, and a random sample of adults). Dinning and Berk (1989) reported internal consistency reliability coefficients in the mid .90s.

The validity of this instrument is based on two main studies (Jones, 1991). In the first of these, the CAST was administered to the offspring of clinically diagnosed alcoholics, to self-identified COAs, and to controls. Both groups of COAs achieved significantly higher scores than the control group. All of the CAST items were found to differentiate COAs from children of nonalcoholics.

The second study utilized a sample of adults, divided into two subgroups, self-identified COAs and controls. COAs were found to achieve significantly higher scores on the CAST than controls. A positive correlation was found between 1) participants' total scores and the amount of alcohol consumed by parents over the course of an ordinary week, and 2) total scores and the number of days (in a typical week) parents drank.

These findings support the conclusion of O'Malley, Carey, and Maisto (1986), that college students can and do provide a generally accurate self-report of parental drinking practices, as well as the problems associated with their parents' use of alcohol.

Procedure

Involvement in the experiment was voluntary. Students from Introductory and Developmental Psychology were recruited from sign-up sheets posted in the Department of Psychology. Participants received one class credit for their participation.

Test sessions were conducted by undergraduate research assistants trained to follow a standardized procedure. Participants were tested in groups of approximately 20 students and requested to sign a statement of informed consent prior to participation (see Appendix B). Extra credit forms were provided at the outset of the session so that participants wishing to end their involvement in the study at any point short of completion would not be penalized. Each participant was administered a survey questionnaire (see Appendix A), along with two separate answer sheets. Students were given a debriefing announcement (see Appendix C) subsequent to testing. To protect confidentiality, respondents were identified by code number only. Total testing time was 45 minutes.

This research was approved by the Iowa State University Human Subjects Review Committee prior to data collection.

Classification of Participants

A grand total of 1,011 participants were tested because the proportion of Adult Children of Alcoholics (ACOAs) in the population was anticipated to be approximately 15%. Fifty-five international students (5.44%), three graduate students (.30%), and nine students over the age of 25 (.89%) were deleted from the data set. Also excluded were 55 test protocols (5.44%) where a random response pattern was detected (those with marks beyond the range of available response options) or where responses were "off-line" (where the participant

failed to mark the correct number of answers on either answer sheet, stopping short of or surpassing the appropriate point of completion). Missing data were treated in the following fashion: In cases where answers to items on the Indecision Scale, Self-Efficacy Ratings of General Occupational Themes, Vocational Identity Scale, Rosenberg Self-Esteem Scale, General Functioning Scale, and Social Provisions Scale were missing, the value for missing items was changed to the person's average item response, if, and only if, 90 percent or more of the items for that particular scale were answered. In cases where less than 90% of the items were answered, the total scale score (reported as the overall average item response) was coded as missing.

Initially, participants were classified as Adult Children of Alcoholics (ACOAs) if their total score on the CAST was six or greater, Children of Problem Drinkers if their score was two to five, and Children of Nonalcoholics if their score was zero or one. One-hundred and eighty-one participants with usable data met the criterion for ACOA, 56 met the criterion for Children of Problem Drinkers, and 652 met the criterion for Children of Nonalcoholics. One-hundred and eighty-one participants were then randomly chosen from the pool of Children of Nonalcoholics for data analysis. Children of Problem Drinkers were eliminated from the data set in order to maximize the likelihood that significant differences between ACOAs and Children of Nonalcoholics would be detected, should any exist.

While, at this point, 362 participants (181 ACOAs and 181 Children of Nonalcoholics) were to be included in the statistical analyses, a preliminary perusal of the data revealed a discrepancy that further reduced the sample size. Although the Total CAST score was intended as the basis for classifying participants as ACOAs or Children of Nonalcoholics, an independent two-item measure of participants' perception of parental drinking patterns was also included in the questionnaire. Students were asked to indicate whether their primary female and male caretakers, respectively, abstained from alcohol use, drank lightly, drank

moderately, drank heavily/were problem drinkers, or were alcoholics. It was discovered that 90 of the participants classified as ACOA by means of their Total CAST score independently indicated that their primary caretakers abstained from alcohol use, drank lightly, or drank moderately. In addition, one of the participants classified as a Child of Nonalcoholics indicated that her primary male caretaker was alcoholic. Given the discrepancy between their Total CAST score and independent two-item self-report of parental drinking patterns, these 91 participants were deleted from primary data analyses, reducing the operative sample size to 271 (91 ACOAs and 180 Children of Nonalcoholics).

The same statistical analyses were conducted using both samples ($\underline{N} = 271$ and $\underline{N} = 362$). While the demographic and statistical tables for the reduced sample ($\underline{N} = 271$) are provided in text, the reader is referred to Appendix D (Tables D1 and D2) for the demographic tables, and Appendices E (Table E1) through F (Tables F1 and F2) for the statistical tables pertaining to the full sample ($\underline{N} = 362$).

Planned Analyses

The planned statistical analyses for this study included (1) an analysis of the internal consistency of all scales contained in the questionnaire, (2) a series of primary analyses including (a) three 2 x 2 (Participant's Gender by ACOA Status) univariate analyses of covariance to determine between-group differences in vocational identity, occupational self-efficacy, and career indecisiveness, with Family Dysfunction as the covariate, and (b) three multiple regression analyses for predicting vocational identity, occupational self-efficacy, and career indecision from a combination of family-related, personal, and demographic variables, and (3) a series of correlational analyses to examine the CAST and explore its relationship to other indices of parental alcohol use. Probabilities less than or equal to .01 were reported as significant for all analyses, given the large sample size and the number of statistical analyses performed. The results of a power analysis revealed that the power to

detect a moderate effect size, defined as one-half of a standard deviation on the dependent variable(s), was greater than or equal to .94 for the analyses of variance and covariance.

Analysis of Internal Consistency

Chronbach's coefficient alpha was used as the estimate of internal consistency for the seven scales included in the questionnaire. These were the Indecision Scale (subscale of the Career Decision Scale), Self-Efficacy Ratings of General Occupational Themes, Vocational Identity Scale (subscale of My Vocational Situation), Rosenberg Self-Esteem Scale, General Functioning Scale (subscale of the Family Assessment Device), Social Provisions Scale, and Children of Alcoholics Screening Test.

Primary Analyses

Analyses of Covariance

Because, as the literature states, it is unclear whether the (potentially) harmful consequences of parental alcoholism are due to the effects of dysfunctional family dynamics or alcohol abuse per se, the analysis of covariance (ANCOVA) procedure was used to control for the effects of general family dysfunction, while testing for differences in the vocational development of Children of Alcoholics and Children of Nonalcoholics.

Between-group differences in the vocational identity, occupational self-efficacy, and career indecisiveness of ACOAs and Children of Nonalcoholics were assessed by means of three 2 x 2 (Participant's Gender by ACOA Status) univariate analyses of covariance using partial sums of squares. Participants' scores on the General Functioning Scale of the Family Assessment Device served as the covariate.

Means on the three vocational variables, within levels of Gender and ACOA Status, were adjusted for the linear association between each dependent variable and the covariate General Family Dysfunction.

Regression Analyses

Three multiple regression analyses were conducted to determine the proportion of variance accounted for by seven predictor variables, and the unique contribution of each predictor, for the three main dependent variables: Vocational Identity, Occupational Self-Efficacy, and Career Indecision. The predictor variables examined included General Family Dysfunction, Participant's Gender, Academic Success, Self-Esteem, Social Support, Length of Maternal Employment, and Birth Order.

Correlational Analyses

A series of correlational analyses was conducted to examine the CAST and explore its relationship to other indices of parental alcohol use. Finally, measures of parental alcohol use other than the CAST were correlated to examine their relationship to one another.

RESULTS

The results of this study, including planned and unplanned analyses, are divided into three main sections as follows: (1) an analysis of the internal consistency of all scales contained in the questionnaire, (2) a series of primary analyses including (a) 2 x 2 (Participant's Gender by ACOA Status) univariate analyses of covariance to determine between-group differences on the three primary dependent variables (vocational identity, occupational self-efficacy, and career indecision), with General Family Dysfunction as the covariate, (b) 2 x 2 (Participant's Gender by ACOA Status) univariate analyses of variance to determine between-group differences on the same three dependent variables, (c) a 2 x 2 (Participant's Gender by ACOA Status) univariate analysis of variance to determine between-group differences on the dependent variable General Family Dysfunction, and (d) three multiple regression analyses for predicting vocational identity, occupational self-efficacy, and career indecision from a combination of family-related, personal, and demographic variables, and (3) a series of correlational analyses to examine the CAST and explore its relationship to other indices of parental alcohol use. Gender was used as an independent variable in the analyses of variance and covariance, and as a predictor variable in the multiple regression analyses, given the literature suggesting the importance of gender effects in research on ACOAs. Alpha was set at .01 for all inferential analyses, given the large sample size and the number of statistical analyses performed.

Analysis of Internal Consistency

Chronbach's coefficient alpha for raw scores was used to determine the internal consistency of the seven scales contained in the questionnaire. These included the Indecision Scale, Self-Efficacy Ratings of General Occupational Themes, Vocational Identity Scale, Rosenberg Self-Esteem Scale, General Functioning Scale, Social Provisions Scale, and Children of Alcoholics Screening Test. Table 3 provides the descriptive statistics (number of participants, number of scale items, mean, and standard deviation) and alpha coefficient for

Table 3

Descriptive Statistics and Alpha Coefficients for Scales Included in Questionnaire

Scale	N	# of Items	Mean	Standard Deviation	Alpha Coefficient[a]
Indecision Scale	888	16	1.83	0.51	0.87
Self-Efficacy Ratings of General Occupational Themes - Total	889	83	4.07	1.10	0.98
Artistic	889	15	3.68	1.05	0.87
Conventional	889	11	4.13	1.35	0.89
Investigative	889	19	3.70	1.36	0.95
Enterprising	889	14	4.43	1.32	0.93
Realistic	889	12	3.75	1.55	0.93
Social	889	12	4.70	1.38	0.93
Vocational Identity Scale	889	18	0.60	0.27	0.88
Rosenberg Self-Esteem Scale	885	10	3.26	0.51	0.86
General Functioning Scale	885	12	1.91	0.56	0.91
Social Provisions Scale	889	24	3.23	0.45	0.93
Children of Alcoholics Screening Test	889	30	3.17	6.34	0.96

Note. N of 889 varies slightly between scales due to missing data. Mean = average item rating for each scale, aside from the Children of Alcoholics Screening Test, where Mean = average total score. The Indecision Scale is based on a 4-point Likert scale ranging from 1 =

(table continues)

not at all like me to 4 = exactly like me, with higher scores indicating greater career indecisiveness. The General Occupational Themes subscale and total-scale scores are based on a 7-point Likert scale ranging from 1 = not at all confident to 7 = completely confident, with higher scores indicating greater self-efficacy. The Vocational Identity Scale is based on a 2-point response option; 0 = mostly true and 1 = mostly false; higher scores indicate a more well-developed sense of vocational identity. The Rosenberg Self-Esteem Scale is based on a 4-point Likert scale ranging from 1 = strongly disagree to 4 = strongly agree, with higher scores indicating greater self-esteem. The General Functioning Scale is based on a 4-point Likert scale ranging from 1 = strongly disagree to 4 = strongly agree, with higher scores indicating greater family dysfunction. The Social Provisions Scale is based on a 4-point Likert scale ranging from 1 = strongly disagree to 4 = strongly agree, with higher scores indicating a perception of greater social support during childhood and adolescence. The Children of Alcoholics Screening Test is based on a 2-point response option; 1 = yes and 0 = no; higher scores indicate a greater perception of parental alcohol abuse/dependence.

[a]Alpha Coefficient = Chronbach's coefficient alpha for raw scores.

each scale. The means reported are equivalent to the average item response rating for each scale, aside from the Children of Alcoholics Screening Test, where the mean is equivalent to the average total score. Eight-hundred and eighty-nine observations (652 Children of Nonalcoholics, 56 Children of Problem Drinkers, and 181 Children of Alcoholics, as classified by the CAST alone) were used in the analyses of internal consistency, although the number of participants varied slightly between scales due to missing data. The coefficient alphas were high, ranging from .86 for the Rosenberg Self-Esteem Scale to .98 for the Total Self-Efficacy Ratings of General Occupational Themes. The alpha coefficient for four out of the seven scales included in the questionnaire was greater than .90.

Primary Analyses

Analyses of Covariance for Vocational Variables

Because, as the literature states, it is unclear whether the (potentially) harmful consequences of parental alcoholism are due to the effects of general family dysfunction or alcohol abuse per se, the analysis of covariance (ANCOVA) procedure was used to control for the effects of family dysfunction, while examining between-group differences in the vocational development of Children of Alcoholics and Children of Nonalcoholics.

A 2 x 2 (Participant's Gender by ACOA Status) univariate analysis of covariance, using partial sums of squares, was conducted for each of the three main dependent variables under investigation in the present study: Vocational Identity, Occupational Self-Efficacy, and Career Indecision. General Family Dysfunction, represented by participants' scores on the General Functioning Scale, served as the covariate. The General Functioning Scale was based on a 4-point Likert-type scale ranging from 1 = strongly disagree to 4 = strongly agree, with higher scores indicating greater family dysfunction. The grouping variable, ACOA Status, was defined by two levels; Children of Nonalcoholics and Children of Alcoholics.

Vocational Identity was measured by means of participants' scores on the Vocational Identity Scale. Items on this scale used a two-point response option (0 = mostly true and 1 = mostly false), with higher scores indicating a more well-developed (clear and stable) sense of vocational identity. Participants' total average item response to the Self-Efficacy Ratings of General Occupational Themes was used as a measure of overall level of occupational self-efficacy. The Self-Efficacy Ratings were based on a 7-point Likert-type scale ranging from 1 = not at all confident to 7 = completely confident, with higher scores indicating a greater sense of self-efficacy. Participants' scores on the Indecision Scale were used as a measure of career indecisiveness. The Indecision Scale was based on a 4-point Likert-type scale ranging from 1 = not at all like me to 4 = exactly like me, with higher scores indicating greater career indecisiveness. One pair of dependent measures was highly correlated (-.79 for Vocational Identity and Career Indecision, significant at $p \leq .0001$), while the other two were not (.09 for Vocational Identity and Occupational Self-Efficacy, and -.11 for Occupational Self-Efficacy and Career Indecision).

No significant between-group differences for Gender or ACOA Status were detected in the three univariate analyses of covariance for vocational variables using the smaller sample of 271 participants (see Table 4). The interaction effect (ACOA Status by Gender) also was not significant in all three analyses.

The covariate, General Family Dysfunction, was statistically significant in all three analyses. The correlations between scores on the covariate and each of the dependent variables were -.17 for Vocational Identity, -.16 for Occupational Self-Efficacy, and .18 for Career Indecision ($p \leq .01$ for all correlations), suggesting a small yet significant association between greater family dysfunction and (1) a less clear and stable sense of vocational identity, (2) less occupational self-efficacy, and (3) greater career indecisiveness.

Table 4

Summary of Analyses of Covariance for Vocational Variables

	Vocational Identity		Occupational Self-Efficacy		Career Indecision	
Source	Mean Square	F[b]	Mean Square	F[b]	Mean Square	F[b]
ACOA Status (A)	0.0004	0.01	0.1577	0.14	0.1308	0.49
Participant's Gender (B)	0.0319	0.43	3.6652	3.27	0.8163	3.05
A X B	0.0580	0.77	0.1661	0.15	0.8922	3.33
Covariate[a]	0.5638	7.51*	8.8220	7.87*	2.2233	8.30*
Error	0.0751		1.1211		0.2678	

Note. N = 271. ACOA = Adult Children of Alcoholics.

[a]Covariate = participant's score on the General Functioning Scale of the Family Assessment Device.

[b]Degrees of freedom = (1, 266) for all analyses.

*$p \leq .01$.

When the full sample of 362 participants was used to examine between-group differences on the three primary dependent variables, the only discrepancy in statistical results for the two samples was a main effect for Gender, evident with regard to Occupational Self-Efficacy, F (1, 357) = 9.77, $p \leq .01$ (see Appendix E, Table E1). Males achieved an average self-efficacy response rating of 4.26 (SD = 1.11), while that for females was 3.90 (SD = 1.07). The main effect of ACOA Status and the interaction effect (ACOA Status by Gender) were not significant in all three analyses.

Again, the covariate, General Family Dysfunction, was statistically significant in all three analyses, supporting a small yet significant association between greater family dysfunction and a lesser degree of vocational adjustment/functioning. The correlations between scores on the covariate and each of the dependent variables were as follows: -.19 for Vocational Identity ($p \leq .001$), -.17 for Occupational Self-Efficacy ($p \leq .01$), and .16 for Career Indecision ($p \leq .01$).

Analyses of Variance

Given that no differences in the vocational functioning of Children of Alcoholics and Children of Nonalcoholics were found when controlling for the effects of general family dysfunction, and as a matter of general interest, the less conservative analysis of variance procedure was used as a follow-up test for differences between these two groups on the three measures of vocational development. It was reasoned that, without controlling for the influence of the covariate, the analyses of variance could reveal any differences between the groups that are mediated by general family dysfunction.

Vocational Variables

A 2 x 2 (Participant's Gender by ACOA Status) univariate analysis of variance (ANOVA), using partial sums of squares, was conducted for each of the three main

dependent variables–Vocational Identity, Occupational Self-Efficacy, and Career Indecision–under investigation in the present study.

Consistent with the results of the analyses of covariance, no significant between-group differences for ACOA Status or Gender were detected in the three univariate analyses of variance using the smaller sample of 271 participants (see Table 5). The interaction effect (ACOA Status by Gender) also was not significant in all three analyses.

Findings for the analyses of covariance and analyses of variance also were parallel when the full sample of 362 participants was used to examine between-group differences on the three vocational variables. The results of the analyses of variance for the full sample revealed a main effect for Gender on Occupational Self-Efficacy, $\underline{F}$ (1, 358) = 8.44, $\underline{p} \leq .01$ (see Appendix F, Table F1). Males achieved an average self-efficacy response rating of 4.25 ($\underline{SD}$ = 1.11), while that for females was 3.91 ($\underline{SD}$ = 1.07). The main effect for ACOA Status and the interaction effect (ACOA Status by Gender) were not significant in all three analyses.

General Family Dysfunction

A 2 x 2 (Participant's Gender by ACOA Status) univariate analysis of variance, using partial sums of squares, also was conducted to determine between-group differences on the dependent variable General Family Dysfunction. The General Functioning Scale of the Family Assessment Device (FAD) was used to measure family dysfunction. This scale was based on a 4-point Likert-type response option ranging from 1 = strongly disagree to 4 = strongly agree, with higher scores indicating greater family dysfunction.

When the smaller sample ($\underline{N}$ = 271) was used, results revealed a main effect for ACOA Status, $\underline{F}$ (1, 267) = 13.04, $\underline{p} \leq .001$ (see Table 6), with Children of Nonalcoholics achieving an average response rating of 1.82 on the General Functioning Scale ($\underline{SD}$ = .56), and Children of Alcoholics obtaining an average response rating of 2.10 ($\underline{SD}$ = .61). No main

Table 5

Summary of Analyses of Variance for Vocational Variables

Source	Vocational Identity		Occupational Self-Efficacy		Career Indecision	
	Mean Square	F[a]	Mean Square	F[a]	Mean Square	F[a]
ACOA Status (A)	0.0346	0.45	0.0623	0.05	0.4897	1.78
Participant's Gender (B)	0.0276	0.36	3.4785	3.02	0.8622	3.13
A X B	0.0479	0.62	0.1024	0.09	0.8117	2.95
Error	0.0769		1.1499		0.2752	

Note. N = 271. ACOA = Adult Children of Alcoholics.

[a]Degrees of freedom = (1, 267) for all analyses.

Table 6

Summary of Analysis of Variance for General Family Dysfunction

Source	Mean Square	F[a]
ACOA Status (A)	4.3110	13.04*
Participant's Gender (B)	0.0247	0.07
A X B	0.0770	0.23
Error	0.3307	

Note. N = 271. ACOA = Adult Children of Alcoholics.

[a]Degrees of freedom = (1, 267).

*$p \leq .001$.

effect for Gender was evident, and the interaction between ACOA Status and Gender also was not significant.

An analysis of the larger sample ($N = 362$) also revealed a main effect for ACOA Status, $F(1, 358) = 17.76$, $p \leq .0001$ (See Appendix F, Table F2). The average response rating on the General Functioning Scale was 1.83 ($SD = .55$) for Children of Nonalcoholics, and 2.08 ($SD = .57$) for Children of Alcoholics. Again, no main effect for Gender was detected, and the interaction effect (ACOA Status by Gender) was not significant.

Multiple Regression Analyses

Regression analyses were conducted to explore the relationship between participants' vocational development and a number of personal and family-related variables. While this procedure originally was intended to examine the role of factors likely to mediate the effects of parental alcoholism on the occupational development of offspring (using Adult Children of Alcoholics only), the validity of the ACOA concept itself was called into question by the results of earlier analyses that revealed no significant between-group differences for Children of Alcoholics and Children of Nonalcoholics on measures of vocational identity, occupational self-efficacy, and career indecision. Thus, the regression analyses were run using the grand sample ($N = 889$) to examine the association between vocational development and personal/family functioning for all respondents, regardless of ACOA status.

Three separate regression analyses were conducted, with Vocational Identity, Occupational Self-Efficacy, and Career Indecision serving as the respective criterion variables. The same seven predictor variables were used in all three analyses. These included (1) General Family Dysfunction (represented by participants' average item response rating on the General Functioning Scale of the FAD), (2) Gender, (3) Academic Success (represented by high school GPA), (4) Self-Esteem (represented by participants' average item response rating on the Rosenberg Self-Esteem Scale), (5) Social Support (represented by

participants' average item response rating on the Social Provisions Scale), (6) Length of Maternal Employment, and (7) Birth Order.

The intercorrelations among all criterion and predictor variables are shown in Table 7. With the exception of the intercorrelations between General Family Dysfunction, Self-Esteem, and Social Support, the intercorrelations among the predictor variables were generally quite low, suggesting that problems associated with multicollinearity were minimal. The intercorrelations between General Family Dysfunction, Self-Esteem, and Social Support were as follows: -.34 for General Family Dysfunction and Self-Esteem, -.56 for General Family Dysfunction and Social Support, and .42 for Self-Esteem and Social Support ($p \leq .0001$ for all correlations). Among the criterion variables, Vocational Identity showed a slight positive correlation with Occupational Self-Efficacy ($r = .14$, $p \leq .0001$), and Career Indecision a slight negative correlation with Occupational Self-Efficacy ($r = -.07$). Vocational Identity was highly negatively correlated with Career Indecision ($r = -.76$, $p \leq .0001$), suggesting that the Vocational Identity and Career Indecision Scales were tapping theoretically similar constructs.

Table 8 provides a summary of results for the three regression analyses. While the R^2 of .16 for Vocational Identity was significant, $F(7, 792) = 21.46$, $p \leq .0001$, the full model of personal, demographic, and family-related variables was associated with only 16% of the variance in participant's scores on the criterion variable, 15% when adjusted for shrinkage. Self-Esteem, the only predictor found to directly account for a significant proportion of the variance in participants' performance on the Vocational Identity Scale ($\beta = .34$, $t = 9.03$, $p \leq .0001$), had a direct positive correlation with the dependent variable ($r = .38$, $p \leq .0001$).

The R^2 for Occupational Self-Efficacy was .10, $F(7, 792) = 12.33$, $p \leq .0001$. Again, the full model of predictor variables was associated with only a modest amount (10%) of the total variance in participant's scores on the criterion variable (9% when adjusted for

Table 7

Intercorrelation Matrix for Predictor and Criterion Variables in Multiple Regression

Variable	Predictor Variable							Criterion Variable			Mean[a]	Standard Deviation
	1	2	3	4	5	6	7	8	9	10		
Predictor												
1. General Family Dysfunction	—	-.04	-.06	-.34***	-.56***	-.01	.05	-.19***	-.12**	.18***	1.91	0.56
2. Gender		—	.17***	-.11*	.13***	.04	-.04	-.05	-.14***	-.08		
3. High School GPA			—	.17**	.11**	-.08	-.09*	.03	.16***	-.05	8.26	1.52
4. Self-Esteem				—	.42***	-.01	-.09*	.38***	.22***	-.31***	3.26	0.51
5. Social Support					—	-.01	-.07	.20***	.14***	-.22***	3.23	0.45
6. Length of Maternal Employment						—	-.03	.08	-.08	-.08	5.10	2.86
7. Birth Order							—	-.05	-.05	.04	2.04	1.14
Criterion												
8. Vocational Identity								—	.14***	-.76***	0.60	0.27
9. Occupational Self-Efficacy									—	-.07	4.07	1.10
10. Career Indecision										—	1.83	0.51

Note. Original N of 889 was reduced to 888 for High School GPA, Birth Order, and Career Indecision, and 885 for General Family Dysfunction and Self-Esteem, due to missing data. N = 808 for Length of Maternal Employment due to missing data and deletion of participants for whom item was nonapplicable. The General Functioning Scale is based on a 4-point Likert

(table continues)

scale ranging from 1 = strongly disagree to 4 = strongly agree, with higher scores indicating greater family dysfunction. Response options for Gender are 1 = male, 2 = female. GPA = Grade Point Average, as a measure of academic success. The reversed-scored response options used in the analyses of High School GPA were: 1 = 0.00-0.99 (D-/F), 2 = 1.00-1.33 (D/D+), 3 = 1.34-2.67 (C-), 4 = 1.68-2.00 (C), 5 = 2.01-2.33 (C+), 6 = 2.34-2.67 (B-), 7 = 2.68-3.00 (B), 8 = 3.01-3.33 (B+), 9 = 3.34-3.67 (A-), 10 = 3.68-4.00 (A). The Rosenberg Self-Esteem Scale is based on a 4-point Likert scale ranging from 1 = strongly disagree to 4 = strongly agree, with higher scores indicating greater self-esteem. The Social Provisions Scale is based on a 4-point Likert scale ranging from 1 = strongly disagree to 4 = strongly agree, with higher scores indicating a perception of greater social support during childhood and adolescence. Length of Maternal Employment = total number of years primary female caretaker was employed outside of the home during participant's first 17 years of life; item is based on a 10-point response option (0 = nonapplicable, 1 = 0-2, 2 = 3-4, 3 = 5-6, 4 = 7-8, 5 = 9-10, 6 = 11-12, 7 = 13-14, 8 = 15-16, 9 = 17). Birth Order is based on a 10-point response option (1 = first to 10 = tenth or more). The Vocational Identity Scale is based on a 2-point response option (0 = mostly true, 1 = mostly false), with higher scores indicating a more well-developed sense of vocational identity. The Indecision Scale is based on a 4-point Likert scale ranging from 1 = not at all like me to 4 = exactly like me, with higher scores indicating greater career indecisiveness. Occupational Self-Efficacy is represented by the General Occupational Themes Total-Scale Score; items are based on a 7-point Likert scale ranging from 1 = not at all confident to 7 = completely confident, with higher scores indicating greater self-efficacy. [a]Mean = average response rating for each item or scale. *$p \leq .01$. **$p \leq .001$. ***$p \leq .0001$.

Table 8

Multiple Regression for Predicting Vocational Variables from Family, Personal, and Demographic Variables

Predictor variable	Vocational Identity		Occupational Self-Efficacy		Career Indecision	
	Beta[a]	t	Beta[a]	t	Beta[a]	t
General Family Dysfunction	-.07	-1.80	-.04	-1.03	.08	2.01
Gender	-.03	-0.76	-.16	-4.60***	-.10	-3.00*
High School GPA	-.02	-0.50	.14	3.92***	-.003	-0.08
Self-Esteem	.34	9.03***	.14	3.52**	-.27	-7.11***
Social Support	.03	0.79	.08	1.90	-.06	-1.46
Length of Maternal Employment	.07	2.22	-.06	-1.89	-.08	-2.27
Birth Order	-.03	-0.90	-.01	-0.30	.03	0.85
R	.40		.31		.37	
R^2	.16		.10		.14	
Adjusted R^2	.15		.09		.13	
F	21.46***[b]		12.33***[c]		17.70***[d]	

Note. Original N of 889 was reduced to 800 for Vocational Identity and Occupational Self-Efficacy and 799 for Career Indecision, due to missing data and deletion of participants for whom Length of Maternal Employment was nonapplicable. GPA = Grade Point Average. Social Support = perception of social support received during childhood and adolescence. Length of Maternal Employment = total number of years primary female caretaker was employed outside the home during participant's first 17 years of life. Original ten-point response option for GPA (with values presented in descending order) was reverse-scored prior to data analyses. [a]Beta = standardized beta weight. [b]Degrees of freedom = (7, 792). [c]Degrees of freedom = (7, 792). [d]Degrees of freedom = (7, 791). *$p \leq .01$. **$p \leq .001$. ***$p \leq .0001$.

shrinkage). Three of the predictors, Gender (ß = -.16, $\underline{t}$ = -4.60, $\underline{p} \leq .0001$), High School GPA (ß = .14, $\underline{t}$ = 3.92, $\underline{p} \leq .0001$), and Self-Esteem (ß = .14, $\underline{t}$ = 3.52, $\underline{p} \leq .001$), were found to directly account for a significant proportion of the variance in participants' average total item rating for Occupational Self-Efficacy. Gender (1= male, 2 = female) had a low negative correlation with the dependent variable ($\underline{r}$ = -.14, $\underline{p} \leq .0001$), High School GPA, a low positive correlation ($\underline{r}$ = .16, $\underline{p} \leq .0001$), and Self-Esteem, a low positive correlation ($\underline{r}$ = .22, $\underline{p} \leq .0001$).

Fourteen percent of the variance in participants' scores on the dependent measure was accounted for when Career Indecision was regressed onto the full set of predictor variables [$\underline{R}^2$ = .14, $\underline{F}$ (7, 791) = 17.70, $\underline{p} \leq .0001$]. The overall $\underline{R}^2$, adjusted for shrinkage, was .13. Gender (ß = -.10, $\underline{t}$ = -3.00, $\underline{p} \leq .01$) and Self-Esteem (ß = -.27, $\underline{t}$ = -7.11, $\underline{p} \leq .0001$) were the two predictors found to directly account for a significant proportion of the variance in participants' performance on the Indecision Scale. Gender showed a slight negative correlation with the criterion variable ($\underline{r}$ = -.08), and Self-Esteem, a moderate negative correlation ($\underline{r}$ = -.31, $\underline{p} \leq .0001$).

Analysis of the Children of Alcoholics Screening Test (CAST)

Discrepancy Between CAST Score and Independent Self-Report of Parental Alcohol Use

As previously stated, 181 ACOAs were identified based on CAST scores of six or greater. A preliminary perusal of the data revealed a discrepancy in outcome between this classification method and that based on an independent two-item measure of participants' perception of parental drinking patterns included in the questionnaire. Participants were asked to indicate, separately, whether their primary female and male caretakers (1) abstained from alcohol use, (2) drank lightly, (3) drank moderately, (4) drank heavily/were problem drinkers, or (5) were alcoholics (see Table 9). These two items were labeled *Female Drink* and *Male Drink*, respectively, then combined to generate a third variable termed *Parent*

Table 9

Participant's Two-Item Self-Report of Parental Drinking Patterns

Variable	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Female Caretaker's Drinking Pattern				
Did Not Drink	189	52.2	189	52.2
Drank Lightly	120	33.1	309	85.4
Drank Moderately	40	11.0	349	96.4
Drank Heavily/Problem-Drinker	10	2.8	359	99.2
Alcoholic	3	0.8	362	100.0
Male Caretaker's Drinking Pattern				
Did Not Drink	82	22.8	82	22.8
Drank Lightly	101	28.1	183	50.8
Drank Moderately	81	22.5	264	73.3
Drank Heavily/Problem-Drinker	37	10.3	301	83.6
Alcoholic	43	11.9	344	95.6
No Male Caretaker	16	4.4	360	100.0

Note. N of 362 varies slightly for Male Caretaker's Drinking Pattern due to missing data. Data reported represents participant's own perception of parental drinking patterns.

Drink. Parent Drink was used to identify those participants raised in an alcoholic home, whether due to alcohol abuse on the part of their primary male *or* female caretaker. Using the same response categories as those for Female Drink and Male Drink, Parent Drink was calculated as follows: If the participant's rating of alcohol use on the part of the primary female caretaker was greater than or equal to their rating of alcohol use on the part of the primary male caretaker, the value for Parent Drink was set to the value for Female Drink; otherwise, it was set to the value for Male Drink. If participants indicated that either no primary female or no primary male caretaker took part in raising them, the value for Parent Drink was based on information regarding the one available caretaker.

Table 10 presents the results of a Chi-square analysis to examine the distribution of 181 Children of Nonalcoholics (identified by a CAST score of zero or one) and 181 Children of Alcoholics (identified by a CAST score of six or greater) across subcategories of the Parent Drink variable [Likelihood Ratio χ^2 (4, $\underline{N}$ = 362) = 229.40, $\underline{p} \leq .001$]. Findings revealed that 90 of the participants classified as ACOAs by means of their CAST score indicated that their primary caretakers abstained from alcohol use, drank lightly, or drank moderately. In addition, one of the participants, classified as a Child of Nonalcoholics, indicated that her primary male caretaker was alcoholic. As mentioned earlier, given the discrepancy between their CAST score and the independent two-item self-report of parental drinking patterns, these 91 participants were deleted from primary data analyses, reducing the operative sample size to 271 (91 ACOAs who indicated that their primary male and/or female caretaker was a heavy/problem drinker or alcoholic, and 180 Children of Nonalcoholics who indicated that their primary male and/or female caretaker did not drink, drank lightly, or drank moderately).

Because of the incongruity between participants' Total CAST Score and their response to the independent two-item measure of parental drinking patterns, a series of post hoc correlational analyses were conducted to assess the validity of the CAST by examining its

Table 10

Chi-square Distribution of ACOA Status by Parent Drink Variable for Children of Nonalcoholics and Children of Alcoholics

	Parent Drink Variable[a]					
ACOA Status	Did Not Drink	Drank Lightly	Drank Moderately	Drank Heavily/ Problem Drinker	Was Alcoholic	Total N (%)
Non-ACOA						
Frequency	73	80	27	0	1	181(50.00)
Row Percent	40.33	44.20	14.92	0.00	0.55	
Column Percent	89.02	80.81	30.34	0.00	2.17	
ACOA						
Frequency	9	19	62	46	45	181(50.00)
Row Percent	4.97	10.50	34.25	25.41	24.86	
Column Percent	10.98	19.19	69.66	100.00	97.83	
Total N (%)	82(22.65)	99(27.35)	89(24.59)	46(12.71)	46(12.71)	362(100.00)

Note. Likelihood Ratio χ^2 (4, N = 362) = 229.40, $p \leq .001$. ACOA Status represents classification of participants by score on the Children of Alcoholics Screening Test: Non-ACOA = scores less than 2; ACOA = scores greater than 5.

[a]Parent Drink Variable = participant's report of parental alcohol use, as defined by highest level of usage between primary male and female caretakers.

relationship to other indices of parental alcohol use. Findings are presented following a brief description of the indices used.

Indices of Parental Alcohol Use Included in the Correlational Analyses

Other indices of parental alcohol use, in addition to Female Drink, Male Drink, and Parent Drink, were created from information gathered on the questionnaire. The data on which these variables were based originally were intended for use in a statistical procedure to examine the role of factors likely to mediate the effects of parental alcoholism on the vocational development of offspring. When this procedure was not conducted, due to a lack of between-group differences for Children of Alcoholics and Children of Nonalcoholics on the three vocational measures, the data were used, instead, to create the following indices of parental alcohol abuse:

1. *Female Treatment*: The variable Female Treatment was defined by the participant's self-report of mental health or alcohol-related treatment services received by his/her primary female caretaker. Participants were asked to respond to the question, "Did the primary adult female by whom you were raised ever receive treatment because of their own or their spouse's alcohol abuse?". Treatment was defined as Alcoholics Anonymous, Al-Anon, inpatient hospital treatment, outpatient treatment at a mental health clinic or hospital, or treatment by a private practitioner (e.g., psychiatrist, psychologist, social worker). The item was based on a four-point response option, where 1 = Yes, 2 = No, although one or both abused alcohol, 3 = No, neither abused alcohol, and 4 = No adult female took part in raising me. A value of 1 was assigned to the variable, Female Treatment, when response option 1 or 2 was endorsed, and a value of zero when response option 3 was endorsed. In cases where the participant indicated that no adult female took part in raising him/her, the value for Female Treatment was coded as missing. Thus, the variable Female Treatment was used as a

measure of alcohol abuse on the part of one or both primary adult caretakers, with a score of 1 indicating alcohol abuse, and a score of zero, no alcohol abuse.

2. *Male Treatment*: The variable Male Treatment was defined by the participant's self-report of mental health or alcohol-related treatment services received by his/her primary male caretaker. Participants were asked to respond to the question, "Did the primary adult male by whom you were raised ever receive treatment because of their own or their spouse's alcohol abuse?". The same four-point response option and scoring procedures were used as a measure of alcohol abuse on the part of one or both primary adult caretakers, with 1 indicating the presence of alcohol abuse and 0 indicating its absence. In cases where the participant indicated that no adult male took part in raising him/her, the value for Male Treatment was coded as missing.

3. *Participant Treatment*: The variable Participant Treatment was defined by the participant's report of mental health or alcohol-related treatment services received by him/her due to alcohol abuse on the part of his/her primary male and/or female caretaker. Participants were asked to respond to the question, "Have you ever received treatment because an adult by whom you were raised abused alcohol?". The item was based on a three-point response option, where 1 = Yes, 2 = No, although an adult by whom I was raised abused alcohol, and 3 = No adult by whom I was raised abused alcohol. A value of 1 was assigned to the variable Participant Treatment when response option 1 or 2 was endorsed, and a value of zero when response option 3 was endorsed. Thus, the variable Participant Treatment was used as a measure of alcohol abuse on the part of a primary adult caretaker, with a score of 1 indicating alcohol abuse, and a score of zero, no alcohol abuse.

Correlational Analyses

The following correlational analyses were conducted using 889 participants (652 Children of Nonalcoholics, 56 Children of Problem Drinkers, and 181 Children of

Alcoholics, as classified by total score on the CAST). International students, graduate students, and students over the age of 25 were deleted from the original sample of 1, 011 participants. Also excluded were students whose test protocol suggested a random response pattern (those with marks beyond the range of available response options) and those whose responses were "off-line" (where the participant failed to mark the correct number of answers on either answer sheet, stopping short of or surpassing the appropriate points of completion).

Intercorrelation Between Indices of Parental Alcohol Use

Table 11 presents the intercorrelation matrix for the seven indices of parental alcohol use examined in this study (Female Drink, Male Drink, Parent Drink, Female Treatment, Male Treatment, Participant Treatment, and Participants' Total CAST Score). The correlations between the first six of these indices ranged from .14 (for Female Drink and Male Treatment) to .96 (for Male Drink and Parent Drink), while most fell within the moderate range. The correlation between the Participants' Total CAST Score and other six indices of parental alcohol use were as follows: .22 for Female Drink; .60 for Male Drink; .63 for Parent Drink; .71 for Female Treatment; .68 for Male Treatment; and .69 for Participant Treatment. All of the correlations presented in Table 11 were significant at a probability level of less than or equal to .0001.

Correlation Between CAST Items and Indices of Parental Alcohol Use

Table 12 is a reproduction of the 30 items found on the CAST. All items are designed to tap the participant's negative reaction to parental alcohol use. With the exception of Item #11, all of the questions begin with a prefix suggestive of past experience, such as "Did you . . ." or "Have you . . .". Item # 11 is written in the present tense, beginning with "Do many of your thoughts . . .".

Table 13 presents the correlation matrix of CAST items with the six indices of parental alcohol use (Female Drink, Male Drink, Parent Drink, Female Treatment, Male Treatment,

Table 11

Intercorrelation Matrix for Parental Drinking Indices

	Parental Drinking Indices						
Parental Drinking Indices	1	2	3	4	5	6	7
1. Female Drink	—	.34	.48	.20	.14	.20	.22
2. Male Drink		—	.96	.60	.63	.58	.60
3. Parent Drink			—	.63	.65	.62	.63
4. Female Treatment				—	.86	.80	.71
5. Male Treatment					—	.81	.68
6. Participant Treatment						—	.69
7. Participant's Total CAST Score							—

Note. N = 889 for Parent Drink and Participant's Total CAST Score. N = 888 for Participant Treatment, 884 for Female Drink, 881 for Female Treatment, 858 for Male Drink, and 855 for Male Treatment, due to missing data. Female Drink = participant's report of primary female caretaker's alcohol use, based on 6-point response option (1 = did not drink, 2 = drank

(table continues)

lightly, 3 = drank moderately, 4 = drank heavily/was a problem drinker, 5 = was alcoholic, 6 = no adult female took part in raising me); if participant marked option 6, the value for Female Drink was coded as missing. Male Drink = participant's report of primary male caretaker's alcohol use, based on 6-point response option (1 = did not drink, 2 = drank lightly, 3 = drank moderately, 4 = drank heavily/was a problem drinker, 5 = was alcoholic, 6 = no adult male took part in raising me; if participant marked option 6, the value for Male Drink was coded as missing. Parent Drink = participant's report of parental alcohol use, as defined by highest level of usage between primary male and female caretakers: if female caretaker's level of use is ≥ to that of male caretaker, then Parent Drink = Female Drink, otherwise, Parent Drink = Male Drink; response options are the same as those used for Female Drink and Male Drink. Female Treatment = participant's report of mental health or alcohol-related treatment received by primary female caretaker due to her own or her spouse's alcohol abuse (1 = received treatment, or did not receive treatment, although she or both she and her spouse abused alcohol; 0 = did not receive treatment because neither abused alcohol); if participant indicated that no adult female took part in raising him/her, the value for Female Treatment was coded as missing. Male Treatment = participant's report of mental health or alcohol-related treatment received by primary male caretaker due to his own or his spouse's alcohol abuse (1 = received treatment, or did not receive treatment, although he or both he and his spouse abused alcohol; 0 = did not receive treatment because neither abused alcohol); if participant indicated that no adult male took part in raising him/her, the value for Male Treatment was coded as missing. Participant Treatment = participant's report of mental health or alcohol-related treatment received by self due to alcohol abuse on the part of the primary male and/or female caretaker (1 = received treatment, or did not receive treatment, although one or both caretakers abused alcohol; 0 = no adult by whom participant was raised abused alcohol). CAST = Children of Alcoholics Screening Test; total score may range from 0 to 30, with higher scores indicating participant's perception of greater parental alcohol abuse. $p \leq .0001$ for all correlations.

Table 13

Correlation Matrix for CAST Items and Parental Drinking Indices

	Parental Drinking Indices						
CAST Item #	Female Drink	Male Drink	Parent Drink	Female Treatment	Male Treatment	Participant Treatment	Participant's Total CAST Score
1	.26***	.61***	.63***	.69***	.69***	.66***	.81***
2	.18***	.46***	.49***	.54***	.54***	.56***	.75***
3	.16***	.48***	.52***	.55***	.53***	.53***	.72***
4	.14***	.45***	.48***	.57***	.56***	.55***	.82***
5	.28***	.48***	.53***	.52***	.51***	.52***	.78***
6	.15***	.29***	.32***	.35***	.34***	.36***	.61***
7	.18***	.51***	.52***	.55***	.52***	.53***	.75***
8	.22***	.54***	.59***	.59***	.59***	.57***	.75***
9	.15***	.35***	.38***	.39***	.37***	.39***	.69***
10	.15***	.38***	.41***	.45***	.40***	.46***	.71***

(table continues)

	Parental Drinking Indices						
CAST Item #	Female Drink	Male Drink	Parent Drink	Female Treatment	Male Treatment	Participant Treatment	Participant's Total CAST Score
11	.03	.35***	.36***	.43***	.39***	.42***	.68***
12	.20***	.57***	.59***	.64***	.65***	.64***	.82***
13	.10*	.22***	.25***	.28***	.25***	.27***	.57***
14	.12**	.53***	.53***	.56***	.59***	.57***	.77***
15	.04	.37***	.36***	.40***	.34***	.38***	.65***
16	.19***	.41***	.45***	.51***	.47***	.49***	.74***
17	.08	.17***	.18***	.17***	.11**	.17***	.44***
18	.10*	.33***	.35***	.42***	.35***	.34***	.60***
19	.21***	.51***	.55***	.64***	.59***	.59***	.84***
20	.15***	.53***	.52***	.55***	.56***	.55***	.77***
21	.08	.13**	.16***	.20***	.14***	.20***	.44***
22	.05	.65***	.60***	.67***	.72***	.63***	.74***
23	.12**	.48***	.50***	.61***	.58***	.58***	.81***

(table continues)

CAST Item #	Parental Drinking Indices						
	Female Drink	Male Drink	Parent Drink	Female Treatment	Male Treatment	Participant Treatment	Participant's Total CAST Score
24	.14***	.41***	.44***	.52***	.49***	.51***	.75***
25	.39***	<.01	.18***	.26***	.12**	.28***	.45***
26	.14***	.37***	.41***	.49***	.46***	.47***	.74***
27	.09*	.20***	.26***	.34***	.27***	.32***	.54***
28	.18***	.35***	.40***	.49***	.47***	.47***	.74***
29	.13***	.48***	.49***	.57***	.53***	.53***	.79***
30	.20***	.23***	.31***	.37***	.31***	.38***	.61***

Note. N = 889 for Parent Drink and Participant's Total CAST Score. N = 888 for Participant Treatment, 884 for Female Drink, 881 for Female Treatment, 858 for Male Drink, and 855 for Male Treatment, due to missing data. Female Drink = participant's report of primary female caretaker's alcohol use, based on 6-point response option (1 = did not drink, 2 = drank lightly, 3 = drank moderately, 4 = drank heavily/was a problem drinker, 5 = was alcoholic, 6 = no adult female took part in raising me); if participant marked option 6, the value for Female Drink was coded as missing. Male Drink = participant's report of primary male caretaker's alcohol use, based on 6-point response option (1 = did not drink, 2 = drank lightly, 3 = drank

(table continues)

moderately, 4 = drank heavily/was a problem drinker, 5 = was alcoholic, 6 = no adult male took part in raising me; if participant marked option 6, the value for Male Drink was coded as missing. Parent Drink = participant's report of parental alcohol use, as defined by highest level of usage between primary male and female caretakers: if female caretaker's level of use is ≥ to that of male caretaker, then Parent Drink = Female Drink, otherwise, Parent Drink = Male Drink; response options are the same as those used for Female Drink and Male Drink. Female Treatment = participant's report of mental health or alcohol-related treatment received by primary female caretaker due to her own or her spouse's alcohol abuse (1 = received treatment, or did not receive treatment, although she or both she and her spouse abused alcohol; 0 = did not receive treatment because neither abused alcohol); if participant indicated that no adult female took part in raising him/her, the value for Female Treatment was coded as missing. Male Treatment = participant's report of mental health or alcohol-related treatment received by primary male caretaker due to his own or his spouse's alcohol abuse (1 = received treatment, or did not receive treatment, although he or both he and his spouse abused alcohol; 0 = did not receive treatment because neither abused alcohol); if participant indicated that no adult male took part in raising him/her, the value for Male Treatment was coded as missing. Participant Treatment = participant's report of mental health or alcohol-related treatment received by self due to alcohol abuse on the part of the primary male and/or female caretaker (1 = received treatment, or did not receive treatment, although one or both caretakers abused alcohol; 0 = no adult by whom participant was raised abused alcohol). CAST = Children of Alcoholics Screening Test; total score may range from 0 to 30, with higher scores indicating participant's perception of greater parental alcohol abuse.

*$p \leq .01$. **$p \leq .001$. ***$p \leq .0001$.

and Participant Treatment), as well as the Participants' Total CAST Score. The correlations were generally low to moderate, ranging from .03 to .39 for Female Drink, .00 to .65 for Male Drink, .16 to .63 for Parent Drink, .17 to .69 for Female Treatment, .11 to .72 for Male Treatment, and .17 to .66 for Participant Treatment. A majority of the correlations between the CAST items and each parental drinking indice were significant at a probability level of less than or equal to .0001.

The correlations between the CAST items and Total CAST Score were moderate to high, ranging from .44 (for Item 17) to .84 (for Item 19). The highest correlations were evident for Items 1 ($r = .81$), 4 ($r = .82$), 12 ($r = .82$), 19 ($r = .84$), and 23 ($r = .81$). All of the correlations were significant at a probability level of less than or equal to .0001.

Intercorrelation Between CAST Items

The intercorrelation matrix for CAST items is shown in Table 14. The association between items ranged from .09 (the correlation between Items 22 and 25) to .76 (the correlation between Items 12 and 20, and between Items 12 and 19). While all correlations were significant at a probability level of less than or equal to .0001 (aside from the correlation between Items 22 and 25, for which $p = .0067$), most fell within the low to moderate range.

Table 14

Intercorrelation Matrix for CAST Items

	CAST Item #									
CAST Item #	1	2	3	4	5	6	7	8	9	10
1	—	.60	.68	.62	.69	.41	.64	.66	.48	.53
2		—	.56	.64	.59	.50	.57	.64	.45	.55
3			—	.58	.61	.45	.51	.51	.42	.57
4				—	.63	.52	.59	.56	.61	.64
5					—	.46	.67	.68	.57	.55
6						—	.46	.39	.39	.43
7							—	.65	.53	.46
8								—	.51	.46
9									—	.55
10										—

(table continues)

	CAST Item #									
CAST Item #	11	12	13	14	15	16	17	18	19	20
1	.40	.82	.32	.65	.41	.53	.25	.40	.72	.70
2	.44	.59	.36	.58	.44	.52	.23	.35	.59	.52
3	.41	.73	.22	.51	.38	.42	.21	.31	.63	.60
4	.54	.64	.44	.55	.51	.54	.32	.46	.67	.59
5	.41	.64	.33	.56	.41	.59	.29	.38	.65	.56
6	.48	.38	.32	.44	.45	.41	.31	.43	.41	.37
7	.44	.59	.32	.60	.42	.58	.26	.42	.65	.52
8	.41	.62	.33	.60	.38	.59	.23	.35	.63	.53
9	.49	.48	.43	.47	.45	.57	.34	.39	.53	.43
10	.46	.55	.41	.47	.47	.46	.34	.38	.54	.50

(table continues)

	CAST Item #									
CAST Item #	21	22	23	24	25	26	27	28	29	30
1	.21	.75	.61	.55	.34	.51	.32	.49	.57	.34
2	.30	.51	.63	.53	.29	.53	.34	.54	.63	.40
3	.22	.59	.52	.44	.34	.52	.30	.49	.54	.34
4	.33	.55	.62	.62	.34	.63	.41	.62	.70	.47
5	.27	.54	.53	.56	.35	.51	.32	.59	.56	.41
6	.35	.34	.43	.44	.31	.48	.38	.56	.47	.43
7	.23	.57	.58	.57	.25	.42	.34	.49	.52	.40
8	.26	.53	.57	.53	.28	.46	.33	.51	.54	.40
9	.33	.44	.50	.52	.27	.45	.42	.51	.49	.52
10	.26	.42	.54	.49	.42	.49	.36	.56	.57	.44

(table continues)

	CAST Item #									
CAST Item #	11	12	13	14	15	16	17	18	19	20
11	—	.44	.45	.56	.57	.52	.38	.50	.50	.45
12		—	.36	.60	.46	.56	.23	.40	.76	.76
13			—	.45	.40	.47	.54	.43	.42	.40
14				—	.48	.62	.28	.51	.66	.60
15					—	.50	.28	.48	.45	.45
16						—	.30	.47	.61	.50
17							—	.38	.28	.26
18								—	.43	.36
19									—	.71
20										—

(table continues)

	CAST Item #									
CAST Item #	21	22	23	24	25	26	27	28	29	30
11	.39	.45	.58	.48	.28	.55	.50	.52	.58	.47
12	.24	.68	.63	.54	.33	.56	.32	.53	.62	.37
13	.44	.34	.42	.45	.27	.46	.45	.44	.50	.48
14	.23	.62	.69	.53	.20	.59	.35	.53	.59	.41
15	.41	.44	.53	.57	.25	.54	.38	.51	.50	.40
16	.31	.48	.63	.54	.31	.53	.40	.53	.52	.56
17	.40	.23	.28	.36	.23	.35	.40	.36	.33	.33
18	.37	.43	.49	.49	.30	.52	.42	.45	.45	.40
19	.25	.63	.70	.59	.41	.57	.33	.57	.69	.44
20	.23	.65	.62	.55	.29	.55	.34	.47	.62	.37

(table continues)

	CAST Item #									
CAST Item #	21	22	23	24	25	26	27	28	29	30
21	—	.24	.30	.35	.37	.34	.45	.35	.33	.51
22		—	.65	.53	.09	.51	.32	.45	.58	.31
23			—	.58	.32	.63	.42	.58	.64	.50
24				—	.34	.52	.40	.56	.56	.51
25					—	.34	.36	.37	.29	.42
26						—	.42	.55	.58	.49
27							—	.43	.43	.45
28								—	.60	.48
29									—	.41
30										—

Note. N = 889. CAST = Children of Alcoholics Screening Test.

$p \leq .0001$ for all correlations, except that between Items 22 and 25, for which $p = .0067$.

DISCUSSION

Main Findings

The results of the present study failed to support the three original hypotheses concerning ACOA Status and the vocational development of college students. Contrary to hypotheses, when controlling for the effects of general family dysfunction, Adult Children of Alcoholics did not differ significantly from Children of Nonalcoholics on measures of vocational identity, occupational self-efficacy, and career indecision. In fact, no differences in performance were evident even when family dysfunction was not controlled. This finding was particularly noteworthy in light of the fact that ACOAs reported a greater degree of family dysfunction than students from nonalcoholic homes. Thus, it may be that (1) ACOA status is unrelated to the quality or degree of vocational development in college students, (2) the greater family dysfunction experienced by ACOAs during childhood and adolescence does not place them at a vocational disadvantage relative to their peers from nonalcoholic homes, and (3) the influence of general family dysfunction on the vocational development of college students is indirect, mediated by personal characteristics and/or outside influences.

When the larger sample of 362 was used, regardless of whether family dysfunction was controlled, the only difference in findings was a main effect for Gender on one of the three primary dependent variables, Occupational Self-Efficacy. Males achieved a significantly higher total average item rating for Occupational Self-Efficacy than females, indicating a greater sense of potential mastery over the educational and job requirements of occupations in general. This is not surprising, given the strong emphasis placed on the occupational achievement of males.

The second purpose of this study was to examine the role of factors likely to mediate the effects of parental alcoholism on the vocational development of ACOAs. Given the lack of differences in the vocational development of ACOAs and Children of Nonalcoholics, however, the secondary purpose of this study was no longer relevant. Instead, multiple

regression analyses were conducted to explore the general association between vocational development and personal/family functioning for the sample as a whole.

Three regression analyses were conducted, with Vocational Identity, Occupational Self-Efficacy, and Career Indecision as the respective criterion variables. The seven predictor variables used in all three analyses included (1) General Family Dysfunction, (2) Gender, (3) Academic Success, (4) Self-Esteem, (5) Social Support, (6) Length of Maternal Employment, and (7) Birth Order. Only one of the independent variables, Self-Esteem, directly accounted for a significant proportion of the variance in participants' scores on the Vocational Identity Scale, while Gender, Academic Success, and Self-Esteem predicted Occupational Self-Efficacy. Gender and Self-Esteem were directly responsible for a significant proportion of the variance in participants' scores on the Indecision Scale.

The full model of personal, demographic, and family-related variables was found, however, to account for only a small proportion of the total variance in Vocational Identity (16%), Occupational Self-Efficacy (10%), and Career Indecision (14%). The relatively low explanatory power of these independent variables suggests that other variables, alone or in combination, are better predictors of college students' vocational development. Nonetheless, several trends were significant. Greater self-esteem was associated with a clearer and more stable sense of vocational identity, indicating that self-regard is related to introspective self-exploration, social maturity, an awareness of personal values, interests, goals, and abilities, and confidence in one's potential (all aspects of a strong vocational identity).

Likewise, the finding that Gender, Academic Success, and Self-Esteem predicted greater Occupational Self-Efficacy was understandable, given that (1) males are accorded greater societal rewards for occupational success, (2) individuals with a history of scholastic achievement are likely to have received more positive feedback regarding their capacity to

succeed, and (3) persons with high self-regard are apt to have more confidence in their ability to master educational and job-related requirements.

Third, the finding that Self-Esteem predicted lower Career Indecision also was not surprising, given that strong self-regard (facilitating an awareness of personal needs, interests, talents, and values) may result in the acquisition of effective decision-making/problem-solving skills. Gender, a second significant predictor of Career Indecision, also was negatively correlated with the dependent variable. Although the correlation was small, it did suggest that the likelihood of being female was associated with less career indecisiveness. This finding may be a slight reflection of either the general societal trend toward the increased occupational independence, awareness, and goal-directedness of women, or the tendency of females to consider a narrower range of occupational choices than men.

The associations found between General Family Dysfunction, Self-Esteem, and Social Support suggested that family dysfunction and perceived social support indirectly effect vocational adjustment and functioning through their relationship with one another and with self-esteem. Greater family dysfunction was associated with less social support and lower self-esteem, while greater social support was associated with higher self-esteem. In contrast, Birth Order and Length of Maternal Employment were unrelated to any of the criterion or predictor variables. Thus, there was no evidence in the present study for direct or indirect influences of these variables on vocational development.

Regarding the relatively small proportion of variance accounted for collectively by the predictor variables, it may be that (1) the deleterious effects, if any, of a dysfunctional family lifestyle on the vocational development of college students are weakened or mitigated by the sheer number of outside influences (e.g., friends, neighbors, teachers, the media) experienced during childhood and adolescence, (2) the measure of social support used in the present study

was too global in nature to detect the more subtle influence of this variable on vocational development, (3) whether or not one's primary female caretaker is employed, and in what capacity, may be more important in predicting the vocational adjustment of offspring than the length of employment, per se, and (4) the (assumed) tendency of first-born children to be more responsible and achievement-oriented is less operative in middle- and upper-middle-class (than poor or lower-middle class) households where all youngsters in the family are likely to be afforded similar opportunities/resources to succeed.

Explanation of Results

Validity of the ACOA Concept

The failure to find support for hypothesized differences in the vocational identity, occupational self-efficacy, and career decision-making status of Children of Alcoholics and Children of Nonalcoholics may be attributable to several factors. First and foremost is the possibility that the ACOA concept itself is invalid.

Some researchers view the ACOA phenomenon with skepticism, given its lack of empirical validity (Chambliss & Hassinger, 1990; Churchill et al., 1990; Goleman, 1992; Seefeldt & Lyon, 1990; Tweed & Ryff, 1991; Wright & Heppner, 1991). These critics claim that its basic tenets are so sweeping and over-inclusive as to be diagnostically and therapeutically meaningless (Goleman, 1992). Clearly, the usefulness of the ACOA construct in understanding differences in the vocational development of undergraduate students must be questioned in light of the present results.

As Wright and Heppner (1993) note, findings such as these have ramifications for the provision of psychotherapeutic and career-counseling services to students at the college level. More specifically, Burk and Sher (1990) caution that clinicians refrain from labeling Children of Alcoholics as maladjusted or psychopathological simply by virtue of their

background, as this may have detrimental consequences, including the initiation of misguided or unwarranted treatment, self-stigmatization, social alienation, and low self-regard.

If, as some (Black, 1981; Woititz, 1983; Woodside, 1988a) believe, the ACOA concept is a valid one, alternate explanations would be needed to account for the present findings. One possibility is that the ACOAs participating in this study felt pressure, strong at the college level, to minimize personal and familial differences from their peers by responding in a socially desirable manner. Thus, denial may have led to the inaccurate self-report of personal, vocational, and family-related characteristics.

It is also possible that deficits in the personal, social, and vocational functioning of ACOAs do not become noticeable or problematic until the later stages of development, when these individuals may find it difficult to perform effectively in the work-setting. It is not uncommon for students, in general, to begin their college career lacking a clear sense of vocational identity and direction, an awareness of their particular interests/abilities, and the self-confidence, knowledge, and experience needed to make unequivocal judgments regarding occupational choice. Self-discovery, social maturity, and vocational competency are processes which, regardless of one's upbringing, are long-term.

Furthermore, it is plausible that the subgroup of ACOAs who participated in the present study are among the resilient children of alcoholics described in the literature (Tweed & Ryff, 1991; Werner, 1984, 1986; Woodside, 1988b). Werner (1986) characterized resilient children as self-directed, positive in their self-image, achievement-oriented, and more internal in their locus of control. Consistent with this hypothesis, students at the university where the present research was conducted may, regardless of ACOA status, be among the brightest and best (e.g., most resourceful) of undergraduate students state- and nationwide (according to university policy, all students must rank in the top one-half of their high-school graduating class to qualify for admission). Also, students apt to volunteer their participation

in research projects may be generally more motivated, conscientious, and achievement-oriented than their peers.

Finally, while the ACOA concept itself may be valid in some ways, the lack of differences between ACOAs and Children of Nonalcoholics may be due to the possibility that parental alcohol use has little or no direct bearing on the vocational development of offspring. By the time young adults prepare to enter college, they may have encountered numerous outside influences more important in the development of their personal, social, and vocational identity.

Limitations of the Present Study

The previous discussion and speculation about the results of this study reflect several limitations of the study, as summarized below.

Sample

The central limitation of this study involved the sample tested. Findings may have been different had the sample been less homogeneous or more experienced in personal and work-related matters. With regard to homogeneity, it may be speculated that college students in general, relative to their non-university-bound peers, are highly career-oriented, pressured to achieve, rewarded for academic accomplishment, and provided with greater financial and interpersonal resources to meet their goals. These advantages may mitigate the effects of an alcoholic or otherwise dysfunctional family upbringing on the vocational adjustment/functioning of university students. Also, as previously mentioned, college students may be prone to minimize personal and family-related differences with their peers, experience relatively fewer problems in occupational adjustment during the early adult stages of development, and/or represent the most resilient of children from alcoholic or otherwise dysfunctional families. Thus, research is needed to examine the potential differences in the vocational adjustment/performance of ACOAs and Children of Nonalcoholics outside the

university setting (e.g., military personnel, self-employed or unemployed persons, individuals choosing jobs rather than careers, etc).

Instrumentation

While one of the strengths of this study lies in the fact that all of the scales used had high internal reliability, the content of items on some of these measures (e.g., the CDS and CAST) may have been too apparent, or too consistently negative, to discourage students from responding in a socially desirable manner. Because the results of the present study may be due to bias or distortion on the part of participants in their self-report of personal, family, and work-related characteristics, caution must be used in the interpretation of patterned responses to these measures.

Ratings of General Occupational Themes. Participants were asked to rate their degree of confidence in meeting the educational and job-related requirements of 83 occupations, using a 7-point scale, ranging from 1 = not at all confident to 7 = completely confident. First- and second-year college students may, however, vary widely in their self-perceived and actual ability to reliably make such judgments, depending on their level of self-awareness and previous exposure to, experience with, and knowledge of the work-world. This variation in intra-personal decision-making ability may have introduced a modest degree of error into participants' ratings of occupational self-efficacy, through a general tendency to mark options at or near the midpoint of the Likert scale.

Career Decision Scale. Participants may have been confused by those items on the Career Decision Scale comprised of more than one statement (see Appendix A, Section 2 of the questionnaire). Because these statements seem to include separate ideas or concerns, it is unclear as to which of these the participant responded when marking his/her answer to the item (participants were requested to rate the applicability of the item [as a whole] to their

own situation, using a 4-point response option where 1 = not at all like me to 4 = exactly like me).

For example, Item #7 on the Career Decision Scale reads as follows: "Until now, I haven't given much thought to choosing a career. I feel lost when I think about it because I haven't had many experiences in making decisions on my own and I don't have enough information to make a career decision right now." (Osipow et al., 1987, p. 2). Here, the participant may have responded to any of four different ideas; (1) having given little thought to choosing a career, (2) feeling lost, (3) having little experience in decision-making, and (4) having little information on which to base a career decision.

Children of Alcoholics Screening Test. Upon initial examination of the data, a discrepancy between participants' CAST score and independent 2-item self-report of parental drinking patterns was found. Ninety out of 181 participants, classified as ACOAs by means of their score on the CAST, indicated that the primary male and/or female caretaker by whom they were raised did not drink, drank lightly, or drank moderately. In addition, one participant (out of 181), classified as a Child of Nonalcoholics, indicated that her primary male caretaker was alcoholic. This finding strongly suggests that a problem with the CAST, rather than the nature of the sample tested, is responsible for the lack of differences between ACOAs and Children of Nonalcoholics found in the present study.

One reason for the discrepancy between participants' CAST score and independent 2-item self-report of parental drinking patterns may lie in the fundamental difference between the two measures. A majority of items on the CAST asked participants to endorse particular instances of, or negative reactions to, parental alcohol abuse, whether or not they occurred on only one occasion. In addition, there was no way of detecting the intensity of the participant's reactions, or when they occurred (all but one of the items began with a prefix stem such as , "Have you ever . . .", or "Did you ever . . ."). By contrast, on the independent

2-item self-report of parental drinking patterns, participants were asked to categorize the overall drinking practices of the primary male and female caretakers by whom they were raised, using one of six response options (1 = did not drink, 2 = drank lightly, 3 = drank moderately, 4 = drank heavily/was a problem drinker, 5 = was alcoholic, 6 = no adult male [or female] took part in raising me).

Thus, it is conceivable that a participant, in recalling just one (past or present) instance of parental alcohol abuse, may have endorsed six or more items on the CAST, causing him/her to be classified as an ACOA by means of his/her total score. This same participant may have then, understandably, categorized his or her primary caretakers as occasional, light, or moderate drinkers.

Another possibility must also be considered. Even when participants responded to CAST items on the basis of severe or ongoing parental alcohol abuse, they still may have been reluctant to label their primary adult caretakers as problem-drinkers or alcoholics, owing to misguided loyalty, confusion over terminology, and/or an internalized fear of social stigmatization.

Given doubts concerning the usefulness and validity of the CAST as a measure of ACOA Status, a series of correlational analyses were conducted to examine its psychometric properties and relationship to other indices of parental drinking.

The results of these analyses were as follows:

1. The correlation between participants' CAST score and the other indices of parental alcohol use were generally within the moderate range, while the correlations of individual CAST items with these same indices, were low to moderate. Some individual items achieved correlations of the same magnitude as the total scale score. These were the items that specifically inquired whether the respondent believed their parents were alcoholic.

2. The correlations between individual items on the CAST and the total CAST score ranged from moderate to high. It is possible that the total number of items comprising the CAST could be reduced without compromising the psychometric integrity of the test itself (the highest correlations with total CAST score were evident for Items 1, 4, 12, 19, and 23). Research is needed to answer this question, and to explore the factor analytic composition of the ACOA construct, as measured by instruments such as the CAST.

Future Research Needs and Directions

Most studies have focused on the adverse consequences of parental alcoholism for the young child (Cermak & Rosenfeld, 1987; Downing & Walker, 1987; Hibbard, 1989), co-dependent spouse (Tharinger & Koranek, 1988), or alcoholic (Tharinger & Koranek, 1988). As the results of the present study indicate, more empirical research is needed to support the claim that children raised in an alcoholic home environment suffer long-term negative effects during the adult stages of development (Plescia-Pikus et al., 1988).

Currently an issue is the extent to which general family dysfunction, rather than parental alcoholism, per se, is responsible for the problems experienced by ACOAs. Relatively little is known of those variables likely to mediate, moderate, or exacerbate the effects of parental alcohol abuse on the well-being of offspring (Crawford & Phyfer, 1988; Heller et al., 1982). Undoubtedly, a number of personal, social, familial, and economic factors, alone, or in combination, interact to influence the impact of an alcoholic upbringing on the quality of adjustment/functioning in adulthood. In addition, preventative programs/services will depend on investigative efforts to study those variables conducive to resiliency in children (and adults) from alcoholic and other dysfunctional environments (Crawford & Phyfer, 1988; Heller et al., 1982; Woodside, 1988b).

The need for research on the vocational development of ACOAs is clear. Little knowledge is available concerning the occupational adjustment of ACOAs at any age. It is

suggested that research be conducted both in and out of the workplace, using clinical and non-clinical samples, to assess the effects, if any, of an alcoholic upbringing on the vocational functioning of individuals at all stages of career development (e.g., the preparation, entry, establishment, maintenance, and retirement phases). It may be that the impact of an alcoholic upbringing on the work-related adjustment/performance of ACOAs is greater or lesser for individuals choosing different occupations or lifestyles.

Summary and Conclusions

Overall, the results of this study raised questions regarding the validity of the ACOA concept. In addition, despite its high internal reliability, it appears that, for a large number of participants, the CAST may be tapping constructs or dimensions other than those originally intended. Nevertheless, application of the methods and measures used in this research may aid in the personal and vocational counseling of young adults. An individual's response to measures such as the CAST, the Career Decision Scale, and My Vocational Situation may be used to promote an awareness/understanding of family dynamics, intra-personal strengths and weaknesses, and future goals/directions, although clinicians are reminded that individuals raised in an alcoholic or otherwise dysfunctional home do not necessarily experience personal, social, and vocational difficulties.

It is recommended that more empirical research on Adult Children of Alcoholics be conducted to (1) identify the long-term effects of parental alcoholism on COAs in adulthood, (2) examine the role of variables likely to mediate the effects of parental substance abuse on the well-being of offspring when differences between ACOAs and Children of Nonalcoholics are found, (3) study the vocational adjustment/functioning of ACOAs at all stages of career development, (4) investigate those factors responsible for resiliency in children from alcoholic homes, and (5) develop reliable and valid measures of the ACOA construct.

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APPENDIX A: QUESTIONNAIRE

Note. This questionnaire contains previously copyrighted material. Further reproduction by any means is prohibited.

APPENDIX B: STATEMENT OF INFORMED CONSENT

Statement of Informed Consent

You are being requested to participate in dissertation research examining the relationship between individual and family characteristics. Your participation will involve completing an 11-page survey questionnaire. You will be asked to answer questions regarding your attitudes, beliefs, childhood experiences, and family background.

Your participation in this study is completely voluntary. You may withdraw consent or discontinue your involvement at any time without prejudice or penalty. To ensure confidentiality, your answer sheets are coded with numbers which in no way identify you. This consent form will be collected separately and cannot be associated with your responses to the survey. Only group data will be utilized. No individual responses will be reported. All answer sheets will be separated from the survey form and stored in a locked file.

Your participation will require approximately 45 minutes. This study involves no foreseeable risks to your psychological, physical, or social well-being, although it is possible that certain items on the survey may raise your awareness of family issues/concerns. You will earn 1 hour of extra credit in the psychology class that you specify on your experimental participation form. You may withdraw your consent to participate at any time and still receive credit.

Your participation in this research will benefit others by helping mental health professionals understand the association between family background variables and individual characteristics.

If you have any questions regarding this study during the session, please ask the test administrator. Should questions arise at a later point, you may contact Kathleen Isgro at work (Knoxville Veterans Administration Medical Center, 828-5035) or home (628-8591) and/or Douglas Epperson, Ph.D., faculty supervisor, W206 Lagomarcino Hall (294-2047).

If you have any concerns regarding your rights, you may contact Dr. Norman Scott, Dr. Veronica Dark, and/or Dr. Lloyd Avant, Department of Psychology Ethics Committee members, through the Department of Psychology, W112 Lagomarcino Hall (294-1742).

Your signature below indicates that you have read and understand this form, and that you agree to participate in this study.

_____ _____

Signature Date

APPENDIX C: DEBRIEFING ANNOUNCEMENT

Debriefing Announcement

Thank you for your participation. You have been involved in a dissertation study examining the relationship between parental alcoholism and the career development of college-age children of alcoholics.

Alcoholism is considered to pose one of the largest health-related dilemmas in the United States. Anywhere from 1 out of 3 to 1 out of 6 families are affected by this disease. Current estimates of the number of adult children of alcoholics (ACOAs) in this country range from 21 to 34 million, with an additional 7 to 15 million children under the age of 18 currently residing in the home of an alcoholic parent. It is now recognized that alcoholism affects not only the alcoholic, but may have long-lasting adverse consequences for the adjustment and functioning of all family members. Children of alcoholics are at risk for a wide array of mental, physical, emotional, social, and behavioral problems. The deleterious effects of an alcoholic upbringing may continue into the adult stages of development.

To date, no empirical investigations have examined the relationship between parental alcoholism and the career development of university students. It is reasoned that the wide range of problems experienced by ACOAs during childhood, adolescence, and adulthood will affect their vocational development. More specifically, it is expected that ACOAs will differ from non-ACOAs on a number of relevant variables including vocational identity, occupational self-efficacy, and career decision-making status.

Research suggests, however, that not all children of alcoholics suffer ill effects. A second purpose of the present study is to examine the role of variables likely to buffer the effects of parental alcoholism on the vocational development of offspring.

After participating in this study, you may notice that answering questions about parental alcohol use has raised or triggered your awareness of family issues/concerns. If you have any questions, or would like to discuss alcoholism with someone, please feel free to contact Kathleen Isgro (Work: 828-5035; Home: 628-8591) and/or Douglas Epperson, Ph.D., W206 Lagomarcino Hall (294-2047). You may also contact the Student Counseling Service (294-5056), located in the Student Services Building on campus, for free confidential counseling.

APPENDIX D: DEMOGRAPHIC INFORMATION FOR FULL SAMPLE

Table D1

Personal Demographics: Full Sample

Variable	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Gender				
Male	144	39.8	144	39.8
Female	218	60.2	362	100.0
Ethnicity				
African-American (Black)	18	5.0	18	5.0
Asian-American	11	3.0	29	8.0
Hispanic-American	12	3.3	41	11.3
Native-American	4	1.1	45	12.4
White-American	317	87.6	362	100.0
Age				
Seventeen	6	1.7	6	1.7
Eighteen	135	37.3	141	39.0
Nineteen	109	30.1	250	69.1
Twenty	66	18.2	316	87.3
Twenty-one	19	5.2	335	92.5
Twenty-two	17	4.7	352	97.2
Twenty-three	4	1.1	356	98.3
Twenty-four	3	0.8	359	99.2
Twenty-five	3	0.8	362	100.0
Current Marital Status				
Never Married	354	97.8	354	97.8
Married	6	1.7	360	99.4
Divorced	1	0.3	361	99.7
Widowed	1	0.3	362	100.0
Current Year in College				
Freshman	210	58.0	210	58.0
Sophomore	86	23.8	296	81.8
Junior	47	13.0	343	94.8
Senior	19	5.2	362	100.0
Academic College				
Agriculture	24	6.6	24	6.6
Business Administration	69	19.1	93	25.7
Design	38	10.5	131	36.2
Education	52	14.4	183	50.6
Engineering	33	9.1	216	59.7
Home Economics	17	4.7	233	64.4
Science and Humanities	96	26.5	329	90.9

(table continues)

Variable	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Other	33	9.1	362	100.0
High School GPA				
4.00 to 3.34 (A range)	162	44.7	162	44.7
3.33 to 2.34 (B range)	177	48.9	339	93.6
2.33 to 1.34 (C range)	23	6.3	362	100.0
College GPA				
4.00 to 3.34 (A range)	33	9.2	33	9.2
3.33 to 2.34 (B range)	145	40.5	178	49.7
2.33 to 1.34 (C range)	79	22.1	257	71.8
0.00 to 1.33 (F/D+)	4	1.1	261	72.9
Nonapplicable	97	27.1	358	100.0

Note. N of 362 varies slightly for College GPA due to missing data. GPA = Grade Point Average.

Table D2

Work-Family Demographics: Full Sample

Variable	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Birth Order				
First	157	43.4	157	43.4
Second	110	30.4	267	73.8
Third	55	15.2	322	89.0
Fourth	18	5.0	340	93.9
Fifth	15	4.1	355	98.1
Sixth	3	0.8	358	98.9
Seventh	2	0.6	360	99.4
Ninth	2	0.6	362	100.0
Number of Siblings				
Zero	25	6.9	25	6.9
One	118	32.6	143	39.5
Two	126	34.8	269	74.3
Three	51	14.1	320	88.4
Four	23	6.4	343	94.8
Five	11	3.0	354	97.8
Six	3	0.8	357	98.6
Seven	3	0.8	360	99.4
Nine or more	2	0.6	362	100.0
Parents' Marital Status				
Never Married	7	1.9	7	1.9
Married	277	76.5	284	78.5
Separated	2	0.6	286	79.0
Divorced	72	19.9	358	98.9
Widowed	4	1.1	362	100.0
Step-Parent[a]				
Yes	73	20.2	73	20.2
No	289	79.8	362	100.0
Parental Income				
Poor	8	2.2	8	2.2
Low Middle	75	20.7	83	22.9
Middle	198	54.7	281	77.6
High Middle	74	20.4	355	98.1
Wealthy	7	1.9	362	100.0
Primary Female Caretaker				
Biological Mother	346	95.6	346	95.6
Step-mother	5	1.4	351	97.0

(table continues)

Variable	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Adoptive Mother	6	1.7	357	98.6
Grandmother	3	0.8	360	99.4
Other	2	0.6	362	100.0
Primary Male Caretaker				
Biological Father	306	84.5	306	84.5
Step-father	19	5.2	325	89.8
Adoptive Father	13	3.6	338	93.4
Brother	3	0.8	341	94.2
Grandfather	2	0.6	343	94.8
None	19	5.2	362	100.0
Length of Maternal Employment[b]				
Zero to Two	58	16.1	58	16.1
Three to Four	28	7.8	86	23.9
Five to Six	30	8.3	116	32.2
Seven to Eight	27	7.5	143	39.7
Nine to Ten	33	9.1	176	48.8
Eleven to Twelve	32	8.9	208	57.7
Thirteen to Fourteen	33	9.1	241	66.8
Fifteen to Sixteen	29	8.0	270	74.8
Seventeen	64	17.7	334	92.5
Nonapplicable	27	7.5	361	100.0
Participant's Age At Onset of Maternal Employment[c]				
Zero to Two	100	27.6	100	27.6
Three to Four	35	9.7	135	37.3
Five to Six	42	11.6	177	48.9
Seven to Eight	34	9.4	211	58.3
Nine to Ten	20	5.5	231	63.8
Eleven to Twelve	28	7.7	259	71.5
Thirteen to Fourteen	27	7.5	286	79.0
Fifteen to Sixteen	22	6.1	308	85.1
Seventeen to Eighteen	20	5.5	328	90.6
Nonapplicable	34	9.4	362	100.0

Note. N of 362 varies slightly for Length of Maternal Employment due to missing data. [a]Participant was asked to respond yes or no to the question, "Have you ever had a step-parent?". [b]Length of Maternal Employment = total number of years primary female caretaker was employed outside of the home during participant's first 17 years of life. [c]Participant's Age at Onset of Maternal Employment = participant's age at time that primary female caretaker first became employed outside of the home.

APPENDIX E: ANALYSES OF COVARIANCE FOR FULL SAMPLE

Table E1

Summary of Analyses of Covariance for Vocational Variables: Full Sample

	Vocational Identity		Occupational Self-Efficacy		Career Indecision	
Source	Mean Square	F[b]	Mean Square	F[b]	Mean Square	F[b]
ACOA Status (A)	0.0266	0.37	0.1443	0.13	0.0017	0.01
Participant's Gender (B)	0.0507	0.71	11.1663	9.77*	0.4351	1.63
A X B	0.0676	0.94	0.3228	0.28	0.4688	1.76
Covariate[a]	1.0054	14.01**	11.8759	10.39**	2.4342	9.12*
Error	0.0718		1.1433		0.2669	

Note. N = 362. ACOA = Adult Children of Alcoholics.

[a]Covariate = participant's score on the General Functioning Scale of the Family Assessment Device.

[b]Degrees of freedom = (1, 357) for all analyses.

*$p \leq .01$. **$p \leq .001$.

APPENDIX F: ANALYSES OF VARIANCE FOR FULL SAMPLE

Table F1

Summary of Analyses of Variance for Vocational Variables: Full Sample

Source	Vocational Identity		Occupational Self-Efficacy		Career Indecision	
	Mean Square	F[a]	Mean Square	F[a]	Mean Square	F[a]
ACOA Status (A)	0.0032	0.04	1.3381	1.14	0.0930	0.34
Participant's Gender (B)	0.0280	0.38	9.9036	8.44*	0.5646	2.07
A X B	0.0732	0.98	0.2830	0.24	0.4916	1.80
Error	0.0744		1.1733		0.2730	

Note. N = 362. ACOA = Adult Children of Alcoholics.

[a]Degrees of freedom = (1, 358) for all analyses.

*$p \leq .01$.

Table F2

Summary of Analysis of Variance for General Family Dysfunction: Full Sample

Source	Mean Square	F[a]
ACOA Status (A)	5.6377	17.76*
Participant's Gender (B)	0.3836	1.21
A X B	0.0126	0.04
Error	0.3174	

Note. N = 362. ACOA = Adult Children of Alcoholics.

[a]Degrees of freedom = (1, 358).

*$p \leq .0001$.