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## PROTECTIVE FAMILIAL FACTORS LEADING TO LOW LEVELS OF SUBSTANCE USE AMONG CHILDREN OF ALCOHOLICS

By

John Paul Walker

#### A DISSERTATION

Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Department of Family and Child Ecology

#### ABSTRACT

#### PROTECTIVE FAMILIAL FACTORS LEADING TO LOW LEVELS OF SUBSTANCE USE AMONG CHILDREN OF ALCOHOLICS

By

#### John Paul Walker

This study examined if conventionality, emotional autonomy, and parental support would mediate the relationship between parentification and low levels of substance use among children of alcoholics (COAs). It was hypothesized that the relationship between high levels of parentification and low levels of COA substance use would be mediated by high levels of conventionality, high levels of emotional autonomy with the alcoholic parent, low levels of support from the alcoholic parent, low levels of emotional autonomy with the non-alcoholic parent, and high levels of support from the non-alcoholic parent. Subjects were 151 COAs and 151 non-COAs who were primarily female and recruited from undergraduate psychology students at Michigan State University. The results of multiple regressions indicated that none of the potential protective factors mediated the relationship between parentification and low levels of substance use. However, deidealization of an alcoholic father and high levels of conventionality had a *moderating* effect on substance use and this only existed within the collapsed COA group (i.e. COAs with one and two alcoholic parents) that were not at any more risk for using drugs or alcohol than the non-COA group. Contrary to predictions, parentification alone actually functioned as a risk factor that was related to higher levels of drug use within the collapsed COA group. Conventionality, the most significant moderating variable, was strongly correlated with low levels of drug and alcohol use across all subgroups within the sample and appeared to reverse or neutralize the relationship between parentification and heightened drug use within the collapsed COA group.

There was support for a probabilistic view of development (Fitzgerald, et al., 1994) that has multiple developmental trajectories with multiple outcomes because a family history of alcoholism did not adequately predict that offspring would perpetuate high levels of alcohol consumption. Female COAs with one alcoholic parent and non-COAs have similar substance use levels, but differ in the levels of parentification, conventionality, parental support, and emotional autonomy. COAs with two alcoholic parents were at significantly higher risk for drug use and received the least amount of support from their mothers. Hence, parentified females between the ages of 18 and 24 from families with one alcoholic who have a seemingly distant relationship with an alcoholic father (i.e. highly deidealized with low levels of support) appear to be on a protective developmental trajectory if high levels of conventionality exist and the outcome leads to low levels of drug and alcohol use.

† 1 1

# THIS WORK IS DEDICATED TO MY "PROTECTIVE FACTORS": WILLIAM J. SMITH, LAWRENCE POLLMAN, JOSEPHINE KOZLOWSKI, DELLA AND ART CARIAN, PHYLLIS SHOENHERR, MARY LEA AND MICHAEL HERMANN, THOMAS GRINDEM, LEE PATRICK SULLIVAN, AND SUSAN JACKSON-WALKER.

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#### Introduction

Approximately 15.3 million adults in the United States struggle with alcohol abuse or dependence (U.S. Department of Health and Human Services, 1993). An estimated 28 million people in the United States grow up with at least one parent who struggles with alcohol addiction (Russel, Henderson, & Blume, 1985). Collective findings from the clinical and empirical literatures provide clear evidence that the offspring of alcoholic parents are at risk for developing a myriad of psychosocial problems. Although one of the most empirically substantiated risks for children of alcoholic parents (COAs) is a drug and/or alcohol problem, a significant number of COAs do not develop problems with substances. Several researchers (e.g. Havey & Dodd, 1993; Burk & Sher, 1988; Werner, 1986) have pointed out the need to focus more empirical and clinical attention on the substantial sub-population of offspring who are functioning well to identify protective factors that lead to low levels of substance use among COAs.

#### Statement of the Problem

This study is the first to identify COA status, and measure offspring and parent substance use while attempting to identify protective familial processes leading to low levels of substance use during late adolescence. More specifically, this study explored if a developmental pathway characterized by parentification (independent variable), conventionality, emotional autonomy, and parental support (potential mediating variables) led to low levels of substance use (dependent variable) among late adolescent

COAs. A developmental systems perspective that examines variations of functioning in substance abusing families (Fitzgerald, Davies, Zucker, & Klinger, 1994) guided the conceptual and methodological framework. The investigator's clinical experience of more than 1000 direct client contact hours with substance abusing adolescents and their families and a subsequent literature review of COA protective factors (Walker & Lee, 1998) provided the foundation for theoretically based hypotheses. This investigator was struck by how inconsistent his clinical experience with alcoholic families was with the clinical COA literature. The literature tends to describe a psychological death sentence for COAs, while the predominate theme in this investigator's clinical work suggested that an adaptive form of parentification clearly helped a sub-population of COAs thrive. A review of the clinical and empirical literature suggested that conventionality, parental support, and emotional autonomy might shape or mediate the impact that parentification would have on family relationships and substance use.

A mediational model was used to explore if conventionality, parental support, and emotional autonomy were potential protective factors that accounted for a significant relationship between parentification and low levels of COA drug and alcohol consumption. Parentification is a concept that has been used in the family therapy literature to describe family interactions that place children and adolescents in a role that is typically performed by parents in a given culture (Mika, Bergner, & Baum, 1987; Boszormenyi-Nagy, Grunebaum, & Ulrich, 1991). The definition of parentification used here has a positive connotation. It can be manifested in an adaptive role within families that have few resources (Minuchin & Fishman, 1981) and lead to greater levels of self esteem (Goldenthal, 1993) and self-efficacy (Boyd-Franklin, 1989). Adaptive

parentification is hypothesized to operate when it is mediated by the potential protective factors.

Adolescents who embrace a conventional belief system are more likely to have internalized traditional societal values, develop an internal locus of control, and not value rebellious behavior (Brook, Brook, Gordon, Whiteman, & Cohen, 1990). Emotional autonomy (Steinberg & Silverberg, 1986) refers to the process where children gradually relinquish childhood dependency on parents, perceptions of parental omnipotence, and begin viewing their parents more and more as fallible people (i.e. deidealization). Although emotional autonomy has a cognitive and emotional dimension, deidealization (i.e. cognitive dimension) was the only component of the concept used in this study. An emotionally supportive parent-adolescent relationship was defined as one that the adolescent perceives to be an accessible, satisfying source of support (Sarason, Levine, Bashon, & Sarason, 1983).

The mediating model in Figure 1 outlines a developmental trajectory that was hypothesized to protect against the development of problems with drugs and alcohol. It illustrates how parentification, conventionality, parental support, and emotional autonomy may organize in an interconnected causal chain with an outcome that transcends any one protective factor. The arrowheads indicate the hypothesized direction of effects. Several potential protective factors were hypothesized to mediate the relationship between high levels of parentification and low levels of substance use. Parentified COAs were expected to *deidealize* their alcoholic parent and score high on measures of conventionality. Their problematic substance using counterparts with low levels of parentification were expected to have low scores on conventionality and *idealize* their alcoholic parent. Conventionality

was hypothesized to mediate parentification and substance use because greater care-taking responsibility towards others (i.e. parentification) is likely to encourage low levels of substance use and other pro-social behaviors that conform to traditional societal norms. In other words, COAs who deidealize their alcoholic parent and idealize their more conventional, non-alcoholic parent were expected to emulate the more conventional parent's value system about drug and alcohol consumption.

Figure 1





In addition to exploring the influence of parentification, conventionality, and emotional autonomy, the study also examined how different levels of parental support impacted substance use. An emotionally disengaged relationship with an alcoholic parent and an emotionally supportive relationship with a non-alcoholic parent were hypothesized to be familial dynamics that strengthen the relationship between parentification and low levels of substance use. Prior research has found that the context of emotional support (Andrews, Hops, & Duncan, 1997) and emotional autonomy (Fuhrman and Holmbeck, 1995) can influence whether or not close parentadolescent relationships serve detrimental or protective functions. A parental relationship that is perceived to be a credible source of support was conceptualized as a protective factor for the parentified COA who has high levels of emotional autonomy with their alcoholic parent.

#### CHAPTER ONE

#### Literature Review

The primary purpose of this study was to utilize a developmental systems perspective (e.g. Fitzgerald et al., 1994; Gottlieb, 1991; Ford & Lerner, 1992) to identify mediators that account for the relationship between COA parentification and low levels of substance use during a period in life when the risk for abusing substances is particularly high. Parentified COAs with low levels of substance use were expected to have adaptive relationships with both alcoholic and non-alcoholic parents. COA conventionality, high levels of idealization, and highly supportive relationships were hypothesized to characterize protective parent-child relationships with non-alcoholic parents. On the other hand, high levels of conventionality, high levels of deidealization, and low levels of support were expected to characterize adaptive relationships with problematic substance-using parents.

Jurkovic (1997) points out that a comprehensive theoretical approach is needed to capture the individual, familial, and sociocultural implications of adaptive parentification. Developmental systems theory provides a meta-perspective to depict "the complexity of the intra-and extra-organism relations that, together, assure the human diversity" (Lerner, 1991, p. 29) found in COA functioning. This comprehensive framework is useful to begin unraveling the complexities of transactions between macrolevel cultural influences to micro level family and individual cognitive processes that lead to adaptive outcomes among COAs. The relative plasticity of human development plays an integral role in producing several developmental trajectories that

is captured in the varying degrees of adaptive behaviors and psychopathology among COAs.

Fitzgerald's et al. (1994) approach to developmental systems theory specifically guided the conceptual and methodological framework of the mediational model used in this study. From their perspective, there are many pathways leading to different forms of substance abuse that extend beyond alcoholism and alcohol abuse. Even siblings living with the same alcoholic, biological father are not destined to be on a developmental trajectory with an outcome of alcoholism, because their developmental and experiential histories are unique on several different levels (e.g. sex, temperament, perception, etc.). Hence, research models that investigate the causal determinants of substance abuse must consider intraindividual (e.g. conventionality), interindividual (e.g. parentification, support), contextual (e.g. late adolescence), and organismenvironmental transaction (e.g. bi-directional effects of parentification on the adolescent and parent) influences leading to low levels of substance use among COAs.

Contextual family therapy theory (Boszormenyi-Nagy, et al., 1991) and the concept of relational resilience (Walsh, 1996; 1998) were used to generate theoretically driven hypotheses about protective adolescent cognitions and parent-adolescent relationships on a micro level. Each of these perspectives was used to quantify how aspects of family relationships (i.e. parentification, emotional autonomy, parentadolescent support) and COA cognitions (e.g. conventionality) are expected to transact and result in low levels of substance use. They provide a detailed lens from which to conceptualize theoretically driven hypotheses that examine the potentially protective functions of parentification, conventionality, emotional autonomy, and emotional

support. Contextual family therapy theory (Boszormenyi-Nagy et al., 1991) offers a competency-based lens through which to view the ethical-relational dimension of parentification within alcoholic families, while relational resilience (Walsh, 1996; 1998) assists in the identification of microlevel parent-adolescent interactions that characterize adaptive parentification.

The following literature review summarizes risks that COAs face, models of resilience, and protective factors (i.e. parentification, conventionality, emotional autonomy, and parental emotional support) that may lead to low levels of substance use. Cicchetti and Garmezy (1993) point out that an understanding of protective influences is intimately tied to an understanding of risk, maladaptation, and psychopathology in general (and vice versa). Protective mechanisms are tied to risk variables because an element of risk (i.e. parental alcoholism) is needed to assess the protective utility of parentification, conventionality, emotional autonomy, and parental support (Rutter, 1990). Therefore, a brief review of the literature on the maladaptive psychosocial outcomes of COAs will establish the parameters of risk (e.g. incidence of substance abuse, psychosocial maladjustment) that confront COAs and help identify which variables are most likely to serve a protective function. A review of the empirical literature about risks across several levels of analysis also provides justification to utilize developmental systems theory to explore protective factors.

#### The Risk Status of COAs

The impact of alcoholism on every level of analysis is so pervasive that it has been identified as causing more problems than the combined effects of all other substances (Royce & Scratchley, 1997). A wealth of research indicates that children who grow up in homes with alcohol problems are more likely to experience a wide range of psychological, emotional, and social problems (West & Prinz, 1987), which may be exacerbated by other clinical diagnoses co-existing with parents' alcoholism (Sher, 1991). Contextual factors at a macro-level of analysis, such as cultural and ethnic variation in norms towards alcohol, accessibility, economic deprivation, gender, and overcrowding offer partial explanations for the prevalence of alcohol and drug use within families and mediate the development of alcoholism subtypes within individuals (Zucker, Fitzgerald, & Moses, 1995).

Theoretical and clinical writings have played a large role in shaping the direction of empirical research on COAs. The clinical literature generally paints a bleak picture for COAs characterized by general maladaptation and psychosocial impairment. During the 1970's and 80s clinicians and the media began popularizing the notion that the offspring of alcoholics exhibit problems in multiple domains of psychosocial functioning throughout the life span (Sher, 1991). Several authors have written extensively on how the detrimental impact of alcoholism affects the global functioning of COAs with one of the most commonly cited problems being an inability to form intimate, trustworthy relationships (Black, 1982; Brown, 1988; Cermak, 1986). Brown (1988) points out that most offspring adopt maladaptive defense mechanisms including denial, self-blame, the inability to express individual needs and emotions, and the

tendency to be over-controlling in relationships with others.

#### Internalizing and Externalizing Disorders

Early trends to pathologize COAs in the clinical literature and popular media set a precedent for empirical research to identify dysfunction in their families. For example, Herjanic, Herjanic, Penick, and Armbruster (1977) found that 54% of children in a sample with drug and/or alcohol abusing parents could be diagnosed with adjustment and internalizing disorders. Internalizing symptoms, such as low self-esteem (Hughes, 1977; Potter & Williams, 1991), anxiety, and depression have been found with some consistency among children of alcoholics when they are compared to controls (Anderson & Quast, 1983; Tarter, Hegedus, Goldstein, Shelly, & Alterman, 1984). Moos and Billings (1982) found that children are more than twice as likely to have emotional problems when their parent had a period of sobriety that ended in relapse.

Cantwell's (1975) early review of hyperactive children and a more recent review by Hawkins, Catalano, and Miller (1992) provides evidence that fathers of these children are more likely to be alcoholic and exhibit antisocial personality traits. Externalizing behaviors such as hyperactivity, conduct disorder, oppositional behavior, and delinquency appear to be some of the most common problems prior to early adulthood (Sher, Walitzer, Wood, & Brent, 1991; Chassin, Rogosch, & Barrera, 1991) and have been linked to the development of alcohol problems and antisocial behavior later in life (e.g. Zucker, Fitzgerald, & Moses, 1995). Although poor academic performance could be attributed to multiple risk factors, offspring from alcoholic families in a longitudinal study were less likely to graduate from high school. They were also more likely to receive school counseling services for discipline problems, and

three times more likely to be expelled from school (Miller & Jang, 1977; Deutsch, Dicicco, & Mills, 1982).

#### Family Dysfunction

Addiction has a profound effect on family relationships and overall functioning. One of the most consistent findings is that many families with substance abusing parents are characterized by low cohesion, emotional constriction, and high levels of conflict (Moos & Billings, 1982; Filstead, McElfresh, & Anderson, 1981; Clair & Genest, 1986; Moos & Moos, 1984). These studies also indicate that family members are less likely to engage in recreational activities together and hinder the individuation process during adolescence. Research using small, clinical samples (e.g. Jacob & Leonard, 1988) has found that alcoholic families are less likely to adapt to stresses due to impaired problem solving skills and interactions characterized by hostility and conflict.

#### Substance Abuse

Perhaps one of the most commonly cited risks for children of alcoholics is the development of problems with alcohol and drugs (for a review see Sher, 1991). Results from twin, adoption and animal studies underscore how the complex relationship between environment, development, and biology transact to place adolescents and young adults with alcoholic parents among the highest risk groups for developing substance abuse problems (Zucker, et al., 1994). One review (Cotton, 1979) found that children who grow up with alcoholic parents have a six to ten times greater risk to

develop substance abuse problems by adulthood. Many studies have found that offspring risk for addiction goes beyond alcohol to include drugs, such as marijuana (Wright & Heppner, 1993; Chassin, Rogosch, & Barrera, 1991; Sher et al., 1991), amphetamines, and cocaine (Johnson, Leonard & Jacob, 1989). COAs are more likely than non-COAs to begin drinking at earlier ages and escalate in their alcohol use during adolescence (Colder, Chassin, Stice, & Curran, 1997).

Although the literature on factors leading to alcoholism among females appears inconclusive, evidence for familial transmission appears to be much stronger for males than females. Research on female offspring had been relatively sparse until the 1980's, and most studies have been conducted with predominantly clinical samples ignoring important within group differences (Mitz, Kashubeck, & Tracy, 1995; Sher, 1991) that may be indicative of protective familial processes. Several studies have found that males are proportionately more at risk for substance abuse problems than females (Schissel, 1993; Berkowitz & Perkins, 1987). Cotton's (1979) highly cited review supports a genetic transmission hypothesis and indicates that only 5% of females and 25% of males develop substance abuse problems when paternal alcoholism exists. In fact, substance abuse among adolescents with alcoholic fathers escalates over a shorter period of time for boys (Chassin, Curran, Hussong, & Colder, 1996). Adoption studies that broaden their scope beyond paternal alcoholism transmission rates have found that maternal alcoholism places females at a much higher, but still lower risk than males (Bohman, Sigvardsson, & Cloninger, 1981; Harburg, et al., 1990). One non-clinical, longitudinal study (Webster, Harburg, Gleiberman, Schork, & DiFranceisco, 1989) measured the volume and frequency of parental and offspring drinking and found that

mother's drinking patterns were a better predictor of daughter's alcohol use seventeen years later. Adult daughters were two times more likely to be heavy drinkers when they had heavy drinking fathers and *three* times more likely when their mothers were heavy drinkers. Other studies have even found that familial transmission among daughters growing up with paternal drinking problems are not at any more risk for substance abuse than daughters of normal fathers (Mitz, et al., 1995; Benson & Heller, 1987; Harburg, Davis, Caplan, 1982). Male COA's substance use escalates far beyond female use during adolescence (Chassin, et al., 1996). Those who appear to be most at risk for substance abuse problems are males who exhibit conduct disordered behaviors and have fathers with a diagnosis of anti-social personality disorder and some type of chemical dependency (Zucker, Ellis, Bingham, & Fitzgerald, 1996).

#### Models of Resilience

Despite the risk status associated with being a child of an alcoholic (COAs), any one variable (including a positive family history for alcoholism) appears to be an imprecise marker of risk due to multiple risk and protective factors that lead to diverse developmental trajectories on an individual level (Zucker et al., 1995). Studies have found that despite long held notions of pathology in COAs, many are not seriously impaired in psychosocial functioning (e.g. Wright & Heppner, 1993; Jacob & Leonard, 1986). The fact that psychological disorders are not pervasive among COAs (West & Prinz, 1987) and many do not develop substance use problems as adults (Fingarette, 1988; Cotton, 1979) underscores the heterogeneity found within chemically dependent families and the different developmental pathways that exist among their offspring.

#### Individual Models of Resilience

The concept of resilience grew out of the field of developmental psychopathology (Cicchetti & Garmezy, 1993) and has historically used the individual as the principal unit of analysis. Developmental psychopathology is interested in how individuals develop maladaptive and adaptive behaviors in response to stress throughout the course of development. Although definitions have varied over time, there is a general consensus that resilient individuals have the ability to successfully adapt or maintain competent psychosocial functioning despite trauma, risk status, or stress (Egeland, Carlson, & Sroufe, 1993; Masten, Best, & Garmezy, 1990). Individuals who develop psychopathology have vulnerability factors that increase susceptibility to stressors, while resilient individuals have dispositional attributes and environmental

factors that serve protective functions against stress and lead to adjustment (Rutter 1985). Unlike the concept of "invulnerability", resilience is relative and varies over time because of changing developmental, biological, and environmental contexts. The context of any given variable dictates its function as a risk or protective variable (Rutter, 1985). For example, a variable, such as social support, can potentially have a protective influence if risk or stress is present.

Constitutional factors such as gender, temperament, and intelligence are often conceptualized to moderate stress and are given a great deal of attention in research utilizing an individual model. The ability to elicit positive regard from others (Werner, 1990), self-efficacy, self-esteem (Rutter, 1985), internal locus of control (Luthar, 1991), and ego resilience (Block & Block, 1990) are some of the most widely accepted and researched personality traits of resilient individuals. Several writers on resilience (Rutter, 1985; Kobasa, 1985; Walsh, 1996) acknowledge that resilient individuals do not simply avoid stress, they actively interface with it in a way that perpetuates selfefficacy and strengthens domains of competency. Kobasa (1985) hypotheses that resilient individuals have "hardy" personalities and possess cognitive structures that enable them to withstand stressors. These individuals are able to cognitively reframe difficult events as challenges with opportunities for growth, have a sense of loyalty and commitment to the activities in their lives, and perceive that they have an influence on the events that impact the course of their development.

Rutter and Garmezy are two of the most prolific writers on resilience and have been instrumental in expanding models beyond individual attributes to include family factors. Individual attributes, external sources of support, and family cohesion are three

domains that are hypothesized by Garmezy (1985) as having the most powerful influence on a child's ability to cope. Some of the most important protective qualities of parent-child relationships are the stability of attachment over time (Rutter, 1985, Farber & Egeland, 1987), emotional accessibility of the parent (Egeland et al., 1993), and a sense of warmth and acceptance (Garmezy, 1985). Although family influences have been given a considerable amount of attention in resiliency research (e.g. Garmezy, 1985; Rutter, 1990; Masten, Best, & Garmezy, 1990), many individual models neglect the protective influence of sibling and parent-child relationships and view resilient individuals as survivors of destructive familial forces (e.g. Wolin & Wolin, 1993).

#### **Ecosystemic Models of Resilience**

Walsh (1996) and Egeland et al. (1993) point out that protective factors need to be understood in their ecological and developmental context. Developmental systems approaches (e.g. Fitzgerald et al., 1994; Staudinger, Marsiske & Baltes, 1995; Ford & Lerner, 1992) posit that the study of resilience needs to extend beyond individual processes to span multiple levels of analysis of protective factors in an attempt to unravel a life course leading to low levels of substance use. The theoretical constructs such as plasticity, multiple developmental trajectories, fusion, and transacting contexts have been instrumental in building and refining models of resilience. Each of these concepts assumes that human beings are in constant change with their environments. While the environment can potentially offer multiple developmental trajectories, the relative plasticity of human development plays an integral role in producing several developmental trajectories that can be characterized by varying degrees of resilience or

psychopathology.

The identification of protective processes within families that have a history of alcoholism is so complex that a developmental systems orientation is necessary. Fitzgerald et al. (1994) have utilized developmental systems theory in the study of alcoholism to conceptualize a methodological framework that analyzes patterns of variation families. Developmental systems offers an excellent theoretical fit to the study of protective factors because it acknowledges that there is a range of developmental pathways within the confines of contextual variables. Research models guided by developmental systems theory explore domain-specific sources of variance and bi-directional affects of two or more domains that "may induce or maintain vulnerability or may provide buffers that induce or maintain resilience (Fitzgerald et al., 1994, p. 352). Although boundaries of plasticity vary within developmental trajectories for COAs due to a genetic predisposition to alcoholism and sociocultural norms that make addictive substances readily available, development is still viewed as open ended. This probabilistic, rather than deterministic, view of development accounts for the multiple outcomes that COAs can potentially exhibit when exposed to similar risks. A probabilistic view of development that has multiple developmental trajectories with multiple outcomes implies any one-risk variable (e.g. family dynamics, genetic predisposition to alcoholism, etc.) cannot adequately predict that offspring will perpetuate intergenerational alcoholism.

Several possible protective factors must be explored to induce or maintain a developmental pathway leading to the existence of substance use problems (e.g. Gottlieb, 1991; Fitzgerald, et al., 1994). Research models that investigate the causal determinants of substance abuse need to take into account intraindividual (within the individual),

interindividual (between individuals), contextual (social-historical-temporal), and organism-environment transactional (ecological, bi-directional) sources of variance. The current study investigates two of these five levels of analysis: conventionality (i.e. intraindividual); and emotional autonomy, parentification, and supportive parent-adolescent relationships (i.e. interindividual). Parentification, emotional autonomy, parental support (i.e. interindividual), and conventional belief systems (i.e. intraindividual) are only four factors that may interact and fuse with genetic predisposition (i.e. intraindividual), and gender socialization (i.e. contextual). Numerous other factors are likely to guide individuals down many different developmental pathways because members from alcoholic families also intentionally and unintentionally alter each other and their contexts (Ford & Lerner, 1992). For example, it is reasonable to expect that female COAs (i.e. contextual) are more likely to be in parentified relationships and hold more conventional belief systems than males because of the tendency for society, parents, and siblings to socialize girls to be caregivers (Gilligan, 1982; Weisner, & Gallimore, 1977).

#### Family Systems Models of Resilience

On a microlevel of analysis, contextual family therapy theory and the notion of relational resilience fits within the metatheoretical approach the developmental systems perspective to give a more detailed account of how intraindividual and interindividual variables transact to serve a protective function. The concept of relational resilience, contextual family therapy theory (Boszormenyi-Nagy et al., 1991) and other models of family therapy theory (e.g. Minuchin & Fishman, 1981) view resilience as a systemic

quality that is embedded in the process of interdependent relationships. Individual models of resilience tend to view the family as a static protective or risk variable.

Walsh's (1996; 1998) concept of relational resilience helps to view the family interaction domain of a developmental systems perspective in greater detail. It makes a conceptual shift from the individual to include the family as a developing system that is continually changing and being changed by multiple contexts (Ford & Lerner, 1992). The concept of relational resilience views the family as the source of resilience, rather than an inborn trait or a product of individual initiative (Walsh, 1996; Hawley & DeHaan, 1996). Thus, resilient families adapt to stressors by utilizing existing resources, developing new strengths, and reorganizing family relationships to minimize the disruptive impact of crises. Walsh (1996; 1998) points out that relational resilience is a phenomenon that lies within the quality of family relationships and can be forged through adversity. There is a reciprocal exchange of benefits that can lead to adaptive outcomes for more than one family member. Families with relational resilience are characterized by affirming belief systems, effective communication patterns, and relationships that are flexible, cohesive, and adaptive. Hence, a resilient family is one that is able to adapt and, ultimately, even prosper from crises (Hawley & DeHann, 1996; Walsh, 1996; 1998).

Minuchin (Minuchin & Fishman, 1981) was one of the first family therapists to acknowledge and explore relational resilience manifested in parentification. He points out that large families or families with few parental resources (e.g. single parent families) "delegate authority" to ensure efficient functioning in much the same way as large organizations. One or several older children often take over specific parental

functions as representatives of the parents. This type of an arrangement works well for the entire family if the duties are well defined and fit within the child's developmental capabilities.

Strategic family therapy (Haley, 1987, Madanes, 1981) theory views family dynamics surrounding parentification within the context of hierarchy and power. The roles of parents are to nurture and protect children. A congruent parent-child hierarchy is one in which the parent has power over a child because they are responsible for providing love, guidance, and limits. An incongruent hierarchy exists when a child holds most of the power in the adult child relationship. The child may take care of the parent and/or be in charge of making rules and running the day-to-day operations of the home. Haley (1987) points out that an incongruent hierarchy usually exists because one or both parents have been undermined by a cross-generational coalition between the child and another adult to undermine the parent's authority. It is possible for a child to have a different power configuration with each parent. In other words, a child may be parentified with one parent and not with another. A congruent hierarchy with an idealized, nurturing, non-alcoholic parent may counterbalance the deleterious effects of an incongruent hierarchy with an alcoholic parent.

Madanes (1981) has is clear in her conceptualization of how positive aspects of parentification can benefit the family and a form of relational resilience. Her conceptualization of how parentification manifests itself is much different from Minuchin's (Minuchin & Fishman, 1981) and Haley's (1987). From her perspective, children may have problems that actually increase their parent's functioning. For example, a child's problems in school can provide a parent with respite from obsessing

about financial problems. The child is benevolently motivated to have school problems that function as a diversion to make the parent feel less helpless and depressed. Hence, a child in a parentified role with an unstable, alcoholic parent might help the family function better.

Contextual family therapy de-emphasizes pathology and enhances the concept of relational resilience by placing it in a comprehensive theoretical perspective to explore the ethical dimensions of parentification. There is a focus on the inherent relational ethics of family life such as, equitable give and take, accountability, and lovalty (Boszormenyi-Nagy et al., 1991). Contextual family therapy theory is a comprehensive approach that has evolved out of developmental and individual theories of psychotherapy (Hargrave & Anderson, 1990). It has made a unique contribution to family therapy by integrating relational ethics into theory and clinical practice. Relational ethics is a dimension that addresses fairness and trust within parentified relationships. All members in a family are instinctually loyal to one another with each member committed to behave in any way necessary to meet the needs of its members. The balance of fairness, between what an individual gives to the family and what one is entitled to take, is directly related to healthy family functioning. Although children can be exploited through extreme parentification, the development of healthy self-esteem and self-efficacy is tied to the degree that children are provided the opportunity to give back to their parents (Goldenthal, 1992).

#### **Protective Factors**

#### Parentification

Parentification is an interaction pattern within a family structure that gives parental roles and responsibilities to children and adolescents (Mika et al., 1987). Children in role reversals or parentified relationships may take care of siblings, an impaired parent, or play the role of a mediator between conflictual parents. The developmental status of a caregiving child often dictates the level of responsibility he or she has in the family and parentification type (e.g. consoler, peacemaker, or confidant). For example, the cognitive and emotional capabilities during adolescence would make teenagers a stronger candidate than a sibling in early childhood to be parentified in a spousal role with a single parent.

A handful of studies have consistently found that COAs are more likely than controls to score higher on parentification measures. Widely held beliefs about parentadolescent role-reversals in the clinical literature on alcoholism have been supported by the research of Goglia, Jurkovic, Burt, and Burge-Callaway (1992). They found that a college sample of COAs (particularly female COAs) were more likely than controls to have assumed caregiving responsibilities in their family of origin. Wright (1992) replicated Goglia et al.'s (1992) findings and found that female COAs are more likely to be in role-reversed relationships specifically with their alcoholic fathers. Although healthy emotional autonomy was lost at the expense of marital conflict and paternal alcoholism, daughters in caregiving roles with drinking fathers were also extremely selfreliant.

The tendency to pathologize families, who place children in caregiving roles
appear to flourish in Western, industrialized nations. Rutter (1985) points out that protective characteristics are often not desirable, positive, or pleasant. This is particularly true of parentification, because it has been normally regarded as dysfunctional (Hecht, 1979) and even exploitative (Boszormenyi-Nagy, et al., 1991). However, several diverse cultures practice and rely on sibling caregiving in order to ensure healthy family functioning (Weisner & Gallimore, 1977). Cross-cultural data indicate that both mothers and younger siblings benefit when an older sibling is an assistant to parents. Ainsworth (1967) found that sibling surrogate parenting has benefits for the entire family system because it can decrease maternal caregiving demands for mothers to be more emotionally and instrumentally accessible to the family. Based on qualitative, anthropological research, Whiting and Whiting (1975) assert that a caregiving role helps children to develop skills to be more nurturant and responsible. Furthermore, while older siblings learn adult functions and how to be nurturant and independent, younger children are less stressful during periods of separation from their mothers because sibling caregivers function as alternative attachment figures.

Family therapy theorists (e.g. Minuchin & Fishman, 1981; Boszormenyi-Nagy, et al., 1991; Boyd-Franklin, 1989) have also maintained that some degree of parentification can be beneficial and even necessary. Boyd-Franklin (1989) suggests that an increase in emotional and instrumental responsibility for adolescents is likely to serve several adaptive purposes within the family domain and have reciprocal benefits for all family members. From an individual perspective, caregiving during adolescence may facilitate a protective autonomy process that permits the adolescent to be separate

from one's family by being in a "one up" position within the deidealized, parentified relationship, while maintaining a sense of connectedness to the family. From a structural family therapy perspective (e.g. Minuchin & Fishman, 1981), successful functioning in large families and single parent families is often made possible by placing older siblings in auxiliary roles of parenting. Children who assume caregiving roles within such families act as parental figures under the auspice of the parents who ensure that the parental child's responsibilities do not exceed developmental capabilities or alienate them from their siblings.

Contextual family therapy asserts (Boszormenyi-Nagy et al., 1991; Goldenthal, 1993) that mild forms of parentification are crucial in guiding children down a normal developmental trajectory. Although young children need to receive more instrumental and emotional support from their parents in general, parents who gradually provide opportunities to give (i.e. mild forms of parentification) throughout the life-span enhance their children's development of self-worth and autonomy (Goldenthal, 1993). A balance between give and take, also called reciprocity, leads to constructive entitlement on behalf of the child and ultimately benefits future generations. Parentchild relationships that do not experience a balance of give and take often cultivate destructive entitlement and exploit future generations through severe and maladaptive parentification. Extreme forms of parentification often leads to an imbalance in the intergenerational ledger, while adaptive forms of parentification within parent-child relationships that are characterized by mutual respect and partiality leads to constructive entitlement, loyalty and protection.

Some research and clinical literature has explored forms of adaptive

parentification that can lead to positive outcomes at individual and familial levels of analyses. Mika et al. (1987) and Jurkovic (1997) reviewed the family therapy theory literature to determine the context in which parentification can be adaptive. They found that the responsibilities associated with a parentified role must be within the child's developmental competencies and the parents or siblings in the parentified relationship must assume complementary, child-like roles with the parentified child. Another important component of adaptive parentification is that others must acknowledge, value, and legitimize the child's parentified role in the family. Mika et al. (1987), however, does not explicitly address how the family meets the parentified individual's emotional needs. A parentified relationship has a hierarchical arrangement with an unequal distribution of power that places the child or adolescent in a "one-up" position with his or her sibling or parent. Hence, it is important for the parentified offspring to have a source of emotional support other than the individual with whom they play a parentified role (Jurkovic, 1997). Emotional support from another parent in a non-parentified relationship can function as a potential resource that can help to protect the parentified individual from becoming overburdened with parental, sibling, and/or spousal responsibilities.

A very small segment of the COA and divorce literature speculates that parentified roles can be adaptive for some adolescents. For example, adolescents who share in the caregiving of siblings, household tasks, and provide developmentally appropriate forms of emotional support to family members may benefit from an increased sense of self-efficacy and independence (Weiss, 1979; Hetherington; 1989; Nardi, 1981; Wilson & Orford, 1978; Boyd-Franklin, 1989). Empirical studies on

parentification or "role-reversals" in alcoholic families have also provided some evidence that caregiving roles are associated with adaptive behavioral functioning (Beardslee & Podorefsky, 1988) and self-reliance (Wright, 1992). Schissel (1993) hypothesizes that lower rates of substance abuse within his sample of female COAs can be explained by Garmezy's (1985) contention that helping a parent leads to the development of life skills that make an individual more resistant to the impact of stressful events.

In summary, a small number of studies have found that parentification has both individual and familial benefits. Quantitative studies seem to indicate that parentification may result in increased self-reliance and self-efficacy, while crosscultural, qualitative research has found that children in caregiving roles exhibit an advanced ability to provide nurturance and tenderness to younger children. Findings from a review of the family therapy theory literature and cross-cultural studies indicates that parentification is a way in which families make a structural shift to adapt to divorce and the instrumental and emotional needs of large families. However, the role of parentification within alcoholic families is much less understood. The tendency for females to be placed in role reversals (Wright, 1992; Goglia et al., 1992) might be one way in which families reorganize and adapt to an alcoholic parent who is not able to fully function in a parenting capacity. Although the theoretical literature states that this form of parentification has several familial benefits, it would be fruitful for future research to explore if parentification has a protective influence on COA substance use.

## Conventionality

Conventionality has been identified as one of the most consistent predictors of COA resilience (Werner, 1986), and a characteristic commonly found to prevent later substance abuse (Hawkins, Catalano, & Miller, 1992; Brook, Brook, Gordon, Whiteman, & Cohen, 1990). Conventional adolescents incorporate traditional social beliefs into their value systems, develop a strong internal locus of control, and value achievement (Brook et al., 1990). More specifically, conventional adolescents have a high intolerance of deviance (e.g. substance use), value school achievement, responsibility, and church involvement and score low on sensation seeking. Brook et al. (1990) was one of the first research teams to operationalize conventionality and investigate its protective function. They found that adolescents from non-clinical, nonalcoholic families were less likely to use drugs and alcohol if they scored high on religiosity and academic achievement. Another study found that adolescent drug and alcohol use actually decreased as commitment to church and academics increased (Johnson, Bryant, Strader, Bucholtz, Berbaum, Collins, & Noe, 1996). Similar findings are confirmed in studies based on samples that do not measure parents' substance use. For example, affiliations with non-using peers in formal settings, such as Boy Scouts and church, are related to a reduction in drug and alcohol use, while peer affiliations in less structured settings (Selnow & Crano, 1985; Johnson, 1980) are associated with increased substance use.

The clinical literature has explored conventionality among offspring of alcoholics who adopt the "hero" role (see Black, 1982; Wegscheider, 1981). The hero, mascot, scapegoat, and lost child all function to form a system that adapts to stressors

related to parental alcoholism that also enables alcohol consumption to continue. The hero is often the oldest child who serves to take the focus off the alcoholic parent's drinking through conventional, pro-social behavior such as excellence in academics and sports. The mascot diverts attention away from the alcoholic parent's problems through humor, while the scapegoat manages to get the family to refocus their attention on anti-social behavior such as truancy, poor peer affiliation, and intense conflict. Finally, the lost child plays a less dramatic role characterized by introversion in an attempt to quietly cope with alcohol related stressors in a way that also does not call attention to the problems associated with addiction.

Despite the pathological connotations that the "hero" role has received, some clinical writings and a small amount of empirical research has explored the notion that adolescents who take on the role may be protected from developing alcohol problems due to higher levels of conventionality. Deutsch (1982), Black (1982), and Wegscheider (1981) have observed that one of the hero's strengths is that they are the least likely of their siblings to develop problems with drugs and alcohol. These clinicians point out that the hero is committed to achievement in conventional activities and are likely to identify with the non-substance abusing parent who "enables" the alcoholic parent's drinking. The scapegoat child, on the other hand, has the tendency to identify with the alcoholic parent and model their drinking behavior accordingly.

At least two studies have provided empirical support for the protective utility of the hero's conventional beliefs and many others have explored the increased risk that the scapegoat's anti-social behavior has on developing problems with substances. Werner (1986) and Potter & Williams (1991) both found that conventional

characteristics commonly associated with the hero role are often linked to lower rates substance abuse and dependence among offspring at risk for developing drug and alcohol abuse. Although Werner's (1986) study was not directed by a conceptualization of childhood "roles" in alcoholic families popularized by the clinical literature (see Black, 1982; Wegscheider, 1981), many of the well-adjusted offspring from a sample of mentally ill and/or substance-abusing parents had conventional attitudes and characteristics that correspond to clinical descriptions of the socially competent hero. The well-adjusted, conventional offspring who demonstrated competence in work and school domains had a heightened sense of responsibility and self-efficacy and lower rates of substance use that set them apart from their less successful peers.

In the only study of its kind to specifically assess for family roles of the alcoholic family and measure substance use, Potter and Williams (1991) found that adults in their mid-thirties who fit the clinical descriptions of the hero and mascot had fewer alcohol problems and higher levels of self-esteem. The items on the questionnaire they used to assess for the hero role was high in face validity with Brook et al.'s (1990) conceptualization of conventionality. On the other hand, alcohol problems were more common in subjects who fit the "scapegoat" description, which is associated with anti-social behaviors. Both COAs and controls that described themselves as "scapegoats" were also more likely to report lower levels of self-esteem. However, Potter and Williams' (1991) results need to be interpreted with caution due to several methodological flaws that include poor measures of substance use and the fact that COAs were recruited from adult self-help groups.

Studies that explore the flip side of conventionality to measure constructs

common to the scapegoat role, such as conduct disordered behaviors and antisocial personality traits, have found that these characteristics are some of the strongest predictors of substance abuse and dependence in adulthood. This trend is especially true for males (see Zucker, Fitzgerald, & Moses, 1995; Zucker, Ellis, Bingham, Fitzgerald, 1996; Drake & Valiant, 1988). In a 33-year longitudinal study of COAs, Drake and Valiant (1988) found that paternal alcoholism coupled with an unsupportive maternal relationship predicts personality disorders in sons. Behavior problems and truancy in adolescence specifically predicted anti-social behavior and alcoholism in adulthood (Valiant, 1983).

In summary, there is not enough evidence to suggest that conventionality results in low levels of COA substance use. However, conventional behavior and beliefs have been identified to be one of the strongest predictors of low levels of substance use among non-COA adolescents. Potter and William's (1991) study on a clinical sample of adult children of alcoholics (ACOAs) sheds a great deal of light on the protective influence that the conventional hero role might have substance use during adolescence. Their study is one of many to suggest that parental alcoholism alone does not seem to predict anti-social and substance abusing behavior among COAs. More research is needed to explore if conventionality and other contextual variables mediate the relationship between parentification and COA's heightened risk for developing problems with drugs and alcohol.

### **Emotional Autonomy**

Analytic and neo-analytic theorists have described emotional autonomy as a process of individuation in which children begin to decentralize the focus that parents play in their lives (Blos, 1979). As children enter adolescence, they engage in the process of deidealization, which entails relinquishing idealized perceptions of parents, renegotiating levels of parent-adolescent intimacy, and re-evaluating childish dependencies. More recent researchers have pointed out that autonomy is a process that requires both adolescent and parent to renegotiate their relationship based on mutual respect (Grotevant & Cooper, 1986). Individuation occurs in the context of intimate parent-adolescent relationships and supports the adolescent's gradual need for greater independence. From this perspective, the goal of emotional autonomy is not a linear detachment from parents with rebellious and chaotic interactions.

Frank, Pirsch, and Wright's, (1988) study on late adolescents indicates that there are three components of emotional autonomy that permit adolescents to function separately from parents without denigrating them or fully detaching. First, emotionally autonomous adolescents do not depend on their parents for determining self-worth. Second, these adolescents have the capacity to be in charge of negative feelings towards their parents, rather than being passively consumed by negative reactions. In other words, rebellious and chaotic interactions are indicative of a destructive detachment process in which behavior is dominated by and based on negative feelings towards parents. Thirdly, emotionally autonomous adolescents are able to maintain respect for their mother and/or father as they struggle with deidealizing their parents.

Blos (1979) also suggests that conflict and chaos is not a necessary condition for

individuation to occur. Instead, children gradually deidealize their parents as they enter adolescence to begin the process of individuation and start functioning as autonomous adults. From this perspective, adolescence is a time of cognitive, behavioral, and emotional individuation that is not accompanied by excessive tension or estrangement from parents. Instead, as children enter into adolescence they gradually deidealize their parents and experience a moderate degree of internal conflict. As adolescents mature, they begin to let go of childhood dependency on parents, perceptions of parental omnipotence, and begin to incorporate weaknesses, faults, and vulnerabilities into a more realistic view of their parents as fallible people.

Steinberg and Silverberg (1986) created the <u>Emotional Autonomy Scale</u> to operationalize Blos's perspective on emotional autonomy. They define emotional autonomy as the development of mature, realistic perceptions of parents and the adolescent's ability to take primary responsibility for emotional stability and decision making (Lamborn & Steinberg, 1993). Emotional autonomy is acquired through the process of individuation that occurs within a supportive parent-adolescent relationship (Grotevant & Cooper, 1986; Steinberg, 1990) and is achieved through deidealization (Frank et al., 1988; Steinberg & Silverberg, 1986). Steinberg and Silverberg's (1986) scale is divided into cognitive and emotional domains. The ability to deidealize their parents and perceive them more as people addresses the cognitive aspects, while nondependency and individuation addresses the affective domain.

The relatively few empirical studies done on separation-individuation and emotional autonomy in alcoholic families have not been designed to identify protective process within alcoholic families or measure substance use as an outcome. However,

Davis, Stern, and VanDeusen's (1978) early study on autonomy sheds some light on how emotional autonomy, may be conceptualized as a protective factor. They studied interactions within a sample of alcoholic families and found that the context for developing optimal levels of autonomy is characterized by enmeshed relationships between non-substance using members and a disengaged relationship with the alcoholic parent. They also found that individuation in the alcoholic family is delayed much longer than families without substance abuse problems. Although adolescents are disengaged or more emotionally autonomous with their alcoholic father, they often have a difficult time separating from the non-alcoholic members of the family (e.g. mother). Although COA substance use was not measured, future studies could explore if an "enmeshed" relationship with a non-substance using parent and a "disengaged" relationship with an alcoholic parent protects the adolescent from problematic alcohol use if the alcohol-abusing parent has also been deidealized.

Parentified adolescents who have disengaged relationships and high levels of emotionally autonomy with their alcoholic parent, but also have enmeshed relationships and low levels of emotional autonomy with family members who use low levels of substances, may develop levels of emotional autonomy much like adolescents in divorced families (Sessa & Steinberg, 1991). Like the divorced family in which the non-custodial parent becomes peripheral and both parents are likely to reveal more instances of vulnerability, the individuation process during adolescence may be challenged by alcohol-related family stress that leads to less parental emotional accessibility. Hence, COAs may be more likely than non-COAs to develop higher levels of emotional autonomy and function independently with their alcoholic parent at

an earlier age. In fact, Wright, Frank, & Pirsch's (1991) findings provide support for an accelerated individuation process within alcoholic families. They found that that "role-reversals" in alcoholic families were common and led to higher levels of emotional autonomy. More specifically, sons reported greater autonomy during adolescence and did not seek assistance from their alcoholic fathers (Wright, 1992). Independent functioning, a component of emotional autonomy, was higher for these males than female COAs and controls.

Although high levels of emotional autonomy appears to be a trend among offspring who grow up with an alcoholic parent, a review of the literature indicates that high levels of emotional autonomy alone have not consistently predicted positive or negative adjustment during adolescence. High scores have been linked to negative outcomes, such as substance use, conformity to anti-social peers, and school misconduct (Lamborn & Steinberg, 1993; Turner, Irwin, & Millstein, 1991; Frank & Burke, 1992). Premature deidealization, an integral part of emotional autonomy, has been described as "pseudo-autonomy" (Wright et al., 1991) because the adolescent displays a high degree of self-governance at the cost of emotional connection to their parents. On the other hand, high levels of emotional autonomy have also been indicative of positive outcomes, such as less identify diffusion (Frank, et al., 1988), fewer behavioral problems, greater social competence, and high academic performance (Furman & Holmbeck, 1995). Mixed findings are likely to be a result of methodological issues that do not take into account the context of the familial environment (Fuhrman & Holmbeck, 1995; Lamborn & Steinberg, 1993) or control for COA status. For example, studies that have found high levels of emotional autonomy associated with substance use did not

measure alcohol problems with parents (e.g. Lamborn & Steinberg, 1993; Turner et al., 1991) or idealization of an emotionally supportive non-alcoholic parent (e.g. Frank et, al., 1988; Lamborn & Steinberg, 1993; Turner et al., 1991).

Lamborn and Steinberg (1993) suggest that emotional autonomy must be measured along with adolescent perception of parental support to accurately predict *adaptive* behavioral adjustment. They hypothesized that high scores on emotional autonomy and supportive relationships with parents would predict better adjustment in their large sample of non-COA, pre-adolescents. Instead, they found that these variables were associated with mixed outcomes (e.g. higher substance use and anxiety, and academic and psychosocial competence). Lamborn (1990) has suggested that high levels of emotional autonomy are more likely to be related to positive adjustment in the context of a tumultuous and stressful family environment, rather than supportive parental relationships per se.

Fuhrman and Holmbeck (1995) conducted a study on 10 to 18 years old adolescents and borrowed Lamborn's (1990) hypothesis that a high level of emotional autonomy would function as a protective factor *only when* adolescents came from stressful (i.e. low cohesion and maternal warmth characterized with high conflict and control), single-parent families. They expected that emotional and cognitive distance would help the adolescent rely on their own internal resources to manage stress. Consistent with their predictions, high scores on emotional autonomy were often detrimental in supportive parent-adolescent relationships characterized with parental warmth and low intensity conflict, yet *adaptive* in parent-adolescent relationships characterized with low parental warmth and high intensity conflict. These conclusions

mirror Davis et al.'s (1979) findings of enmeshed relationships with non-alcoholic parents and disengaged relationships with alcoholic parents. The adaptive function of emotional autonomy in Furman and Homlbeck's (1995) study also differed between mothers and fathers. Emotional and cognitive distance (i.e. deidealization) from supportive mothers, but not fathers, was associated with behavior problems.

Three studies on COA's perceptions of parents' substance abuse provide some evidence that the cognitive dimension of emotional autonomy, deidealization, may play a protective influence against substance abuse. These studies indicate that daughters who do not identify with their using fathers (Brook, Whiteman, Gordon, & Brook, 1986) and young males who do not perceive their alcoholic fathers in a position of power (McCord, 1988) are less likely to misuse alcohol as adults. Further evidence comes from Harburg, DiFranceisco, Webster, Gleiberman, & Schork's (1990) longitudinal study on COAs that measured both adolescent and parent substance use. They found that offspring of alcoholics who consumed low levels of alcohol believed their parent's use was problematic. The authors hypothesize that this "fall-off effect" is likely to occur when the cross-sex parent has the drinking problem and offspring do not hold the alcohol-using parent in high esteem.

In summary, the literature on emotional autonomy appears to support the contention that certain levels of emotional autonomy are protective against COA substance abuse only when specific contextual factors are present. The collective findings of Davis et al. (1978), Gleiberman, & Schork (1990), and Fuhrman & Holmbeck (1995) identify elements of a protective developmental trajectory for COAs. Fuhrman & Holmbeck's (1995) results clearly indicate that the level of parental support

(rather than "enmeshment") from a non-alcoholic parent might be the most important contextual variable that regulates the protective function of emotional autonomy. Davis et al.'s (1978) and Gleiberman & Schork's (1990) studies indicate that de-idealization of an alcoholic parent is the most important component of emotional autonomy in predicting low levels of COA substance use. In other words, an adolescent who has low levels of emotional autonomy with a supportive non-alcoholic parent might be protected from developing problems with substances if the adolescent also has high levels of emotional autonomy with an alcoholic parent.

### Family and Parental Support

A review of the literature indicates that there are no published studies that have explicitly identified a sample of COAs to explore whether a supportive relationship with a non-alcoholic parent protects offspring from developing problems with alcohol or drugs during late adolescence. This is striking in light of evidence that parents are direct agents for modeling alcohol use before adolescents experiment with substances, whereas peers are more influential for marijuana and alcohol after experimentation with substance use begins (e.g. Kandel & Andrews et. al., 1987). Parent-adolescent relationships have indirect effects on substance use with peers because they influence adolescents' choices for substance abusing versus non-substance abusing peer groups (Blanton et al., 1997). Moreover, very few studies have been conducted on the impact of low levels of parental substance use on the relationship between parental support and adolescent substance use. In fact, extra-familial sources of support and individual cognitive processes have received considerably more attention than have supportive

relationships within alcoholic families. The reason for this might be due to the pervasive tendency to pathologize families with an alcoholic parent. Hence, children of alcoholics are more likely to be labeled "resilient " if they have successfully *detached* from their families (e.g. Berlin, Davis, & Orenstein, 1988) and find support from an extra-familial source. For example, Ohannessian and Hesselbrock (1993) examined the social support networks of adult offspring in their thirties and found that friends were a more significant source of support than family for reinforcing abstinence. Based on retrospective data, Bennett, Wolin, Reiss, and Teitelbaum (1987), found that COAs who did not have problems with substance use as adults consistently reported a pattern of "selective disengagement and reengagement" that allowed them to maintain effective functioning during times that paternal alcoholism escalated.

Because of the limited research in the area of family support and COA substance use, as noted above, this review has included studies that have investigated the role of family and parental support on 1) COA psychosocial functioning, and 2) substance use levels among non-alcoholic parents and their children. A strong parent-child bond with at least one parent has been identified as the single most important protective process operating to produce resilient outcomes across several, diverse populations at risk (Rutter, 1990; Garmezy, 1985; Radke-Yarrow & Brown, 1993; Masten, Best, & Garmezy, 1990; Cicchetti & Garmezy, 1993). Although the clinical literature appears to suggest that alcoholic families lack supportive, intimate relationships and COAs lack the ability to form these relationships with others (Black, 1982; Brown, 1988; Cermak, 1986), some empirical studies suggest the opposite. Barnard and Spoentgen (1987) found that a non-clinical, COA cohort actually had a significantly greater capacity for

intimate relationships than clinical COAs and a control group. The investigators speculate that the processes behind this outcome were either a manifestation of healthy familial relationships or an acquired skill that helped resilient COAs cope with familial stress. Moreover, pre and post-test measures indicated that a treatment group increased their ability to engage in greater levels of intimacy. Devine & Braithwaite (1992) give further support against the clinical observation that alcoholic families are devoid of intimacy and support. They found that a substantial sub-population of alcoholic families were capable of cohesive, supportive, interactions and were more likely than conflictual alcoholic families to have offspring who are empathetic and caring to family members in distress. More recent empirical evidence suggests that families with alcoholic parents who also have strong emotional bonds provide a warm, supportive environment that inhibits the development of conduct disorders and depression in young children (Roosa, Dumka, & Tein, 1996).

A more ecologically driven study by Werner (1986) confirms Barnard and Spoentgen's (1987) speculation that supportive familial relationships exist in alcoholic families and provides some evidence that they actually prepare offspring to cultivate such relationships outside of the home. Werner's longitudinal study (Werner, 1986; Werner & Smith, 1992) emphasizes the importance of investigating external sources of support in conjunction with other domains of protective influences identified by Garmezy (1985) to gain a more comprehensive conceptualization of protective processes that lead to resilience. Werner identified approximately 50 children in a sample of 698 that had at least one parent who was struggling with alcohol and/or drug problems. Following several intervals of data collection, she found that 59% exhibited

adaptive outcomes at age 18. Most of these individuals cultivated intimate relationships with both familial and extra-familial sources, had average intelligence scores, and had temperaments during infancy that fostered a complementary parent-child subsystem.

Familial support within alcoholic families appears to have a significant impact across the life span and some findings suggest that lacking an intimate relationship with at least one parent is a more reliable predictor of psychosocial maladjustment than parental alcoholism per se. Although COA substance use was not measured, several studies (Braithwaite & Devine, 1993). Many studies (Obuchowska, 1974; Braithwaite & Devine, 1993; Jacob & Leonard, 1986; Roosa, Tein, Groppenbacher, Michaels, & Dumka, 1993; Masini, 1996; Werner & Smith, 1992) have indicated that a supportive relationship with a non-alcoholic parent has been associated with competent psychosocial functioning and the absence of antisocial behavior within the context of paternal alcoholism. In one of the earliest studies on the protective role of a nonalcoholic parent, Obuchowska (1974) found that elementary age children with alcoholic fathers who had an emotionally satisfying relationship with their mother demonstrated social and academic competence to compensate for familial problems. Obuchowska and other researchers (Jacob & Leonard, 1986; Roosa et al., 1993) interpret the absence of serious psychosocial impairment (e.g. depression, anti-social behavior) to mean that mothers play a mediating role in the negative effects of paternal alcoholism on children. Masini (1996) found that self-esteem levels were higher than controls among male adolescents with alcoholic fathers when mothers were perceived as a source of support. Werner and Smith (1992) found that ACOAs who exhibited healthy functioning in their thirties had cultivated some of the most supportive relationships within their family of

origin. ACOAs with primarily alcoholic fathers reported that sibling and maternal relationships were the most utilized and effective forms of support during childhood, adolescence, and young adulthood (Children of Alcoholics Foundation, 1992).

The combined effects of supportive familial relationships and cognitive processes that help cope with alcohol related stress have been found to reduce the impact of parental alcoholism on psychosocial functioning. Braithwaite and Devine (1993) findings from a non-clinical sample of COAs found that overall family cohesion and an intimate, non-drinking parent-adolescent relationship were the best predictors of psychological adjustment when alcoholism was not perceived as a threat to the adolescents' well-being. In other words, a family system that denied the problematic nature of alcoholism appeared to serve a protective function against anxiety and depression in adolescents. Similar results from another study (Keane, 1983) found that positive *perceptions* of family life in the midst of active parental alcoholism might also lead to healthy adjustment. The protective function of denial about familial alcoholism runs contrary to observations in the clinical literature (Deutsch, 1982; Black, 1982; Royce & Scratchley, 1997). However, Braithwaite and Devine (1993) hypothesize that a buffering effect is likely to be operating because high levels of familial cohesion served to protect the children from worry and concern associated with the acknowledgement of severe parental alcoholism. Another study (Reich, Earls, & Powel, 1988) lends empirical support to such a "sheltering" hypothesis with its findings that children who are not exposed to the negative ramifications of parental drinking are less likely to have a psychiatric diagnosis. It is difficult to conclude whether denial of parental alcoholism led to better less substance use among offspring in any of these

studies, because parental personality disorders and COA substance use was not measured.

A small body of family process research provides detailed findings on the interactional nature of supportive parent-adolescent relationships within alcoholic families. Resilient families collectively cope with distal risks, such as poverty (Masten, et al., 1990), and family relationships (e.g. mother-child) cope with more immediate familial risks (e.g. alcoholism). For example, Seilhamer, Jacob, and Dunn (1993) point out that mothers who are unaffected by their husbands' drinking buffer their children from the negative influences of paternal alcoholism. Alternatively, positive parent-child relationships can significantly mediate maternal stress related to paternal alcoholism (Dumka & Roosa, 1993). Dumka and Roosa (1993) also found that families characterized by relational resilience (Walsh, 1996) were able to utilize existing resources (i.e. parent-child relationships and mother's marital adjustment) to mediate the deleterious effects of parental drinking problems. Although problem drinking mothers and fathers were equally represented, only paternal drinking contributed to family stress. The complex nature of relational resilience is exemplified by the finding that mothers who were invested in relationships with their children provided protection from paternal alcoholism for their children and themselves. That is, positive mother-child subsystems and mothers' marital adjustment led to lower levels of alcohol-related family stress, supportive parenting styles (Dumka & Roosa, 1993), and positive mental health profiles for both children and mothers (Roosa et al., 1993).

Another body of literature that does not identify COA status has demonstrated that supportive relationships with parents lead to better psycho-social adjustment and

decreased substance use among adolescents (e.g. Luster & Small, in press; Kandel & Andrews, 1987; Wills, Vaccaro, & McNamara, 1992; Wills, 1990; Rhodes & Jason, 1990). For example, pregnant, Hispanic and African American substance abusing adolescents are more likely to decrease substance use when they reported access to a mentor or parent who is perceived as a source of support (Rhodes, Gingiss, & Smith, 1994).

Five studies (Brook et al., 1990; Johnson, et al., 1996; Kandel & Andrews, 1987; Andrews, Hops, & Duncan, 1997; Blanton, Gibbons, Gerrard, Conger, & Smith, 1997) have measured parental substance use and parental support to explore drug and alcohol use among adolescents. Although substance use for parents and adolescents was measured, COA status was not explicitly identified using measures such as the CAST in any of the studies. Andrews et al. (1997) measured the existence of parent and adolescent substance use and found that the quality of the parent-adolescent relationship had a moderating effect on adolescent substance use. Adolescents 11 to 15 years old modeled parental drug (e.g. marijuana) and alcohol use if they had good relationships with relatively low conflict. Hence, findings suggested that poor parent-adolescent relationships could actually *protect* against adolescent substance use when parents are using marijuana, alcohol, or tobacco. The investigators point out that close parent-child relationships alone are not adequate protective influences against adolescent substance use. The primary limitation of this study is that the onset or severity of substance use was not measured.

The protective functions of familial support seem to be most powerful in facilitating adjustment in families with substance using parents when the reciprocal influences between

individual, familial, and community contexts are explored. Johnson, et al. (1996) evaluated a community based intervention program and found that substance use among high-risk youth was reduced when protective factors were operating in multiple domains. Adolescent substance use decreased along with parents' use when family cohesion, school involvement, and church involvement increased. Family involvement in church-based, parenting programs were associated with a decrease in parental alcohol consumption and was followed by increased adolescent-parent and adolescent-sibling bonding. Moreover, an increase in global family cohesion was accompanied by an increase in conventional beliefs among targeted delinquent youth and ultimately a reduction in both drug and alcohol use. Although severity of substance use was not adequately measured, Johnson et al.'s (1996) study provides support for the synergistic effects of protective factors on relational resilience among substance using parents and offspring.

Brook et al. (1990) investigated how protective mechanisms from multiple contexts (e.g. individual, parent-adolescent relationships, peer group) can interact with risks (e.g. parental and peer substance use) to impact adolescent substance use. They specifically investigated the protective function of a non-substance using parentadolescent relationship and conventional attitudes with adolescents at risk for substance abuse. They found that conventional attitudes became the most powerful predictors of low levels of substance use among adolescents with drug using peers when there is a strong attachment to a parent who has similar conventional attitudes. Strong maternaladolescent attachments were correlated with non-substance use among adolescents who had fathers that used drugs when mothers with conventional beliefs were emotionally stable. Interestingly, the same findings did not exist for paternal-child subsystems.

Instead, a secure relationship with a non-using, emotionally stable father had systemic reverberations that strengthened bonds with their mothers, buffered the impact of drug using peers, and enhanced adolescents' conventional attitudes.

Brook et al.'s (1990) findings of strong parental bonds and adolescent conventionality were replicated in a study with a non-COA, community sample of urban, African American adolescents. Rhodes and Jason (1990) found that adolescents who had pro-social relationships with their parents were more likely to generalize conventional attitudes about drug use to their interactions with peers. Adolescents in supportive parental relationships were found to be assertive with their peers and resist pressures to engage in heavy drug use. Although COA status was not identified and parent substance use was not measured, another study moved a step beyond family support, and investigated the nature of parent-adolescent relationships in more detail (Kwakman, Zuiker, Schippers, & de Wuffel, 1988). Using Bowlby's (1980) theory of attachment, results indicated that insecurely attached adolescents were more likely to drink for the purpose of social interaction and securely attached adolescents reported more abstinence and light drinking. It is tempting to generalize these findings to COAs and assume that offspring who are securely attached to a non-alcoholic parent are less likely to use substances abusively. However, more studies are needed to explore the nature of these relationships in greater depth and identify process level variables in parent-adolescent attachments among COA samples.

In conclusion, the *context* of supportive parent-adolescent relationships needs to be taken into account before it can be determined that support, per se plays a protective role within a developmental trajectory that leads to low levels of COA substance use.

Based on the studies reviewed here, it appears that supportive parental relationships are most effective in reducing the risk of COA substance use when the parent is not abusing substances, can provide emotional stability, and is perceived to be a credible source of support. Brooks et al. (1990) study provides strong support that adolescent conventionality is a strong mediating factor between parental support and adolescent substance use. It is also conceivable that these processes would operate in a similar fashion with regard to COA substance use.

### Summary

Although COAs have a history of being treated as a homogeneous group with predictable maladjustment problems, there is overwhelming evidence that protective factors contribute to the varying degrees of offspring adjustment. Research needs to identify developmental pathways, rather than generic protective variables, that lead to adaptive outcomes because COAs are "contextually embedded within a broader set of systems (biological, intraindividual, interindividual, social and cultural)" (Fitzgerald, et al., 1994). Parentification, conventionality, deidealization, and parental support are hypothesized to characterize a protective developmental trajectory that leads to low levels of substance use during a time in adolescence that is often associated with heightened substance use. It is likely that these protective variables contribute to lower rates of substance use among a sub-population of COAs because the pathway reflects macrolevel influences that transact with microlevel influences to dictate genetic susceptibility at the individual level (Zucker, et al., 1995).

There are no studies to date that specify parameters of risk by identifying COA status and substance use of offspring in an attempt to identify protective factors within parent-adolescent relationships that are associated with low levels of substance use among late adolescents. The current study used continuous variables in a mediating model (see Figure 1) to provide empirical support for theoretically based hypotheses that identify variables through which parentification leads to low levels of substance use use. The relationship between parentification and low levels of substance use was hypothesized to be mediated by higher scores on conventionality, which inhibit the development of conduct disordered behaviors in childhood and antisocial personality

traits that have been associated with substance abuse in adulthood (see Zucker et al., 1995; Zucker, et al, 1996; Drake & Valiant, 1988). Parental support was also conceptualized as a potential mediating variable, but prior research (Andrews, et al., 1997; Fuhrman and Holmbeck, 1995) has found that supportive parental relationships are only protective in particular contexts. Hence, the mediational model shows that highly parentified COAs will have lower levels of substance use when they have high levels of conventionality and receive low levels of parental support from a deidealized alcoholic parent and receive high levels of parental support from an idealized non-alcoholic parent.

# Hypotheses

A total of eight theoretically driven hypotheses were used to identify protective factors that may lead to low levels of substance use among COAs. The first set of hypotheses tested if COA status within the sample is an independent risk factor for problematic substance use when compared to non-COAs (Sher, 1991). A second set of hypotheses tested if conventionality, parental support, and deidealization mediated the relationship between parentification and low levels of substance use. The protective utility of parentification, conventionality, parental support, and emotional autonomy can be best measured if family history of alcoholism places COAs at greater risk than non-COAs for using more substances (Rutter, 1985; Sher, 1991).

## Hypotheses for Risk Factors

- The COA group will have significantly higher rates of substance use than the non-COA group.
- 2. The COA group will have significantly higher rates of parentification than the non-COA group.

### Hypotheses for Protective Factors

- 3. COAs with low levels of substance use will have higher levels of parentification than COAs with high levels of substance use.
- 4. Conventionality will mediate the relationship between parentification and low levels of COA substance use. That is, higher scores on conventionality will help account for the relationship between parentification and low levels of substance use.

- 5. High scores on idealization with a non-alcoholic parent will mediate the relationship between parentification and low levels of COA substance use. That is, idealization of a non-alcoholic parent will help account for the relationship between parentification and low levels of COA substance use.
- 6. High scores on deidealization with an alcoholic parent will mediate the relationship between parentification and low levels of COA substance use. That is, deidealization will help account for the relationship between parentification and low levels of COA substance use.
- 7. High levels of support from a non-alcoholic parent will mediate the relationship between parentification and low levels of COA substance use. That is, higher scores on non-alcoholic parental support will help account for the relationship between parentification and low levels of substance use.
- 8. Low levels of support from an alcoholic parent will mediate the relationship between parentification and low levels of COA substance use. That is, lower levels of alcoholic parental support will help account for the relationship between parentification and low levels of COA substance use.

### CHAPTER TWO

### Method

A developmental systems perspective posits that research models investigating causal determinants of substance abuse need to take into account intraindividual (within the individual), interindividual (between individuals), contextual (social-historicaltemporal), and organism-environment transactional (ecological, bi-directional) sources of variance (Fitzgerald et al., 1994). The current study utilized multivariate techniques to investigate if two of these five levels, conventionality, emotional autonomy (i.e. intraindividual), and supportive parent-adolescent relationships (i.e. interindividual), mediate the relationship between parentification and COA substance use.

Data were collected from a sample of college students in social science undergraduate courses from Michigan State University. A college sample of COAs may be most appropriate for identifying familial protective mechanisms that lead to low levels of substance use because college attendance may operate as a natural screening device that selects offspring who have better coping skills than their siblings and peers who share the same status (i.e., alcoholic parent). Perkins and Berkowitz (1991) point out that nonclinical, college samples offer researchers the opportunity to study relatively well adjusted COAs who are at particularly high risk for problematic alcohol use due to developmental stage (Pandina & Johnson, 1990) and the prevalence of substance abuse on college campuses. White (1987) suggests that, regardless of COA status, the peak period for problematic alcohol use is between 15 and 24 years old. The cohort of COAs that enter college are less likely to experience academic impairment (Deutsch, DiCicco, & Mills,

1982) and are generally less distressed than COAs in self-help groups (Kashubeck & Christensen, 1992).

Sher (1991) recommends that data collection and statistical procedures be designed to confirm if a given variable functions as a mediator, moderator, or another risk variable. He specifically recommends that research models include a control group of non-COAs. A control group of non-COAs was used here to help establish the parameters of risk (Rutter, 1985) and explore whether or not a given variable moderates or mediates substance use (Sher, 1991). Level of vulnerability can be established by exploring if level of parentification poses different levels of risks to COAs compared to non-COAs.

Eligible subjects were self-identified COAs between the ages of 18 and 24 who lived with two parents (biological or step-parent) for at least eight years during their adolescent years. Although controlling for family status may have omitted adolescents from more chaotic single parent families with parental problem drinking, it is assumed that parameters of risk are best defined with a sample of subjects who have lived with an alcoholic parent for most of their adolescence. A comparison group of non-COAs was randomly drawn from the same sample of college students. COAs with two alcoholic parents constituted a third group that was analyzed separately. Both the COAs and non-COAs completed all of the same measures to identify if within and between group differences existed.

## Subjects

The initial goal of data collection was to identify COAs from intact families. A

statistical power analysis (Cohen, 1988, 1992) was performed to determine the overall sample size of COAs needed to test the set of four independent variables. A .05 significance level with a medium effect size indicated that a sample of 168 COAs and 168 non-COAs was sufficient. Data were initially collected on 1,083 participants in an effort to obtain 168 COAs in each group. This number was reduced to 978 because 105 of the 1,083 subjects were between the ages of 18 and 24 and/or did not live in an intact family since the age of 10. Descriptive statistics on the 978 subjects are presented below in Table 1.

Table 1

Ethnicity,	College	Class,	and	Gender	From	the	Total	Sam	ple	(N=97	(8)

Ethnicity	
Caucasian	823
African American	67
Asian	46
Hispanic or Latino	21
Native American	1
Other	6
College Class	
Freshman	380
Sophomore	289
Junior	209
Senior	78
5 <sup>th</sup> year Senior	22
Gender	
Male	256
Female	722

N=978

A total of 151 COAs were identified within the sample of 978 and divided into subjects who had two alcoholic parents (n=22) and subjects who had one alcoholic

parent (n=129). A sample of 151 non-COAs was randomly identified from the original 827 non-COAs to serve as the comparison group. Hence, separate analyses were conducted on the final sample that had a total of 302 subjects and consisted of three groups: 1) COAs with one alcoholic parent; 2) COAs with two alcoholic parents; and 3) non-COAs. Descriptive statistics on the final sample are found in Table 2. All preceding analyses for this study were conducted on the final sample below.

Table 2

Ethnicity, College Class, and Gender Within Three Groups From the Final Sample (n=302)

	One Alcoholic Parent	Two Alcoholic Parents	Non-COAs
Ethnicity			
Caucasian	100	13	121
African American	11	6	10
Asian	6	1	13
Hispanic or Lating	o 8	1	3
Native American	1	•••	•••
Other	3	1	4
College Class			
Freshman	44	10	58
Sophomore	40	6	40
Junior	29	3	35
Senior	10	3	15
5 <sup>th</sup> year Senior	6	••••	3
Gender			
Male	18	1	38
Female	111	21	113

One Alcoholic Parent (n=129); Two Alcoholic Parents (n=22); Non-COAs (n=151)

Most of the final sample (n=302) was never married (99%), Caucasian (81%), Christian (75%) females (81%) with a mean age of 19 that had no children (98%). All of respondents were from intact families and lived with both parents since they were at least 10 years old. Twenty-five percent of the families had a stepparent and 75 percent had never been divorced. The vast majority of subjects had at least one sibling (90%), 39 percent grew up as the oldest sibling, 31 percent were the youngest, 20 percent identified themselves as the middle child, and 10 percent were only children. The mean grade point average (GPA) during college was a 3.0 and 3.5 while in high school. Most of their fathers worked full-time (95%) and over half (57%) of their mothers worked full-time.

#### Procedures

Subjects were drawn from undergraduate psychology courses at Michigan State University and were offered research credits that contributed to their final grade as an incentive to participate in the study. Interested individuals logged onto the psychology web-based subject pool, viewed restrictions (i.e. intact family status and be between the ages of 18 and 24), and reviewed the informed consent form. Individuals who agreed to participate in the study completed a 275-item questionnaire from any location that had Internet access. The questionnaire took approximately one hour to complete and students earned one research credit per 30 minutes of participation. All participants' responses were anonymous. Anonymity was obtained by deleting any identifying information from the completed questionnaire once it was down loaded. Furthermore, data were only reported in aggregate form so that participants would not be identified or associated with the data. The primary researcher provided subjects with a telephone number, address and e-mail address to contact him and two Michigan State University faculty who were co-chairs on the dissertation with any questions they might have about

the study. They were also given information to contact the Chair of the University Committee on Research Involving Human Subjects (UCRIHS) if they had any questions about their role and rights as a participant of research. The primary researcher imported all of the anonymous data from the completed, on-line questionnaires to an SPSS database for analysis.

### Measures

# COA Status

Rutter (1990) points out that it is critical to measure the extent and severity of substance use among family members and COAs to identify the parameters of risk (e.g. Seilhamer & Jacob, 1989) because protective mechanisms have the clearest effect in high-risk contexts. The Children of Alcoholics Screening Test (CAST; Jones, 1986) was used to assess adolescents' subjective experience of how parental drinking has, or has not, affected several life domains. Hence, COA status is based on the participants' self report of their parent's alcohol abuse or addiction and does not reflect any diagnostic categorization of parents. The CAST is a thirty item yes-no measure that produces an aggregate score to classify offspring of alcoholic parents. The CAST was modified to capture adolescents' perceptions, feelings, experiences, and attitudes of each parent. Hence, sixty items assessed if one or both parents were described as alcoholics. A total of six or more "yes" responses indicated a significant level of parental alcohol related stress and categorized the respondent as a COA. Wright and Heppner (1993) have referred to a score from two to five as a sub-clinical population of COAs.

It is crucial to identify if problem parental drinking occurred during adolescence

in order to investigate family factors that might protect against risk. Subjects were identified as COAs if they answered "yes" to six or more items that inquire about their father's or mother's drinking that occurred while they were living at home. This inclusion criterion ensured that parental problem drinking was active during a period of adolescence when substances become more and more accessible and alcohol consumption is expected to escalate in the general population (Johnston, O'Malley, & Bachman, 1988).

The CAST specifically assesses subjective feelings, attitudes, perceptions, and experiences related to parental drinking behavior. Items such as, "Have you ever lost sleep because of a parent's drinking?" measures emotional distress. Perceptual distress is measured by items like "Did you ever think your father was an alcoholic?" Questions such as, "Did you ever stay away from home to avoid the drinking parent or your other parent's response to the drinking?" taps into stressful alcohol-induced family experiences. Other items explore the subject's desire to seek out support, such as: "Did you ever wish that you could talk to someone who could understand and help the alcohol-related problems in your family?"

The CAST has been used extensively in the COA literature since the early 1980's. A number of validity and reliability tests have validated Schuckit's (1980) assertion that offspring's perceptions of parent's alcohol-related problems can be used to reliably predict a family history of alcoholism when compared to parent reports. For example, Jones (1986) found that 100% of self-identified COAs, and COAs who were identified during face-to-face, clinical interviews scored six or higher with a validity coefficient of .78. Maxwell (1985) found a Spearman-Brown split-half (odd-even)

reliability coefficient to be .98 for adolescent and adult offspring of alcoholics. Coefficient alphas were .96 for mothers and .95 for fathers suggesting extremely good internal consistency within this sample.

Although the validity of close-ended survey instruments has been debated in the literature, Skinner and Allen (1983) have found no significant differences between self-report questionnaires and face-to-face, clinical interviews. In fact, Gfroerer (1985) found that substance use self-report measures have benefits over interviews, because interviews do not afford the privacy of self-report questionnaires. Furthermore, self-report questionnaires tend to facilitate candid disclosure, especially among adolescents.

#### Parentification

Degree of parentification was measured using a scale developed by Mika, et al. (1987). Parentification is defined as a familial interaction pattern that places children and adolescents in a role that is typically filled by a parent in a particular culture. Subjects responded to items that measured the degree to which they fulfilled parental roles. Ages 14 to 16 are considered to be a critical period during which children first begin the transition into adult status (Erikson, 1963). The scale was chosen because of its value free conceptualization of parentification. Items are worded in a neutral manner to assess the degree to which respondents provide instrumental and emotional support to parentification from a relatively pathological view and assume that caregiving responsibilities have a negative impact on mental health (e.g. "It often seemed that my feelings weren't taken into account in my family")
Mika, et al.'s (1987) parentification measure is divided into four sub-scales that assess parentification in spousal, parental, and sibling domains. Likert-form questions inquire about behavioral patterns that are indicative of parentification within each subscale. The spousal sub-scale assesses the degree to which subjects performed confidant roles with each parent (e.g. "My mother shared personal problems or concerns with me as if I were another adult"). On the other hand, the parental sub-scale inquires about a respondent's role as mediator between parents (e.g. "I restored peace if conflicts developed between my parents"). The sibling parentification sub-scale items measure the extent to which subjects provided instrumental (e.g. "I was the person responsible for deciding what action to take if one of my siblings(s) misbehaved, even when my parent(s) were present") and emotional support to siblings (e.g. "I provided emotional support and/or comfort for my siblings").

An overall score was based on item weights of thirty questions to determine the degree to which adolescents fill the role as a supportive spouse to a parent; a parent to their mother and/or father; and a parent to their sibling(s). Although validation of the scale is in its infancy (Mika et al., 1987), there appears to be a wide distribution of scores that determine the degree of parentification. A Spearman correlation of  $\underline{r} = .98$ , p < .01 was derived from weighted item rankings of the authors and weighted item rankings of trained graduate students. A coefficient alpha of .91 was obtained from this sample indicating that there was good internal consistency. No sub-scale alphas are available.

## Conventionality

A combination of several scales was used to test the hypothesis that highly conventional COAs would consume fewer substances than their non-conventional counterparts. The conventionality measure included 47 Likert-type items that were divided into six sub-scales that assessed intolerance of deviance, rebelliousness, responsibility, sensation seeking, religiosity, and orientation to school. A coefficient alpha of .95 was obtained from this sample, indicating that there was good internal consistency. Brook et al. (1990) used all of the sub-scales that were used in this study except Jessor, Turbin, and Costa's (1998) scale on religiosity and orientation to school. Brook et al.'s (1990) scale has been used to measure conventionality within three different studies investigating the protective utility of conventionality against adolescent substance abuse. Each of the scales Brook et al., (1990) used was reduced to sub-scales consisting of 6 to 8 items and was subjected to reliability tests. Most of the measures that they selected had been previously used in research that directly or indirectly investigated adolescent substance use or problem behavior. Items are phrased in a developmentally appropriate manner for adolescents who are in their first year of high school to their senior year in college.

Each of the original measures to create the 47-item scale in this study had sound psychometric properties and was used extensively within the substance abuse and juvenile justice literatures. Jessor, et al.'s (1998) scales on religiosity and orientation to school have Cronbach alphas of .89 and .87 respectively. The religiosity scale has 5 items that assess the frequency of church or temple attendance and the use of prayer as a coping skill (e.g. "To be able to turn to prayer when you're facing a personal problem").

*Orientation to School* assesses commitment to academics using 13 items (e.g. "Being in college helps me to become the person I'd like to be"). *The Attitude Towards Deviance* sub-scale (Jessor, Graves, Hanson, & Jessor's, 1968) was modified by Brook et al. (1990) to consist of 7 items. It had a Cronbach alpha of .75 in the present study. Questions inquire about subject's willingness to drive without a license, smoke marijuana, or copy another student's work. Rebelliousness was measured using Brook et al.'s (1990) modified version of Smith and Fogg's scale (1979). It has a Cronbach alpha of .74 in this study and consists of 7 items that tap into an adolescent's willingness to follow rules and social norms (e.g. "When rules and regulations get in my way I sometimes ignore them"). The coefficient alpha for this sample was .83 in this study, suggesting good internal consistency for all 47 items.

Brook et al.'s (1990) version of Gough's scale (1957) includes 6 items that measure the degree to which respondents are responsible for their own behavior and the well-being of those around them. Items measure if subjects are willing to help others (e.g. "There's no use in doing things for people: you only find that you get it in the neck in the long run") and whether or not they take responsibility to abide by laws (e.g. "It is all right to get around the law if you don't actually break it"). Sensation seeking was measured using Brook et al.'s 7 item version of Zuckerman, Eysenck, & Eysenck's (1978) scale. Brook et al. (1990) found that the sub-scale yielded a Cronbach alpha of .53. The scale assesses thrill and adventure seeking ("I would like to try parachuting"), experience seeking (e.g. "I would like to take off on a trip with no preplanned or definite routes or timetables"), disinhibition ("I like wild, 'uninhibited' parties"), and boredom susceptibility ("I have no patience with dull or boring persons").

#### Parental Support

Perceived source of support was measured using the <u>Social Support</u> <u>Questionnaire Six: Revised (SSQSR)</u> (Sarason, Sarason, Shearin, & Pierce, 1987) to determine if non-substance abusing COAs seek out their problem drinking versus nonproblem drinking parent for support. The SSQSR is the most appropriate measure of social support to assess if adolescents perceive that they have a "credible" source of support other than the individual with whom they play a parentified role. Each item has two parts. The first part identifies from whom they obtain support and the second part assesses their level of satisfaction with the support on a six-point Likert-type scale. There are 6 items that measure the dependability of the respondent's source of support (e.g. "Whom can you really count on to be dependable when you need help?") and acceptance ("Who accepts you totally, including both your worst and your best points?").

The SSQSR was modified to specifically assess the level of satisfaction associated with social support from each parent. The authors of the measure conceptualize support as a continuous variable that is represented by an aggregated score. Scores are obtained by counting the total number of people identified as sources of support and the number that represents the level of satisfaction with supportive individuals. However, this study modified the SSQSR into a mother and father version and obtained a score on each parent by aggregating scores that reflect level of satisfaction associated with mothers and fathers separately.

Four studies have been conducted to refine the <u>SSQSR's</u> psychometric properties and assess its utility in quantifying the perceived availability and satisfaction of social

support. The authors found that the scale is a reliable instrument with high internal consistency that yields comparable results to an extensive structured interview (Sarason, et al., 1987). Each item was factor analytically derived from a large body of items intended to measure the functions served by social networks (Sarason, Levine, Basham, & Sarason, 1983). The coefficient alpha for this sample was .89, suggesting good internal consistency. The availability and quality of social support is significantly related to positive (rather than negative) life changes and permits individuals to pursue difficult goals under frustrating conditions. Results also indicated that people with satisfying sources of social support score lower on measures of anxiety, depression, and hostility, appear to have a more optimistic outlook on life, and score higher on measures of self-esteem.

## **Emotional Autonomy**

Emotional autonomy within relationships with a problem drinking and nonproblem drinking parent was measured using the <u>Emotional Autonomy Scale</u> (Steinberg & Silverberg, 1986). This scale distinguishes subjects' perceptions of the degree of emotional autonomy that exists with each parent. It was used to measure if COAs who use low levels of substances are more likely to have high levels of emotional autonomy with their problem-drinking parent and low levels of emotional autonomy with their non-problem drinking parent.

The <u>Emotional Autonomy Scale</u> is a 20-item measure that has four sub-scales that operationalize Blos's (1979) conceptualization of individuation. According to this conceptualization of individuation, adolescence is a time of separation that is not

characterized by a stormy, chaotic, rebellious parent-adolescent relationship. Instead, as children enter into adolescence they gradually relinquish childhood dependency on parents, perceptions of parental omnipotence, and begin viewing them more and more as fallible people. The "deidealization" and "perceives parents as people" sub-scales measure cognitive aspects of emotional autonomy while the "non-dependency" and "individuation" sub-scales measure affective aspects.

Steinberg and Silverberg (1986) found that an overall emotional autonomy score has a Cronbach's alpha of .75. Each sub-scale has four to six, four-point Likert-format items with each exceeding a .60 internal reliability coefficient. The current study utilized only the deidealization sub-scale (5 items) and modified the measure to produce two scales to derive a score that reflects the degree of emotional autonomy with each parent. A coefficient alpha of .83 was obtained from this sample indicating good internal consistency. Emotional autonomy scores have been found to increase between the ages of 10 and 16 with girls scoring significantly higher than boys. However, Ryan and Lynch (1989) found that boys score higher than girls. Emotional autonomy is conceptualized as a continuous variable and a score is obtained by adding up the numbers that represent the four-point Likert responses that range from strongly disagree to strongly agree. High scores reflect a high degree of emotional autonomy and low scores reflect a low degree.

#### Alcohol & Drug Use

The dependent variable was measured using two scales: the <u>Adolescent Alcohol</u> <u>Involvement Scale (AAIS) (Mayer & Filstead, 1979) and the Drinking and Drug</u>

<u>History-Revised Edition (Version 3)</u> (Zucker, Noll, & Fitzgerald, 1989). Subjects were given the AAIS to identify those who use alcohol problematically and the <u>Drinking and</u> <u>Drug History-Revised Edition (Version 3)</u> to assess level of drug use. The AAIS provides an in-depth assessment of the quantity, frequency, context in which drinking occurs (e.g. "I drink alone"), precipitants to alcohol use (e.g. I usually start to drink because I feel nervous, tense, full of worries or problems"), and perceived consequences of alcohol use and involvement (e.g. "was in a fight or destroyed property"). It also provides information about how others perceive their drinking behavior (e.g. "my family or friends tell me to get help for my drinking"). Subjects were also asked to assess their reasons for drinking and disclose how old they were when they had their first experience with alcohol.

The AAIS is a 14-item questionnaire that is used to assess for problematic alcohol use. A subject's substance use is categorized as problematic when it interferes with psychological, social, and/or family domains of functioning. Each item has several weighted responses which correspond with the degree to which drinking interferes with one or any combination of the domains. A total score is gleaned from the responses and places subjects on a continuum from abstinence to misuse. The items on the AAIS are a compilation of previously verified indicators that discriminate between adolescent alcohol use and misuse. An expert panel of psychiatrists and staff members, many who were in recovery, working in an inpatient substance abuse unit for adolescents rated the weight of each item on the basis of face validity. A coefficient alpha of .89 was obtained in this study indicating good internal consistency.

Mayer and Filstead (1979) report that the measure has extremely high face

validity, high test-retest reliability when they administered it to a control (infrequent drinkers) and experimental group residing in inpatient psychiatric care, and well established norms. Test-retest reliabilities were obtained by administering the questionnaire to each group two times with a two-week lag. The correlation between the two average scores was .91 for the experimental group and .89 for the control group. The authors also administered the questionnaire to a non-clinical sample of 3662 adolescents at four Chicago high schools. Responses were factor analyzed and results indicated that scores from the AAIS appear to reflect normal benchmarks demarcating adolescents' use or nonuse of alcohol. The control group of normal adolescents had scores that ranged from 0-19. Adolescents who use low levels of alcohol had scores that ranged from 20-41, and problematic drinking adolescents had scores from 42-57. Scores 58-79 were obtained from hospitalized adolescents. Moberg (1983) administered the measure through a telephone survey to a random sample of 1014 youth aged 13-17. Their results were strikingly consistent to Mayer and Filstead's (1979) norms and cutoff scores.

Because it has been found that COAs are at higher risk than controls to use marijuana and other drugs (Johnson, et al., 1989), data on drug use were collected using the <u>Drinking and Drug History-Revised Edition (Version 3)</u> (Zucker, Noll, & Fitzgerald,1989). Zucker et al.'s measure uses a 9-point Likert scale to assess the frequency and quantity of marijuana, LSD, inhalants, cocaine, amphetamines, barbiturates, and other substances. A coefficient alpha of .95 was obtained from this sample indicating extremely good internal consistency.

#### Plan of Analysis

There has been a considerable amount of discussion regarding the confusion between moderator and mediator variables in research models that attempt to identify protective variables (e.g. Sher, 1991; Baron and Kenny, 1986). Moderators and mediators are often conceptualized as protective factors that have the ability to buffer the consequences of risk, or to substantially reduce risk associated with vulnerability (Rogosh, et al., 1990; Sher, 1991). They also have the potential to exacerbate risk that leads to greater vulnerability. According to Baron and Kenny (1986), mediatormoderator distinctions are essential in determining research models and statistical analysis. Mediating variables underscore mechanisms that explain how effects occur. They account for the relationship between the independent and dependent variables. On the other hand, moderators identify the conditions that must be in place for certain effects to take place. They interact with independent variables to impact the dependent variable. Moderating variables are expected to affect the direction and/or strength between the independent and dependent and dependent

Sher (1991) recommends that a series of regression analysis be performed to determine if a given factor has a mediating or moderating function. Regression analyses were conducted separately for the COA and non-COA groups. The relationship between parentification and low levels of substance use needed to be substantially weakened when COA substance use was regressed on each of the potential protective factors to be considered mediators. This assumption rests on Baron and Kenny's (1986) three criteria for mediating variables: 1) the independent variable (i.e. high

parentification) needs to predict the potential mediators (i.e. high conventionality, low alcoholic parent support, high non-alcoholic parent support, deidealization of alcoholic parent, and idealization of non-alcoholic parent); 2) the independent variable (i.e. high parentification) is correlated with the dependent variable (i.e. low levels of COA drug or alcohol use); 3) and the presumed mediators (i.e. high conventionality, low alcoholic parent support, high non-alcoholic parent support, deidealization of alcoholic parent, and idealization of non-alcoholic parent support, deidealization of alcoholic parent, and idealization of non-alcoholic parent support, deidealization of alcoholic parent, and idealization of non-alcoholic parent) are correlated with the dependent variable (low levels of COA substance use).

A set of regression techniques was used to test for moderator effects when variables did not have a mediating function. Variables were considered moderators if the interaction between parentification and the potential protective factors add significant, explained variance over the main effects of parentification and each potential moderating variable (Rogosh, et al., 1990). There were essentially two regressions to test whether the potential protective factors moderate the relationship between parentification and low levels of drug and alcohol use. Parentification was entered first to control for its effects on drug and alcohol use separately. Parentification was expected to have the most predictive utility and would ultimately have a main effect on COA substance use level if the variables function as moderators. The first step was to enter the main effects of parentification and the moderator variables. In the second step, the interaction of parentification and the moderators were then entered, depending on which is most highly associated with the dependent variable, to allow for the moderators with the most predictive utility to be entered first. Rogosch et al. (1990) points out that a significant two-way interaction is indicative of moderation. Simple

regression lines for high and low values of each moderator variable were used to determine statistically significant interactions (Aiken & West, 1991).

#### CHAPTER FOUR

#### Results

#### Preliminary Analyses

Preliminary analyses were conducted in two stages. The first stage was to assess the representativeness of the sample and the second was to determine if there were significant differences among the potential protective factors across the subgroups. The sample was divided into three sub-groups for further analyses on ethnicity, religion, sex, and parental education: COAs with one alcoholic parent (n=129), COAs with two parents (n=22), and non-COAs (n=151). Ethnicity and religion did not differ significantly across the three groups (see Tables 3 & 4).

## Table 3

## Distribution of Religious Faiths Within Three Groups From a Sample of College Students

Faith	One Alcoholic Parent	Two Alcoholic Parents	Non-COAs
Christian	78.3%	63.6%	72.9%
Not Affiliated	17.1%	18.3%	15.2%
Other	3.9%	13.6%	9.3%
Jewish	.7%	4.5%	2.6%

 $X^2 = 22.0^{ns}$ 

One Alcoholic Parent (n=129); Two Alcoholic Parents (n=22); Non-COAs (n=151)

Chi Squares indicated that there were significant sex differences (p<.05) with females (see Table 4) and level of father's education (see Table 5) unevenly distributed across groups. There were a total of 57 males within a sample of 302: one had two alcoholic parents, 18 had one alcoholic parent, and 38 were in the non-COA group.

Fathers of non-COAs had more education than fathers of COAs with one alcoholic parent, and fathers of COAs with two alcoholic parents had the least amount of education. However, the majority of respondents indicated that both of their parents had completed some college course work. One-way ANOVAS also indicated that the differences on paternal education were significant between non-COAs and COAs with one alcoholic parent  $\underline{F}(2, 299)=9.114$ , p< .05.

Table 4

# The Number of Males and Females Within Three Groups From a Sample of College Students

Į.]

Group	Male	Female	
One Alcoholic Parent	14%	86%	
Two Alcoholic Parents	.5%	95.5%	
Non-COAs	25.2%	74.8%	

 $\overline{X^2=8.9, p<.05}$ 

One Alcoholic Parent (n=129); Two Alcoholic Parents (n=22); Non-COAs (n=151)

Table 5

# Father's Education Level in Three Groups of Participants From a Sample of College Students

Father's Education	One Alcoholic Parents	Two Alcoholic Parents	Non-COAs
Less than high school	4.7%	••••	2%
High school diploma	27.9%	31.8%	14.6%
Some college	29.5%	31.8%	25.2%
Four years of college	22.5%	18.2%	25.8%
Master's degree	11.6	13.6%	.5%
Post Master's degree	3.9%	4.5%	9.9%

 $X^2 = 19.4, p < .05$ 

One Alcoholic Parent (n=129); Two Alcoholic Parents (n=22); Non-COAs (n=151)

The second stage of preliminary analyses was to determine if there were

significant differences between the subgroups on the potential protective factors.

Means, standard deviations, ranges, and F scores were derived from one-way ANOVAS

on all continuous variables in the model (i.e. parentification, drug use, alcohol use,

conventionality, father support, mother support, non-alcoholic parent idealization, and

alcoholic parent deidealization), which are included in Table 6.

#### Table 6

Means, Standard Deviations, and F Scores for All Continuous Variables in a Sample of College Students

<u> </u>	One Alcoholic Parent	Two Alcoholic Parent	s Non-CC	Non-COAs		
	M (SD)	M (SD)	M (SD)	F		
Variable			_ · ·			
Parentification	42.43 (19.30) <sup>1</sup>	51.09 (25.55)	33.50 (17.43)	12.94°		
Drug Use	28.40 (35.95)	55.82 (101.70) <sup>2</sup>	22.34 (31.44)	6.13 <sup>b</sup>		
Alcohol Use	32.83 (10.58)	30.59 (11.88)	31.79 (11.88)	.51		
Conventionalit	y 116.63 (10.91)	114.50 (11.72)	116.76 (10.91)	.41		
Father Deideal	$3.08(.56)^3$	2.97 (.81)	2.72 (.61)	11.79°		
Father Support	25.14 (8.30)4	26.18 (8.44)	29.81 (6.15)	14.63°		
Mother Deidea	I. 2.61 (.55)	2.84 (.86)	2.60 (.45)	1.88		
Mother Suppor	rt 32.41 (5.47)	28.90 (9.30) <sup>5</sup>	32.36 (5.05)	3.89ª		

#### (df=2,299)

One Alcoholic Parent (n=129); Two Alcoholic Parents (n=22); Non-COAs (n=151)

<sup>a</sup>p<.05, <sup>b</sup>p<.01, <sup>c</sup>p<.0001

- <sup>1</sup>The mean for Non-COAs significantly differs from COAs with one alcoholic parent and COAs with two alcoholic parents
- <sup>2</sup> The mean for COAs with two alcoholic parents significantly differs from COAs with one alcoholic parent and non-COAs

<sup>3</sup> The mean for COAs with one alcoholic parent significantly differs from non-COAs

<sup>4</sup> The mean for COAs with one alcoholic parent significantly differs from non-COAs

<sup>5</sup> The mean for COAs with two alcoholic parents significantly differs from COAs with one alcoholic parent and non-COAs

Father Deideal. = Father Deidealization

Mother Deideal. = Mother Deidealization

Post Hoc Analyses (i.e. Scheffe Tests) indicated that there were significant differences on father deidealization between groups, <u>F</u>(2, 299)=11.79, p<.05. That is, COAs with one alcoholic parent deidealized their fathers (<u>M</u>=3.08, p<.05) more than non-COAs (<u>M</u>=2.72, p<.05). Moreover, significant differences existed on paternal support between groups, F(2, 299)=14.63, p<.05. That is, COAs with one alcoholic parent (<u>M</u>=25.14, p<.05) perceived that they had less paternal support than non-COAs (<u>M</u>=29.81, p<.05). There were also significant differences on maternal support between groups <u>F</u>(2, 299)=3.90, p<.05. That is, COAs with two alcoholic parents (<u>M</u>=28.90, p<.05) perceived that they had less maternal support than non-COAs (<u>M</u>=32.36, p<.05) and COAs with one alcoholic parent (<u>M</u>=32.41, p<.05).

Table 7 shows correlations among all the continuous variables. Correlations were conducted on each of the three groups (COAs with one alcoholic parent; COAs with two alcoholic parents, and non-COAs) and a fourth group that consisted of all COAs regardless of whether there were one or two alcoholic parents. This latter collapsed COA group was included because there was a significant correlation ( $\mathbf{r} = .20$ ,  $\mathbf{p}$ <.05) between parentification and drug use that did not exist within the other subgroups.

## Table 7

## Pearson Correlations Among All Continuous Regression Variables in a Sample of College Students

Groups	1	2	3	4	5	6	7	8
One Alcoholic Parent (n=129)								
1. Parentification	•••							
2. Conventionality	.017	•••						
3. Mother Support	.047	.085	•••					
4. Father Support	165	.051	.243 <sup>b</sup>	•••				
5. Mother Deidealization	081	256 <sup>b</sup>	591°	015	•••			
6. Father Deidealization	.155	113	167	653⁵	.177			
7. Alcohol use	.083	391 <sup>b</sup>	.054	.005	011	.003	•••	
8. Drug use	.084	402 <sup>b</sup>	.066	039	.066	036	.361 <sup>b</sup>	
Two Alcoholic Parents (n=22)								
1. Parentification								
2. Conventionality	540 <sup>b</sup>	•••						
3. Mother Support	348	.222	•••					
4. Father Support	362	.159	.640 <sup>ь</sup>	•••				
5. Mother Deidealization	170	.031	571 <sup>b</sup>	228	•••			
6. Father Deidealization	240	.207	251	378	.664 <sup>ь</sup>	•••		
7. Alcohol use	.375	780 <sup>⊾</sup>	.063	093	112	048	•••	
8. Drug use	.358	651 <sup>b</sup>	129	181	254	402	.540 <sup>b</sup>	•••
Collapsed COA (n=151)								
1. Parentification	•••							
2. Conventionality	097	••••						
3. Mother Support	087	.126	•••					
4. Father Support	191*	.064	.308 <sup>b</sup>	•••				
5. Mother Deidealization	080	199ª	595 <sup>b</sup>	051	•••			
6. Father Deidealization	.051	044	174°	595°	296 <sup>b</sup>			
7. Alcohol use	.127	448 <sup>6</sup>	.068	014	043	003	•••	
8. Drug use	.20ª	442 <sup>b</sup>	056	066	037	181*	.363 <sup>b</sup>	•••
Non-COA (n=151)								
1. Parentification	•••							
2. Conventionality	.055							
3. Mother Support	151	.179•	•••					
4. Father Support	051	.178*	.420 <sup>b</sup>	•••				
5. Mother Deidealization	094	266 <sup>b</sup>	376 <sup>b</sup>	164ª	•••			
6. Father Deidealization	.060	117	154	430 <sup>b</sup>	.516	•••		
7. Alcohol use	126	486 <sup>ъ</sup>	045	.017	.090	006	•••	
8. Drug use	120	491 <sup>b</sup>	097	037	.057	037	.434 <sup>6</sup>	•••
N=302								

<sup>a</sup>p<.05 (two tailed), <sup>b</sup>p<.01 (two tailed)

There was a negative relationship between deidealization of father and drug use  $(\underline{r} = -.18, \underline{p} < .05)$  among the collapsed COA group. That is, high levels of father deidealization were correlated with low levels of drug use. Conventionality and alcohol use had a negative relationship ( $\underline{r} = -.45, \underline{p} < .05$ ). The same was true of conventionality and drug use ( $\underline{r} = -.44, \underline{p} < .05$ ). In other words, high levels of conventionality were strongly associated with low levels of COA alcohol and drug use. There was also a negative relationship between conventionality and alcohol use ( $\underline{r} = -.49, \underline{p} < .05$ ) among non-COAs. That is, high levels of conventionality were strongly were strongly correlated with low levels of alcohol and drug use.

Conventionality and alcohol use had a strong, negative relationship ( $\mathbf{r} = -.39$ ,  $\mathbf{p}<.05$ ) and conventionality and drug use ( $\mathbf{r} = -.40$ ,  $\mathbf{p}<.05$ ) had a strong, negative relationship among COAs with one alcoholic parent. In other words, high levels of conventionality were strongly associated with low levels of alcohol use and drug use. Conventionality and alcohol use had even a stronger negative relationship ( $\mathbf{r} = -.78$ ,  $\mathbf{p}<.05$ ) among COAs with two alcoholic parents. The same was true of drug use ( $\mathbf{r} = -.65$ ,  $\mathbf{p}<.05$ ). That is, high levels of conventionality were strongly associated with two alcoholic parents.

#### Hypotheses for Risk Factors

Consistent with predictions, one-way ANOVA results indicated that there were significant differences between COAs and non-COAs on drug use when COAs had two alcoholic parents  $\underline{F}(2, 299)=6.13$ . COAs with two alcoholic parents used more drugs (M=55.82, p<.05) than non-COAs (M=22.34, p<.05), and COAs with one alcoholic parent (M=28.40, p<.01). Contrary to predictions, however, there were no significant differences (p<.05) on alcohol use between COAs in any of the subgroups and non-COAs (see Table 5). Fathers constituted most of the alcoholics within the COA groups. There were 129 alcoholic fathers in the one parent alcoholic group (n=129) and 11 in the two parent alcoholic group (n=22). Alcoholic mothers were found only in the COA group that had two alcoholic parents.

Consistent with predictions, there were significant differences (see Table 5) between COAs and non-COAs on parentification  $\underline{F}(2, 299)=12.94$  (p<.0001). Post Hoc Analyses (i.e. Scheffe Tests) indicated that non-COAs had lower levels of parentification ( $\underline{M}=33$ , p<.05) than both COAs with one parent ( $\underline{M}=42$ , p<.05) and two alcoholic parents ( $\underline{M}=51$ , p<.05). The mean parentification score of the non-COA group ( $\underline{M}=33.5$ , p<.0001) was comparable to the mean score in Mika, et al.'s (1987) study of non-clinical, non-COAs ( $\underline{M}=32$ , p<.05).

#### Hypotheses for Protective Factors

Rogosch, et al.'s (1990) procedures were used to determine if the potential protective factor had a mediating or moderating effect on the relationship between parentification and substance use. The procedure to determine if a factor functioned as a mediator was run on each potential protective factor within each of the three COA subgroups and the non-COA group. The procedure that determines if a factor has a moderating effect was also conducted on each potential protective factor if it did not serve a mediating effect.

Baron and Kenny (1986) state that the independent variable, parentification, must predict both the dependent variable and the potential mediator and the potential mediator must predict the dependent variable. Rogosch, et al. (1990) point out that a factor has a mediating effect if "the strength of the relation between the independent and dependent variable is eliminated (or substantially weakened) when the dependent variable is regressed on both the independent variable and the potential mediator" (p. 313). Two tasks were performed to test whether the potential protective factors moderated the relationship between parentification. The main effects of parentification and each potential moderating variable were entered in step one and the interaction between them was entered in step two (see Table 7). The variable was considered a moderator if there was a significant two-way interaction.

#### Parentification and Substance Use

Regression analyses showed that the collapsed COA group was the only subgroup where parentification significantly predicted drug use (beta = .20 p < .05). None of the other regressions within each of the subgroups, including the non-COA group was significant. Hence, the procedures to determine if the potential protective factors have a mediating effect were only conducted on the collapsed COA group. Contrary to hypotheses, however, none of the variables mediated the relationship between parentification and low levels of substance use.

Findings from Pearson correlations contradicted predictions that high levels of parentification would be associated with low levels of COA drug and/or alcohol use (see Table 6). High levels of parentification were actually associated with *greater levels* of drug use ( $\mathbf{r} = .20$ , p<.05) among the collapsed COA subgroup. High levels of parentification were not associated with high levels of drug ( $\mathbf{r} = -.12$ , p>.05) or alcohol use ( $\mathbf{r} = .13$ , p>.05) among non-COAs. In fact, there was not a significant direct effect between alcohol use and parentification within any of the subgroups.

#### Conventionality as a Mediator Variable

Parentification predicted conventionality (beta = .20, p<.05) within the collapsed COA group. Hence, the first set of Rogosch, et al.'s (1990) conditions for demonstrating that conventionality is a mediating variable was met.

#### Idealization of a Non-alcoholic Parent as a Mediator

Parentification did not predict idealization of mother (beta = -.080, p>.05)

within the collapsed COA group. Hence, the first set of Rogosch, et al.'s (1990) conditions for demonstrating that idealization of a non-alcoholic parent (i.e. mother in this sample) as a mediating variable was not met. However, the remaining two conditions were not met.

#### Deidealization of an Alcoholic Parent as a Mediator

Parentification did not predict deidealization of father (beta = .051, p>.05) within the collapsed COA group. Hence, the first set of Rogosch, et al.'s (1990) conditions for demonstrating that deidealization of an alcoholic parent (i.e. father in this sample) as a mediating variable was not met.

#### High Support From a Non-Alcoholic Parent as a Mediator Variable

Parentification did not predict high mother support (beta = -.087, p>.05) within the collapsed COA group. Hence, the first set of Rogosch, et al.'s (1990) conditions for demonstrating that high levels of support from a non- alcoholic parent (i.e. mother in this sample) as a mediating variable were not met.

#### Low Support From an Alcoholic Parent as a Mediator Variable

Parentification predicted low father support (beta = -.191, p<.05) within the collapsed COA group. However, low father support did not predict drug use (beta = -.066, p>.05). Hence, the first set of Rogosch, et al.'s (1990) conditions for demonstrating that low levels of support from an alcoholic parent (i.e. father in this sample) as a mediating variable were not met.

## Deidealization of Father and Conventionality as Moderating Variables

Two regressions were performed on each potential protective variable to determine if any of them moderated parentification and substance use. High levels of conventionality and deidealization of father were the only potential protective variables that had a moderating effect and this relationship was only significant within the collapsed COA group. These variables did not function as moderating variables among COAs with one alcoholic parent, COAs with two alcoholic parents, or non-COAs. Beta coefficients derived from regression analyses on parentification, conventionality and drug use are shown in Table 8. Table 9 shows coefficients derived from regression analysis on parentification, father deidealization and drug use.

#### Table 8

Regressions Predicting Drug use From Parentification, Conventionality,	and Their
Interaction Among COAs With One Alcoholic Parent and Two Alcoholic	Parents

Dependent Measure Drug Use					
Predic	tors	$R^2$ change	β	<u></u>	
Step 1	Main effects Conventionality Parentification	.30°	385° .174ª		
Step 2	2-way interaction parentification x Conventionality	.06°	266°		

## n=151

<sup>a</sup>p<.05, <sup>c</sup>p<.0001

The tabled values for betas were computed at the step that the variable was entered into the equation.

## Table 9

## <u>Regressions Predicting Drug use From Parentification, Father Deidealization, and Their</u> <u>Interaction Among COAs With One Alcoholic Parent and Two Alcoholic Parents</u>

Dependent Measure Drug Use						
Predictors	$R^2$ change	β				
Step 1						
Main effects	.04 <sup>b</sup>					
Father deidealization		.249 <sup>b</sup>				
Parentification		102				
Step 2						
2-way interaction	.06ª					
Parentification x						
father deidealization		216 <sup>a</sup>				

<sup>a</sup>p<.05, <sup>b</sup>p<.01

N=151

The tabled values for betas were computed at the step that the variable was entered into the equation.

Simple regression lines were plotted on high and low values (one standard deviation above and below the mean) of conventionality (Aiken & West, 1991) and were used to explore the nature of the interaction. Figure 2 shows that there is a strong, positive relationship between parentification and drug use among those who report low levels of conventionality. That is, higher levels of parentification are associated with higher levels of drug use when COAs report low levels of conventionality. However, there is a slight negative relationship between parentification and drug use when COAs report high levels of parentification and drug use when COAs report high levels of parentification are associated with lower levels of drug use when COAs report high levels of parentification are associated with lower levels of drug use when COAs report high levels of conventionality.

#### Figure 2

## Significant Relations Between Parentification and Drug Use as Moderated by Conventionality and Deidealization of Alcoholic Father Among COAs With One Alcoholic Parent and Two Alcoholic Parents



## N=151

A similar finding emerged in the analyses involving COA deidealization of father and parentification (see Figure 2). There is a strong, positive relationship between parentification and drug use among COAs who report low levels of father deidealization (i.e. father is idealized). That is, higher levels of parentification are associated with higher levels of drug use when COAs report low levels of father deidealization. However, there is essentially no relationship between parentification and drug use when COAs report high levels of deidealization. In other words, higher levels of parentification are associated with higher levels of drug use when COAs report low levels of father deidealization, but there is essentially no relationship between parentification and drug use when COAs report low levels of father deidealization.

#### CHAPTER FOUR

#### Discussion

A series of regression analyses were completed to investigate whether high levels of parentification and low levels of drug and/or alcohol use would be mediated by high levels of conventionality, alcoholic parent deidealization and low support, and non-alcoholic parent idealization and high support. None of these potential protective factors had a mediating effect on the relationship between parentification and drug or alcohol use within a primarily female sample. Alcoholic parent deidealization (i.e. father deidealization) and high levels of conventionality were the only potential protective factors that had a moderating effect on substance use and this only existed within the collapsed COA group that were not at any more risk for using drugs *or* alcohol than the non-COA group.

There was some limited support for a probabilistic view of development (Fitzgerald, et al. 1994) that has multiple developmental trajectories with multiple outcomes because a family history of alcoholism did not adequately predict that offspring would perpetuate high levels of alcohol consumption as defined by Mayer and Filstead (1979). Consistent with some of the literature on female COAs (Mitz, et al., 1995; Benson & Heller, 1987; Harburg, et al., 1982), all the female COAs in this sample with one alcoholic parent (i.e. father) were not at significantly more risk for using alcohol than non-COAs. However, COAs with two alcoholic parents *were* at significantly higher risk for drug use. According to Sher (1991), not all COAs possess a level of vulnerability that predisposes them to develop problems with substance use.

Hence, it cannot be assumed that protective processes are responsible for the insignificant results on substance use levels between COAs with one alcoholic parent and non-COAs.

Despite the fact that there were no data to support the mediating hypotheses, other findings from this study are helpful in starting to identify some of the processes underlying a developmental pathway leading to low levels of COA substance use (Fitzgerald et al., 1994). Data from correlations and one-way ANOVAS indicated that female COAs with one alcoholic parent and non-COAs have similar substance use levels, but differ in the levels of parentification, conventionality, parental support, and emotional autonomy. Consistent with Brook et al.'s (1990) findings, conventionality had the strongest correlation with low levels of drug and alcohol use across all groups within the sample. Perhaps the most important finding of this study was the complex, moderating role that conventionality appeared to play in low levels of drug use among highly parentified COAs. Goglia et al.'s (1992) findings that females COAs are more parentified than males were replicated in this study. In fact, all the females in COA subgroups within this study scored significantly higher on parentification than females that were not COAs. Contrary to predictions, however, parentification alone actually functioned as a risk factor that was related to higher levels of drug use within the collapsed COA group. Conventionality, the most significant moderating variable, was strongly correlated with low levels of drug and alcohol use across all subgroups within the sample and appeared to reverse or neutralize the relationship between parentification and heightened drug use within the collapsed COA group (see Figure 2).

The relationship between parentification and conventionality indicate that

parentification, alone, cannot be expected to protect adolescents from using high levels of substances. Instead the influence of parentification on low levels of COA substance use appeared to be moderated through caregiving responsibilities that probably reinforced conventional belief systems (Weiss, 1979; Wilson & Orford, 1978; Nardi; 1979; Whiting & Whiting, 1975). Conventional belief systems may inhibit the development of conduct-disordered behaviors and antisocial personality traits that Zucker, et al. (1996) found to be associated with substance abuse in adulthood. It is also possible that conventionality moderated the impact of parentification on drug use because greater care-giving responsibility towards others increased the likelihood offspring would emulate a myriad of pro-social behavior from their non-alcoholic mothers, including low levels of substance use. Parentification alone appears to play a protective role only in a context that promotes conventional behavior and belief systems. Another interpretation is that parentified COAs who used drugs might have had care-giving tasks that fell outside the realm of their developmental capabilities. Increased stress associated with roles as a caregiver and the absence of conventional belief systems, coupled with a family culture that normalizes high levels of substance use may have predisposed these COAs to non-conventional means of alleviating stress, such as drug use.

Deidealization of alcoholic fathers, in addition to parentification and conventionality, may be another piece of the causal chain within a developmental pathway that leads to low levels of drug use. Although idealization of an alcoholic father among parentified COAs appears to predict drug use, the reverse, deidealization of father, was *not* strong enough to predict low drug use. In other words, deidealization

appears to only be a *part* of the causal chain leading to decreased drug use. *Idealization* of an alcoholic father within the collapsed COA group was associated with higher drug use, presumably indicating that father's drinking behavior strongly influenced daughter's choice to use high levels of drugs because of their perceptions of parental omnipotence, and inability to gradually relinquish childhood dependency and begin viewing their fathers more and more as fallible people. Interestingly, father *deidealization* had an interaction effect with parentification to serve a moderating effect on drug use. However, the effect on drug use was fairly weak (see Figure 2).

The strong, positive correlation between father deidealization and parental support may provide some limited support for Sarason, et al.'s (1983) perspective that an individual needs to be perceived as a credible source of support before one can feel confident enough to access them as a resource. Findings from correlations and one-way ANOVAS indicated that COAs with one alcoholic parent were more likely to deidealize their fathers and receive less support from them. From a contextual family therapy perspective (Boszormenyi-Nagy, et al., 1991), the "one-up" position associated with caregiving responsibilities and providing support to others may make it difficult for parentified children to be on the receiving end of support from their alcoholic fathers. The finding that COAs with one alcoholic parent (i.e. the father) reported low levels of support from their fathers is not surprising when viewed from this perspective. That is, daughters may not have viewed alcoholic fathers as a credible source of support because they viewed them as more fallible and impotent than non-COAs viewed their fathers.

Interestingly, low levels of support from alcoholic fathers and *insignificant* levels of maternal support (when compared to non-COAs) did not place COAs from the

collapsed group at higher risk for using drugs or alcohol. The most parsimonious interpretation of this finding is that parental support from a non-alcoholic parent has no relationship to drug use levels among female COAs. On the other hand, this could be evidence in favor of prior research, which has found that the context of emotional support (Andrews, Hops, & Duncan, 1997) and emotional autonomy (Fuhrman and Holmbeck, 1995) can influence whether or not close parent-adolescent relationships serve detrimental or protective functions. That is, the level of maternal support within non-alcoholic families might have been more adaptive or protective for the COAs in this sample and extremely high levels of support might have been a detriment. For example, moderate levels of support from non-alcoholic mothers may have helped daughters maintain a connection with their mother that was flexible enough to receive support from non-substance abusing individuals outside the family.

The findings of this study shed light on the intimate relationship between protective influences and risk, maladaptation, and psychopathology (Cicchetti & Garmezy, 1993). COAs who had two alcoholic parents were at highest risk for using drugs, received the least amount of support from their mothers, did not differ significantly from the other groups on father support, and had fathers who had the least amount of formal education. The fact that this group had more risk variables than the others makes their self-reports of low alcohol use and self-reports of high drug use a provocative finding that could have many implications for protective factors that have not been identified in this study. Their increased use of drugs can be interpreted in different ways based on the theoretical perspective being used. It could mean that spousal parentification (Mika, et al., 1987) is more prevalent with both parents because

she becomes the "parent" on a pragmatic day-to-day basis. As a result, she may not be able to form stable attachments with others (Ainsworth, Blehar, Waters, & Wall, 1978), acquires anti-social personality traits, and abuses substances to exonerate her substanceabusing parents and indulge in a path of destructive entitlement (Boszormeny-Nagy & Spark, 1984). On the other hand, her heightened drug use could be the result of social learning (Bandura & Walters, 1963).

A developmental systems approach (e.g. Fitzgerald et al., 1994; Staudinger, Marsiske & Baltes, 1995; Ford & Lerner, 1992) to this study has attempted to extend beyond individual processes to span multiple levels of analysis of protective factors to help begin unraveling a developmental trajectory that leads to low levels of substance use. The findings presented here have started to uncover a developmental trajectory that protects daughters from a family history of alcoholism. An individuation process that is characterized by high levels of parentification, deidealization of an alcoholic father, and high levels of conventionality, may be adaptive for female COAs between the ages of 18 and 24. It is tempting to conclude that a seemingly distant relationship with an alcoholic father (i.e. highly deidealized with low levels of support) is more adaptive for parentified daughters if high levels of conventionality exist and the outcome leads to low levels of drug and alcohol use.

## Limitations

The failure to support a mediational model and the limited support on a moderating model may be partly due to the methodological limitations of this study. The findings of a single, cross-sectional, retrospective study utilizing self-report

questionnaires cannot be used to definitely rule out a mediational or moderating model for protective factors (Rogosch, et al. (1990). Moreover, COA status is based on the participants' self report of their parent's alcohol abuse or addiction and does not reflect any diagnostic categorization of parents. Although these limitations are common to most large, survey studies, they strongly suggest caution in interpreting the findings. Some of the major methodological limitations of this study include the absence of measures that tap into the biological and genetic aspects of addiction and the inability to isolate subtypes of alcoholism and comorbidity of alcoholism and other mental health diagnoses (Zucker, et al., 1996). Zucker et al., (1996) point out that alcoholism is often accompanied by depression in women and antisocial personality traits in men. Each of these disorders would greatly influence the context of risk and are likely to have an influence on offspring substance use levels, the degree to which COAs perceive a parent to be a credible and reliable source of support, and level of behavioral adjustment.

The findings of this study are not generalizable to diverse samples, because the majority of the population was college-age, single, childless, Caucasian females who had parents with some college education. Hence, the findings of this study may not hold up across different individual, familial, and cultural contexts. Furthermore, this sample was obtained from psychology courses only, which are notorious for having more females than males. Perhaps, more females who go into psychology have alcoholic parents, or highly parentified females are more attracted to psychology. It is impossible to compare parentification levels between males and females in this sample and the differences that might exist within the four sub-scales on parentification. For example, females might be more parentified on the spousal sub-scale and males might

be more parentified on the sibling sub-scale. More stress may be associated with spousal parentification and influence levels of drug and alcohol consumption. Although this was not true of the females in this sample, it may be a trend among male COAs.

Another limitation of the study may be in the measures that were used to assess parentification. Parentification is a complex concept with some substantial differences in its meaning as an adaptive versus pathological construct among theories in the family therapy literature (Jurkovick, 1997). However, there are only two published measures that existed at the time this study was conducted. The scale used in this study (i.e. Mika et al., 1987) did not tap into the relational ethics dimension of parentification, which is a primary focus of contextual family therapy. For example, it is impossible to know where parentified COAs fall on a continuum of entitlement and how this, in turn, might impact levels of conventionality and substance use. Items from the Therapist Action Index (Bernal, Flores-Ortiz, Rodriguez, Sorenson, & Diamond, 1990) and the Relational Ethics Scale (Hargrave & Bomba, 1993) could be used in future studies to assess the degree of destructive or constructive entitlement among COAs. Such measures might help identify the reasons why high levels of parentification reached maladaptive levels and were correlated with increased drug use.

Perhaps the association between high levels of parentification and high levels of drug use among COAs within the collapsed group indicates that the scale used to assess support in this study did not adequately measure the type of familial support needed when a child is parentified. The contextual family therapy literature indicates that the tasks of a parentified child need to be within their developmental capabilities and the role needs validation from the family to result in constructive entitlement. Although

children can be exploited through extreme parentification, the development of healthy self-esteem and self-efficacy is intimately tied to the degree that children are provided the opportunity to give back to their parents (Goldenthal, 1992). A scale that is specifically developed using contextual family therapy's perspective on parentification and measures that assess behavioral adjustment and psychological stress would help explore adaptive forms of caregiving and the impact that it might have on substance use.

Finally, more studies are needed to differentiate between parental drug and alcohol dependency, and COA abstinence, substance use, substance abuse and dependency. Perhaps drug use was more significant than alcohol use because the scale used to measure drugs was far more comprehensive than the scale that measured alcohol. It is not possible to know if mothers from families with two alcoholic parents used more drugs than alcohol and if daughters emulated this behavior because the CAST did not differentiate between drug and alcohol addicted parents. Hence, there is no empirical evidence to understand why female COAs of two alcoholic parents scored higher on drug use, but were comparable to non-COAs on their alcohol use

#### **Directions for Future Studies**

Future studies that have a significant number of COAs who use substances more than non-COAs are needed to increase confidence that moderating and mediating functions have protective utility. Studies that have sub-groups of substance abusing COAs, non-problematic substance using COAs, abstaining COAs and non-COAs would provide solid data to identify protective factors and between and within group differences on alcohol versus drug consumption. Sub-groups would also need to

represent both male and female COAs with a more diverse racial and cultural background. Diversity in this sample would help provide data to determine if parentification remains a risk variable when gender, race and culture is controlled. Culture may strongly influence whether or not parentification, alone, is a protective variable. For example, parentification is associated with less taboo in African American, Latino, and Hispanic cultures (Boyd-Franklin, 1989) and may be associated with less stress. Hence, parentification in such a culture may also be associated with more conventionality and less drug and alcohol use and abuse.

Future studies that have samples consisting of both males and females could explore if protective processes within female socialization play a role in insulating females from the risk of substance use and abuse. In their extensive review, Weisner and Gallimore (1977) found that the majority of cultures assign caregiving responsibilities to girls. Gilligan (1982) suggests that females mature and individuate differently from males because female socialization and individuation involves interpersonal caring, autonomy, and self-care. Longitudinal studies that utilize a developmental systems approach can provide data that helps unravel the bi-directional influences that peers, parents, and a patriarchal society have on guiding girls through an individuation process that is characterized by conventional, parentified behavior. Data from future studies may suggest that the individuation process of females is accelerated beyond that of males and results in substance use levels that are more comparable to non-COAs only when there is one alcoholic parent and there is access to credible sources of support. Even when alcohol problems occur among girls, the process appears to be very different from boys. Preliminary results of Fitzgerald, Zucker, Puttler,

Caplan, and Mun's (2000) study suggest that the socialization process of females and recent increases in alcohol use among girls may result in more alcoholism subtypes than for males. The age that these subtypes emerge is also different for females.

More studies, with larger sample sizes, are needed to provide data on the reciprocal effects that biology and environmental variables have on one another among females growing up with two alcoholic parents. Future studies could investigate if female COAs need to be at considerable higher risk than male COAs before they begin using substances at a level that differs from non-COAs. Fitzgerald, Zucker, Puttler, Caplan, & Mun (2000) have found that the bi-directional influences of biology and environment intensify when females have two biological parents that are alcoholic. More specifically, their preliminary data suggests that girls who have an alcoholic mother during early school-age years have more externalizing behaviors than girls who only have an alcoholic father. Other studies (e.g. Drake & Vaillant, 1988) indicate that neglect, poor attachments to parents, and parental conflict have been some of the environmental risk factors that are present in the family histories of adult, female alcoholics.

Preliminary data from longitudinal studies that utilize a developmental systems approach strongly suggest that the pathways to alcoholism for women may be more varied and complex than men and often involve depression as part of the causal structure (Fitzgerald, et al., 2000). The alcoholic women in Fitzgerald et al.'s study had the densest family history of alcoholism among three subtypes of alcoholism, exhibited anti-social personality traits and had histories of childhood conduct problems. Fitzgerald et al. hypothesize that girls with alcoholic mothers are at more risk than girls

with alcoholic fathers for comorbid depression because the mothers in the former group have fewer resources to have a protective function. Although it was not measured, the females in the current study who grew up in households with two alcoholic parents might have been at increased risk for depression.

Research is needed to replicate the findings in this study to determine if girls are at higher risk for using drugs over alcohol. Drug or alcohol sensitive strategies could be implemented in prevention programs that target girls and boys in early adolescence if females are more likely to use drugs and males are more likely to use alcohol. Trends in gender specific drug and alcohol abuse could also mean that clinicians need to be more thorough in their assessments for drug use among females.

Future studies are also needed to explore the effects of conventionality to help determine if other contextual variables moderate or mediate its relationship with low levels of substance use among COAs. For example, strong relationships with conventional peers might strengthen, or moderate, the relationship between COA conventionality and low levels of substance use. It is also important to identify the antecedents of conventionality. Data from future studies might discover that conventionality is a necessary part of deidealizing an alcoholic parent.

Finally, longitudinal data are needed to help assess how levels of familial connectedness with alcoholic families might mirror developmental needs as adolescents move into the early, middle and adult years. Optimal levels of support might help COAs be connected to the family without destructively individuating during adolescents and explore how connection to the family might need to change as developmental needs for autonomy change throughout the life cycle. Although high levels of parentification
might result in an increase in self-efficacy and independence through caring for others during adolescence, (Weiss, 1979; Wilson & Orford, 1978; Nardi; 1979; Whiting & Whiting, 1975; Boyd-Franklin, 1989), it may be maladaptive as they enter adulthood and begin to marry and have children.

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