THRIVING IN ADULT CHILDREN OF ALCOHOLICS: A COMPARISON OF COLLEGIATE ACOAS AND NON-ACOAS ON MEASURES OF PSYCHOLOGICAL MINDEDNESS AND DEFENSE MECHANISM STYLE

Except where reference is made to the work of others, the work described in this dissertation is my own or was done in collaboration with my advisory committee. This dissertation does not include proprietary or classified information.

_____
Jaymee Elizabeth Holstein

Certificate of Approval:

_____	_____
John C. Dagley Associate Professor Counselor Education, Counseling Psychology & School Psychology	Becky J. Liddle, Chair Associate Professor Counselor Education, Counseling Psychology & School Psychology
_____	_____
Margaret E. Ross Associate Professor Educational Foundations, Leadership & Technology	Joe F. Pittman Interim Dean Graduate School

THRIVING IN ADULT CHILDREN OF ALCOHOLICS: A COMPARISON OF COLLEGIATE ACOAS AND NON-ACOAS ON MEASURES OF PSYCHOLOGICAL MINDEDNESS AND DEFENSE MECHANISM STYLE

Jaymee Elizabeth Holstein

A Dissertation

Submitted to

the Graduate Faculty of

Auburn University

in Partial Fulfillment of the

Requirements for the

Degree of

Doctor of Philosophy

Auburn, Alabama
December 15, 2006

THRIVING IN ADULT CHILDREN OF ALCOHOLICS: A COMPARISON OF COLLEGIATE ACOAS AND NON-ACOAS ON MEASURES OF PSYCHOLOGICAL MINDEDNESS AND DEFENSE MECHANISM STYLE

Jaymee Elizabeth Holstein

_____
Signature of Author

_____
Date of Graduation

DISSERTATION ABSTRACT

THRIVING IN ADULT CHILDREN OF ALCOHOLICS: A COMPARISON OF COLLEGIATE ACOAS AND NON-ACOAS ON MEASURES OF PSYCHOLOGICAL MINDEDNESS AND DEFENSE MECHANISM STYLE

Jaymee Elizabeth Holstein

Doctor of Philosophy, December 15, 2006
(B.S., University of Florida, 2001)
(B.A., University of Florida, 2001)

140 Typed Pages

Directed by Becky J. Liddle

Traditionally, literature examining Adult Children of Alcoholics (ACOAs) has focused on negative outcomes associated with growing up in an alcoholic family. However, there is evidence of resiliency among ACOAs, given that some of this research has failed to differentiate ACOAs from non-ACOAs on a number of measures. Many of the latter studies examined college student ACOAs, suggesting that perhaps this is a more resilient subset of the ACOA population. At this time only five studies have assessed

factors associated with resiliency among ACOAs (i.e., doing as well as non-ACOA peers), and none have examined thriving (i.e., doing better than peers).

To assess whether thriving is evident on specific measures for ACOAs, psychological mindedness and defense mechanism style were examined and compared to non-ACOAs. The Children of Alcoholics Screening Test, Short Form (CAST-6) was given to 396 Auburn University undergraduates along with the Psychological Mindedness Scale (PMS) and the Defense Mechanism Style Questionnaire-40 (DSQ-40). Additionally, a screening question was used to remove participants who self-identified as having one of three possibly dysfunctional family backgrounds (physical abuse perpetrated by a parent, sexual abuse perpetrated by a parent, or parental debilitating mental illness). After classification, 323 participants remained, with 37 ACOAs (12%) and 286 Non-ACOAS (88 %).

Results indicated that ACOAs endorsed a significantly higher belief in the benefits of discussing one's problems, but did not differentially endorse any of the other PMS scales. The significantly greater belief in benefit to talking about problems may suggest college ACOAs are more amenable to therapy, or that they are more inclined to use this coping strategy in everyday life. Either interpretation could help explain resilience among this population. Differences in defense mechanism style were also found, with ACOAs reporting a significantly lower endorsement of immature defenses. Other differences were not found on the DSQ-40. This suggests that college student ACOAs are using mature defenses as often as non-ACOAs and immature defenses less than non-ACOAs.

Thriving, defined as a significantly higher proportion of participants scoring one SD above the grand mean, was not evident on any of the measures, however, there was a

non-significant trend toward a higher percentage of high functioning ACOAs on all but one of the subscales. Twenty-four percent of ACOAs were high functioners (one standard deviation above the grand mean) on PMS total score, whereas only 14% of non-ACOAs were high functioners.

Results are suggestive of high resilience, or even thriving, among college student ACOAs. ACOAs did not score significantly worse than their non-ACOA peers on any measure (suggesting resilience), and scored significantly better on two measures (possibly suggesting thriving among a subset of college ACOAs). In contrast to previous research using clinical or community samples, it appears that ACOAs who make it to college are functioning very well, at least on the variables studied here.

Style Manual Used: APA Style Manual

Computer Software Used: SPSS 14.0

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

CHAPTER 1. INTRODUCTION

The vast majority of research on Adult Children of Alcoholics (ACOAs) has focused on adverse outcomes associated with growing up in an alcoholic family (e.g., Devor, 1994; El-Guebaly, Staley, Rockman, Leckie, Barkman, O-Riordan, & Koensgen, 1991; Jacob, Windle, Seilhamer, & Bost, 1999; Sher, Walitzer, Wood, & Brent, 1991). However, increasing knowledge about the heterogeneity of the ACOA population can lead to greater clinical insight and more appropriate psychotherapy interventions with ACOA clients.

Burk and Sher (1988) found that counselors assume that ACOAs are psychologically unhealthy based solely on knowledge of parental alcoholism. Assumptions that all ACOAs are damaged or that there are not within-group differences in the ACOA population are dangerous and can have deleterious effects on the psychotherapy relationship, psychotherapist and client expectations, and client self-esteem. Psychotherapists must help combat the myth that all ACOAs are the same so that they can be better equipped to help ACOA clients without making negative assumptions about the impact of the ACOA experience. Likewise, acknowledging strengths and heterogeneity among ACOAs may help psychotherapists to focus on ACOAs' hard won skills and strengths. If a shift is made, wherein psychotherapists and clients can tap into positive traits and skills, and stop treating ACOAs as a homogenously damaged group, this may empower ACOA clients. Likewise, focusing on ACOAs' potential to thrive may

encourage ACOAs and their psychotherapists to gain a richer understanding of their experiences.

ACOA Research Findings

Research has shown that, on average, ACOAs are not functioning as well as non-ACOAs on a wide variety of variables. Such findings include greater incidence of alcohol and substance use and abuse (e.g., Devor, 1994; Jacob et al., 1999; Sher et al., 1991) higher frequency of depressive symptomatology (e.g., Bush, Ballard, & Fremouw, 1995; Domenico & Windle, 1993; Hawkins, 1997), higher frequencies of anxiety symptoms (e.g., El-Guebaly et al., 1991; Harter, 2000; Hinkin & Kahn, 1995; Tweed & Ryff, 1991), greater stress (e.g., Barrera, Li, & Chassin, 1995; Fischer, Kittleson, Ogletree, Welshimer, Woehlke, & Benshoff, 2000; Sher, 1991), greater levels of neuroticism (Sher et al., 1991), lower self-esteem (Beaudoin, Murray, Bond, & Barnes, 1997; Currier & Aponte, 1991; Sher et al., 1991), more negative perceptions of family life (Jarmas & Kazak, 1992), some educational and achievement difficulties (Garbarino & Strange, 1993; Hill, Ross, Mudd, & Blow, 1997; Sher et al., 1991), less adaptive attachment styles (Brennan, Shaver, & Tobey, 1991; Hardwick, Hansen, & Bairnsfather, 1995; Hibbard, 1989, 1993), greater difficulty with interpersonal boundaries (Goglia, Jurkovic, Burt, & Burge-Callaway, 1992), less marital satisfaction (Domenico & Windle, 1993; Hill et al., 1997; Kerr & Hill, 1992), and greater problems with trust and self-disclosure (e.g., Currier & Aponte, 1991; Drozd & Dalenberg, 1994; Martin, 1995).

However, some researchers have argued that ACOAs are not a homogenous group and argue that a "uniformity myth" has led to confusion about the composition of the ACOA group (Mintz, Kashubeck, & Tracy, 1995; Stout & Mintz, 1996; Wright &

Heppner, 1993). The "uniformity myth" refers to falsely characterizing a group's experiences and outcomes as mostly homogenous when it is not. Some researchers have suggested that ACOAs are a much more heterogeneous group that originally postulated by the clinical and self-help literature (Black, 1982; Cermak, 1986; Webb, Post, Robinson, & Moreland, 1992; Woititz, 1990). There is evidence to suggest that not all ACOAs are doing poorly.

Although ACOA populations typically show average scores toward the more negative end of the above variables, the differences tend to be less reliable or not detectable in college student populations (e.g., Jarmas & Kazak, 1992; Kashubeck, 1994; Mintz et al., 1995; Rodney, 1994; Segrin & Menees, 1996; Williams & Corrigan, 1992). Thus, it makes sense that that while some ACOAs are doing poorly (and pulling the average down on these outcome variables), others (particularly those who have made it to college) may be doing as well as, or in some cases perhaps better than, their non-ACOA counterparts.

Many studies have failed to differentiate ACOAs from non-ACOAs on a number of outcome measures. These findings include research failing to find higher incidences among ACOAs on some measures of depressive symptomatology (e.g., Alterman, Searles, & Hall, 1989; Dodd & Roberts, 1994; Harman, Armsworth, Hwang, Vincent, & Preston, 1995), anxiety (e.g., Fulton & Yates, 1990; Harman & Arbona, 1991; Plescia-Pikus, Long-Suter, & Wilson, 1988), feelings of shame (e.g., Hadley, Halloway, & Mallinckrodt, 1993; Hibbard, 1993; Jones & Zalewski, 1994), autonomy (Hinkin & Kahn, 1995; Jarmas & Kazak, 1992) , self-esteem (e.g., Churchill, Broida, & Nicholson, 1990; Rodney & Rodney, 1996; Webb et al., 1992), and some aspects of educational

achievement (e.g., Alterman et al., 1989; Hinz, 1990; Tweed & Ryff, 1991). Additionally, researchers have failed to find significant differences on measures of antisocial personality disorder (e.g., Alterman et al., 1989; Harter, 2000; Senchak, Leonard, Greene, & Carroll, 1995), eating disorder symptomatology (Mintz et al., 1995; Senchak et al., 1995; Stout & Mintz, 1996), suicidal ideation (Windle, Windle, Scheidt, & Miller, 1995; Wright & Heppner, 1991), coping resources (Segrin & Menees, 1996), problem solving appraisal skills (Wright and Heppner, 1991, 1993), locus of control (e.g., Nirenberg , Liepman, Begin, Maisto, & Liebermann, 1990; Tweed & Ryff, 1991; Werner & Broida, 1991), dominance (Berkowitz & Perkins, 1988; Neff, 1994; Wilson, 1989), directiveness (e.g., Churchill et al., 1990; Tweed & Ryff, 1991; Werner & Broida, 1991), controlling behavior (e.g., Neff, 1994; Nirenberg et al., 1990), openness to feelings (Martin, 1995), abilities to describe emotions (Sher et al., 1991), somatization and somatoform disorders (e.g., Benda & DiBlasio, 1991; Hill et al., 1992; Hinkin & Kahn, 1995), adaptability to marriage (Boye-Beaman, Leonard, & Senchak; 1991; Domenico & Windle, 1993; Hinkin & Kahn, 1995), fears of intimacy (Guinta & Compas, 1994), perceived social support (Kashubeck, 1994; Rodney, 1994; Williams & Corrigan, 1992), and interpersonal skills (Segrin & Menees, 1996; Senchak et al., 1995). The failure to find significant differences among ACOAs and non-ACOAs on these important variables may suggest that some ACOAs are functioning quite well, or at least at the same level as non-ACOAs.

College ACOAs

The vast majority of studies described above that failed to find significant negative outcomes for ACOAs or to differentiate ACOAs from non-ACOAs were

conducted with college samples (e.g., Guinta & Compas, 1994; Harman et al., 1995; Jarmas & Kazak, 1992; Rodney & Rodney, 1996; Segrin & Menees, 1996; Sher at al., 1991; Windle et al., 1995; Wright & Heppner, 1991, 1993). These findings raise questions such as, are college ACOAs perhaps a more resilient or thriving population than the clinical and community samples than the majority of early ACOA research was conducted on? Is it possible that the individuals attending college represent a subset of the population that is already functioning at high levels on a number of factors, such as achievement and mental health?

It is possible that differences between ACOAs and non-ACOAs are less likely to be evident in the college population because the low functioning ACOAs are more likely to be missing from this group. ACOAs who are attending college are already a high functioning group able to survive their family experiences to the extent that they attained a high school education and have successfully enrolled in a university. Therefore, it is logical that college ACOAs are more similar to college non-ACOAs than community and clinical ACOAs, when examined using averages. The college ACOAs studied in the literature are not the ACOAs who are, in general, in in-patient treatment facilities or struggling to function in the community. Likewise, when researchers do find significant differences between the means of college ACOAs and non-ACOAs it may be that a subset of poorly coping ACOAs are pulling down the average of ACOAs. These mean differences do not mean that all ACOAs, or even most ACOAs, are doing poorly.

If some ACOAs are doing poorly because of their childhood experiences, but others have risen above, or even thrived partially as a result of these experiences, then we might expect ACOAs in the college population to fall on a wider continuum of

functioning than non-ACOA college students. If this were the case, ACOAs would have a higher standard deviation than non-ACOAs so that the two groups, on average, would appear to be similar, but in reality more ACOAs would be functioning at the further ends of the continuum than non-ACOAs. This would mean that more ACOAs were functioning in the lowest level of functioning than non-ACOAs and that more ACOAs are thriving than the non-ACOAs. This would be statistically evident if a larger standard deviation were found for ACOAs than for non-ACOAS. See Figure 1 for an illustration of this concept. (This illustration has been exaggerated for emphasis.) In the graph in Figure 1, the ACOAs under the upper tail of the ACOA graph (functioning higher than the non-ACOAs) would be considered thrivers.

In this study the researcher was interested in whether or not higher percentages of ACOAs fall into the low functioning and the thriving level of functioning when compared with college non-ACOAs. In particular, the researcher was interested in determining if there is a larger percentage of ACOAs who fall into the thriving category than non-ACOAs. It was predicted that some ACOAs would be thrivers: that is, that some would do better than non-ACOAs since ACOAs might have had to develop extra skills to survive their experience (Tweed & Ryff, 1991). If present, these thrivers would appear with greater frequency among ACOAs than in the general population. Thriving among the ACOA population could also be identified by greater variability among ACOAs than among non-ACOAs on a specified factor.

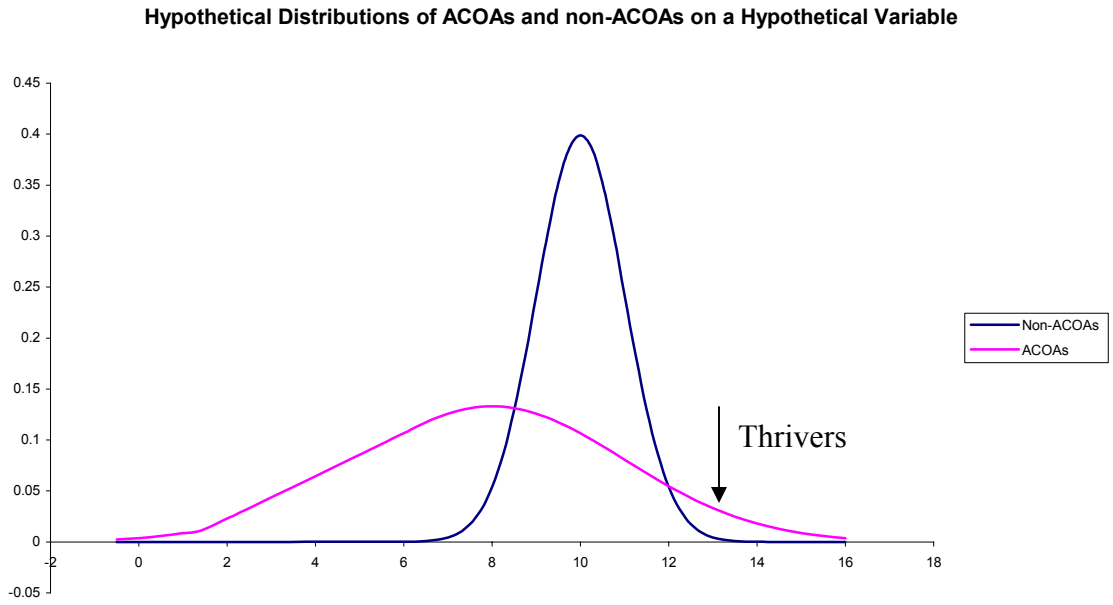

Figure 1

Resiliency and Thriving

Resiliency is defined as "a process, capacity, or outcome of successful adaptation despite challenges or threatening circumstances…good outcomes despite high risk status, sustained competence under threat and recovery from trauma" (Masten, Best, & Garmezy, 1990, p. 426). Resiliency, or recovery, as exhibited in ACOAs and other populations, is a level of functioning that is the same as that of someone who has never experienced a trauma or long-term adverse situation. On the other hand, thriving is functioning "beyond the original level of psychosocial functioning" (O'Leary & Ickovics, 1995, p.128). Thus, thriving represents not just a return to baseline, but a growth beyond the normal level of functioning.

Thriving occurs as a result of a traumatic or negative life event and results in "enhanced social relationships, coping skills, and understanding of self, others, and principles of living" (Schaefer & Moos, 1992, cited in Tedeschi & Calhoun, 1995, p.106). At this time, researchers have not examined thriving in the ACOA population. However, it seems likely that ACOAs have the potential to be thrivers. ACOAs are faced with a continuous circumstance that allows them many opportunities to grow, gain personal insights, to understand themselves and others, and to create positive meaning from their negative experiences. ACOAs' life experiences necessitate that they find ways to cope, to establish means of self-care, to seek support, to build relationships, and to understand their situation.

Resiliency and thriving have been examined in many populations including those suffering from various types of cancer (Bonanno, 2004; Collins, Taylor, & Skokan, 1990; Curbow, Somerfield, Baker, Wingard, & Legro, 1993; O'Leary & Ickovics, 1995); veterans (Aldwin, Levenson, & Spiro, 1994); prisoners of war (Sledge, Boydstun, & Rabe, 1980); rape survivors (Veronen & Kilpatrick, 1983) and individuals experiencing bereavement (Lehman, Davis, Delongis, Wortman, Bluck, Mandel, & Ellard,1993; Lund, Caserta, & Dimond, 1993; Tedeschi & Calhoun, 1995). Thus, it is reasonable to assume that thriving could occur among ACOAs and merits investigation.

Resilience

A number of variables are associated with resilience in other populations that are of interest when considering the ACOA college student population. For example, Masten and Coatsworth (1998) found that resiliency is correlated with intellectual functioning, sociable and easygoing disposition, self-efficacy, self-confidence, high self-esteem,

talents, and faith (Masten & Coatsworth, 1998). Other personal factors that have been found to be related to resiliency include positive emotionality (Tugade & Fredrickson, 2004), optimistic and energetic approaches to life (Block & Kremen, 1996; Klohnen, 1996), positive self-concept and positive self-esteem (Basic Behavioral Science Task Force, 1996), openness to new experiences (Block & Kremen, 1996; Klohnen, 1996), high positive emotionality (Block & Kremen, 1996; Klohnen, 1996), the tendency to cope through relaxation (Demos, 1989; Wolin & Wolin, 1993), the use of humor to cope (Werner & Smith, 1992), and optimistic thinking (Kumpfer, 1999). We might expect that several of these variables, for example intellectual functioning, self-efficacy, self-confidence, and openness to new experiences, would be more common in college student populations. If that is the case, we might expect to find resiliency in the ACOA college population.

In addition, factors beyond personal characteristics that are associated with resilience include bonds to prosocial non-family member adults (Masten & Coatsworth, 1998), healthy infant-parent attachments and close personal relationships (Basic Behavioral Science Task Force, 1996), connections to prosocial organizations (Masten & Coatsworth, 1998), positive educational environments (Basic Behavioral Science Task Force, 1996), and attending effective schools (Masten & Coatsworth, 1998). Furthermore, relationships with caring adults/mentors and high intellectual functioning were found to be the two most common factors associated with resilience (Masten & Coatsworth, 1998). Again, we might expect that college students are likely to have several of these factors in their lives, including connections to prosocial organizations,

positive educational environments, and attending effective schools. Therefore, we might expect to find resilience in the ACOA college population.

Thriving

Other researchers have addressed the commonalities of individuals who go beyond resiliency, and thrive in the face of adversity (Linley & Joseph, 2004). In a review of 40 empirical studies of thriving Linley and Joseph (2004) report a number of factors associated with thriving in the face of adversity. Personal variables and characteristics associated with thriving include extraversion (Evers, Kraaimaat, van Lankveld, Jongen, Jacobs, Bijlsma, 2001; Tedeschi & Calhoun, 1996), openness to experience (Tedeschi & Calhoun, 1996), agreeableness (Tedeschi & Calhoun, 1996), conscientiousness (Tedeschi & Calhoun, 1996), self-efficacy (Abraido-Lanza, Guier, & Colon, 1998), and positive affect (Abraido-Lanza et al., 1998; Evers et al., 2001; Park, Cohen, & Murch, 1996; Tennen, Affleck, Urrows, Higgins, & Mendola, 1992). Cognitive processes associated with thriving include awareness of the event and ability to control aspects of the event (Park et al., 1996; Evers et al., 2001; Tennen, et al., 1992), problem-focused coping (Aremeli, Gunthert, & Cohen, 2001; Evers et al., 2001; Koenig, Pargament, & Nielsen, 1998), acceptance (Park et al., 1996), and positive reinterpretation (Park et al., 1996). Further, elements of social support are associated with thriving, including emotional social support (Park et al., 1996), and social support satisfaction (Park et al., 1996), as well as factors associated with the process of meaning-making (Calhoun, Cann, Tedeschi, & McMillan, 2000; Cordove, Cunningham, Carlson, & Andrykowski, 2001).

Resiliency Research on ACOAs

To date, five studies have examined factors related to resiliency in the ACOA population (Hall, 1997; O'Sullivan, 1991; Palmer, 1997; Werner, 1986; Werner & Johnson, 2004). All of these findings elaborated below support the idea that ACOAs are not a homogenous group, but that they may vary in their functioning both as a result of personal characteristics and life circumstances. Thus, reducing ACOAs to averages is misleading and may be damaging if research findings of lower average functioning contribute to stereotypes that may lead to lower expectations by others (e.g., psychotherapists) or lower self-esteem or self-efficacy in the ACOA.

Werner (1986) and Werner and Johnson (2004), in a longitudinal study of ACOAs, found that, by age 32, 51% of the sample exhibited successful adult adaptation, 28% had developed minor coping problems, and 21% had developed major coping problems. These findings suggest that although 49% of the ACOA population had some difficulty coping as an adult that the majority did not. Werner (1986) and Werner and Johnson (2004) reported that intelligence, an achievement orientation, and communication skills in reading and writing were associated with resilience in the successfully adapted ACOAs.

Additionally, Werner and Johnson (2004) reported a number of protective factors that contributed to the resilience of the ACOAs, including social support from other family members, friends, parents of friends, teachers, and mentors; and having a non-alcoholic mother. Overwhelmingly, the number one protective factor for this group of ACOAs was a supportive adult, such as teachers or an aunt. O'Sullivan (1991) corroborated this finding with a study that found that ACOAs who reported a mentor as a

child were more resilient than those who did not report a mentor. In addition, O'Sullivan (1991) found the following factors to be associated with resilience in ACOAs: greater internal locus of control, self-actualizing values, self-care, spontaneity, self-regard, self-acceptance, individual perception of the inherent nature of people as good, and a capacity for intimate contact. Another study found that personal growth orientation is a mediating variable between ACOA status and well-being (Robitschek & Kashubeck, 1999). Personal growth orientation is defined as "active and intentional engagement in the process of self-change" (Robitschek, 1998) and "a sense of continued growth and development as a person" (Ryff and Keyes, 1995, p. 720). Robitschek and Kashubeck (1999), in the discussion of their findings related to personal growth, point to a suggestion by Tweed and Ryff (1991) that growing up in an alcoholic family may "actually facilitate personal growth and continued development" (p. 134). ACOAs' life experiences allow them opportunities that others not experiencing long-term familial discord may not have, to develop advanced coping skills, utilize creative means of self-care, seek social support, build relationships, and develop insight into themselves and others.

Robitsheck and Kashubeck (1999) also examined hardiness in the college ACOAs surveyed in this study. Hardiness is defined as "stress resistance" (Robitschek & Kashubeck, 1999, p.160) that includes the ability to see one's life and experiences as interesting and important (Maddi & Khoshaba, 1994), the ability to engage actively with life (Maddi & Khoshaba, 1994), the belief that one has control over one's life (Kobasa, 1979), and the ability to see change as a normal and positive part of life that is to be embraced (Kobasa, 1979; Kobasa, 1982). Robitschek and Kashubeck (1999) found that,

for ACOAs, hardiness mediated the negative impact that family functioning in the alcoholic family had on later well-being.

Finally, in a qualitative study of ten community ACOAs, Palmer (1997) examined the Differential Resiliency Model. According to this model, there are four types, or degrees, of resiliency found in ACOAs: anomic survival, regenerative resilience, adaptive resilience, and flourishing resilience. Palmer describes anomic survival as a person who is in a "constant state of chaos or disruption" (p.202) and uses little to no "constructive coping strategies," shows "destructive cognition or behaviors," and "diminished access to personal and environmental resources, and energy directed toward survival" (p. 203). Regenerative resilience is defined as "the formative development of competence and constructive coping strategies or the learning of new, more effective ways of dealing with life's challenges, although integration and internalization are incomplete" (p. 202). Adaptive resilience is evidenced by "relatively sustained periods of regular extended use of competencies and constructive coping strategies" as well as "positive self-regard and a personal sense of wholeness" (p. 202) marked by "sustained periods of stability and balance" and "reciprocity between personal and environmental resources for growth and change" (p.203). Finally, flourishing resilience is a stage at which one extensively uses "effective coping strategies" and has a "strong sense of self-integration" (p. 202-203). The flourishing resilient individual "views life as meaningful and manageable" (p. 203).

Palmer found the following frequencies of resilience types among the 10 participants: three anomic survival types, two regenerative resilience types, three adaptive resilience types, and two flourishing resilient types. Of interest are the three adaptive resilience types and the two flourishing resilient types, who would be considered resilient

according to the definitions described above. ACOAs who fall into this category illustrate that ACOAs can exhibit great resiliency and possibly even thriving.

Overall, very little research, particularly large sample studies, has assessed resiliency in ACOAs and no research has assessed thriving in ACOAs. However, the existing research indicates that the ACOA population is resilient in many ways. At this point, research needs to address thriving on specific characteristics in ACOAs. This study assessed college student ACOAs and non-ACOAs to determine whether there are ACOAs who are thriving on certain measures that are associated with thriving in this population. College ACOAs are a group that are particularly likely to be more resilient, as indicated by the failure of a sizable portion of the literature to differentiate college ACOAs and non-ACOAs. Furthermore, college ACOAs are likely to possess many of the traits associated with resiliency and thriving, such as high intellectual functioning (Masten & Coatsworth, 1998; Werner, 1986; Werner & Johnson, 2004), talents (Masten & Coatsworth, 1998), achievement orientation (Werner & Johnson, 2004), positive educational environments (Basic Behavioral Science Task Force, 1996), attending effective schools (Masten & Coatsworth, 1998), and conscientiousness (Tedeschi & Calhoun, 1996), suggesting that many college ACOAs might show resiliency or thriving on particular measures. The presence of such ACOAs should result in higher standard deviations in the dependent variables measured or possibly even higher average scores for ACOAs.

This study examined two variables, psychological mindedness and defense mechanism style, to determine whether thriving is evident on these measures. Psychological mindedness is described by Applebaum (1973) as “a person’s ability to see

relationships among thoughts, feelings, and actions, with the goal of learning the meanings and causes of his [or her] experiences and behaviour" (p.36). Bakeland and Lundwall (1975) later add that psychological mindedness "implies the patient's abilities to recognize and admit psychological and interpersonal problems, to see himself [or herself] in psychological terms, to use or to accept the use of psychological constructs" (p.756). The concept of psychological mindedness in ACOAs is of interest to the field of counseling psychology as it has long been thought to indicate clients' potential to benefit, particularly maximally benefit, from psychotherapy (Abramowitz & Abramowitz, 1974; Applebaum, 1973; Conte & Ratto, 1997; Conte, Ratto, & Karasu, 1996; Conte, Buckley, Picard, & Karasu, 1995; Hall, 1992).

Likewise, psychological mindedness can be thought of as a skill that could lead to or be the result of thriving. A number of studies have examined psychological mindedness as a trait and in relation to other variables in non-ACOA populations. For example, Shill and Lumley (2002) found that psychological mindedness and alexithymia, an inability to describe emotions, are negatively correlated (Shill & Lumley, 2002). Similarly, Ryff (1989) found that psychological mindedness was associated with healthy emotional regulation. Finally, psychological mindedness is negatively correlated with psychopathology (Muris & Merckelbach, 1996) and neuroticism (Beitel & Cecero, 2003) indicating that psychological mindedness is a sign of mental health (Muris & Merckelbach, 1996).

A handful of studies have assessed a few variables related to psychological mindedness in ACOAs; however researchers have not assessed the broad concept of psychological mindedness in ACOAs. Martin (1995) failed to differentiate ACOAs and

non-ACOAS on measures of openness to feelings. Similarly, Sher et al. (1991) failed to differentiate ACOAs from non-ACOAs on abilities to describe emotions. At this point further research is needed to determine whether ACOA status is associated with psychological mindedness. In the current study it was predicted that more ACOAs would have higher scores on psychological mindedness than non-ACOAs because ACOAs had to develop skills related to psychological mindedness such as developing insight into one's own and others' thoughts, feelings, and actions, "with the goal of learning the meanings and causes of [one's own] experiences and behaviour" (Applebaum, 1973, p.36).

In the current study, ACOAs and non-ACOAs were compared on psychological mindedness in order to ascertain whether this skill set exists with greater frequency among ACOAs. This would be evidenced by higher means for ACOAs or as a higher standard deviation for ACOAs if being an ACOA impacts this skill differently among various subsets of the college ACOA population. Furthermore, ACOA scores were examined to determine whether a subset of ACOAs are thriving on the measure of psychological mindedness. This would be evidenced by a significantly high number of the ACOA population performing at least one standard deviation above the mean.

Defense mechanisms are defined by the American Psychiatric Association "automatic psychological processes that protect the individual against anxiety and from the awareness of internal or external dangers or stressors" (American Psychiatric Association, 2000, p. 807). They are further defined as mediating "the individual's reaction to emotional conflicts and to internal and external stressors" (American Psychiatric Association, 2000, p. 807). Defense mechanisms of interest include

sublimation, humor, anticipation, suppression, undoing, pseudo-altruism, idealization, reaction formation, projection, passive aggression, acting out, isolation, devaluation, autistic fantasy, denial, displacement, dissociation, splitting, rationalization, and somatization.

Some studies have indirectly examined defense mechanisms in ACOAs or have examined a single defense mechanism. Researchers have failed to find differences between ACOAs and non-ACOAs related to denial of feelings (Wilson, 1989). However, researchers, when comparing ACOAs and non-ACOAs have found greater use of humor to elicit positive emotions among ACOAs (Werner & Smith, 1992) and greater use of humor to cope among ACOAs than non-ACOAs (Segrin & Menees, 1996). Thus, the negative defense mechanisms that have been examined are no more common among ACOAs than among non-ACOAs, and at least one higher-functioning defense mechanism (humor) has been found to be higher among ACOAs. This suggests that ACOAs may tend to employ more adaptive forms of defense mechanisms.

At this time research has not assessed overall defense mechanism style in ACOAs, nor has the research assessed the general level of functionality of defense mechanisms employed by ACOAs. It is likely that higher-functioning defenses are related to thriving, as higher level defense mechanisms indicate more advanced coping skills. This study compared ACOA and non-ACOA utilization of three categories of overall defense mechanism style: immature, neurotic, and mature. It was predicted that ACOAs would report more mature defense mechanism and would not differ in their utilization of immature and neurotic defense mechanism. However, it was predicted that a subset of the ACOA population would utilize the mature defense mechanisms in greater

numbers than the non-ACOAs, indicating thriving on that measure. This would be evidenced by a significantly higher percentage of the ACOA population performing at least one standard deviation above the mean.

Conclusion

It is important to determine whether there is a subset of the college ACOA population thriving on various dimensions when compared to college non-ACOAs. Increasing knowledge of the heterogeneity of the ACOA population can lead to greater knowledge on part of the clinician when conducting psychotherapy with ACOA clients. For example, knowing what strengths ACOAs are likely to have can help therapists aid clients in capitalizing on those strengths. Further, it is important to rely on empirical literature, not just clinical experience, when making assumptions about dimensions of a client based on one defining characteristic.

It is dangerous to assume that all ACOAs are damaged or that there are not within-group differences in the ACOA population. It is important to acknowledge the variability within any group and to examine the outliers of groups. If psychotherapists combat the "uniformity myth" that all ACOAs are the same, they will be better equipped to help ACOA clients without making negative assumptions about the impact of the ACOA experience and may even be able to help ACOAs to focus on skills and strengths they have developed as a result of their experiences. Evidence that ACOAs are a more heterogeneous group than previously assumed, or even a higher-functioning group than non-ACOAs, in some ways, may help to empower ACOA clients as well as to encourage ACOAs to gain a richer sense of their experiences.

CHAPTER 2. REVIEW OF THE LITERATURE

Researchers estimate that 15% to 33% of the college population is comprised of Adult Children of Alcoholics (ACOAs) (Fischer & Ingrassia, 1993; Hall, 1995; Hall, 1997; Landers & Hollingdale, 1988; Stratton & Penney, 1992). In a study of college ACOAs Hall (1997) found that 71% of ACOAs reported an alcoholic father, 11% reported an alcoholic mother, 4% reported both parents, 7% reported a step-father and 7% reported combinations of parents and stepparents. ACOAs are defined as individuals who have one or more parents who were alcoholics during the individual's childhood or adolescence. ACOAs are generally defined in two main ways. The first is through identification of an alcoholic through treatment centers where researchers have access to clinical populations of alcoholics and their family members. The second method is through self-report instruments such as the Children of Alcoholics Screening Test, Short Form (CAST-6; Hodgins, Maticka-Tyndale, El-Guebaly, & West, 1993) the Short Michigan Alcoholism Screening Test for Father (Sher & Descunter, 1986, F-MAST), or Short Michigan Alcoholism Screening Test for Mother (Sher & Descunter, 1986, M-MAST).

The vast majority of research on Adult Children of Alcoholics (ACOAs) has focused on poor outcomes associated with the experience of growing up in an alcoholic family. However, it is critical that psychologists determine whether there is a subset of

the college ACOA population who is thriving on various dimensions when compared to college non-ACOAs. Burk and Sher (1988) found that counselors, based solely on knowledge of ACOA status, assume that ACOAs are psychologically unhealthy. Assumptions that all ACOAs are damaged or that the ACOA population is homogenous can have harmful effects on the psychotherapy relationship, psychotherapist and client expectations, and client self-esteem. Psychotherapists must combat the myth that all ACOAs are the same so they are better equipped help ACOA clients without making negative assumptions about the impact of the ACOA experience. Further, awareness of potential positive outcomes may aid therapists to help ACOAs focus on their hard won skills and strengths. If a shift is made, wherein psychotherapists and clients can focus on positive ACOA traits and skills, therapists may be able to implement more clinically appropriate interventions and work to empower ACOA clients. Likewise, focusing on ACOAs' potential to thrive may encourage ACOAs and their psychotherapists to gain a richer understanding of their experiences.

Although the majority of the ACOA research has found negative outcomes among ACOAS, the vast majority of studies (described below) that failed to find significant negative outcomes for ACOAs or to differentiate ACOAs from non-ACOAs were conducted with college samples (e.g., Harman & Arbona, 1991; Jarmas & Kazak, 1992; Kashubeck, 1994; Mintz et al., 1995; Rodney, 1994; Rodney & Rodney, 1996; Segrin & Menees, 1996; Senchak et al., 1995; Sher et al., 1991; Windle et al., 1995; Wright & Heppner, 1991, 1993). These findings suggest that perhaps college ACOAs are a more resilient or thriving population than the clinical and community samples that the majority of negative outcome research has been conducted with. It makes sense that differences

between ACOAs and non-ACOAs are likely to be less pronounced in the college population since ACOAs who are attending college are already a high functioning group, resilient enough to survive their family experiences to the extent that they have successfully entered into college. Therefore, college ACOAs will by definition be more similar to college non-ACOAs than community and clinical ACOAs, when examined using averages. Likewise, research failing to differentiate college ACOAs and non-ACOAs on the basis of means suggests that there may be a subset of poorly coping ACOAs who are pulling down the average of ACOAs, but these mean differences do not mean that most college ACOAs are not doing well. Nor does this mean that there is not a subset of ACOAs who are thriving.

As pointed out in the previous chapter, at this point only five studies have assessed resiliency in ACOAs and no research has assessed thriving in ACOAs. The existing research findings indicate that the college ACOA population is resilient in many ways. College ACOAs are particularly likely to be more resilient, as indicated by the failure of a sizable portion of the literature to differentiate college ACOAs and non-ACOAs. Furthermore, college ACOAs are likely to possess many of the traits associated with resiliency and thriving, such as high intellectual functioning (Masten & Coatsworth, 1998; Werner, 1986; Werner & Johnson, 2004) conscientiousness (Tedeschi & Calhoun, 1996), and achievement orientation (Werner & Johnson, 2004). ACOAs are also likely to have had positive educational environments (Basic Behavioral Science Task Force, 1996), and attended effective schools (Masten & Coatsworth, 1998) if they have entered college, and these can serve as buffers to traumatic events. Furthermore, it can be argued that possessing these qualities related to resiliency could increase the likelihood that

anyone, ACOAs or non-ACOAs, would make it to college. It is particularly likely that possessing qualities associated with resiliency makes it more likely that ACOAs will make it to college. Therefore, the researcher believes that many college ACOAs may show resiliency or thriving. The presence of such ACOAs could result in higher standard deviations in the dependent variables measured, or possibly even higher average scores for ACOAs.

The following section will describe the current outcome research related to ACOAs. The subsequent section will describe the current debate on the homogeneity of the ACOA population. Finally, resiliency and thriving in the ACOA population will be discussed. The terms related to resiliency and thriving will be defined, followed by a summary of the resiliency and thriving outcomes that have been studied in the ACOA populations and non-ACOA populations.

Research Outcomes for ACOAs

Many studies have assessed various characteristics of ACOAs, including self-deprecation (Ashby & Mangine, 1995; Lipman, 1990), independence/autonomy (Berkowitz & Perkins, 1988; Gotham & Sher, 1996), social support (Kashubeck, 1994; Wright & Heppner, 1991, 1993), directiveness (Tweed & Ryff, 1991; Werner & Broida, 1991), other-directedness (Berkowitz & Perkins, 1988), depression (Bush et al., 1995; Lyon & Greenberg, 1991; Sher et al., 1991), coping styles (Jarmas & Kazak, 1992; Parker & Harford, 1988), alcohol and drug use and abuse (Chassin, Rogosch, & Barrera, 1991; Devor, 1994; Tartar & Vanyukov, 1994), psychopathology (Belliveau & Stoppard, 1995), cognitive ability (Sher et al., 1991; Chassin et al., 1991), need for control (Hemmings & Irwin, 1993; Shapiro, Weatherford, Kaufman, & Broenen, 1994),

attachment style (Brennan, Shaver, & Tobey, 1991; Hardwick et al., 1995), relationship satisfaction (Beesley & Stoltenberg, 2002), traumatic symptomatology (Plescia-Pikus et al., 1988), stress (Hall & Webster, 2002), and marital satisfaction (Watt, 2002; Parker & Harford, 1988). Compared with non-ACOAs, most of these studies have found ACOAs to score closer to the negative or adverse side on these dimensions.

The ACOA outcome literature is described below. At this time ACOA literature has been conducted in three main populations: community samples, clinical samples, and college samples. Community ACOAs are part of a non-clinical community sample, clinical ACOAs consist of ACOAs who are seeking in-patient or out-patient services, and college ACOAs are currently enrolled in undergraduate or graduate study. The ACOA outcome research is organized below first by outcome variables and then within those categories by populations studied. Each of the outcome variable sections will describe outcomes for the community, clinical, and college populations as available. If no research exists, to date, on a certain subset of the ACOA population, that population will not be addressed.

Substance Abuse and Substance Behaviors

One of the earliest areas of interests in the ACOA research was ACOAs' greater propensity toward substance use and abuse (Bennett, Wolin, & Reiss, 1988; Tartar & Vanyukov, 1994). Many researchers have found that ACOAs tend to be more vulnerable, genetically and developmentally, to substance use and abuse than non-ACOAs (Devor, 1994; Tartar & Vanyukov, 1994). The vast majority of research with community samples has found a greater rate of drug and alcohol abuse among community samples of ACOAs (Fulton & Yates, 1990; Hill, Nord, & Blow, 1992; Hill et al., 1997; Matthew,

Wilson, Blazer, & George, 1993 [males only]; Rose, Peabody, & Stratigeas, 1991). Only two studies of community settings (Domenico & Windle, 1993; Neff, 1994) and one clinical study (Nirenberg et al.,1990) failed to find significant differences between ACOAs and non-ACOAs on measures or substance use and abuse.

Similarly, ACOA college students have been shown to have higher incidence of substance abuse problems than non-ACOAs (Cavell, Jones, Runyan, Constantin-Page, & Velasquez, 1993; Drozd & Dalenberg, 1994; El-Guebaly et al., 1991; Hawkins, 1997; Jarmas & Kazak, 1992 [males only]; Knoblauch & Bowers, 1989; Ohannessian & Hesselbrock, 1993; Rodney, 1994; Rodney & Rodney, 1996 [males only]; Sher et al., 1991; Wright & Heppner, 1993). Further, Cavell et al. (1993) found that ACOAs, when compared to non-ACOAs, used alcohol and drugs more frequently, had more negative consequences for their drug and alcohol related behaviors, were more likely to achieve a drug or alcohol diagnoses, and were more likely to have stronger expectancies for benefits from alcohol use. Six studies have failed to find significant differences on some measures of substance use and abuse for college ACOAs (Alterman et al., 1989; El-Guebaly et al., 1992; Harman & Arbona, 1991; Mintz et al., 1995; Senchak et al.,1995; Wright & Heppner, 1991).

Depression

The ACOA literature overwhelmingly supports the notion that community, clinical, and college ACOAs report more depressive symptomatology than non-ACOAs (Harter, 2000; Tweed & Ryff, 1991). In a review of the empirical literature, Harter (2000) reported, "ACOAs appear more likely to report depressive symptoms than non-ACOAs across clinical, community, and college samples" (p.317). Overall, studies of community

ACOAs (Domenico & Windle, 1993; Matthew et al., 1993; Wilson, 1989) and clinical ACOAs (Harter, 2000; Hawkins, 1997; Hinkin & Kahn, 1995; Jones & Zaleweski, 1994) have found higher self-reports of depressive symptomatology and diagnoses. Although, one study found that ACOA status was not predictive of later major depressive diagnoses, when controlling for physical or sexual abuse histories of inpatient alcohol abuse and addiction clients (Windle et al., 1995).

On the whole, research has shown that college ACOAs tend to have more depressive symptomatology and depressive diagnoses than non-ACOAs (Harter, 2000, Sher et al., 1991). Likewise, a number of studies have found significant differences between ACOAs and non-ACOAs on self-report measures of depression, such as the Beck Depression Inventory (BDI) (Bush et al., 1995; Hinz, 1990; Knowles & Schroeder, 1990; Lyon & Greenberg, 1991). Jarmas and Kazak (1992) found that college ACOAs exhibited greater introjective depression than non-ACOAs, characterized by "feelings of guilt, inferiority, worthlessness, and a sense of having failed to meet expectations" (p.245). A small number of studies have failed to find significant differences in self-reported depressive symptomatology among college ACOAs (Alterman et al., 1989; Dodd & Roberts, 1994; Harmon & Arbona, 1991; Harman et al., 1995). However, overall, ACOA studies have found that ACOAs in clinical, community, and college report more depressive symptoms and a higher incidence of depressive diagnoses than non-ACOAs (Harter, 2000).

Anxiety

Research is mixed in regards to anxiety disorders and related symptomatology in community and clinical populations (El-Guebaly et al., 1991; Fulton & Yates, 1990; Hill

et al., 1992; Hinkin & Kahn, 1995; Matthew et al., 1993; Plescia-Pikus et al., 1988; Windle et al., 1995). For example, Matthew et al. (1993) found that community ACOAs had a greater frequency of anxiety diagnoses, particularly specific phobias, agoraphobia, panic disorder, and generalized anxiety disorder. Likewise, a higher incidence of panic disorders (El-Guebaly et al., 1991) and obsessive-compulsive disorder (Hinkin & Kahn, 1995) has been found among clinical ACOA patients when compared to non-ACOAs. However, other researchers have failed to failed to find significant differences between ACOAs and non-ACOAs on anxiety measures (Hill et al., 1992), anxiety diagnoses (Fulton & Yates, 1990), and measures of posttraumatic symptomatology (Plescia-Pikus et al., 1988).

Overall, researchers have found that college ACOAs report more anxiety symptomatology and a higher incidence of anxiety disorders than college non-ACOAs (Harter, 2000; Sher et al., 1991). More specifically, researchers have found a higher rate of self-reported generalized anxiety and phobic anxiety in ACOA college students (Harmon & Arbona, 1991; Knowles & Schroeder, 1990; Tweed & Ryff, 1991) as well as interpersonal anxiety (Hinz, 1990) and state and trait anxiety (Webb et al., 1992). However, other researchers have not found differences in anxiety disorders or anxiety symptoms for college ACOAs (Alterman et al., 1989; Harman & Arbona, 1991; Harman et al., 1995).

Stress

A number of studies have found that, when compared to non-ACOAs, ACOAs and COAs are more vulnerable to stress (Barrera et al., 1995; Sher, 1991) and experience more stress (Roosa, Tien, Groppenbacher, Michaels, & Dumka, 1993). Additionally

researchers have found that stress is more related to problem behaviors among COAs than non-COAs (Barrera et al., 1995). A cross-cultural study, Barrera and colleagues, 1995, found that non-Hispanic COAs are more vulnerable to stress than Hispanic COAs. Finally, researchers have also found that college student ACOAs experience greater stress than non-ACOAs (Fischer et al., 2000).

Antisocial Traits

A small number of researchers have assessed the frequency of antisocial personality disorder diagnoses and traits in ACOAs. Overall, studies with sufficient power conducted in community samples have found greater antisocial traits in ACOAs (Matthew et al., 1993; Mützell, 1994).Contrarily, studies of the college population have consistently failed to find evidence that antisocial traits are related to ACOA status for college students (Alterman et al., 1989; Berkowitz & Perkins, 1988; Harter, 2000; Senchak et al., 1995). This is indicative of the different nature of the ACOA sub-groups, implying that the college ACOA population is a separate, higher functioning population than the ACOA community population.

General Psychological Concerns

Neuroticism

Research suggests that ACOAs are more likely to show personality maladjustment, particularly neuroticism, when assessed with omnibus personality instruments (Harter, 2000). Likewise, studies of college ACOAs have found an overall increase in distress and pathology (Belliveau & Stoppard, 1995; Coleman & Frick, 1994; Knowles & Schroeder, 1990). In a large study of college student ACOAs, researchers

found that college ACOAs compared to non-ACOAs reported higher levels of neuroticism (Sher et al., 1991).

Eating Disorders

The three studies that have addressed eating disorders in ACOAs assessed college ACOAs and found that they do not report more eating disorder symptoms than non-ACOAs (Mintz et al., 1995; Senchak et al., 1995; Stout & Mintz, 1996). Mintz et al. (1995), in a study of female ACOA and non-ACOA college students' eating disorder symptomatology, failed to find significant differences on any measures. However, the researchers did find that ACOAs reported less confidence in their ability to identify emotions and sensations of hunger or satiation when compared to non-ACOAs. Additionally, they found that ACOAs' level of distress about parental alcoholism was associated with greater eating disorder symptomatology.

Suicide

Researchers have failed to differentiate ACOAs and non-ACOAs on measures of suicidal ideation and suicide attempts. Windle et al. (1995), in study of alcoholic inpatient ACOAs, found that ACOAs are no more likely to attempt suicide than non-ACOAs. Likewise, Wright and Heppner (1991) failed to find differences between college ACOAs and non-ACOAs on measures of suicidal ideation.

Well-Being

In general, research has shown poorer well-being among ACOAs than among non-ACOAs, with one study yielding mixed results. Two small mixed sample studies found that ACOAs reported poorer well-being or life satisfaction (Drozd & Dalenberg, 1994; Plescia-Pikus et al., 1988). A large clinical study failed to differentiate ACOAs and

non-ACOAs on purpose in life or capacity for play, both which are related to well-being (Tweed & Ryff, 1991). However, Hall (1997) in a study of ACOA and non-ACOA college students found that ACOA students reported an overall lower self-perceived well-being.

Coping Resources and Skills

The research has yielded mixed results on studies of coping skills and resources among all ACOA populations. In a community sample of middle-aged female ACOAs, Domenico and Windle (1993) found ACOAs used alcohol and distraction to cope more often than non-ACOAs. Additionally, McCown, Carise, and Johnson (1991) found that ACOAs were more likely than non-ACOAs to utilize procrastination as a coping strategy. In two studies, Wright and Heppner (1991, 1993) failed to find differences between ACOAs and non-ACOAs on problem-solving appraisal. Werner and Johnson (2004), in a longitudinal study of community ACOAs, found that male ACOAs developed more coping problems than female ACOAs at ages 10, 18, and 31.

Researchers have also found mixed results regarding coping resources in college ACOAs. Hall (1997), in a study of ACOA and non-ACOA college students, found that ACOAs had significantly lower coping resources, particularly in areas of cognitive, emotional, and spiritual and philosophical resources. However, in a study of college students, Segrin and Menees (1996) found that ACOAs use more humor than non-ACOAs to cope. However, the authors failed to find differences on measures of family problem-solving, spirituality, and high-activity level.

Externalizing and Internalizing Symptoms

In a 1991 study, Chassin et al. found that ACOAs are more likely to report internalizing (e.g., depression, anxiety) and externalizing symptoms (e.g., conduct problems) when compared to non-ACOAs. Additionally, Chassin et al. (1991) found that female ACOAs with alcoholic mothers and non-alcoholic fathers reported the most externalizing symptoms, as compared to female and male ACOAs with and without one or more alcoholic parents.

Self- Esteem

A number of researchers have found that ACOAs report lower self-esteem than non-ACOAs (Beaudoin et al., 1997; Bush et al., 1995; Currier & Aponte, 1991; Domenico & Windle, 1993; Sher et al., 1991). Researchers have found lower self-esteem among community and clinical ACOAs (Beaudoin et al., 1997; Currier & Aponte, 1991; Domenico & Windle, 1993; Hinkin & Kahn, 1995). Likewise, two studies have found that ACOA college students report lower self-esteem than non-ACOAs (Bush et al., 1995; Sher et al., 1991). However, most researchers have not found significant differences in ACOAs and non-ACOAs on measures of self-esteem (Churchill et al., 1990; Dodd & Roberts, 1994; Rodney & Rodney, 1996; Tweed & Ryff, 1991; Webb et al., 1992; Werner & Broida, 1991).

A few studies have found that ACOAs reported personality characteristics or tendencies that are often cited as related to self-esteem including perfectionism, self-deprecation, self-criticism, abasement and self-blaming (Ashby & Mangine, 1995; Berkowitz & Perkins, 1988; Jarmas & Kazak, 1992; Lipman, 1990; Wilson, 1989). Berkowitz and Perkins found that female ACOAs reported greater self-deprecation than

male ACOAs. Likewise, one researcher found that ACOAs report higher levels of shame (Hawkins, 1997) but most studies have not found significant differences on this measure (Hadley et al., 1993; Hibbard, 1993; Jones & Zalewski, 1994; Wright & Heppner, 1991).

Control

Several studies have been conducted to assess a variety of variables related to control in ACOAs (Bradley & Schneider, 1990; Hemmings & Irwin, 1993; Knoblauch & Bowers, 1989; Shapiro et al., 1994). Findings related to control in ACOAs include a greater need for control (Knoblauch & Bowers, 1989), overestimation of control on controllable but not random experimental tasks (Hemmings & Irwin, 1993), feeling less in control than non-ACOAs (Shapiro et al., 1994), and higher scores on the MMPI control scale (Bradley & Schneider, 1990).

Researchers have also assessed locus of control, dominance, directiveness, and controlling personality traits among ACOAs and non-ACOAs. In community, clinical, and college samples researchers have failed to find differences between ACOAs and non-ACOAs on these dimensions (Berkowitz & Perkins, 1988; Churchill et al., 1990; Neff, 1994; Nirenberg et al., 1990; Tweed & Ryff, 1991; Werner & Broida, 1991; Wilson, 1989).

Autonomy and Independent Behavior

Research findings related to autonomy and independent behavior are mixed. In the only community sample assessing independent behavior, Hinkin and Kahn (1995), in a sample of ACOA wives of VA patients, failed to find elevated levels of dependency behaviors.

Research on independence and autonomy is mixed in college populations. Gotham and Sher (1996) found that college ACOAs reported more co-dependent behaviors than non-ACOAs. Relatedly, female college student ACOAs have been shown to report fewer autonomy and independence related behaviors than non-ACOAs (Berkowitz & Perkins, 1988). However, male ACOAs have been found to report higher autonomy and independence than non-ACOA males (Berkowitz & Perkins, 1988). Finally, one study of college ACOAs failed to differentiate ACOAs and non-ACOAs on measures of dependency (Jarmas & Kazak, 1992).

Emotions

The few studies that have assessed emotional patterns and behaviors of ACOAs consistently failed to find differences between ACOAs and non-ACOAs on these factors. A community religious sample failed to find differences between ACOAs and on-ACOAs related to denial of feelings (Wilson, 1989). Another study of a religious community sample also failed to find differences between ACOAs and non-ACOAs related to openness to feelings (Martin, 1995). Sher et al. (1991) found that college ACOAs were not different than non-ACOAs on measures of alexithymia (an inability to describe emotional experiences).

Somatization

The vast majority of studies have failed to find a higher incidence of somatization or somatoform disorders among ACOAs (Benda & DiBlasio, 1991; Harman et al., 1995; Hill et al., 1992; Hinkin & Kahn, 1995; Neff, 1994). Only one researcher, in a longitudinal study of ACOAs of inpatient alcoholic fathers found that ACOAs were more likely to have somatic and psychiatric illnesses than non-ACOAs (Mützell, 1994).

Researchers have found within group differences on somatization for ACOAs. For example, research has indicated that sons of male alcoholics tend to develop externalizing symptomatology (e.g., conduct problems) more often than female children of alcoholics (Chassin et al., 1991; Reich, Earls, Frankel, Shayka, 1993). Likewise, researchers have found that female ACOAs tend to report more somatic complaints (classified as externalizing by some researchers and internalizing by other researchers) than male ACOAs (Biek, 1981; Roberts & Brent, 1982).

Familial Concerns

Jarmas and Kazak (1992) compared ACOA and non-ACOA college students on depressive experiences, coping styles, and family systems (Jarmas & Kazak, 1992). The researchers found that ACOAs "perceived their families as having shown greater inconsistency, lower cohesion, less expressiveness, more conflict, less organization, and poorer communication" (p.247).

Educational Achievement and Skills

Research on differences between clinical and community ACOAs and non-ACOAs on measures of educational achievement, in general, have found that ACOAs have lower education levels (Nirenberg et al., 1990), lower occupational levels and lower income levels than non-ACOAs (Hill et al., 1997), and lower high-school grade point averages (Jacob et al., 1999). Likewise, in a review of the literature on sons of male alcoholics, researchers found consistent negative outcomes for males growing up with alcoholic fathers related to cognitive characteristics including poor performance on tests of linguistic abilities, abstract thinking problems, and problem solving; a tendency to perform more poorly academically than non-ACOAs; a higher truancy rate than non-

ACOAs; and a tendency to complete fewer years of school than non-ACOAs (Pihl, Peterson, & Finn, 1990). Only two studies have failed to find differences on achievement orientation among clinical and community ACOAs and non-ACOAs (Plescia-Pikus et al., 1988; Tweed & Ryff, 1991).

Research regarding achievement in college ACOAs, however, is more mixed. In a large and comprehensive study of college ACOAs, researchers found ACOAs had lower academic achievement and less verbal ability than non-ACOAs, when assessing undergraduate class rank and standardized test scores (Sher et al., 1991). Garbarino and Strange (1993) found poorer adjustment to college among ACOAs, when compared to non-ACOAs. However, Hinz (1990) failed to find greater academic problems in ACOA college students. Likewise, researchers failed to find a greater history of childhood learning difficulties in ACOA college students (Alterman et al., 1989).

Interpersonal Relationships

Caretaking and Attachment Behaviors

A small number of studies have addressed the interpersonal relationships of ACOAs. A study by Lyon and Greenberg (1991) found that female ACOAs, when compared to female non-ACOAs, were more helpful to an experimenter portrayed as exploitative, rating the exploitative experimenter as more likable and intelligent than non-ACOAs did. The researchers suggest that these results indicate that female ACOAs may be more likely than non-ACOAs to exhibit codependent and caretaking behaviors. Likewise, in a study of college student ACOAs, Goglia and colleagues (1992) found that female ACOAs reported more caretaking than non-ACOAs and male and female ACOAs reported greater difficulty with interpersonal boundaries than non-ACOAs.

Other studies have addressed the attachment behaviors and patterns of ACOAs in comparison to non-ACOAs. In a study of college ACOAs, Brennan and colleagues (1991) found ACOAs reported a higher rate of avoidant and anxious-ambivalent attachment patterns than non-ACOAs. Hardwick and colleagues (1995), in a study of ACOAs employed in corporate setting found a higher occurrence of insecure attachment patterns when compared to non-ACOAs. Likewise, in a study of a clinical substance abuse population, El-Guebaly, West, Maticka-Tyndale, and Pool (1993) found that female ACOAs, when compared to female non-ACOAs, reported more maladaptive attachment patterns, although male ACOAs did not differ significantly from non-ACOAs on this measure. Hibbard (1989, 1993), found that ACOAs reported more pathological object relations than non-ACOAs.

Dating and Marriage

Other studies have examined the intimate relationship behaviors of ACOAs, particularly dating and marriage patterns. In a community sample, Boye-Beaman, Leonard, and Senchak (1991) found that ACOAs are more likely than non-ACOAs to marry other ACOAs. However, the researchers failed to find differences between ACOAs and non-ACOAS in relation to marrying problem drinkers. In contrast, a study of Australian outpatient ACOAs found that ACOAs are more likely to have an alcoholic partner than non-ACOAs (Kerr & Hill, 1992). Likewise, a study of college students found ACOAs to be more likely to date substance dependent people than non-ACOAs (Fox & Gilbert, 1994).

Community and outpatient and inpatient clinical samples have found ACOAs are more likely than non-ACOAs to marry younger (Hill et al., 1997; Kerr & Hill, 1992),

marry and divorce more frequently (Hill et al., 1997; Kerr & Hill, 1992), report poorer marital adjustment and relationships with spouses (Hill et al., 1997; Kerr & Hill, 1992) and report lower levels of perceived marital satisfaction and higher levels of marital conflict (Domenico & Windle, 1993). However, Hinkin and Kahn (1995), in a study of wives of VA patients, did not find differences in adjustment among the ACOAs and non-ACOAs.

Intimacy

In a small college sample, Guinta and Compas (1994) did not find differences between female ACOAs and non-ACOAs on measures of fears of intimacy. In contrast, other researchers found that community ACOAs have more intimacy problems than non-ACOAs (Fisher, Jenkins, Harrison, &, Jesch, 1992; Martin, 1995) have greater difficulty with trust and self-disclosure (Currier & Aponte, 1991; Drozd & Dalenberg, 1994; Wilson, 1989); and report greater sexual dysfunction (Currier & Aponte, 1991). Only one study has examined intimacy in college ACOAs, and found that have greater difficulty with trust and self-disclosure (Bradley & Schneider, 1990).

Social Support and Interpersonal Skills

Levels of perceived social support and overall interpersonal skills have also been assessed in college ACOAs. The research has consistently failed to find significant differences between college ACOA and non-ACOAs on dimensions of perceived social support (Chassin et al., 1991; Kashubeck, 1994; Rodney, 1994; Williams & Corrigan, 1992; Wright & Heppner, 1991; Wright & Heppner, 1993). Likewise, researchers have failed to find significant differences between ACOAs and non-ACOAs on measures of interpersonal skills, such as emotional expressivity and sensitivity, and social expressivity

and sensitivity (Segrin & Menees, 1996; Senchak et al., 1995). However, researchers have found that ACOAs of alcoholic fathers report greater distress from interpersonal relationships than non-ACOAs and ACOAs of alcoholic mothers (Stout & Mintz, 1996).

Summary of ACOA Research Findings

In general, ACOA research has found that ACOAs are experiencing adversity in relation to certain outcomes. These outcomes include a greater incidence of alcohol and substance use and abuse, higher frequency of depressive symptomatology, higher frequencies of anxiety symptoms, greater stress, greater levels of neuroticism, lower self-esteem, more negative perceptions of family life growing up, some educational and achievement difficulties, some less adaptive attachment styles, greater difficulty with interpersonal boundaries, and greater problems with trust and self-disclosure.

However, ACOAs still appear to be functioning well in many respects. ACOA research has typically failed to differentiate ACOAs from non-ACOAs, a sign of resiliency, on a number of factors. Researchers have failed to find higher incidences among ACOAs on some measures of depressive symptomatology, anxiety, autonomy, self-esteem, and aspects of educational achievement. Further, researchers have consistently failed to find significant differences on measures of antisocial personality disorder, eating disorder symptomatology, suicidal ideation, coping resources, problem solving appraisal skills, feelings of shame, locus of control, dominance, directiveness, controlling behavior, abilities to describe emotions, somatization and somatoform disorders, adaptability to marriage, fears of intimacy, perceived social support, and interpersonal skills.

The vast majority of studies that failed to find significant negative outcomes for ACOAs or to differentiate ACOAs from non-ACOAs were conducted with college samples (Alterman et al., 1989; Berkowitz & Perkins, 1988; Dodd & Roberts, 1994; Guinta & Compas, 1994; Harman & Arbona, 1991; Harman et al., 1995; Hibbard, 1993; Hinz, 1990; Jarmas & Kazak, 1992; Kashubeck, 1994; Mintz et al., 1995; Rodney, 1994; Rodney & Rodney, 1996; Segrin & Menees, 1996; Senchak et al., 1995; Sher at al., 1991; Williams & Corrigan, 1992; Windle et al., 1995; Wright & Heppner, 1991, 1993). This suggests that perhaps college ACOAs are a higher functioning and more resilient group than community and clinical ACOAs. ACOAs who are attending college are already a high functioning group. Thus, it is logical that college ACOAs are more similar to college non-ACOAs than community and clinical ACOAs and non-ACOAs, when examined using averages. Research that has differentiated college ACOAs and non-ACOAs on the basis of means suggest that there may be a subset of poorly coping ACOAs who are pulling down the average of ACOAs. However, these mean differences do not mean that ACOAs are not doing well, overall, nor does this mean that there is not a subset of ACOAs who are thriving.

The Uniformity Myth

Although ACOA populations typically show average scores toward the more negative end of the above variables, the differences tend to be less reliable or not detectable in college student populations (e.g., Jarmas & Kazak, 1992; Kashubeck, 1994; Mintz et al., 1995; Rodney, 1994; Segrin & Menees, 1996; Williams & Corrigan, 1992). Thus, it makes sense that that while some ACOAs are doing poorly (and pulling the average down on these outcome variables), others (particularly those who have made it to

college) may be doing as well as, or in some cases perhaps better than, their non-ACOA counterparts.

Many studies have failed to differentiate ACOAs from non-ACOAs on a number of outcome measures. These findings include research failing to find higher incidences among ACOAs on some measures of depressive symptomatology (e.g., Alterman et al., 1989; Dodd & Roberts, 1994; Harman et al., 1995), anxiety (e.g., Fulton & Yates, 1990; Harman & Arbona, 1991; Plescia-Pikus et al., 1988), feelings of shame (e.g., Hadley et al., 1993; Hibbard, 1993; Jones & Zalewski, 1994), autonomy (Hinkin & Kahn, 1995; Jarmas & Kazak, 1992) , self-esteem (e.g., Churchill et al., 1990; Rodney & Rodney, 1996; Webb et al., 1992), and some aspects of educational achievement (e.g., Alterman et al., 1989; Hinz, 1990; Tweed & Ryff, 1991). Additionally, researchers have failed to find significant differences on measures of antisocial personality disorder (e.g., Alterman et al., 1989; Harter, 2000; Senchak et al., 1995), eating disorder symptomatology (Mintz et al., 1995; Senchak et al., 1995; Stout & Mintz, 1996), suicidal ideation (Windle et al., 1995; Wright & Heppner, 1991), coping resources (Segrin & Menees, 1996), problem solving appraisal skills (Wright & Heppner, 1991, 1993), locus of control (e.g., Nirenberg et al., 1990; Tweed & Ryff, 1991; Werner & Broida, 1991), dominance (Berkowitz & Perkins, 1988; Neff, 1994; Wilson, 1989), directiveness (e.g., Churchill et al., 1990; Tweed & Ryff, 1991; Werner & Broida, 1991), controlling behavior (e.g., Neff, 1994; Nirenberg et al., 1990), openness to feelings (Martin, 1995), abilities to describe emotions (Sher et al., 1991), somatization and somatoform disorders (e.g., Benda & DiBlasio, 1991; Hill et al., 1992; Hinkin & Kahn, 1995), adaptability to marriage (Boye-Beaman et al., 1991; Domenico & Windle, 1993; Hinkin & Kahn, 1995), fears of

intimacy (Guinta & Compas, 1994), perceived social support (Kashubeck, 1994; Rodney, 1994; Williams & Corrigan, 1992), and interpersonal skills (Segrin & Menees, 1996; Senchak et al., 1995). The failure to find significant differences among ACOAs and non-ACOAs on these important variables may suggest that some ACOAs are functioning quite well, or at least at the same level as non-ACOAs.

Due to the failure to differentiate ACOAs and non-ACOAs on so many measures, many ACOA researchers have suggested that the ACOA population may not be homogeneous (e.g., Harrington & Metzler, 1997; Logue, Sher, & Frensch, 1992). Some researchers and authors suggest that this can be explained by the "uniformity myth" (Mintz et al., 1995; Mothersead, Kivlighan, & Wynkoop, 1998; Stout & Mintz, 196; Wright & Heppner, 1993). The "uniformity myth" refers to falsely characterizing a group's experiences and outcomes as mostly homogenous when they are not (Mintz et al., 1995; Stout & Mintz, 196; Wright & Heppner, 1993). These researchers have suggested that ACOAs are a heterogeneous group, with ACOAs arriving at different outcomes based on their experiences (Senchak et al., 1995; Sher, 1997; Tweed & Ryff, 1991). This argument is logical when personal characteristics, familial differences, educational opportunities, and other such factors are considered. As discussed above, it is likely that the three main ACOA populations (community, clinical, and college) tend to have different outcomes associated to parental drinking. The different research findings related to these groups suggests that we already know that ACOAs do not all turn out the same and are not entirely homogenous.

Similarly, some researchers have suggested that perhaps distinctions have not been found between college ACOAs and college non-ACOAs because college ACOAs

are likely to be a more resilient group than the clinical or community ACOA population (Fischer et al., 2000; Kashubeck & Christensen, 1992; Stout & Mintz, 1996; Wright & Heppner, 1993). Therefore, it would be expected that between group differences in the college ACOA population would be more subtle than in community and clinical populations. Likewise, it would be expected that the ACOA college population would be more similar to non-ACOA college students by virtue of their university enrollment and similar education level. It is possible that ACOAs who have made it to college already represent a resilient or thriving subset of the ACOA population. It is also possible that there may be a restriction of range in general when comparing ACOAs and non-ACOAs at the college level. Researchers have suggested that ACOAs should be studied separately from clinical and community ACOA samples since they may be a potentially more resilient population (Kashubeck & Christensen, 1992; Stout & Mintz, 1996; Wright & Heppner, 1993).

The Relationship Between ACOA status and Dysfunctional Families

Some ACOA researchers have also suggested that ACOAs are difficult to distinguish from what is referred to in the ACOA literature as Adult Children of Dysfunctional Families (ACDF), and that family disruption is what leads to symptoms found in ACOAs, not the parental drinking (Berkowitz & Perkins, 1988; Hadley et al., 1993; Harrington & Metzler, 1997; Logue et al., 1992; Mintz et al., 1995; Mothersead et al., 1998; Wright & Heppner, 1991, 1993). ACDFs are defined in a variety of ways by different researchers. In general, in the ACOA literature, ACDFs are defined by some sort of ongoing or discrete highly traumatic event in their childhood. Such events may include growing up with a parent with a major mental illness (i.e., depression,

schizophrenia), surviving the death of a parent, growing up with a parent with a major health concern (e.g., cancer), surviving verbal/emotional/physical/sexual abuse, surviving incest, etc.

Researchers have argued that the dysfunctional family system found in ACOAs' families is what results in negative outcomes for ACOAs. In a review of the literature, Velleman and Orford (1999) pointed out that many of the negative circumstances that arise in ACOA homes are caused by drinking, but may not be isolated to homes with problem-drinking parents. However, they add that many of the family situations experienced by ACOAs are different from that of ACDFs as they relate to the drinking. These situations may include "parental drunkenness, moodiness, unreliability and embarrassing behaviour; reduced family social life, joint family activities, and open family discussions; awareness of rows, including violence between parents, and experiencing pressure to take sides or participate in parents' rows; a poor relationship, sometimes involving violence, with the problem-drinking parent; being required to adopt a caretaking or coping role more suitable to an older person" (p.249-250). In this study, ACDFs were not studied, but participants who self-identified as having one of three possibly dysfunctional family backgrounds (physical abuse perpetrated by a parent, sexual abuse perpetrated by a parent, or parental severe mental illness) were assessed and removed from the sample in order to make the ACOA sample more pure and thus possibly reduce error variance and increase power.

In summary, it appears that ACOA population is far more heterogeneous than originally suggested by early ACOA self-help writers (Black,1982). The majority of the early research in the ACOA literature took place amongst community or in-patient

samples, likely leading to a population description with a higher prevalence of pathology and more severe pathology. Understandably, college samples, in general, have been found to have less pathology and have been found to be less differentiated from non-ACOAs. It is likely that the clinical, community, and college ACOA populations represent a set of three distinct groups of ACOAs who have already sorted themselves into levels of functioning. It is logical that ACOAs in in-patient clinical treatment are reporting lower functioning, overall, when compared to ACOAs who are in college. The ACOAs who are in college already represent a group of ACOAs who are thriving when compared to community and clinical ACOAs. College ACOAs have, it is assumed, developed coping skills and academic skills that have helped them, to an extent, to overcome difficulties related to their ACOA experience. This study will examine if a higher number of college ACOAs are thriving on certain measures than college non-ACOAs.

Resiliency and Thriving in ACOAs

Although the majority of the ACOA literature has focused on negative outcomes among ACOAs, a number of studies have examined resiliency in the ACOA population (Hall, 1997; Kumpfer & Bluth, 2004; O'Sullivan, 1991; Palmer, 1997; Werner, 1986; Werner & Johnson, 2004). Additionally, a number of studies have found that the majority of ACOAs do not have homogenous negative outcomes (e.g., Plescia-Pikus et al., 1988; Werner, 1986).

Survival, Coping, Resiliency, and Thriving Defined

O'Leary and Ickovics (1995) propose a model of thriving wherein an individual, will respond to a traumatic event with either survival, recovery, or thriving. Survival is

defined as an individual continuing to function with impairment. When one survives a trauma, his or her functioning falls below baseline functioning. Recovery is defined as a "return to baseline" (p.128). This indicates the individual, once the challenge has ended, is able to "return to previous levels of social and psychological functioning" (p. 128). The authors describe the third possible response to a challenge, thriving, as going "beyond the original level of psychosocial functioning, to grow vigorously, to flourish" (p. 128). The authors add that thriving represents more than a return to equilibrium, but rather is a "value-added" experience wherein an individual "may go beyond both survival and recovery to thrive" (p.122). The authors further add that thriving can provide "the impetus for growth and greater well-being" (p. 122). The authors indicate that thriving is marked by the "effective mobilization of individual and social resources in response to a risk or threat" (O'Leary & Ickovics, 1995, p. 122). Finally, the authors propose that thriving occurs in the behavioral, cognitive, and emotional domains.

A number of authors have defined resiliency and the process associated with it. For example, Masten (1994) states that "resilience in an individual refers to successful adaptation despite risk and adversity" (p. 3). Masten and colleagues describe resiliency as "a process, capacity, or outcome of successful adaptation despite challenges or threatening circumstances…good outcomes despite high risk status, sustained competence under threat and recovery from trauma" (Masten et al., 1990, p. 426). In general, resiliency is conceptualized as a return to baseline, or functioning as if the event or trauma had not occurred. Resilience, as defined by Masten and colleagues (1990) is similar to O'Leary and Ickovics' (1995) recovery.

Variables of Resiliency and Thriving that Have Been Studied in ACOAs

The vast majority of ACOA research in the area of resiliency and thriving has focused on resiliency, not thriving. Researchers have found that ACOAs can and do, in many cases, prove to be a resilient population (Hall, 1997; Kumpfer & Bluth, 2004; O'Sullivan, 1991; Palmer, 1997; Werner, 1986; Werner & Johnson, 2004). Likewise, researchers have identified a number of factors associated with ACOAs' abilities to be resilient. Each of the major studies of resiliency and thriving among ACOAs is described below, as there are so few studies in this area.

In a landmark study of resiliency and coping in ACOAs, researchers followed a group of 49 Hawaiian COAs from birth until age 32 (Werner, 1986; Werner & Johnson, 2004). The researchers released three updates on the longitudinal study for the group at ages 10, 18, and 30. Werner (1986) reported on findings for the group at age 18. Werner found many negative outcomes for many of the participants. For example, by age 18, 30% of the COAs "had records of repeated or serious delinquencies" (p. 36) and 25% had serous mental health concerns requiring in-patient or out-patient care. Likewise, 49% had problems at home, in school, at work, or in the community. However, whereas many of Werner's sample had developed serious coping problems by age 18, the majority, 59%, had not.

Werner (1986) found that certain child characteristics and qualities of the caregiving environment differentiated COAs who did and did not develop coping problems. Werner reported significant predictors of resiliency in COAs for women and men. For women she found a number of factors associated with resiliency including positive primary caretaker perception of the infant in the first year of life, absence of the

birth of another sibling in the first 20 months of life, minimal conflict in the family during the first two years of life, at least average COA intelligence, adequate COA communication skills in reading and writing, and high ratings on COA self esteem. Werner found four variables that contributed to the resiliency of male COAs. These variables included a lack of prolonged separation from caregiver in first two years of life, normal or above normal psychologist rating of COA socio-emotional status at age two, at least mid-percentile reading scores at age five, and normal or above rating of self esteem.

Overall, Werner (1986) found seven behavioral characteristics and three caretaking environment characteristics that were associated with resiliency in COAs. The seven behavioral characteristics include COA temperament that elicited positive attention from primary caretaker, average or above average intelligence and adequate reading and writing skills, an achievement orientation, a responsible and caring attitude, a positive self-concept, an internal locus of control, and belief in self-help. The three caretaking environment variables associated with resilience included sufficient to high levels of caretaking attention and minimal absences during infancy, no additional births in the family 20 months after the COA birth, and the absence of serious conflict between parents prior to age two.

Werner and Johnson (2004) summarized the findings of their final follow-up with the Hawaiian COAs at ages 31 and 32. The authors reported that 55 of the original 67 COAs were available for this follow-up study. Werner and Johnson (2004) found that 51% of the sample developed into ACOAs with successful adult adaptation, 28% had developed minor coping problems, and 21% had developed major coping problems. Successful adult adaptation was defined by high satisfaction in school/work, relationship

with partner, relationship with children, relationship with parents and siblings, relationship with peers, and self assessment of current state of life. Additionally, successfully adapted adults did not report dependency on alcohol or drugs, psychosomatic illness, or psychiatric disorders.

Werner and Johnson (2004) reported a number of protective factors that statistically contributed to the resilience of the ACOAs. These included a number of factors that primarily revolved around social support from other family members, community members, and teachers. The researchers found that the majority of the resilient ACOAs reported having a non-alcoholic mother (94% of females and 80% of males). Percentages were not reported for the poor coping groups on this measure. Other family members such as an older sibling, uncle, aunt, or grandparent also often seemed to contribute to the resilience of the coping ACOAs. Other sources of support included friends, parents of friends, teachers, and mentors. Overwhelmingly, the number one protective factor for this group of ACOAs was a supportive adult, such as a non-alcoholic parent, teacher or aunt.

O'Sullivan (1991) in response to Werner's (1986) study assessed the relationship between childhood mentors and resiliency in ACOAs. O'Sullivan (1991) found that ACOAs who reported a mentor as a child were more resilient than those who did not report a mentor. O'Sullivan determined resilience based on high scores on 8 of the 12 scales on the Personal Orientation Inventory (Shostrum, 1974). These scales included measures of internal locus of control, self-actualizing values, self care, spontaneity, self-regard, self-acceptance, individual perception of the inherent nature of people as good or bad, and capacity for intimate contact.

In an article summarizing previous findings relating to resiliency and protective factors that mediate COA/ACOA risk of substance abuse, Kumpfer and Bluth (2004) stated, "Learning from one's failures as well as successes is the hallmark of resilient people in strengthening their self-efficacy and concept of personal power" (p. 681). The authors also state that the majority of literature on resiliency suggests that, "the most important characteristics promoting resilience are *purpose in life* and *determination*" (p.675).

Robitschek and Kashubeck (1999) found that there was a significant positive path in a structural equation model of mediating variables between college ACOAs' experience as a child of an alcoholic and personal growth orientation. Personal growth orientation is defined by Robitschek and Kashubek (1999, p.720) as "active and intentional engagement in the process of self-change" (Robitshek & Kashubeck, 1999) and "a sense of continued growth and development as a person" (Ryff & Keyes, 1995). In their discussion of their findings related to personal growth the authors point to a 1991 suggestion by Tweed and Ryff that growing up in an alcoholic family may "actually facilitate personal growth and continued development" (p. 134).

Robitshek and Kashubeck (1999) also examined hardiness in college student ACOAs in a structural equation model. Hardiness is defined as "stress resistance" (Robitshek & Kashubeck, 1999, p.160) and includes three components: commitment, control, and challenge (Kobasa, 1979, cited in Robitshek & Kashubeck, 1999). Later researchers defined these components. Maddi and Khoshaba (1994) defined commitment as the ability to see one's life and experiences as interesting and important and the ability to engage actively with life. Kobasa (1979) defined control as the belief that one has

control over one's life. Finally, challenge is defined as seeing change as a normal part of and positive part of life that is to be embraced (Kobasa, 1979; Kobasa, 1982). Hardiness was measured using the Dispositional Resilience Scale (DRS; Bartone, Ursano, Wright, & Ingraham, 1989). The DRS assesses the three components of hardiness defined above. Robitschek and Kashubeck (1999) found, in a structural equation model, that hardiness was a significant mediator between college ACOAs' experience as a child of an alcoholic and later well-being.

Palmer (1997), in a qualitative study of ten community ACOAs, examined her model of resilience in ACOAs to see if the model fit for actual ACOAs. It is unknown if the participants attended college. Palmer's model, the Differential Resiliency Model, describes four types, or degrees, of resiliency found in ACOAs: anomic survival, regenerative resilience, adaptive resilience, and flourishing resilience. Each of the four categories is comprised of varying degrees of success or coping in four life domains: homeostasis, coping strategies, relationship to environment, and use of energy.

Palmer describes anomic survival as a person who "lies in a constant state of chaos or disruption" (p.202), with "little or no use of constructive coping strategies, destructive cognition or behaviors, diminished access to personal and environmental resources, and energy directed toward survival" (p. 203). The author describes regenerative resilience as "the formative development of competence and constructive coping strategies or the learning of new, more effective ways of dealing with life's challenges, although integration and internalization are incomplete" (p. 202). This type of resilience is marked by some periods of stability, use of "sporadic constructive cognitions and behaviors" and use of energy for integration and insight as well as survival (p.203).

Palmer goes on to describe adaptive resilience as “relatively sustained periods of regular extended use of competencies and constructive coping strategies” as well as “positive self-regard and a personal sense of wholeness” (p. 202). This type of resilience is marked by “sustained periods of stability and balance” and “reciprocity between personal and environmental resources for growth and change” (p.203). Finally, Palmer describes flourishing resilience as the “extensive use of effective coping strategies and a strong sense of self-integration” (p. 202-203). She continues, "the individual views life as meaningful and manageable” (p. 203). Palmer found the following frequencies of resilience types among the 10 participants, 3 anomic survival types, two regenerative resilience types, three adaptive resilience types, and two flourishing resilient types. Of the 10, three were in transitional phases into a more advanced type of resilience.

Coping Among ACOAs

A number of studies have studied concepts such as coping and surviving in ACOAs. These type of ACOAs are those who suffer less than other ACOAs, but still are below or at baseline, unlike thrivers, who are above baseline functioning.

Researchers have found that a number of variables are associated with coping and surviving among ACOAs. El-Sheikh and Buckhalt (2003) found that child-parent attachment does, to some extent, mediate and moderate the impact of parental drinking status. Other variables, such as high maternal occupations status, internal locus of control, and more positive life experiences also served to mediate some of the impact of growing up a COA (Springer & Gastfriend, 1995).

Factors Associated with Resiliency and Thriving for Other Groups

Thriving in the face of adversity has been recognized among many other groups of adults (Tedeschi & Calhoun, 1995; Tedeschi, Park, & Calhoun, 1998). A number of researchers have examined factors associated with resiliency and thriving among a number of populations who have faced adversity and trauma (Basic Behavioral Science Task Force, 1996; Block & Kremen, 1996; Demos, 1989; Klohnen, 1996; Kumpfer, 1999; Masten & Coatsworth, 1998; Linley & Joseph, 2004; Tugade & Fredrickson, 2004; Werner & Smith, 1992, Wolin & Wolin, 1993).

Masten and Coatsworth (1998) summarized characteristics of resilient children and adults in a variety of studies of children and adolescents who were in negative environments. These child characteristics include individual, family, and extrafamilial factors. The individual characteristics cited are good intellectual functioning, sociable and easygoing disposition, self-efficacy, self-confidence, high self-esteem, talents, and faith. Family factors include close relationship to a caring parent or parent figure, authoritative parenting, socioeconomic advantages, and supportive extended family. Finally, extrafamilial factors include bonds to prosocial non-family member adults, connections to prosocial organizations, and attending effective schools. Relationship with caring adults/mentors and high intellectual functioning were the two most common factors associated with resilience (Masten & Coatsworth, 1998).

Key findings from the resilience research were also summarized by a task force of the National Advisory Mental Health Council (Basic Behavioral Science Task Force, 1996). The authors cite a number of common personal and life characteristics of individuals who thrive. These characteristics include successful and healthy infant-parent

attachments, close personal relationships, positive self-concept, positive self-esteem, and positive educational environments.

Other researchers have focused on specific personal factors, such as positive emotionality, associated with resiliency (Tugade & Fredrickson, 2004). Two studies found that resilient individuals report optimistic and energetic approaches to life, are open to new experiences, and have high positive emotionality (Block & Kremen, 1996; Klohnen, 1996). More specifically, resilient individuals elicit positive emotions through relaxation (Demos, 1989; Wolin & Wolin, 1993), humor (Werner & Smith, 1992), and optimistic thinking (Kumpfer, 1999).

Linley and Joseph (2004) in a review of 40 empirical studies of thriving report a number of factors associated with thriving in the face of adversity. The studies reviewed include studies ranging from those facing a rape to those living with debilitating rheumatoid arthritis. The factors associated with thriving include situational, personal, cognitive, religious, social, and meaning-making factors. Moderate threat levels during the traumatic event are associated with thriving (Fontana & Rosenheck, 1998; Schnurr, Rosenberg, & Friedman, 1993). Personal variables and characteristics associated with thriving include extraversion (Evers et al., 2001; Tedeschi & Calhoun, 1996), openness to experience (Tedeschi & Calhoun, 1996), agreeableness (Tedeschi & Calhoun, 1996), conscientiousness (Tedeschi & Calhoun, 1996), self-efficacy (Abraido-Lanza et al., 1998), and positive affect (Abraido-Lanza et al., 1998; Evers et al., 2001; Park et al., 1996; Tennen et al., 1992). Cognitive processes associated with thriving include cognitive appraisal abilities of awareness of the event and ability to control aspect of the event (Park et al., 1996; Evers et al., 2001; Tennen et al., 1992), problem-focused coping

(Aremeli et al., 2001; Evers et al., 2001; Koenig et al., 1998), acceptance (Park et al., 1996), and positive reinterpretation (Park et al., 1996). A number of factors related to religion and spirituality were associated with thriving, such as positive religious coping (Koenig et al., 1998; Pargament, Koenig, & Perez, 2000; Paragment, Smith, Koenig, & Perez, 1998), religious activities (Koenig et al., 1998; Milam, Ritt-Olson, & Unger, 2004; Tedeschi & Calhoun, 1996) and intrinsic religiousness (Park et al., 1996). Further, elements of social support are associated with thriving, including emotional social support (Park et al., 1996), social support satisfaction (Park et al., 1996). Finally, factors associated with the process of meaning-making were also associated with thriving (Calhoun et al., 2000; Cordove et al., 2001).

Overall, very little research has assessed resiliency in ACOAs and no research has assessed thriving specifically in ACOAs. The research indicates that the ACOA population is resilient in many ways. At this point, research needs to assess whether thriving is evident on specific characteristics of ACOAs. This study assessed evidence of psychological mindedness and defense mechanism style of ACOA college students, as research has shown that this subset of the ACOA population does not experience as many negative outcomes as the community and clinical ACOA populations. Individual coping skills have been assessed in a few studies in ACOAs, but no research has examined overall defense mechanism styles in ACOAs nor has any research examined thriving on defense mechanism style. Likewise, psychological mindedness has not been studied in ACOAs and thriving on this measure has also not been examined. Therefore, the purpose of this study was to assess two hitherto unexamined aspects of ACOAs, to compare

ACOAs with non-ACOAs on these outcome variables, and to determine whether thriving is evident on either outcome.

Research Questions

Each of the 6 research questions examined in this study is summarized below along with the predicted findings.

Question One

Are there differences for ACOAs and non-ACOAs on mean scores on psychological mindedness? It was predicted that ACOAs would be more psychologically minded than non-ACOAs.

Question Two

Are there differences for ACOAS and non-ACOAS on the mean scores on defense mechanism styles? It was predicted that ACOAs would score higher on mature defense mechanism than non-ACOAs and would not be differ in their use of neurotic and immature defense mechanisms.

Question Three

Are there differences between ACOAS and non-ACOAS on the distribution of psychological mindedness scores? It was predicted that ACOAs would have greater variability than non-ACOAs on measures of psychological mindedness.

Question Four

Are there differences for ACOAS and non-ACOAS on distribution of defense mechanism style scores? It was predicted that ACOAs would have greater variability than non-ACOAs on measures of defense mechanisms.

Question Five

Is thriving evident on psychological mindedness for ACOAs and non-ACOAs? Further, are there differences in thriving between ACOAS and non-ACOAs on measures of psychological mindedness? It was predicted that high functioning would be evident for both ACOAs and non-ACOAs with more thriving for ACOAs.

Question Six

Is thriving evident on each of the defense mechanism styles for ACOAs and non-ACOAs? Further, are there differences in thriving between ACOAS and non-ACOAs on each of the defense mechanism styles? It was predicted that high functioning would be evident for both ACOAs and non-ACOAs with more thriving for ACOAs.

CHAPTER 3. METHOD

Participants

The population of interest is college students who are classified as Adult Children of Alcoholics (ACOAs) and Non Adult Children of Alcoholics (non-ACOAs). A total of 396 Auburn University undergraduate students responded to the instrument. After all participants who self-identified as having one of three possibly dysfunctional family backgrounds (physical abuse perpetrated by a parent, sexual abuse perpetrated by a parent, or parental severe mental illness), participants with missing variables, and ACOAs who did not make the cut off score to be coded as either an ACOA or non-ACOA were dropped from the data set; 323 respondents remained. Those participating in this study ranged in age from 19 to 42 years of age, with a mean age of 21.7 years (SD = 2.75) and a median age of 21. Of the 323 participants, 150 were women (46%) and 173 were men (54%). According to the self-reported demographic data, 286 participants (89%) identified themselves as European American, 24 participants (7 %) identified themselves as African American, six participants (2%) identified themselves as Asian American/Pacific Islander, two participants (.6 %) identified themselves as Hispanic/Latino, one participant (.3 %) identified as biracial, one participant (.3 %) identified as Native American/American Indian, and three participants identified themselves as other (.9%). Participation in the study was voluntary and anonymous.

Participants, on the basis of their responses to a set of screening questions, fell into three groups: (a) ACOAs, (b) participants who self-identified as having one of three possibly dysfunctional family backgrounds (physical abuse perpetrated by a parent, sexual abuse perpetrated by a parent, or parental severe mental illness), or (c) non-ACOAs. All participants who were identified as possibly having one of the three assessed dysfunctional family backgrounds were dropped from the final data set, regardless of whether they also identified as ACOA or non-ACOA, to reduce extraneous variance in either category. Of the original 396 participants 31 were classified as having self-reported a dysfunctional family (8%). ACOAs who did not make the cut off score to be coded as either an ACOA or non-ACOA were also dropped from the data set, leaving a final sample size of 323. Of the 323 participants, 37 were classified as ACOAs (12%) and 286 participants were classified as Non-ACOAS (88 %). Of the 37 ACOAs, 26 participants reported that they had an alcoholic father (79%), 5 participants reported they had an alcoholic mother (15%), and 2 reported they had both an alcoholic mother and father (5%).

Procedure

This research was reviewed by the Auburn University Institutional Review Board for the Use of Human Subjects in Research. The examiner administered the four instruments to undergraduate students enrolled in a variety of courses at Auburn University upon permission from the instructor. The researcher contacted the department heads of forty-seven departments (see Appendix A), ranging from horticulture to English, and received permission from thirty-three departments (70%) to contact instructors teaching summer courses to seek their permission to announce the opportunity to students

to stay after class to complete the questionnaire. Forty-five instructors were contacted (see Appendix B) by the researcher and permission was given by forty-three instructors (96%) to allow the researcher to come to the instructors' courses to administer the questionnaires. The researcher stopped collecting data once the agreed upon number of participants were amassed, collecting data in a total of forty-three classes. The researcher went to the instructors' courses at the end of the class time and asked students to voluntarily participate in the study. Students were asked to stay after the class period ended if they were interested in participating and were informed that there were no potential repercussions for not participating.

The survey took approximately 20 minutes to complete. Participants were given informed consent (see appendix C) and participation was voluntary. The survey consisted of the The Children of Alcoholics Screening Test, Short Form (CAST-6) (see Appendix D), the Psychological Mindedness Scale (PMS) (see Appendix E), The Defense Style Questionnaire-40 (DSQ-40) (see Appendix F), and a demographic questionnaire including the possible dysfunctional family screening question (see Appendix G). Participants were offered the opportunity to put their name and address on a raffle entry for the chance to win one of two fifty dollar gift certificates. The raffle entries were in no way associated with the questionnaire and could not be traced to the questionnaire completed by the individual. At the end of the data collection time period two names were drawn at random and the two fifty dollar money orders were mailed to the two winners. At that time all of the raffle entries were shredded.

Measures

The Children of Alcoholics Screening Test, Short Form (CAST-6)

The Children of Alcoholics Screening Test, Short Form (CAST-6; Hodgins et al., 1993) was used to assess parental alcohol problems. The CAST-6 is a six question self-report inventory that was used to ascertain whether the participant is an ACOA and whether the participant's mother or father, or both, were alcoholic. The items are as follows: (1) *Have you ever thought that one of your parents had a drinking problem?*, (2) *Did you ever encourage one of your parents to quit drinking?*, (3) *Did you ever argue or fight with a parent when he or she was drinking?*, (4) *Have you ever heard your parents fight when one of them was drunk?*, (5) *Did you ever feel like hiding or emptying a parent's bottle of liquor?*, (6) *Did you ever wish that a parent would stop drinking*? (Hodgins et al.,1993). Participants answer yes or no to all items; yes answers are scored as one point. Traditionally, in the literature a score of three or higher on the CAST-6 indicates that the respondent can be classified as an ACOA and all others are assumed not to be ACOAs. In this study, I chose to more stringently classify non-ACOAs. I used the usual cut off score of 3 or higher to classify a participant as an ACOA but only those who scored 1 or lower were classified as non-ACOAs. All participants scoring a 2 were dropped in order to minimize the chance of mis-categorization and thus minimize error and maximize statistical power.

Researchers suggest adding two additional questions to determine whether the ACOA is the offspring of an alcoholic father, alcoholic mother, or both, (1) *Did you ever think your father was an alcoholic?*, (2) *Did you ever think your mother was an alcoholic?* (Hodgins et al., 1993). These questions were added to the questionnaire and

the responses to these questions were only used for demographic purposes and were not used in the total score.

The CAST-6, is a short form which was derived from the original 30-item Children of Alcoholics Screening Test (Jones, 1981), using Principle Components Analysis of the 30 CAST responses (Hodgins et al., 1993). The CAST was and is widely recognized as a consistently valid way to assess ACOA status (Charland, & Cote, 1998; Pilat & Jones, 1984/85; Staley & El-Guebaly, 1991; Yeatman, Bogart, Geer, & Sirridge, 1994). The CAST-6 is widely used to assess ACOA status, particularly when a shorter instrument is called for (Charland, & Cote, 1998; Pilat & Jones, 1984/85; Staley & El-Guebaly, 1991; Yeatman et al., 1994). The CAST-6 is as internally consistent as the original CAST with item-total correlations for the CAST-6 ranging from .62 to .89 across the normative samples (Hodgins et al.,1993). The CAST-6 is highly correlated with the original full-length CAST with correlation scores ranging from .92 to .94 for the student, substance abuse treatment, and outpatient samples (Hodgins et al.,1993). Cronbach's alphas were high and appropriate for research with .86, .91, and .92 for the student, substance abuse treatment, and outpatient samples, respectively.

The CAST-6 is also equally effective as the original CAST in distinguishing ACOAs from non-ACOAs. The CAST-6 uses a score of three as the cut-off point for ACOAs and results only in 2% false positives and 4% false negatives, relative to the full CAST score (Hodgins et al., 1993). Likewise, the CAST-6 is comparably as effective in determining ACOA status as other self-report instruments such as the Short Michigan Alcoholism Screening Test for Father (Sher & Descunter, 1986, F-MAST), Short Michigan Alcoholism Screening Test for Mother (Sher & Descunter, 1986, M-MAST),

and Family History Research Diagnostic Criteria Interview (Andreasen, Endicott, Spitzer, & Winkour, 1977, FH-RDC).

Possible Family Dysfunction Screening Questions

The primary focus of interest in the study is examining differences between ACOAs and non-ACOAs. However, the presence of adult children of other dysfunctional families (other than alcoholic families) among the non-ACOA and ACOA groups may tend to obscure differences because ACDFs have been found, in some studies, to share some characteristics with ACOAs. Thus, all participants who self-identified as having one of three possibly dysfunctional family backgrounds (physical abuse perpetrated by a parent, sexual abuse perpetrated by a parent, or parental severe mental illness) were dropped from the final data set, regardless of whether they also identified as ACOA or non-ACOA, to reduce contamination of the ACOA category. Because this group is not a primary group of interest, but rather is primarily an attempt to remove some of the extraneous variance from the non-ACOA group, to improve power and clarity, I chose not to use a lengthy assessment of ACDFs (the shortest of which is 40 items). Instead, a rough assessment of possible family dysfunction was used to remove them from the both ACOA and non-ACOA groups, using the researcher-designed questions as follows:

Please indicate whether ANY of the following statements were true for you as a child or adolescent, from your birth until you graduated high school:

1. *I was physically abused as a child/adolescent by one or both of my parents*
2. *I was sexually abused as a child/adolescent by one or both of my parents*
3. *One or both of my parents had a serious and/or debilitating mental health concern (e.g., debilitating depression, schizophrenia, etc.)*

*If **any** of the above were true for you, please check here: ___*

No validity or reliability statistics are available on this screening tool.

Psychological Mindedness Scale (PMS)

This 45-item self-report inventory (Conte, & Ratto, 1997) assesses behaviors and attitudes related to psychological mindedness. It is an abbreviated version of Lotterman's (1993) 65-item scale. Psychological mindedness, as described by Applebaum (1973), and adapted by Conte & Ratto (1997) is "a person's ability to see relationships among thoughts, feelings, and actions, with the goal of learning the meanings and causes of his [or her] experiences and behaviour" (p.36). Shill and Lumley (2002) note that psychological mindedness "bespeaks a capacity to tolerate psychological conflict and stress intrapsychically rather than resorting to more regressive means of conflict management or resolution such as somatization" (p. 132).

The PMS uses a 4–point Likert scale ranging from *strongly agree* to *strongly disagree*. The instrument was originally designed to assess client suitability for psychodynamic psychotherapy (Conte & Ratto, 1997). Twenty items of the PMS are reverse scored resulting in a sum score with higher scores indicating greater psychological mindedness. Additionally, the PMS is comprised of five subscales, willingness to try to understand oneself and others (*Willingness*), openness to new ideas and capacity to change (*Openness*), access to feelings (*Access*), belief in the benefits of discussing one's problems (*Belief*), and interest in meaning and motivation of own and others' behavior *(Interest*). A total score is derived for the participant. The higher the score on each of the five factors the more psychologically minded the participant is on each factor.

Content validity of the Lotterman (1993) 65-item questionnaire was determined by a panel of five expert judges. Internal consistency reliabilities (Cronbach's alphas) for the full-scale PMS score as reported by Conte and Ratto (1997) and Conte et al. (1996) ranged from .86-.87. However, these were based on norms for clients in an outpatient psychodynamically oriented clinic. Another study, assessing the internal consistency of the full-scale score PMS in undergraduate college students found a reliability coefficient of .80 (Shill & Lumley, 2002). Likewise, convergent validity was found between the PMS and a measure of alexithymia (an inability to describe emotional experiences) (r = -.309, p=.01) (Shill & Lumley, 2002).

The Defense Style Questionnaire-40 (DSQ-40)

The DSQ is a 40-item self-report inventory used to assess the use of 20 defenses (Andrews, Singh, & Bond, 1993). Defense mechanisms are defined by the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III-R) (1987, p.393) and adopted by Andrews et al. (1993) as, "patterns of feelings, thoughts, or behaviors that are relatively involuntary and arise in response to perceptions of psychic danger. They are designed to hide or to alleviate the conflicts or stressors that give rise to anxiety" (p. 246). Defense mechanisms have also been referred to as "an enduring and important dimension of personality" (Vaillant, Bond, & Valliant, 1986, p.787). More simply put, defense mechanisms are the way in which people cope with stressors.

The defense mechanisms measured by the DSQ-40 are broken into three factors: mature, neurotic, and immature. Mature defenses, as categorized by the DSQ-40, are sublimation, humor, anticipation, and suppression. Neurotic defenses measured are undoing, pseudo-altruism, idealization, and reaction formation. Finally, immature

defenses assessed are projection, passive aggression, acting out, isolation, devaluation, autistic fantasy, denial, displacement, dissociation, splitting, rationalization, and somatization. The DSQ-40 uses a 9–point Likert scale ranging from 1-*strongly disagree* to 9-*strongly agree*. The DSQ-40 yields factor scores for each of the three main factor scales as well as for each of the 20 specific defenses. Each of the 20 defense mechanisms is assessed with two questions and is part of only one factor. It is for this reason that the three factors are examined as composite variables, and that individual defenses were not examined statistically. The scores for the three factors are the average of the scores for the items related to that factor. A higher score indicates higher endorsement of that factor.

Internal consistency reliabilities (Cronbach's alphas) for the three factors of the DSQ-40 for the entire normative sample of outpatient clients and non-client participants are *Mature* factor (.68), *Neurotic* factor (.58), and *Immature* factor (.80) (Andrews, Singh, & Bond, 1993). Likewise, test-retest correlations at four weeks for non-client participants were found to be *Mature* (.75), *Neurotic* (.78), and *Immature* (.85) (Andrews, Singh, & Bond, 1993). Although the somewhat low internal consistency reliabilities of the *Immature* and *Neurotic* factors scales are not ideal, this instrument is the best available measure of defense mechanisms at this time.

Muris and Merckelbach (1996) found that immature defenses, as categorized by the DSQ-40, such as projection, devaluation, acting out, and somatization are positively related to neuroticism and symptoms of psychopathology, indicating good convergent validity. Additionally, these researchers found that humor, a mature defense, is negatively correlated with neuroticism and psychopathological symptoms, indicating discriminant validity.

Demographic Questionnaire

This survey was designed by the researcher. The demographic questionnaire elicited the participants' age, gender, and ethnicity/race.

Data were analyzed using the SPSS 13.0 statistical package. Participants with missing or incomplete data were dropped from the corresponding analysis.

CHAPTER 4. RESULTS

Research Questions

Hypothesis One

Six ANOVAs were performed to examine differences between ACOAs and non-ACOAs on mean scores on psychological mindedness as measured by the total Psychological Mindedness Scale (PMS) score as well as the five subscales of the PMS (Conte, & Ratto, 1997). All tests were two-tailed at the $p<.05$ level. No significant differences were found between ACOAs and Non-ACOAs on the total PMS. However, significant differences were found between ACOAs and Non-ACOAs on the *Belief* subscale, $F(1, 321)= 4.215$, $p<.041$ of the PMS, with ACOAs scoring higher, indicating a higher endorsement of the *Belief* subscale. The effect size of the *Belief* finding is Cohen's $d=.387$, indicating a small to moderate effect size (Cohen, 1992). *The Belief* subscale assesses the participant's belief in the benefits of discussing one's problems. Significant differences were not found on the other four subscales: willingness to try to understand oneself and others (*Willingness*), access to feelings (*Access*), interest in meaning and motivation of own and others' behavior (*Interest*), and openness to new ideas and capacity to change (*Openness)*. Results of these analyses are displayed in Tables 1 and 2.

Table 1. ANOVAs for Psychological Mindedness Scale (PMS)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Willing	Between Groups	14.719	1	14.719	0.711	0.400
	Within Groups	6647.287	321	20.708		
	Total	6662.006	322			
Open	Between Groups	8.825	1	8.825	2.483	0.116
	Within Groups	1140.643	321	3.553		
	Total	1149.467	322			
Access	Between Groups	12.115	1	12.115	1.806	0.180
	Within Groups	2153.068	321	6.707		
	Total	2165.183	322			
Belief	Between Groups	11.675	1	11.675	4.215	0.041*
	Within Groups	889.074	321	2.770		
	Total	900.749	322			
Interest	Between Groups	0.211	1	0.211	0.056	0.814
	Within Groups	1220.947	321	3.804		
	Total	1221.158	322			
PM Total	Between Groups	401.135	1	401.135	2.873	0.091
	Within Groups	44817.367	321	139.618		
	Total	45218.502	322			

Table 2. Group Means and Standard Deviations for Psychological Mindedness Scale

Descriptives						
		N	Mean	Std. Deviation	Minimum	Maximum
Willing	Non-ACOA	286	27.0594	4.5630	16.00	39.00
	ACOA	37	27.7297	4.4513	17.00	39.00
Open	Non-ACOA	286	16.2378	1.9101	11.00	20.00
	ACOA	37	16.7568	1.6734	13.00	20.00
Access	Non-ACOA	286	14.5000	2.6328	7.00	20.00
	ACOA	37	15.1081	2.2209	11.00	20.00
Belief	Non-ACOA	286	9.4301	1.7087	4.00	12.00
	ACOA	37	10.0270	1.2580	7.00	12.00
Interest	Non-ACOA	286	12.3776	1.9764	6.00	16.00
	ACOA	37	12.2973	1.7299	9.00	16.00
PM Total	Non-ACOA	286	131.8252	11.7705	101.00	171.0
	ACOA	37	135.3243	12.1702	110.00	160.0

Hypothesis Two

An ANOVA was performed to examine differences for ACOAS and non-ACOAS on the mean scores on defense mechanism styles as measured by The Defense Style Questionnaire-40 (DSQ-40; Andrews et al., 1993) for the three factor scores of *Mature, Neurotic,* and *Immature* defense styles. All tests were two-tailed at the $p<.05$ level. Significant differences were found on the *Immature factor* $F(1, 312)=4.50$, $p=.035$. The effect size of the *Immature* finding is Cohen's $d=.389$, indicating a small to moderate effect size (Cohen. 1992). Non-ACOAs had higher endorsements of the *Immature* defense mechanism styles, meaning they reported a greater reliance on immature defense mechanisms than ACOAs. No significant differences were found between ACOAs and non-ACOAs on the *Mature* or *Neurotic* factors. Results of these analyses are reported in Tables 3 and 4.

Table 3. ANOVAs for Defense Mechanism Style Questionnaire-40 (DSQ-40)

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Mature	Between Groups	0.519	1	0.519	0.525	0.469
	Within Groups	316.839	321	0.987		
	Total	317.357	322			
Immature	Between Groups	3.616	1	3.616	4.503	0.035*
	Within Groups	250.546	312	0.803		
	Total	254.162	313			
Neurotic	Between Groups	0.376	1	0.376	0.316	0.575
	Within Groups	382.604	321	1.192		
	Total	382.980	322			

Table 4. Group Means and Standard Deviations for DSQ-40

Descriptives						
		N	Mean	Std. Deviation	Minimum	Maximum
Mature	Non-ACOA	286	5.9012	1.0001	2.88	8.50
	ACOA	37	6.0270	0.9392	3.50	7.88
Immature	Non-ACOA	277	4.0558	0.9078	1.67	6.46
	ACOA	37	3.7230	0.8009	2.58	5.79
Neurotic	Non-ACOA	286	5.0227	1.1091	2.13	8.63
	ACOA	37	4.9155	0.9433	3.13	6.88

Hypothesis Three

To determine whether there were differences for ACOAs and non-ACOAs on the *distribution* of PMS scores, Levene's test of homogeneity of variances was used (Conte, & Ratto, 1997). The *Belief* subscale of the PMS was the only variable to violate Levene's test of homogeneity of variances F (1, 346)=7.79, p=.006. This means that there was a differential distribution for ACOAs and non-ACOAs. On the *Belief* subscale, ACOAs had a SD of 1.26 and non-ACOAs had a SD of 1.71, with a greater distribution for non-ACOAs. This is the reverse of what was predicted (see Tables 5 and 6).

Table 5. Levene's Test of Homogeneity of Variances for the PMS

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Willing	0.092	1	321	0.761
Open	1.091	1	321	0.297
Access	1.954	1	321	0.163
Belief	6.409	1	321	0.012*
Interest	1.588	1	321	0.209
PM Total	0.018	1	321	0.894

Table 6. Standard Deviations for ACOAs and Non-ACOAs on the PMS

Descriptives		
		Std. Deviation
Willing	Non-ACOA	4.5630
	ACOA	4.4513
Open	Non-ACOA	1.9101
	ACOA	1.6734
Access	Non-ACOA	2.6328
	ACOA	2.2209
Belief	Non-ACOA	1.7087
	ACOA	1.2580
Interest	Non-ACOA	1.9764
	ACOA	1.7299
PM Total	Non-ACOA	11.7705
	ACOA	12.1702

Hypothesis Four

Levene's test of homogeneity of variances was performed to examine differences between ACOAS and non-ACOAS on the distribution of defense mechanism style scores as measured by the Defense Style Questionnaire-40 (DSQ-40; Andrews et al., 1993). Differences were not found between ACOAs and Non-ACOAs on Levene's test of homogeneity of variances for any of the three DSQ factors. Similar to the PMS subscales, standard deviations were larger for non-ACOAs than ACOAs on each of the three factors. Results are reported in Tables 7 and 8.

Table 7. Levene's Test of Homogeneity of Variances for the DSQ-40

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Mature	0.819	1	321	0.366
Immature	0.550	1	312	0.459
Neurotic	1.094	1	321	0.296

Table 8. Standard Deviations for ACOAs and Non-ACOAs on the DSQ-40

Descriptives		
		Std. Deviation
Mature	Non-ACOA	1.0001
	ACOA	0.9392
Immature	Non-ACOA	0.9078
	ACOA	0.8009
Neurotic	Non-ACOA	1.1091
	ACOA	0.9433

Hypothesis Five

To examine if thriving was evident for ACOAs or non-ACOAs on psychological mindedness and if there were differences in thriving between ACOAs and non-ACOAs on measures of psychological mindedness a Chi-Square test was used. This question was examined using a cut-off score, classified as those with one total-participant-group standard deviation above the total-participant-group mean, to categorize a subset of high scoring respondents for psychological mindedness. A Chi-Square test was used to determine whether the percentage of ACOAs in this group was higher than the percentage in the non-ACOA group. Using this method, thriving was not significantly different for Non-ACOAs and ACOAs on the entire PMS score nor any of the five subscales. However, high functioning was evident at very similar percentages for ACOAs and Non-ACOAs on the PMS total score as well as all five of the subscales, with a trend indicating more high functioning ACOAs in all subscales except the *Willing* subscale. See Table 10.

Table 9. Chi-Square Tests for the PMS

Pearson Chi-Square			
	Value	df	Asymp. Sig. (2-sided)
PM Total	2.498	1	0.114
Willing	0.491	1	0.483
Openness	0.133	1	0.715
Access	0.049	1	0.825
Belief	0.239	1	0.625
Interest	0.133	1	0.715

Table 10. Percentage of High-functioning ACOAs and Non-ACOAs on the PMS

	PM Total	*Willing*	*Openness*	*Access*	*Belief*	*Interest*
ACOAs	24%	14%	16%	14%	16%	16%
Non-ACOAs	14%	18%	14%	12%	13%	14%

Hypothesis Six

To examine if thriving was evident for ACOAs or non-ACOAs on defense mechanism style and if there were differences in thriving between ACOAs and non-ACOAs on measures of defense mechanism style a Chi-Square test was used. This question was examined using cut-off score, classified as those with one total-participant-group standard deviation above the total-participant-group mean, to categorize a subset of high scoring respondents for *Mature* defense mechanism style. A Chi-Square test was used to determine whether the percentage of ACOAs in this group was higher than the percentage in the non-ACOA group. Using this method, thriving was not significantly different for ACOAs and Non-ACOAs on the DSQ. See Table 9.

Table 11. Chi-Square Test for *Mature* Factor of DSQ-40

Pearson Chi-Square			
	Value	df	Asymp. Sig. (2-sided)
Mature	0.006	1	0.938

In fact, high-functioning was evident for ACOAs and Non-ACOAs at the same level on the mature factor of the DSQ. Using the criterion described above, 14% of the ACOAs and non-ACOAs were classified as high-functioners on the mature defense mechanism style, indicating that equal percentages of ACOAs and non-ACOAs are high-functioning on this measure. See Table 12

Table 12. Percentage of High-functioning ACOAs and Non-ACOAs on the *Mature* factor of the DSQ-40

	Mature
ACOAs	14 %
Non-ACOAs	14 %

CHAPTER 5. DISCUSSION

The first purpose of this study was to determine whether psychological mindedness and defense mechanism style differ for college ACOAs and non-ACOAs. I found support for differences in the belief in the benefits of discussing one's problems, with ACOAs indicating a higher endorsement. I also found support for differences in defense mechanism style with ACOAs reporting a significantly lower endorsement of immature defenses. Although ACOAs did not have a higher mean on the mature defense style, their lower endorsement of immature defenses implies a higher level of functioning. These two findings are good news for both college ACOAs and their potential psychotherapists. These findings, discussed in more detail below, suggest that college ACOAs should be more amenable to therapy and are more likely to use more advanced defense mechanisms. This suggests an overall hardiness and resilience.

The second purpose of this study was to determine whether thriving was evident for college ACOAs on any of the measures. It was thought that there would be a significant subgroup of ACOAs who would be thriving on each measure, above and beyond non-ACOAs. Unfortunately, thriving was not evident on any of the measures. However, a lack of differences in this measure indicates that college ACOAs are doing as well college non-ACOAs on these measures.

Related to the second purpose of this study, I was interested in determining whether there is greater variability among college ACOAs than non-ACOAs, such that

the distribution of scores would be wider for ACOAs. Opposite of my prediction, I found that non-ACOAs had a wider variability on the belief in the benefits of discussing one's problems. However, I did not find this at the significant level for any of the other measures. The implications of this are discussed below.

Overall, the findings of this study have important clinical implications. Previous to this study, the vast majority of research (e.g., Devor, 1994; El-Guebaly, Staley, Rockman, Leckie, Barkman, O-Riordan, & Koensgen, 1992; Jacob et al., 1999; Sher et al., 1992) on Adult Children of Alcoholics (ACOAs), with the exception of five studies (Hall, 1997; O'Sullivan, 1991; Palmer, 1997; Werner, 1986; Werner & Johnson, 2004), has focused on adverse outcomes associated with growing up in an alcoholic family . However, this study suggests that college ACOAs are doing as well as or better than non-ACOAs in a number of important ways. This study found that college ACOAs are more likely to believe in the benefit of discussing their concerns, and are likely to use fewer immature defense mechanisms. These findings contrast with much of the ACOA literature and suggest that the college ACOA population may be quite different from clinical and community ACOAs. Hopefully, this study, and others after it, can lead to greater clinical insight and more appropriate psychotherapy interventions with ACOA clients, particularly those who are attending or have attended college.

Burk and Sher (1988) found that counselors assume that ACOAs are psychologically unhealthy based solely on knowledge of parental alcoholism. Assumptions that all ACOAs are damaged or that there are not within group differences in the ACOA population is dangerous and can have deleterious effects on the psychotherapy relationship, psychotherapist and client expectations, and client

self-esteem. This study is a starting point to allow psychotherapists to combat the myth that all ACOAs, across clinical, community, and college settings, are the same. Thus they can be better equipped to help college ACOA clients without making negative assumptions about the impact of the ACOA experience. Likewise, therapists are now equipped with the knowledge of specific strengths and skills among college ACOAs that may help psychotherapists to focus on ACOAs' hard won skills and strengths, as opposed to focusing only on negative outcomes of growing up in an alcoholic family. Hopefully this shift in understanding the college ACOA experience may help college ACOA clients gain a richer understanding of their experiences and become more empowered.

In interpreting the findings of this study it is important to keep in mind the concepts of resiliency and thriving. Resiliency is defined as "a process, capacity, or outcome of successful adaptation despite challenges or threatening circumstances…good outcomes despite high risk status, sustained competence under threat and recovery from trauma" (Masten et al., 1990, p. 426). Resiliency, or recovery, as exhibited in ACOAs and other populations, is a level of functioning that is the same as that of someone who has never experienced a trauma or long-term adverse situation. On the other hand, thriving is functioning "beyond the original level of psychosocial functioning" (O'Leary & Ickovics, 1995, p.128). Thus, thriving represents not just a return to baseline, but a growth beyond the normal level of functioning. This study overwhelmingly supports the idea that college ACOAs are resilient. It further suggests that college ACOAs may actually be thriving in some ways, specifically in that they are more open to talking about their problems, and are less immature in their defense mechanisms than non-ACOAs, showing strength above and beyond that of their college non-ACOA peers.

Summary of Findings and Implications

Psychological Mindedness Scale Finding and Implications

Mean Differences

Psychological mindedness is described by Applebaum (1973) as "a person's ability to see relationships among thoughts, feelings, and actions, with the goal of learning the meanings and causes of his [or her] experiences and behaviour" (p.36). Psychological mindedness is further defined as implying "the patient's abilities to recognize and admit psychological and interpersonal problems, to see himself [or herself] in psychological terms, to use or to accept the use of psychological constructs" (Bakeland & Lundwall, 1975, p.756). The concept of psychological mindedness in ACOAs is of interest to the field of counseling psychology as it has long been thought to indicate clients' potential to benefit, particularly maximally benefit, from psychotherapy (Abramowitz & Abramowitz, 1974; Applebaum, 1973; Conte et al., 1990; Conte, Ratto, & Karasu, 1996; Conte, Buckley, Picard, & Karasu, 1995; Hall, 1992). Likewise, psychological mindedness can be thought of as a skill that could help facilitate other forms of resilience or thriving.

Although no significant differences were found between ACOAs and Non-ACOAs on the total Psychological Mindedness Scale (PMS; Conte, & Ratto, 1997), significant differences were found between ACOAs and Non-ACOAs on the *Belief* subscale, with ACOAs scoring higher, indicating a higher endorsement of the belief in the benefits of discussing one's problems. Significant differences were not found on the other four subscales. In addition to the one significant finding of ACOAs scoring higher than non-ACOAs, it is important to stress that ACOAs did not perform significantly worse than

non-ACOAs on any of the subscales, suggesting resilience in the other areas and thriving in the belief of the benefit of discussing concerns. Prior to this study, only two studies assessed dimensions of psychological mindedness and no research had assessed the broad concept of psychological mindedness in ACOAs. Consistent with the findings in this study, Martin (1995), studying a community population, failed to differentiate ACOAs and non-ACOAs on measures of openness to feelings and Sher and colleagues (1991), studying college freshmen, failed to differentiate ACOAs from non-ACOAs on abilities to describe emotions (an aspect of psychological mindedness not assessed in this study). Thus, prior findings seem quite consistent with this study and suggest that perhaps researchers should further examine psychological mindedness in college and community ACOAs as the existing research indicates that ACOAs are, on some dimensions, as psychologically minded as non-ACOAs, and more psychological minded in regards to the benefit of talking about problems.

Higher endorsement of the *Belief* subscale has important implications for clinical work. This bodes well for clinicians working with this population as it suggests that ACOAs may be more amenable to psychotherapy because they believe that it is beneficial to discuss their problems. This means that this group could be more likely to seek help via talk therapy because they believe that talking about their concerns will be helpful.

The belief in the benefit of talking about problems is a belief that will also serve ACOAs well in settings outside of therapy. One of the primary goals therapists often have when helping clients deal with relationship concerns is convincing them of the benefit of communication with significant others. Because ACOAs already believe in this

more strongly than other college students, it may be that they already employ this sort of communication in their lives outside of therapy. It remains for future research to determine whether this is the case: Do college ACOAs actually get more social support from their friends and family than other college students, because of their higher belief in the value of such conversations? If so, this could help explain the resiliency and thriving evident in some college ACOAs, since social support (and effective use of that support) can benefit personal functioning and development. For example, if college ACOAs believe that talking about their concerns are more helpful, it is logical to assume that they will try to talk about their problems with the people in their life, such as bosses, co-workers, friends, and partners. This could lead to more satisfying relationships and careers.

Taking it one step further, perhaps ACOAs who are able to discuss their feelings and concerns with others might be less likely to use other means to cope, such as drug or alcohol abuse, or other lower-functioning approaches. Although it remains for future researchers to assess whether drug and alcohol abuse is lower among college ACOAs, the idea of talking about problems rather than using other lower-functioning approaches does dovetail nicely with the other significant finding in this study: finding that the ACOAs self-reported lower use of immature defense mechanisms. It may be that having a stronger belief in the higher-level coping strategy of talking about problems (whether with friends, family, or therapists) may free college ACOAs from needing to rely on less mature defense mechanisms. This is only speculation, but the dovetailing of these findings is enticing.

In addition to discussing the possible benefits of ACOAs' higher endorsement of the *Belief* subscale, it is also interesting to consider *why* ACOAs might have exhibited this difference: where might this difference come from, developmentally? It might be that college ACOAs believe in talking out their problems more because they have done so more (because of having extra issues to work through, as ACOAs) and have learned that it works. This might be because they have done this with friends, suggesting good relationships and good coping skills, or possibly because they have been in therapy more, and have found that it works for them there. It would be interesting for future researches to conduct qualitative research to try to get at the source of college ACOAs' belief in the benefit of discussing one's concerns.

An alternate explanation for the higher belief in talking things through among college ACOAs involves the possibility that this trait is a variable that helps enable resilience in ACOAs. In this scenario, this belief in talking things through is no more common among ACOAs in general, but a higher-than-normal belief in talking out problems was a pre-existing difference that helped these *particular* ACOAs make it into the population studied here. College ACOAs might have used their belief in talking about things as way to help them cope and this might have helped them succeed enough to make it to college despite other disadvantages they may have faced due to their ACOA status. Thus certain strengths of psychological mindedness might act as a sorting process, where those who are better at it are more likely to succeed and enter the elite group studied here, while the ACOAs without this trait might not make it as far as college. Psychological mindedness might be a less necessary skill for non-ACOAs to have in order to succeed, since they

have fewer hurdles to overcome to succeed, thus there might be more non-ACOAs making it to college without this particular strength.

In addition to considering the source of this difference, future research should also determine whether there is a corresponding difference in behavior, that is, whether college ACOAs have acted on their belief (by seeking help from friends or therapists) more than their non-ACOA counterparts.

It should be noted that although the Psychological Mindedness total scores did not significantly differ, the difference was approaching significance with a .09 p-value trending in the direction of a higher level of psychological mindedness for ACOAs. This has implications for future research, suggesting that perhaps enough power was not achieved with the existing sample size (of only 37 ACOAs) and that with a larger sample significant differences might be found. Likewise, although not significant, ACOA means on the other subscales of the PMS, aside from the Interest subscale, also trended toward higher scores for ACOAs further suggesting the possibility that thriving on overall psychological mindedness may exist among college ACOAs, and might become evident statistically if studied with a larger sample.

Thriving

Finally, thriving was not significantly different for Non-ACOAs and ACOAs on the entire PMS score nor any of the five subscales, although the PMS total score was approaching significance (p-value of .14, p=.09 on one-tailed test). High functioning was evident at different percentages for ACOAs and Non-ACOAs on the PMS, with a trend indicating more high functioning ACOAs in all subscales except the *Willing* subscale. In this study, 24% of ACOAs were high functioners (one standard deviation above the grand

mean on PMS total score) whereas only 14% of non-ACOAs were high functioners on the PMS total score. Although this finding was not statistically significant, had it been this would have been clinically significant. Twenty-four percent of the ACOA sample (n=37) is about 9 participants whereas 14% (the percentage of non-ACOAs thriving) would be about 5 participants. Although this is only 4 more participants, suggesting that it could have been due to chance (thus, the lack of significance), it is nearly double (so, if real, is important). This finding suggests that perhaps with more power significant differences might have been found in the direction of higher percentage of high-functioners on psychological mindedness among ACOAs. The fact that 4 of the 5 subscales trended in this direction as well is some reassurance that this trend of ACOAs scoring higher might be a real difference. It remains for future research to determine whether this trend is indicative of a real difference.

If this difference does turn out to be real, it will be an important finding as it would indicate thriving in the college ACOA population. As describe in the introduction and literature review, this would drastically change the way researchers and clinicians look at college ACOAs and possibly the way they view other survivors of long term trauma. These findings could suggest that not only does a long term trauma such as familial alcoholism not necessarily have long term detrimental effects, but it may allow a subset of people the opportunity to develop more advanced skills and strengths than those who never suffered the trauma. This could have a great impact on clinical work in general, and could help shift toward a more strength based positive psychology with survivors of long term traumas. Due to this exciting prospect and the importance of this potential finding, I strongly encourage others to pursue this line of study.

It is also important to note that one of the most important implications of these findings it that ACOAs were doing at least as well as non-ACOAs on their overall psychological mindedness. This is good news for ACOAs as it suggests that there are resilient and have made it to college without any deficits in this area. This has the important clinical implication that ACOAs are doing as well as their college peers, despite their experience in an alcoholic family. They are already a resilient group who is capable of surviving stressors. This could suggest that they will be just as prepared to deal with the many psychological stressors of college life, relationships, and career as college non-ACOAs.

Findings and Implications for the Defense Style Questionnaire-40

Mean Differences

Defense mechanisms are defined by the American Psychiatric Association "automatic psychological processes that protect the individual against anxiety and from the awareness of internal or external dangers or stressors" (American Psychiatric Association, 2000, p. 807). They are further defined as mediating "the individual's reaction to emotional conflicts and to internal and external stressors" (American Psychiatric Association, 2000, p. 807). Significant differences were found on the *Immature* factor of the Defense Style Questionnaire-40 (DSQ-40; Andrews et al.,1993), with ACOAs showing a lower endorsement of the *Immature* defense mechanism styles, indicating less reliance on immature defense mechanisms than non-ACOAs. No significant differences were found between ACOAs and non-ACOAs on the *Mature* or *Neurotic* factors. This finding suggests that ACOAs seem to be functioning as well as, if not better than, non-ACOAs when it comes to defense mechanism style. This suggests

that ACOAs are coping as well as non-ACOAs, if not better, since defense mechanisms are instrumental ways in which people cope. This could be indicative of the resiliency of ACOAs.

The immature defense mechanisms examined by the *Immature* factor of the DSQ-40 are: projection, passive aggression, acting out, isolation, devaluation, autistic fantasy, denial, displacement, dissociation, splitting, rationalization, and somatization. Previous research has indirectly examined defense mechanisms in ACOAs or has examined a single defense mechanism. Previous research failed to find differences between ACOAs and non-ACOAs on a number of factors related to immature defense mechanisms such as denial of feelings in a community religious sample (Wilson, 1989), somatization and somatoform disorders (e.g., Benda & DiBlasio, 1991 (clinical ACOAs); Hill et al., 1992 (community and clinical); Hinkin & Kahn, 1995 (VA wives living in community) suggesting a widespread resilience among ACOAs in all settings with regard to at least some of these defense mechanisms.

On the other hand, the non-significant differences in this study on other types of defense mechanisms (mature and neurotic) seem to contrast with earlier research. Sher and colleagues (1991) found that college ACOAs showed greater levels of neuroticism on personality assessments than non-ACOAs which contrasts with the failure of this study to differentiate college ACOAs and non-ACOAs on neurotic defenses. Other researchers have found higher use of positive coping skills, especially humor, among ACOAs, which was not borne out by this research. Werner and Smith (1992) found a greater use of positive coping skills, such as humor, to elicit positive emotions among community ACOAs than among their non-ACOA counterparts. Other research found greater use of

humor to cope among college ACOAs (Segrin & Menees, 1996). In contrast, the current study found an equal use of mature defense mechanisms (which included humor), with equal percentages of high functioning ACOAs and non-ACOAs, and thus may be due to a lack of power rather than a conflicting finding.

It was predicted that, since it is likely that higher-functioning defenses are related to thriving, that ACOAs would report more mature defense mechanism and would not differ in their utilization of immature and neurotic defense mechanisms. In retrospect it makes sense that adaptive coping would not only be related to higher adaptive defense mechanisms, but also an underutilization of immature defenses. The latter was found.

The fact that more non-ACOAs than ACOAs endorse immature defense mechanisms suggests that college ACOAs are actually functioning somewhat higher than their non-ACOA counterparts. This also runs counter to early clinical and self help ACOA literature that suggests that ACOAs do not develop healthy coping skills. Further, this has implications for psychotherapy with ACOAs, suggesting that clinicians do not need to make negative assumptions about ACOAs' coping skills, and in fact will know that research suggests that ACOAs are using immature defenses less than non-ACOAs. It could be empowering for clinicians to share with ACOA college students that they may be just as equipped as non-ACOAs, or more so, to cope with their struggles.

The lesser utilization of immature defenses by college ACOAs also has important implications in other aspects of their lives, such as relationships and career. As with psychological mindedness, staying away form immature defenses should aid college ACOAs in their relationships. Perhaps they will be less likely to rely on defense such as projection, passive aggression, acting out, isolation, devaluation, denial, displacement,

dissociation, splitting, and rationalization in their personal relationships. It seems that this would be beneficial to interpersonal relationships across situations and could contribute to better communication, which we already know ACOAs believe in the benefit of. It could also contribute to better coping skills in work settings, where perhaps ACOAs will rely on mature defenses and their belief in talking things through instead of coping through immature methods such as somatization.

Thriving

Finally, rates of high functioning (one standard deviation above the grand mean) did not significantly differ for ACOAs and Non-ACOAs on the maturity subscale of the DSQ. Thus, this measure of thriving did not appear among this ACOA sample. However, the fact that these college ACOAs that they used positive defenses just as much as non-ACOAs and used immature defenses less than non-ACOAs, suggests that ACOAs are actually doing better on defense mechanism style than non-ACOAs. This, in itself, is a marker of some sort of thriving, although not the predicted finding.

It is also interesting to examine the reliability of the three factors of the instrument used to measure defense mechanisms, as that may have impacted the results. Internal consistency reliabilities (Cronbach's alphas) for the three factors of the DSQ-40 for the entire normative sample of outpatient clients and non-client participants are *Mature* (.68), *Neurotic* (.58), and *Immature* (.80) (Andrews, Singh, & Bond, 1993). Clearly, the *Immature* factor has the best internal consistency of all of the scales, possibly due to the fact that it assesses triple the number of defenses as each of the other scales. Another marker of reliability, test-retest correlations at four weeks for non-client participants was more similar across factors, *Mature* (.75), *Neurotic* (.78), and *Immature* (.85), but the

Immature factor again has the highest reliability (Andrews et al., 1993). However, the trends of the other scales show that ACOAs trended higher on the *Mature* factor and lower on the *Neurotic* factor, which would reinforce the finding that they use *Immature* defenses less than non-ACOAs. Perhaps the poor reliability of the *Neurotic* and *Mature* scales subscales, as well as the sample size, might have prevented enough power to detect significant differences.

In summary, college ACOAs are utilizing less immature defense than non-ACOA college students and are utilizing neurotic and mature defenses at the same level. This is contrary to much of the existing postulations that ACOAs are damaged, pathological, or not as equipped to cope.

Homogeneity of Variance for Psychological Mindedness and Defense Mechanism Style

Levene's test of homogeneity of variances was used to assess whether the standard deviations of ACOAs and non-ACOAs differed on any of the variables studied. The *Belief* subscale of the PMS was the only variable to violate Levene's Test of Homogeneity of Variances, indicating greater distribution for non-ACOAs-- a finding opposite than was predicted. The other scales of the PMS and the three factors of the DSQ-40, although not in violation of homogeneity of variance, also trended in the direction of higher standard deviations, or more variability, for non-ACOAs, also opposite the direction predicted. In retrospect, these findings are perhaps not surprising. It is likely that finding less variance for the other variables is due to the commonalities of the ACOA sample. The likely reason for the trends toward less variability for ACOAs is that any time you have a subgroup that has something in common (related to a variable of interest), it is likely you are going to tend to have less variability in the subgroup because

the group is similar in some way. The more a group has in common (assuming what they have in common has any effect on the variable of interest), the more their results should bunch together more than the more varied larger population. So, in the absence of my other predicted reason for expecting the opposite, what I found is what would be expected statistically.

Wider variability was predicted because it was expected that lower functioners damaged by being an ACOA would still be in the college population, but that higher functioners, due to thriving, would also be there. In retrospect, this probably was unfounded since, within the college population, the lower functioning ACOAs are likely not there (because they did not make it to college) and so that source of additional variability is not present in this college sample. It may be that wider variability might be found in community and clinical samples, but not in college samples. Future research could assess variability among the clinical and community samples to determine if greater variability exists and if thriving exists.

It is also important to examine why the *Belief* subscale yielded less variance for ACOAs, in the opposite direction of the prediction. The first thing to keep in mind is that ACOAs overall had a higher endorsement of the *Belief* subscale, indicating that the group was in some way performing better on this measure than non-ACOAs. Thus the lower variability could be a ceiling effect. The parallel findings between significant differences in means and significant differences in corresponding standard deviations, and also between non-significant trends in means and the corresponding non-significant differences in standard deviations, is another argument for a possible ceiling-effect explanation: it seems that the more the ACOA group scores higher than the larger group,

the more likely they show a smaller standard deviation--a pattern one would expect if ceiling effects are in operation.

Limitations

This study has a number of limitations. The methodology of this study has a number of limitations that may have impacted the reliability of the findings. First, this sample was collected at a single southeastern university and may not be representative of the general college population. Second, a non-randomized approach was used to attain the sample. I was only allowed to collect data after the class session had ended for the day, requiring participants to give up twenty minutes of their own time to complete the survey. This may have affected the sample as participants self-selected to stay. It is possible that students who volunteer for such a study are not representative of all students (whether ACOA or non-ACOA), although there is no reason to assume bias resulting from volunteer participants would differentially affect one group or the other. Additionally, this survey was offered to students in summer courses, which are smaller and might draw a certain type of student, perhaps making this sample different than a sample drawn from a fall or spring semester. However, again, there is no reason to suppose such a result would differentially affect ACOAs, and thus does not invalidate the findings. Finally, the sample is this study is not very diverse and is not representative of general population of college students. However, the sample is very similar to the demographic characteristics of the overall student body at the university (Auburn University Office of Institutional Research and Assessment, 2006).

There are further methodological limitations with the instrumentation used in this study. First, all of the instruments used in this study were self-report. Second, the

categorization used to remove participants who self-identified as having one of three possibly dysfunctional family backgrounds (physical abuse perpetrated by a parent, sexual abuse perpetrated by a parent, or parental severe mental illness) was designed by the researcher to be a quick and simple way to remove participants with one of three possibly dysfunctional family backgrounds (physical abuse perpetrated by a parent, sexual abuse perpetrated by a parent, or parental severe mental illness) from the study but was not a full ACDF instrument. It would have been ideal to use one of the many full-length validated ACDF instruments available but it was felt that participants would not complete a longer survey using the current methodology. However, future researchers could use a more stringent measure of ACDF status as well as compare findings among ACOAs, non-ACOAs, and ACDFs. Finally, the DSQ-40 has a number of limitations. Although the DSQ-40 purports to assess individual defense mechanisms, it does not really allow you to examine individual defense mechanisms since it only assesses each defense with two items. Additionally, reliability is not ideal for Mature style (.68) and Neurotic style (.58). These are the factors that no significant differences were found between ACOAs and non-ACOAs. It is possible that the low reliability introduced high error, yielding low power, and resulting in non-significant findings.

Additionally, we were statistically limited in our analysis of thriving on psychological mindedness and defense mechanism style. We chose to classify individuals as thriving on a measure using a cut-off score of one total-participant-group standard deviation above the total-participant-group mean. This cut-off score was selected by the researcher to capture a group of participants who were performing above the mean on the measure. However, in some ways this cut-off score is arbitrary and cannot truly be

representative of thriving. However an instrument directly assessing thriving in a population likes this is not available at this time.

It is also important to examine the possibility that findings in the study could be due to chance due to the large number of statistical analyses performed. Nine ANOVAs and nine Chi Squares, each at the $\underline{p} < .05$ level, were performed to examine group mean differences and 2 significant findings were found. We would expect to get one significant finding by chance. Thus these findings should be treated with some caution until replicated. On the other hand, the fact that the Belief subscale finding came in the context of similar trends on the other subscales offers some reassurance that this finding at least is indicative of a real difference. Finally, 9 Levene's tests of homogeneity of variance were performed and one significant finding was found in the direction opposite of the prediction, with greater variability for non-ACOAs. This might suggest that the finding is due to chance (since 9 tests mean a nearly 50/50 chance of one chance finding), however, the one significant finding is in the context of a consistent trend in the same direction (of smaller SDs for ACOAs). This suggests that is not likely that this finding was due to chance.

Finally, the most prominent limitation of this study is the low sample size of ACOAs, resulting in lower power. Of the 366 participants 37 were classified as ACOAs (12%) and 286 participants were classified as Non-ACOAS (88 %), leaving a final sample size of 323. The percentage of ACOAs in this sample is similar to the vast majority if the ACOA research, however, the fact that only 12% of the participants sampled are ACOAs makes it difficult to survey enough participants to achieve high power. Limitations on power due to sample size are primarily determined by the size of

the smaller sample, in this case an n of 37. The resultant lack of power can only detect moderate differences, not small differences. This limitation is particularly important to keep in mind in regards to the non-significant trends related to thriving.

Recommendations for Future Research

It is recommended that future research address the limitations of this study as well as expand on the findings of this research. In order to address limitations of this study, it would be ideal to used a randomized approach to collect data from a bigger, more diverse and representative sample. It is further recommended that future research utilize an established ACDF instrument that could be used to fully categorize individuals as ACDFs in order to compare ACDFs, ACOAs, and non-ACOAs. Likewise, future researchers could develop and use a thriving instrument that could compare thriving on a variety of skills and characteristics across groups. Existing thriving scales only assess the thriving of one group after a particular isolated event, as opposed to comparing different subgroups' thriving in relation to long term trauma, such as growing up in an alcoholic or dysfunctional family. Future researchers could also develop and use a more comprehensive instrument assessing defense mechanism style to determine differences in use of specific defenses.

Future research could also expand on the findings of this study and explore questions that came out of these results. Researchers could assess why college ACOAs have a higher belief in the benefit of discussing their problems and whether they actually do discuss their problems more than non-ACOAs. Further, researchers could examine the variables assessed in this study, psychological mindedness and defense mechanism style, as well as others in clinical, community, and college ACOA populations to determine

whether there are real differences among this group and whether thriving is more or less evident in the different groups. Researchers could also determine how ACOAs may benefit from their use of less immature defense mechanisms. Variable such as quality of romantic relationships and level of social support are just two examples of variables that might be worth exploring in future research, given the lower use of immature defense mechanisms among college ACOAs. Finally, researchers could examine how ACOAs' belief in the benefit of talking about problems and their underutilization of immature defense mechanisms could contribute to other aspects of their lives, such as relationships and career choices. Perhaps ACOAs are drawn to careers and relationships that allow them to use these skills.

Conclusion

Overall, the findings of this study are good news for college ACOAs, therapists, and researchers. Previous to this study, the vast majority of research (e.g., Harter 2000) focused on adverse outcomes associated with growing up in an alcoholic family. However, this study suggests that college ACOAs are doing as well as or better than non-ACOAs in that they are more likely to believe in the benefit of discussing their concerns and are likely to use fewer immature defense mechanisms. This suggests that the college ACOA population may be quite different from clinical and community ACOAs. It is hoped that this study will lead to further research that can expand on and replicate these findings, leading to greater clinical insight and more appropriate psychotherapy interventions with college ACOA clients.

REFERENCES

Abraido-Lanza, A.F., Guier, C., & Colon, R.M. (1998). Psychological thriving among Latinas with chronic illness. *Journal of Social Issues, 54,* 405-424.

Abramowitz, S.L., & Abramowitz, C.V. (1974). Psychological-mindedness and benefits from insight-oriented group therapy. *Archives of General Psychiatry, 30,* 610-615.

Aldwin, C.M., Levenson, M.R., & Spiro, A. (1994). Vulnerability and resilience to combat exposure: Can stress have life-long effects? *Psychology and Aging, 9,* 34-44.

Alterman, A.I., Searles, J.S., & Hall, J.G. (1989). Failure to find differences in drinking behaviors as a function of familial risk for alcoholism: A replication. *Journal of Abnormal Psychology, 98,* 50-53.

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision) (DSM-IV-TR). Washington, DC: Author.

Andreasen, N.C., Endicott, J., Spitzer, R.L., & Winkour, G. (1977). The family history method using diagnostic criteria: reliability and validity. *Archives of General Psychiatry, 43,* 1229-1235.

Andrews, G., Singh, M., & Bond, M. (1993). The defense style questionnaire. *The Journal of Nervous and Mental Disease, 181 (4),* 246-256.

Applebaum, S.A. (1973). Psychological-mindedness: Word, concept, and essence. *International Journal of Psychoanalysis, 54,* 35-46.

Armeli, S., Gunthert, K.C., & Cohen, L.H. (2001). Stressor appraisal, coping, and post-event outcomes: The dimensionality and antecedents of stress-related growth. *Journal of Social and Clinical Psychology, 20,* 366-395.

Ashby, J.S., & Mangine, J.D. (1995). An investigation of perfectionism in a university sample of adult children of alcoholics, *Journal of College Student Development, 36,* 452-455.

Auburn University Office of Institutional Research and Assessment. *2005-06 First-time Freshmen Yield Report*. Retrieved July 23, 2006 from http://oira.auburn.edu/factbook/enrollment/newstudents/ftfyr.aspx.

Bakeland, F., & Lundwall, L. (1975). Dropping out of treatment: A critical review. *Psychological Bulletin, 82(5),* 331-351.

Barrera, M., Li, S.A., & Chassin, L. (1995). Effects of parental alcoholism and life stress on Hispanic and non-Hispanic Caucasian adolescents: A prospective study. *American Journal of Community Psychology, 23(4),* 1-29.

Bartone, P.T., Ursano, R.J., Wright, K.M., & Ingraham, L.H. (1989). The impact of a military air disaster on the health of assistance workers: A prospective study. *Journal of Nervous and Mental Disease, 177,* 317-328.

Basic Behavioral Science Task Force of the National Advisory to Mental Health Council. (1996). Basic behavioral science research for mental health: Vulnerability and resilience. *American Psychologist, 51 (1)*, 22-28.

Beaudoin, C.M., Murray, R.P., Bond, J., & Barnes, G.E. (1997). Personality characteristics of depressed or alcoholic adult children of alcoholics. *Personality and Individual Differences, 92,* 559-567.

Beesley, D., & Stoltenberg, C.D. (2002). Control, attachment style, and relationship satisfaction among adult children of alcoholics. *Journal of Mental Health Counseling, 24 (4),* 281-298.

Belliveau, J.M., & Stoppard, J.M. (1995). Parental alcohol abuse and gender as predictors of psychopathology in adult children of alcoholics. *Addictive Behaviors, 20,* 619-625.

Benda, B. B., & DiBlasio, F. A. (1991). A comparison of alcoholic and other adult children of alcoholics to other alcoholics on the BSI. *Alcoholism Treatment Quarterly, 8*, 81–93.

Bennett, L.A., Wolin, S.J., & Reiss, D. (1988). Cognitive, behavioral, and emotional problems among school age children of alcoholic parents. *American Journal of Psychiatry, 145,*185-190.

Berkowitz, A., & Perkins, H. (1988). Personality characteristics of children of alcoholics. *Journal of Consulting and Clinical Psychology, 56,* 206-209.

Biek, J. (1981). Screening test for identifying adolescents adversely affected by a parental drinking problem. *Journal of Adolescent Health Care, 2,* 107-113.

Beitel, M., & Cecero, J.J. (2003). Predicting psychological mindedness from personality style and attachment security. *Journal of Clinical Psychology, 59,* 1-10.

Black, C. (1982). *It will never happen to me.* Denver, CO: MAC Publishing.

Block, J., & Kremen, A.M. (1996). IQ and ego-resiliency: Conceptual and empirical findings in the origination of behavior. In W.A. Collings (Ed.), *The Minnesota Symposia on Child Psychology* (Vol. 13, pp. 39-101). Hillsdale, NJ: Erlbaum.

Bonanno, G.A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events. *American Psychologist, 59(1)*, 20-28.

Boye-Beaman, J., Leonard, K. E., & Senchak, M. (1991). Assortative mating, relationship development, and intimacy among offspring of alcoholics. *Family Dynamics of Addictions Quarterly, 1*, 20–33.

Bradley, L.G., & Schneider, H.G. (1990). Interpersonal trust, self-disclosure, and control in adult children of alcoholics. *Psychological Reports, 67,* 731-737.

Brennan, K. A., Shaver, P. R., & Tobey, A. E. (1991). Attachment styles, gender, and parental problem drinking. *Journal of Social and Personal Relationships, 8*, 451–466.

Burk, J.P., & Sher, K.J. (1988). The "forgotten children" revisited: Neglected areas of COA research. *Clinical Psychology Review, 8*, 285-302.

Bush, S.I., Ballard, M.E., & Fremouw, W. (1995). Attributional style, depressive features, and self-esteem: Adult children of alcoholic and non-alcoholic parents. *Journal of Youth and Adolescence, 24*, 177-185.

Calhoun, L.G., Cann, A., Tedeschi, R.G., & McMillan, J. (2000). A correlational test of the relationship between posttraumatic growth, religion, and cognitive processing. *Journal of Traumatic Stress, 13*, 521-527.

Cavell, T.A., Jones, D.C., Runyan, R.D., Constantin-Page, L.P., & Velasquez, J.M. (1993). Perceptions of attachment and the adjustment of adolescents with alcoholic fathers. *Journal of Family Psychology, 7 (2),* 204-212.

Cermak, T. (1986). *Diagnosing and treating co-dependence.* Minneapolis, MN: Johnson Institute Books.

Charland, H., & Cote, H. (1998). The Children of Alcoholics Screening Test (CAST): Test-retest reliability and concordance validity. *Journal of Clinical Psychology, 45 (7),* 995-1003.

Chassin, L., Rogosch, F., & Barrera, M. (1991). Substance use and symptomatology among adolescent children of alcoholics. *Journal of Abnormal Psychology, 100 (4),* 449-463.

Churchill, J.C., Broida, J.P., & Nicholson, N.L. (1990). Locus of control and self-esteem of adult children of alcoholics. *Journal of Studies on Alcohol, 51,* 373-376.

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112 (1),* 155-159.

Coleman, F.L., & Frick, P.J. (1994). MMPI-2 profiles of adult children of alcoholics. *Journal of Clinical Psychology, 50,* 446-447.

Collins, R.L., Taylor, S.E., & Skokan, L.A. (1990). A better world or a shattered vision? Changes in life perspectives following victimization. *Social Cognition, 8,* 263-285.

Conte, H.R., Buckley, P., Picard, S., & Karasu, T.B. (1995). Relationships between psychological mindedness and personality traits and ego functioning: Validity studies. *Comprehensive Psychiatry, 36 (1),* 11-17.

Conte, H.R., & Ratto, R.R. (1997). Self-report measures of psychological mindedness. In M. McCallum & W.E. Piper (Eds.), *Psychological Mindedness: A contemporary understanding* (pp.1-26). Mahwah, NJ: Lawrence Erlbaum.

Conte, H.R., Ratto, R., & Karasu, T.B. (1996). The Psychological Mindedness Scale: Factor structure and relationship to outcome of psychotherapy. *Journal of Psychotherapy Research and Practice, 5,* 250-259.

Cordove, M.J., Cunningham, L.L.C., Carlson, C.R., & Andrykowski, M. (2001). Posttraumatic growth following breast cancer: A controlled comparison study. *Health Psychology, 20,* 176-185.

Curbow, B., Somerfield, R., Baker, F., Wingard, J.R., & Legro, M.W. (1993). Personal changes, dispositional optimism, and psychological adjustment to bone marrow transplantation. *Journal of Behavioral Medicine, 16,* 423-443.

Currier, K.D., & Aponte, J.F. (1991). Sexual dysfunction in female adult children of alcoholics. *International Journal of Addictions,* 195-201.

Demos, E.V. (1989). Resiliency in infancy. In T.F. Dugan & R. Cole (Eds.), *The child of our times: Studies in the development of resiliency* (pp.3-22). Philadelphia: Brunner/Mazel.

Devor, E.J. (1994). A developmental-genetic model of alcoholism: Implications for genetic research. *Journal of Consulting and Clinical Psychology, 62,* 1108-1115.

Dodd, D.T., & Roberts, R.L. (1994). Differences among adult COAs and adult non-COAs on levels of self-esteem, depression, and anxiety. *Journal of Addictions and Offender Counseling, 14,* 49-56.

Drozd, L.M., & Dalenberg, C.J. (1994). The self as mediator in the psychopathology of female children of alcoholics. *International Journal of Addiction, 29*, 1787-1800.

Domenico, D., & Windle, M. (1993). Intrapersonal and interpersonal functioning among middle-aged female adult children of alcoholics. *Journal of Consulting and Clinical Psychology, 61(4),* 659-666.

El-Guebaly, N., Staley, D., Leckie, A., & Koensgen, S. (1992). Adult children of alcoholics in treatment programs for anxiety disorders and substance abuse. *Canadian Journal of Psychiatry, 37,* 544-548.

El-Guebaly, N., Staley, D., Rockman, G., Leckie, A., Barkman, K., O-Riordan, J., & Koensgen, S. (1991). The adult children of alcoholics in a psychiatric population. *American Journal of Drug and Alcohol Abuse, 17*, 215-226.

El-Guebaly, N., West, M., Maticka-Tyndale, E., & Pool, M. (1993). Attachment among adult children of alcoholics. *Addiction, 88*, 1405–1411.

El-Sheikh, M., & Buckhalt, J.A. (2003). Parental problem drinking and children's adjustment: Attachment and family functioning as moderators and mediators of risk. *Journal of Family Psychology 17 (4),* 510-520.

Evers, A.W.M., Kraaimaat, F.W., van Lankveld, W., Jongen, P.J.H., Jacobs, J.W.G., & Bijlsma, J.W.J. (2001). Beyond unfavourable thinking: The Illness Cognition Questionnaire for chronic diseases. *Journal of Consulting and Clinical Psychology, 69,* 1026-1036.

Fischer, K., & Ingrassia, T. (1993). A comparison of university resident assistants with non-resident assistants regarding percentages who are children of alcoholics. *Journal of College University Housing, 23,* 21-27.

Fisher, G. L., Jenkins, S. J., Harrison, T. C., & Jesch, K. (1992). Characteristics of adult children of alcoholics. *Journal of Substance Abuse, 4*, 27–34.

Fischer, K.A., Kittleson, M., Ogletree, R., Welshimer, K., Woehlke, P., & Benshoff, J. (2000). The relationship of parental alcoholism and family dysfunction among college students. *Journal of American College Health, 48*(4)*,* 151- 157.

Fontana, A., & Rosenheck, R. (1998). Psychological benefits and liabilities of traumatic exposure in the war zone. *Journal of Traumatic Stress, 11,* 482-505.

Fox, K.M., & Gilbert, B.O. (1994). The interpersonal and psychological functioning of women who experienced childhood physical abuse, incest, and parental alcoholism. *Child Abuse and Neglect, 18,* 849-858.

Fulton, A.I., & Yates, W.R. (1990). Adult children of alcoholics: A valid diagnostic group? *Journal of Nervous and Mental Disease, 178,* 505-508.

Garbarino, C., & Strange, C. (1993). College adjustment and family environments of students reporting parental alcohol problems. *Journal of College Student Development, 34*, 261–266.

Goglia, L. R., Jurkovic, G. J., Burt, A. M., & Burge-Callaway, K. G. (1992). Generational boundary distortions by adult children of alcoholics: Child-as-parent and child-as-mate. *American Journal of Family Therapy, 20*, 291–299.

Gotham, G. J., & Sher, K. J. (1996). Do codependent traits involve more than basic dimensions of personality and psychopathology? *Journal of Studies on Alcohol, 57*, 34–39.

Guinta, C. T., & Compas, B. E. (1994). Adult daughters of alcoholics: Are they unique? *Journal of Studies on Alcohol, 55*, 600–606.

Hadley, J.A., Halloway, E.L., & Maillinckrodt, B. (1993). Common aspects of object relations and self-representations in offspring from disparate dysfunctional families. *Journal of Counseling Psychology, 40,* 348-356.

Hall, A. (1995). Adult children of alcoholics: Are they at greater risk for negative health behaviors? *Journal of Health Education, 26,* 232-239.

Hall, A. (1997). Coping resources and self-perceived well-being of college students who reported a parental drinking problem. *Journal of American College Health, 45 (14),* 159-167.

Hall, C.W., & Webster, R.E. (2002). Traumatic symptomatology characteristics of adult children of alcoholics. *Journal of Drug Education, 32 (3),* 195-211.

Hall, J.A. (1992). Psychological-mindedness: A conceptual model. *American Journal of Psychotherapy, 46(1),* 131-140.

Hardwick, C. J., Hansen, N. D., & Bairnsfather, L. (1995). Are adult children of alcoholics unique? A study of object relations and reality testing. *International Journal of the Addictions, 30*, 525–539.

Harman, M.J., & Arbona, C. (1991). Psychological adjustment among Hispanic adult children of alcoholics: An exploratory study. *Hispanic Journal of Behavioral Sciences, 13*, 105-112.

Harman, M.J., Armsworth, M.W., Hwang, C., Vincent, K.R., & Preston, M.A. (1995). Personality adjustment in college students with a parent perceived as alcoholic or non-alcoholic. *Journal of Counseling and Development, 73,* 459-462.

Harrington, C.M., & Metzler, A.E. (1997). Are adult children of dysfunctional families with alcoholism different from adult children of dysfunctional families without

alcoholism? A look at committed, intimate relationships. *Journal of Counseling Psychology, 44 (1)*, 102-107.

Harter, S.L. (2000). Psychological adjustment of adult children of alcoholics: A review of the recent empirical literature. *Clinical Psychology Review, 20 (3)*, 311-337.

Hawkins, C.A. (1997). Disruption of family rituals as a mediator of the relationship between parental drinking and adult adjustment in offspring. *Addictive Behaviors, 22*, 219-231.

Hemmings, S., & Irwin, H.J. (1993). Tendency toward controlling behavior in adult children of problem drinkers: An experimental study. *Psychological Reports, 72,* 691-700.

Hibbard, S. (1989). Personality and object relational pathology in young adult children of alcoholics. *Psychotherapy,26*, 504–509.

Hibbard, S. (1993). Adult children of alcoholics: Narcissism, shame, and the differential effects of paternal and maternal alcoholism. *Psychiatry, 56,* 153-162.

Hill, E.M., Nord, J.L., & Blow, F.C. (1992). Young-adult children of alcoholic parents: Protective effects of positive family functioning. *British Journal of Addiction, 87,* 1677-1690.

Hill, E.M., Ross, L.T., Mudd, S.A., & Blow, F.C. (1997). Adulthood functioning: The joint effects of parental alcoholism, gender, and childhood socioeconomic status. *Addiction, 92,* 583-596.

Hinkin, C.H., & Kahn, M.W. (1995). Psychological symptomatology in spouses and adult children of alcoholics: An examination of the hypothesized personality

characteristics of codependency. *International Journal of the Addictions, 30*, 843-861.

Hinz, L.D. (1990). College student adult children of alcoholics: Psychological resilience or emotional disturbance. *Journal of Substance Abuse, 2*, 449-457.

Hodgins, D. C., Maticka-Tyndale, E., El-Guebaly, N., & West, M. (1993). The CAST-6: Development of a short screening form of the Children of Alcoholics Screening Test. *Addictive Behaviors*, 18, 337-345.

Jacob, T., Windle, M., Seilhamer, R.A., & Bost, J. (1999). Adult children of alcoholics: Drinking, psychiatric, and psychosocial status. *Psychology of Addictive Behaviors, 13(1),* 3-21.

Jarmas, A.L., & Kazak, A. (1992). Young adult children of alcoholic fathers: Depressive experiences, coping styles, and family systems. *Journal of Consulting and Clinical Psychology, 60 (2),* 244-251.

Jones, J.W. (1981). *The children of alcoholics screening test. (C.A.S.T.)* Chicago: Family Recovery Press.

Jones, D.J., & Zalewski, C. (1994). Shame and depression proneness among female adult children of alcoholics. *International Journal of Addictions, 29*, 1601-1609.

Kashubeck, S. (1994). Adult children of alcoholics and psychological distress. *Journal of Counseling and Development , 72*, 538–543.

Kashubeck, S., & Christensen, S.A. (1992). Differences in distress among adult chidlrend of alcoholics. *Journal of Counseling Psychology, 39,* 356-362.

Kerr, A. S., & Hill, E. W. (1992). An exploratory study comparing ACOAs to non-ACOAs on family of origin relationships. *Australian Journal of Marriage and Family, 13*, 24–33.

Klohnen, E.C. (1996). Conceptual analysis and measurement of the construct of ego-resiliency. *Journal of Personality and Social Psychology, 70,* 1067-1079.

Knoblauch, D.L., & Bowers, N.D. (1989). A therapeutic conceptualization of adult children of alcoholics. *Journal of College Student Psychotherapy, 4,* 37-52.

Knowles, E.E., & Schroeder, D.A. (1990). Personality characteristics of sons of alcohol abusers. *Journal of Studies on Alcohol, 51,* 142-147.

Kobasa, S.C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology, 37,* 1-11.

Kobasa, S.C. (1982). The hardy personality: Toward a social psychology of stress and health. In G.S. Sanders & J. Suls (Eds.), *Social psychology of health and illness* (pp.3-22). Hillsdale, NJ: Erlbaum.

Koenig, H.G., Pargament, K.I., & Nielsen, J. (1998). Religious coping and health status in medically ill hospitalized older adults. *Journal of Nervous and Mental Diseases, 186,* 513-521.

Kumpfer, K.L. (1999). Factors and processes contributing to resilience. The resilience framework. In M.D. Glantz, & J.L. Johnson (Eds.), *Resilience and Development: Positive Life Adaptations.* New York: Kluwer Academic/Plenum Publishers, 179-224.

Kumpfer, K.L., & Bluth, B. (2004). Parent/Child transactional processes predictive of resilience or vulnerability to "substance abuse disorders". *Substance Use & Misuse, 39 (5)*, 671-698.

Landers, D., & Hollingdale, L. (1988). Working with children of alcoholics on a college campus: A rationale and strategies for success. *Journal of College Student Psychotherapy, 2*, 205-222.

Lehman. D.R., Davis, C.G., Delongis, A., Wortman, C., Bluck, S., Mandel, D.R., & Ellard, J.H. (1993). Positive and negative life changes following bereavement and their relations to adjustment. *Journal of Social and Clinical Psychology, 12,* 90-112.

Linley, P.A., & Joseph, S. (2004). Positive change following trauma and adversity: A review. *Journal of Traumatic Stress, 17(1)*, 11-21.

Lipman, A.J. (1990). Causal attributions in offspring of alcoholics. *Alcoholism Treatment Quarterly, 7,* 31-45.

Logue, M.B., Sher, K.J., & Frensch, P.A. (1992). Purported characteristics of adult children of alcoholics: A possible "Barnum Effect." *Professional Psychology: Research and Practice, 23 (3)*, 226-232.

Lotterman, A.C. (1993). *A questionnaire measure of psychological mindedness and he capacity to benefit from psychotherapy*, © unpublished.

Lund, D.A., Caserta, M.S., & Dimond, M. (1993). The course of spousal bereavement in later life. In M.S. Stroebe, W. Stroebe, & R.O. Hanson (Eds.), *Handbook of Bereavement: Theory, research, and intervention* (pp.240-254). Cambridge, UK: Cambridge University Press.

Lyon, D. & Greenberg, J. (1991). Evidence of codependency in women with an alcoholic parent: Helping out Mr. Wrong. *Journal of Personality and Social Psychology, 61 (3)*, 435-439.

Maddi, S.R., & Khoshaba, D.M. (1994). Hardiness and mental health. *Journal of Personality Assessment, 63,* 265-274.

Martin, J. I. (1995). Intimacy, loneliness, and openness to feelings in adult children of alcoholics. *Health and Social Work, 20*, 52–59.

Masten, A.S. (1994). Resilience in individual development: Successful adaptation despite risk and adversity. In MC. Wang & E.W. Gorden. (Eds.) *Educational resilience in inner-city America* (p.3-25). Hillsdale, NJ: Erlbaum.

Masten, A.S., Best, K.M., & Garmezy, N. (1990). Resilience and development: contributions from the study of children who overcome adversity. *Development and Psychopathology, 2,* 425-444.

Masten, A.S., & Coatsworth, J.D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist, 53 (2)*, 205-220.

Matthew, R.J., Wilson, W.H., Blazer, D.G., & George, L.K. (1993). Psychiatric disorders in adult children of alcoholics: Data from the Epidemiological Catchment Area project. *American Journal of Psychiatry, 150,* 793-800.

McCown, W., Carise, D., & Johnson, J. (1991). Trait procrastination in self-described adult children of excessive drinkers: An exploratory study. *Journal of Social Behavior and Personality, 6*, 147–151.

Milam, J.E., Ritt-Olson, A., & Unger, J. (2004). Posttraumatic growth among adolescents. *Journal of Adolescent Research, 19(2)*, 192-204.

Mintz, L.B., Kashubeck, S., & Tracy, L.S. (1995). Relations among parental alcoholism, eating disorders, and substance abuse in nonclinical college women: Additional evidence against the uniformity myth. *Journal of Counseling Psychology, 42,* 65-70.

Mothersead, P.K., Kivlighan, D.M., & Wynkoop, T.F. (1998). Attachment, family dysfunction, parental alcoholism, and interpersonal distress in late adolescence: A structural model. *Journal of Counseling Psychology, 45 (2),* 196-203.

Muris, P., & Merckelbach, H. (1996). The short version of the Defense Style Questionnaire: Factor structure and psychopathological correlates. *Personality and Individual Difference, 20 (1),* 123-126.

Mützell, S. (1994).Coping strategies in children of male alcoholic parents and men from the general population. *Early Child Development and Care, 97,* 73-89.

Neff, J.A. (1994). Adult children of alcoholic or mentally ill parents: Alcohol consumption and psychological distress in a tri-ethnic community sample. *Addictive Behaviors, 19,* 185-197.

Nirenberg, T.D., Liepman, M.R., Begin, A.M., Maisto, S.A., & Liebermann, M.P. (1990). Family history of alcoholism in males: Absence of distinguishing features for treatment matching. *International Journal of Addictions, 25,* 1195-1209.

Ohannessian, C.M., & Hesselbrock, V.M. (1993). The influence of perceived social support on the relationship between family history of alcoholism and drinking behaviors. *Addiction, 88*, 1651-1658.

O'Leary, V.E., & Ickovics, J.R. (1995). Resilience and thriving in response to challenge: An opportunity for a paradigm shift in women's health. *Women's Health: Research on Gender, Behavior, and Policy, 1*, 121-142.

O'Sullivan, C.M. (1991). The relationship between childhood mentor and resiliency in adult children of alcoholics. *Family Dynamics Quarterly, 1(4)*, 46-59.

Palmer, N. (1997). Resilience in adult children of alcoholics: A nonpathalogical approach to social work practice. *Health & Social Work, 22 (3)*, 201-209.

Pargament, K.I., Koenig, H.G., & Perez, L.M. (2000). The many methods of religious coping: Development and initial validation of the RCOPE. *Journal of Clinical Psychology, 56*, 519-543.

Pargament, K.I., Smith, B.W., Koenig, H.G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion, 37*, 710-724.

Park, C.L., Cohen, L.H., & Murch, R. (1996). Assessment and prediction of stress-related growth. *Journal of Personality, 64,* 71-105.

Parker, D.A., & Harford, T.C. (1988). Alcohol-related problems, marital disruption and depressive symptoms among adult children of alcohol abusers in the United States. *Journal of Studies on Alcohol, 49(????),* 306-313.

Pihl, R.O., Peterson, J., & Finn, P. (1990). Inherited predisposition to alcoholism: Characteristics of sons of male alcoholics. *Journal of Abnormal Psychology, 99 (3),* 291-301.

Pilat, J.M., & Jones, J.W. (1984/85). Identification of children of alcoholics: Two empirical studies. *Alcohol Health and Research World,* 27-36.

Plescia-Pikus, M., Long-Suter, E., & Wilson, J.P. (1988). Achievement, well-being, intelligence, and stress reaction in adult children of alcoholics. *Psychological Reports, 62,* 603-609.

Reich, W., Earls, F., Frankel, O., & Shayka, J. J.(1993). Psychopathology in children of alcoholics. *Journal of American Academy Child and Adolescence Psychiatry, 32,* 995-1002.

Roberts, K., & Brent, E. (1982). Physician utilization and illness patterns in families of alcoholics. *Journal of Studies on Alcohol, 43*, 119-128.

Robitschek, C., & Kashubeck, S. (1999). A structural model of parental alcoholism, family functioning, and psychological health: The mediating effects of hardiness and personal growth orientation. *Journal of Counseling Psychology, 46 (2),* 159-172.

Rodney, H.E. (1994). What differentiates ACOAs and non-ACOAs on a black college campus? *Journal of American College Health, 43,* 57-63.

Rodney, H.E., & Rodney, L. (1996). An exploratory study of African American collegiate adult children of alcoholics. *Journal of American College Health, 44,* 267-272.

Roosa, M., Tien, J., Groppenbacher, N., Michaels, M., & Dumka, L. (1993). Mothers' parenting behavior and child mental health in families with a problem drinking parent. *Journal of Marriage and Family, 55(1)*, 107-118.

Rose, S.M., Peabody, C.G., & Stratigeas, B. (1991). Responding to hidden abuse: A role for social work in reforming mental health systems. *Social Work, 36*, 408-413.

Ryff, C.D. (1989). Happiness is everything, or is it? Explorations of the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57,* 1069-1081.

Ryff, C.D., & Keyes, L.M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69,* 719-727.

Schaefer, J.A., & Moos, R.H. (1992). Life crises and personal growth. In B.N. Carpenter (Ed.), *Personal coping: Theory, research, and application.* (pp. 149-170). Westport, CT: Praeger.

Schnurr, P.P., Rosenberg, S.D., & Friedman, M.J. (1993). Change in MMPI scores from college to adulthood as a function of military service. *Journal of Abnormal Psychology, 102,* 288-296.

Segrin, C., & Menees, M. M. (1996). The impact of coping skills and family communication on the social skills of children of alcoholics. *Journal of Studies on Alcohol, 57*, 29–33.

Senchak, M., Leonard, K., Greene, B., & Carroll, A. (1995). Comparisons of adult children of alcoholic, divorced, and control parents in four outcome domains. *Psychology of Addictive Behaviors, 9 (3)*, 147-156.

Shapiro, D.H., Weatherford, V., Kaufman, E., & Broenen, R.E. (1994). A control profile of adult children of alcoholics: A preliminary investigation. *The American Journal of Drug and Alcohol Abuse, 20,* 247-262.

Sher, K.J. (1991). *Children of alcoholics: A critical appraisal of theory and research*. Chicago: University of Chicago Press.

Sher, K.J., & Descunter, C. (1986). Reports of paternal alcoholism: Reliability across siblings. *Addictive Behaviors, 11,* 25-30.

Sher, K.J., Walitzer, K.S., Wood, P.K., & Brent, E.E. (1991). Characteristics of children of alcoholics: Putative factors, substance use and abuse, and psychopathology. *Journal of Abnormal Psychology, 100 (4),* 427-448.

Shill, M.A., & Lumley, M.A. (2002). The psychological mindedness scale: Factor structure, convergent validity and gender in a non-psychiatric sample. *Psychology and Psychotherapy: Theory, Research, and Practice, 75,* 131-150.

Shostrum, E.L. (1974). *Personal Orientation Inventory manual*. San Diego: Educational and Industrial Testing Service.

Sledge, W..H., Boydstun, J.A., & Rabe, A.J. (1980). Self-concept changes related to war captivity. *Archives of General Psychiatry, 37,* 430-443.

Springer, S.A., & Gastfriend, D.R. (1995). A pilot study of factors associated with resilience to substance abuse in adolescent sons of alcoholic fathers. *Journal of Addictive Diseases, 14(2)*, 53-66.

Staley, D., & El-Guebaly, N. (1991). Psychometric evaluation of the Children of Alcholics Screening Test (CAST) in a psychiatric sample. *The International Journal of Addictions*, *26*, 657-668.

Stout, M.L., & Mintz, L.B. (1996). Differences among nonclinical college women with alcoholic mothers, alcoholic fathers, and nonalcoholic parents. *Journal of Counseling Psychology, 43 (4),* 466-472.

Stratton, A., & Penney, A. (1992). High school and college student children of alcoholics: A pilot educational program and assessment of readiness for assistance. *Journal of Alcohol Drug Education, 38(1)*, 100-112.

Tartar, R.E., & Vanyukov, M. (1994). Alcoholism: A developmental disorder. *Journal of Consulting and Clinical Psychology, 62,* 1096-1107.

Tedeschi, R.G., & Calhoun, L.G. (1995). *Trauma and transformation: Growing in the aftermath of suffering.* Thousand Oaks, CA: Sage.

Tedeschi, R.G., & Calhoun, L.G. (1996). The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9,* 455-471.

Tedeschi, R.G., Park, C.L., & Calhoun, L.G. (Eds.). (1998). *Posttraumatic growth: Positive change in the aftermath of crisis*. Mahwah, NJ: Erlbaum.

Tennen, H., Affleck, G., Urrows, S., Higgins, P., & Mendola, R. (1992). Perceiving control, construing benefits, and daily processes in rheumatoid arthritis. *Canadian Journal of Behavioral Science, 24,* 186-203.

Tugade, M.M., & Fredrickson, B.L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology, 86 (2)*, 320-333.

Tweed, S.H., & Ryff, C.D. (1991). Adult children of alcoholics: Profiles of wellness admist distress. *Journal of Studies on Alcohol, 52,* 133-141.

Vaillant, G.E., Bond, M., & Valliant, C.O. (1986). An empirically validated hierarchy of defense mechanisms. *Archives of General Psychiatry, 43,* 786-794.

Velleman, R., & Orford, J. (1999). *Risk and resilience: Adults who were the children of problem drinkers*. Australia: Harwood Academic Publishers.

Veronen, L.J., & Kilpatrick, D.G. (1983). Rape: A precursor of change. In E.J. Callahan & K.A. McCliskey (Eds.), *Life span development psychology: Non-normative events* (pp.167-191). San Diego, CA: Academic Press.

Watt, T.T. (2002). Marital and cohabitating relationships of adult children of alcoholics: Evidence from the National Survey of Family and Households. *Journal of Family Issues, 23 (2),* 246-265.

Webb, W., Post, P., Robinson, B., & Moreland, L. (1992). Self-concept, anxiety and knowledge exhibited by adult children of alcoholics and adult children of nonalcoholics. *Journal of Alcohol and Drug Education, 38,* 106-114.

Werner, E.E. (1986). Resilient offspring of alcoholics: A longitudinal study from birth to age 18. *Journal of Studies on Alcohol, 47,* 34-40.

Werner, L.J., & Broida, J.P. (1991). Adult self-esteem and locus of control as a function of familial alcoholism and dysfunction. *Journal of Studies on Alcohol, 52,* 249-252.

Werner, E., & Johnson, J.L. (2004). The role of caring adults in the lives of children of alcoholics. *Substance Use & Misuse, 39 (5)*, 699-720.

Werner, E., & Smith, R.S. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Ithaca, NY: Cornell University.

Williams, O.B., & Corrigan, P.W. (1992). The differential effects of parental alcoholism and mental illness on their adult children. *Journal of Clinical Psychology, 48*, 406-414.

Wilson, S.D. (1989) Evangelical Christian adult children of alcoholics: A preliminary study. *Journal of Psychology and Theology, 17,* 263-273.

Windle, M., Windle, R.C., Scheidt, D.M., & Miller, G.B. (1995). Physical and sexual abuse and associated mental disorders among alcoholic inpatients. *American Journal of Psychiatry, 152,* 1322-1328.

Woititz, J.G. (1990). *Adult children of alcoholics* (Expanded ed.). Deerfield Beach, FL: Health Communications.

Wolin, S.J., & Wolin, S. (1993). *Bound and determined: Growing up resilient in a troubled family.* New York: Villard.

Wright, D.M., & Heppner, P.P. (1991).Coping among nonclinical college age children of alcoholics. *Journal of Counseling Psychology, 38,* 465-472.

Wright, D.M., & Heppner, P.P. (1993). Examining the well-being of nonclinical college students: Is knowledge of the presence of parental alcoholism useful? *Journal of Counseling Psychology, 40,* 324-334.

Yeatman, F.R, Bogart, C.J., Geer, F.A., & Sirridge, S.T. (1994). Children of Alcoholics Screening Test: Internal consistency, factor structure, and relationship to measures of family environment. *Journal of Clinical Psychology, 50 (6),* 931-936.

APPENDICES

Appendix A

Department Head Contact Script

Subject line of email:
Seeking permission to announce research study in classes

Hello, my name is Jaymee Holstein. I am a doctoral candidate here at Auburn University in the Department of Counselor Education, Counseling Psychology, and School Psychology and would like to seek your permission to solicit students from undergraduate courses in your department. The Institutional Review Board (human subjects committee) has instructed me to get department head permission before contacting individual instructors. I am completing my dissertation and would like to come to the last 5 minutes of undergraduate courses, pending your and the instructor's permission, and invite students to participate in a research study. Students will be informed that after the end of their class they can come to a nearby classroom and voluntarily and anonymously complete a survey designed to ascertain how their family background is related to their methods of coping and managing anxiety. Students will be given the opportunity to enter a drawing for a chance to win one of two $50 money orders. I can provide a copy of the survey as well as the information letter if that would help in your decision making process. Your approval can come in the form of a simple email reply (e.g., "yes, this is fine.") to my address above (holstja@auburn.edu).

Thank you so much for your help.

Jaymee Holstein

Appendix B

Instructor Contact Script

Subject line of email:

Seeking permission to make announcement in your class

Hello, my name is Jaymee Holstein. I am a doctoral candidate here at Auburn University in the Department of Counselor Education, Counseling Psychology, and School Psychology and would like to seek your permission to announce an opportunity to participate in a research study to students in your ***** course/courses. I am completing my dissertation and would like to come to the last 5 minutes of your course/courses *****, pending your permission, and invite students to participate in a research study. Students will be informed that after the end of their class they can come to a nearby classroom and voluntarily and anonymously complete a survey designed to ascertain how their family background is related to their methods of coping and managing anxiety. Students will be given the opportunity to enter a drawing for a chance to win one of two $50 money orders. I can provide a copy of the survey as well as the information letter if that would help in your decision making process.

If you are willing to allow me to make this announcement in your class, we can arrange for me to come on a date convenient to you.

Thank you so much for your assistance.

Jaymee Holstein

Appendix C

INFORMATION LETTER
for a Research Study Entitled:
Wellness in College Students as it Relates to Family History

You are invited to participate in a research study that is designed to gather knowledge about the ways in which college students have been impacted by their family experiences. This study is being conducted by Jaymee Holstein, B.S., a doctoral candidate, under the supervision of her advisor Dr. Becky Liddle. We hope to learn more about how the family history of college students impacts their wellness. You were selected as a possible participant because you are a 19 years old or older and are a college student. If you are not at least 19 you may not participate.

If you decide to participate, you will be asked to complete a questionnaire. **All answers will be anonymous**. The questionnaire will take approximately 15 minutes to complete (a trial run of this survey found that participants took 12-17 minutes to complete the survey). Questions will be asked about your methods of coping and managing anxiety as well as about your family background (e.g., parental use of alcohol and one brief question about history of physical/sexual abuse or parental mental illness). If you are unsure of how to answer a question, please give your best possible answer. There are no right or wrong answers to this survey.

If you complete the questionnaire, you have the choice to enter a drawing to win one of two $50 money orders. To protect the anonymity of your survey responses, the survey entries (which contain name and contact information) will be collected and stored separately from your anonymous survey. After I have collected all survey responses, I will randomly select 2 raffle entries. I will then notify you by mail if I have selected your name. All identifying information will be kept confidential up until the time of the drawing and all raffle entry forms will be shredded after the winners have been notified.

You may discontinue participation at any time and there is no penalty for not participating. We anticipate no risks associated with this questionnaire, but if you feel uncomfortable at any time feel free to discontinue your participation. Additionally, a list of outside support services has been provided if you feel that you would like to talk with a professional about any feelings that may have arisen during your participation of this study. Any use of these service providers would be at your own expense.

Information gathered in this survey may be used to fulfill an educational requirement of the investigator, may be published in a professional journal, and may be presented at professional meetings. As your responses are anonymous, any information obtained in connection with this study will be kept anonymous.

Your decision whether or not to participate will not jeopardize your future relations with Auburn University or the Department of Counselor Education, Counseling Psychology, and School Psychology.

If you have any questions I invite you to ask them now. If you have questions later, Jaymee Holstein, 334-844-5789, holstja@auburn.edu or Dr. Becky Liddle, 334-844-5160, will be happy to answer them.

For more information regarding your rights as a research participant you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu .

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

_____

Investigator's signature Date

Referral List of Auburn-Area Mental Health Service Providers

Individual/Agency	Services/Available	Cost/Hour
East Alabama Mental Health Center (334)742-2700 (334) 821-0660 (After hours emergency #)	Individual and group therapy	$8-80 Based on Income
Student Counseling Services Auburn University (334)844-5123	Individual and group therapy	No cost
Auburn Univ. Psychological Services Center (334)844-4889	Marriage, family, and individual therapy	$25-55 Based on Income
Clinical Psychologists 248 E. Glenn Ave. (334)821-3350	Individual and group therapy	$75-100
Anne Harzem 2204 Executive Park Dr., Opelika (334)821-9770	Marriage, family, and individual therapy	$30-75 Based on Income
Crisis Center	Phone Counseling	No Charge
Rape Counselors of East Alabama	Phone Counseling	No Charge

Appendix D

Children of Alcoholics Screening Test-6 (CAST-6)

Please read the questions below and circle yes or no.

1.	Have you ever thought that one of your parents had a drinking problem?	YES	NO
2.	Did you ever encourage one of your parents to quit drinking?	YES	NO
3.	Did you ever argue or fight with a parent when he or she was drinking?	YES	NO
4.	Have you ever heard your parents fight when one of them was drunk?	YES	NO
5.	Did you ever feel like hiding or emptying a parent's bottle of liquor?	YES	NO
6.	Did you ever wish that a parent would stop drinking?	YES	NO
7.	Did you ever think your father was an alcoholic?	YES	NO
8.	Did you ever think your mother was an alcoholic?	YES	NO

Appendix E

Psychological Mindedness Scale (PMS)

This questionnaire consists of a number of statements about personal attitudes. There are no right or wrong answers. Using the 4-point scale below, please indicate how much you agree or disagree with each statement by circling one of the numbers on the scale beside each statement. For example, a score of 4 would indicate that you strongly agree with the statement.

1	2	3	4
Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree

1. I would be willing to talk about my personal problems if I thought it might help me or a member of my family.	1	2	3	4
2. I am always curious about the reasons people behave as they do.	1	2	3	4
3. I think that most people who are mentally ill have something physically wrong with their brain.	1	2	3	4
4. When I have a problem, if I talk about it with a friend, I feel a lot better.	1	2	3	4
5. Often I don't know what I'm feeling.	1	2	3	4
6. I am willing to change old habits to try a new way of doing things.	1	2	3	4
7. There are certain problems which I could not discuss outside my immediate family.	1	2	3	4
8. I often find myself thinking about what made me act in a certain way.	1	2	3	4
9. Emotional problems can sometimes make you physically sick.	1	2	3	4
10. When you have problems, talking about them with other people just makes them worse.	1	2	3	4
11. Usually, if I feel an emotion, I can identify it.	1	2	3	4
12. If a friend gave me advice about how to do something better, I'd try it out.	1	2	3	4
13. I am annoyed by someone, whether he is a doctor or not, who wants to know about my personal problems.	1	2	3	4

14. I find that once I develop a habit, it is hard to change, even if I know there is another way of doing things that might be better.	1	2	3	4
15. I think that people who are mentally ill often have problems which began in their childhood.	1	2	3	4
16. Letting off steam by talking to someone about your problems often makes you feel a lot better.	1	2	3	4
17. People sometimes say that I act as if I'm having a certain emotion (anger, for example) when I am unaware of it.	1	2	3	4
18. I get annoyed when people give me advice about changing the way I do things.	1	2	3	4
19. It would not be difficult for me to talk about personal problems with people such as doctors and clergymen.	1	2	3	4
20. If a good friend of mine suddenly started to insult me, my first reaction might be to try to understand why he was so angry.	1	2	3	4
21. I think that when a person has crazy thoughts, it is often because he is very anxious and upset.	1	2	3	4
22. I've never found that talking to other people about my worries helps much.	1	2	3	4
23. Often, even though I know that I'm having an emotion, I don't know what it is.	1	2	3	4
24. I like to do things the way I've done them in the past. I don't like to try to change my behavior much.	1	2	3	4
25. There are some things in my life that I would not discuss with anyone.	1	2	3	4
26. Understanding the reasons you have deep down for acting in certain ways is important.	1	2	3	4
27. At work, if someone suggested a different way of doing a job that might be better, I'd give it a try.	1	2	3	4
28. I've found that when I talk about my problems to someone else, I come up with ways to solve them that I hadn't thought of before.	1	2	3	4
29. I am sensitive to the changes in my own feelings.	1	2	3	4

30. When I learn a new way of doing something, I like to try it out to see if it would work better than what I had been doing before.	1	2	3	4
31. It is important to be open and honest when you talk about your troubles with someone you trust.	1	2	3	4
32. I really enjoy trying to figure other people out.	1	2	3	4
33. I think that most people with mental problems have probably received some kind of injury to their head.	1	2	3	4
34. Talking about your worries to another person helps you to understand problems better.	1	2	3	4
35. I'm usually in touch with my feelings.	1	2	3	4
36. I like to try new things, even if it involves taking risks.	1	2	3	4
37. It would be very difficult for me to discuss upsetting or embarrassing aspects of my personal life with people, even if I trust them.	1	2	3	4
38. If I suddenly lost my temper with someone, without knowing exactly why, my first impulse would be to forget about it.	1	2	3	4
39. I think that what a person's environment (family, etc.) is like has little to do with whether he develops mental problems.	1	2	3	4
40. When you have troubles, talking about them to someone else just makes you more confused.	1	2	3	4
41. I frequently don't want to delve too deeply into what I'm feeling.	1	2	3	4
42. I don't like doing things if there is a chance that they won't work out.	1	2	3	4
43. I think that no matter how hard you try, you'll never really understand what makes people tick.	1	2	3	4
44. I think that what goes on deep down in a person's mind is important in determining whether he will have a mental illness.	1	2	3	4
45. Fear of embarrassment or failure doesn't stop me from trying something new.	1	2	3	4

Appendix F

Defense Style Questionnaire-40 (DSQ-40)

This questionnaire consists of a number of statements about personal attitudes. There are no right or wrong answers. Using the 9-point scale below, please indicate how much you agree or disagree with each statement by circling one of the numbers on the scale beside each statement. For example, a score of 5 would indicate that you neither agree nor disagree with the statement.

1	2	3	4	5	6	7	8	9
Strongly disagree				Neutral				Strongly agree

1. I get satisfaction from helping others and if this were taken away from me I would get depressed	1	2	3	4	5	6	7	8	9
2. I'm able to keep a problem out of my mind until I have time to deal with it	1	2	3	4	5	6	7	8	9
3. I work out my anxiety through doing something constructive and creative like painting or woodwork	1	2	3	4	5	6	7	8	9
4. I am able to find good reasons for everything I do	1	2	3	4	5	6	7	8	9
5. I'm able to laugh at self pretty easily	1	2	3	4	5	6	7	8	9
6. People tend to mistreat me	1	2	3	4	5	6	7	8	9
7. If someone mugged me and stole my money, I'd rather he be helped than punished	1	2	3	4	5	6	7	8	9
8. People say I tend to ignore unpleasant facts as if they don't exist	1	2	3	4	5	6	7	8	9
9. I ignore danger as if I was Superman	1	2	3	4	5	6	7	8	9
10. I pride myself on my ability to cut people down to size	1	2	3	4	5	6	7	8	9
11. I often act impulsively when something is bothering me	1	2	3	4	5	6	7	8	9

12. I get physically ill when things aren't going well for me	1	2	3	4	5	6	7	8	9
13. I'm a very inhibited person	1	2	3	4	5	6	7	8	9
14. I get more satisfaction from my fantasies than from my real life	1	2	3	4	5	6	7	8	9
15. I've special talents that allow me to go through life with no problems	1	2	3	4	5	6	7	8	9
16. There are always good reasons when things don't work out for me	1	2	3	4	5	6	7	8	9
17. I work more things out in my daydreams than in my real life	1	2	3	4	5	6	7	8	9
18. I fear nothing	1	2	3	4	5	6	7	8	9
19. Sometimes I think I'm an angel and other times I think I'm a devil	1	2	3	4	5	6	7	8	9
20. I get openly aggressive when I feel hurt	1	2	3	4	5	6	7	8	9
21. I always feel that someone I know is like a guardian angel	1	2	3	4	5	6	7	8	9
22. As far as I'm concerned, people are either good or bad	1	2	3	4	5	6	7	8	9
23. If my boss bugged me, I might make a mistake in my work or work more slowly so as to get back at him	1	2	3	4	5	6	7	8	9
24. There is someone I know who can do anything and who is absolutely fair and just	1	2	3	4	5	6	7	8	9
25. I can keep the lid on my feelings if letting them out would interfere with what I'm doing	1	2	3	4	5	6	7	8	9
26. I'm usually able to see the funny side of an otherwise painful predicament	1	2	3	4	5	6	7	8	9
27. I get a headache when I have to do something I don't like	1	2	3	4	5	6	7	8	9
28. I often find myself being very nice to people who by all rights I should be angry at	1	2	3	4	5	6	7	8	9
29. I am sure I get a raw deal from life	1	2	3	4	5	6	7	8	9

30. When I have to face a difficult situation I try to imagine what it will be like and plan ways to cope with it	1	2	3	4	5	6	7	8	9
31. Doctors never really understand what is wrong with me	1	2	3	4	5	6	7	8	9
32. After I fight for my rights, I tend to apologize for my assertiveness	1	2	3	4	5	6	7	8	9
33. When I'm depressed or anxious, eating makes me feel better	1	2	3	4	5	6	7	8	9
34. I'm often told that I don't show my feelings	1	2	3	4	5	6	7	8	9
35. If I can predict that I'm going to be sad ahead of time, I can cope better	1	2	3	4	5	6	7	8	9
36. No matter how much I complain, I never get a satisfactory response	1	2	3	4	5	6	7	8	9
37. Often I find that I don't feel anything when the situation would seem to warrant strong emotions	1	2	3	4	5	6	7	8	9
38. Sticking to the task at hand keeps me from feeling depressed or anxious	1	2	3	4	5	6	7	8	9
39. If I were in a crisis, I would seek out another person who had the same problem	1	2	3	4	5	6	7	8	9
40. If I have an aggressive thought, I feel the need to do something to compensate for it	1	2	3	4	5	6	7	8	9

Appendix G

Demographic Questionnaire

1) Age: ___ years old.

2) Gender:
   - O Male
   - O Female

3) Ethnicity:
   - O African American
   - O Asian/Pacific Islander
   - O Caucasian
   - O Hispanic/Latin American
   - O Native American
   - O Other (please describe) _____

Please indicate by checking here: _____ if ANY of the following were true for you when you were a child or adolescent: you were physically abused by a parent, sexually abused by a parent, or lived with a parent with a debilitating mental health concern such as schizophrenia or debilitating depression.