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The Effect of Being An Adult Child of An Alcoholic On the Spiritual Well-Being of Evangelical Christians

Dennis W. Henderson

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The Effect of Being An Adult Child of An Alcoholic
On the Spiritual Well-Being of
Evangelical Christians

by

Dennis W. Henderson

Presented to the Faculty of
George Fox College
in partial fulfillment
of the requirements for the degree of
Doctor of Psychology
in Clinical Psychology

Newberg, Oregon

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To Whom It May Concern,

My name is Dennis W. Henderson and I attend George Fox College Graduate School of Psychology in Newberg, Oregon.

I am presently working on my dissertation for my Doctor of Psychology degree. The population of my study is Adult Children of Alcoholics. The article "The Relationship Between Child and Adult Psychopathology in Children of Alcoholics" by J. Giglio and E. Kaufman, 1990, The International Journal of Addictions, 25(3) copyrighted by your firm has been a great help to me. I would like to ask your written permission to adapt information from the two tables on page 275-284.

Thank you for your help in this matter and I look forward to hearing from you.

Sincerely,



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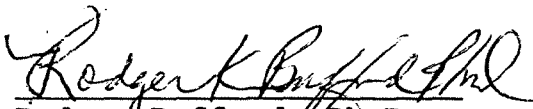
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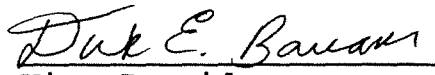
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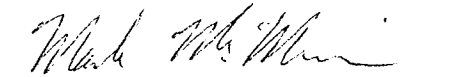
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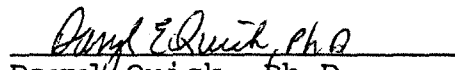
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Abstract

In the last decade there has been a proliferation of research on adult children of alcoholics (ACAs). However, the religious domain of ACAs has received little investigation. Wilson (1988) studied Evangelical Christian ACAs and included a brief assessment of their religious well-being. She found that ACAs report lower religious well-being than non-ACAs. The purpose of this investigation was to examine further Wilson's finding and to ask whether Evangelical ACAs can be differentiated from non-ACAs based on spiritual well-being as measured by the Spiritual Well-Being Scale (SWB). The study included 136 adults who were gathered from three Portland, Oregon area Evangelical Christian churches.

The adults were divided into two groups based on scores on the Children of Alcoholics Screening Test (CAST). There were 39 ACAs (14 male, 25 female) and 97 non-ACAs (51 male and 46 female). The mean age of the ACAs was 41 and 43 for the non-ACAs.

Using a score of 6 or greater on the CAST to define ACAs, student's t-tests showed no significant differences between ACAs and non-ACAs on the Existential Well-Being (EWB) and Religious Well-Being (RWB) subscales as well as the total SWB scale. Post hoc analysis was done by reclassification of the CAST total scores to "NO ACA", "LOW ACA" (1-19), and "HIGH ACA" (20 or higher). An analysis of variance (ANOVA) using RWB, EWB, as SWB as the dependent variable resulted in statistically significant differences for EWB. The "High ACA" group was significantly lower on EWB than the "NO ACA" group which suggests that ACAs who come from more severe alcoholic homes tend to have difficulty with interpersonal relationships.

The present study failed to replicate Wilson's (1988) findings that ACAs have lower religious well-being. An effort was made to explain this discrepancy by using post hoc statistics. Results suggest that Evangelical ACAs are a heterogeneous group and that

caution should be taken in generalizing sample results. Those with more severe parental alcoholism seem more likely to report lower existential well-being. Further it is possible that the high frequency of counseling and support group involvement which characterized this sample accounts for the absence of impaired religious and existential well-being for the sample as a whole.

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CHAPTER 1

INTRODUCTION

There are approximately 28 to 35 million people in the U.S. who have grown up in alcoholic families (Black, 1986; Naiditch, 1983). Russell, Henderson, and Blume (1985), estimated that 1 out of 8 children, or 6.6 million children 18 or under, live in alcoholic homes.

Many who have experienced having an alcoholic parent are left with emotional disturbances, and "if children do not resolve the problems created by parental alcoholism, they will carry them the rest of their lives" (Booz-Allen & Hamilton, 1974, p. 73). Surprisingly, this distinct population has received little attention in the literature until recently. It has only been in the last decade that therapists have begun to treat adult children of alcoholics (ACAs) as such (Beletsis & Brown, 1981; Black, 1982; Cermak, 1984; Cermak & Brown, 1982).

Young children who have alcoholic parents are more likely to display a broad spectrum of disorders

(Heller, Sher, & Benson, 1982; West & Prinz, 1987). It is reasonable to expect that these pathologies would carry over into adulthood. Black (1979, 1982), Booz-Allen and Hamilton (1974), and El-Guebaly and Orford (1977) have suggested that some children of alcoholics do not display difficulties in their youth. Ackerman (1984) states that the experience and adjustment of the child in the alcoholic home depends on several factors including severity and type of alcoholism, age, and perceptions of the child's significant others. Woititz (1983) and Wegscheider (1981) agree that the effects of the alcoholic home are commonly demonstrated in specific personality characteristics of ACAs.

Most of the research related to ACAs has centered on psychological and emotional characteristics. Wilson (1988) suggests that there are religious variables that require consideration in understanding the effects of being raised in an alcoholic family. She has done a preliminary study in this area focusing on an Evangelical Christian ACA population. In her study, Wilson (1988) focuses on a distinct subgroup that is of interest to both her and this researcher. According to a Gallup report in 1984, 19 percent of the population

of the United States could identify themselves in the definition of Evangelical as "one who has had a born again experience, has tried to encourage someone to accept Jesus Christ as his or her Savior, and holds a literal view of the Bible or believes the Bible is not mistaken in its views or teaching" (Princeton Religious Resource Center, 1984, p. 67). If equally distributed in the population, a conservative estimate of 31 million adult children of alcoholics in the United States would mean that there are approximately 5,890,000 Evangelical adult children of alcoholics (Wilson, 1988). Although there is no accurate means of determining the number of Evangelical Christian ACAs, intuitively it would seem that there are many.

From Wilson's (1988) sample it can be suggested that Evangelical adult children of alcoholics suffer from many of the same issues of personality dysfunction as those identified in the general population of adult children of alcoholics (Cermak and Brown, 1982; Woititz, 1983). This parallels the findings of Aycock and Noaker (1985) who found no significant difference in Evangelical Christians and the general population on measures of self-esteem which includes problem areas

of low self-esteem. Similarly, Mauger (1976) reports little or no difference on MMPI clinical scales between Evangelical Christians and the general population. Wilson's findings regarding religious issues imply that Evangelical Christian ACAs have difficulty in the religious domain. She appears to be the first to investigate the religious domain of ACAs. Her study used a series of questions created by her to examine the religious well-being of the subject. She did not use an established instrument which would provide validity and reliability, but she was able to begin exploring this significant area of human experience which previously has been left to 12-step groups and basically ignored in the literature.

It seems profitable to expand Wilson's research on Evangelical Christian ACAs using an established instrument for assessment. This would possibly broaden understanding of the effects on the religious domain of ACAs from an Evangelical Christian persuasion, but also offer implications for the general population of ACAs. For this study, spiritual well-being was chosen for assessment of the religious domain of Evangelical Christian ACAs.

Statement of Problem

This study focuses on the questions: Does being an ACA effect the spiritual well-being of Evangelical Christians?, and Can ACAs be differentiated from non-ACAs in the area of spiritual well-being? The focus of testing was on the differences of scores obtained in testing spiritual well-being after classifying participants as ACAs versus non-ACAs.

Literature Review

Although much research has been done in the area of ACAs, this study is focused on the use of the Spiritual Well-Being Scale to assess the religious domain of ACAs. The review will be directed at a brief look at alcoholism, the research on children and adult children of alcoholics, the development and research of the Spiritual Well-Being Scale (SWB).

Alcoholism

Alcoholism is a national plague, affecting approximately 10 million people, or 1 out of 12

drinkers (Barnes, 1988). It is clearly the number one drug problem in America today. It is estimated that alcoholics represent approximately 20% of the patients seen in psychiatric facilities (Guze, Cloninger, Martin, & Clayton, 1986). Adult children of alcoholics cannot be understood without information regarding the personal and familial impact of alcoholism.

Definition

Definitions of alcoholism vary greatly throughout society in both professional and lay circles. In 1988 the United States Supreme Court ruled that "willful misconduct" is the view that the government takes on alcoholism. Viewing it as an uncontrollable disease would mean granting veteran's educational benefits (Grilley, 1989). The disease designation was adopted in 1957 by the American Medical Association. This has helped change society's social stigma and establishes it as a treatable and arrestable condition (Guze et al., 1986).

It is suggested by Barnes (1988) that there are four major criteria for alcoholism: (a) loss of control, (b) evidence of functional or structural damage, (c) use of alcohol as a general approach to

dealing with psychosocial problems, (d) physical dependence on alcohol. He emphasizes that physical dependence is not a necessity to be diagnosed alcoholic. If at least one or two of the criteria are evident one is still considered alcoholic. Some believe that abstinence is the primary treatment goal for alcoholism since the alcohol acts as an "on switch" for the alcoholic. Others take the position that there is a continuum of control (Mello, 1978) and that drinking in moderation is the more appropriate goal of treatment (Robertson, Heather, Dzialdowski, Crawford, & Winton, 1986). In the United States, generally, the treatment of choice is total abstinence, while in Britain there is a greater acceptance of controlled drinking.

Etiology

There are many studies that support the conclusion that genetics are probably involved in alcoholism (e.g. Cadoret, Troughton, & O'Gorman, 1987; Cloninger, 1987; Vaillant & Milofsky, 1982). Concordance rates for alcoholism are greater for identical twins than with fraternal twins (55% versus 28%) (Schuckit & Rayes, 1979). Those people whose biological parents (one or

both) were alcoholic and who were adopted by non-alcoholics as children have higher incidence of alcoholism than those adoptees whose biological parents were not alcoholics (Cloninger, 1987; Vaillant & Milofsky, 1982).

Environmental factors also play a part in vulnerability to alcoholism (Zucker & Gamberg, 1986). An estimated one third of alcoholics have no family history of alcoholism and only 30 - 50% of sons of alcoholics become alcoholics (Kolata, 1988). There appears to be contradictory evidence regarding environmental factors involved in alcoholism when viewed in different cultures. The lowest incidence of alcoholism occurs in cultures where: (a) the children are exposed to alcohol early in life with parents presenting an example of moderation; (b) alcohol is served in small quantities, usually with meals; (c) abstinence is socially acceptable and excessive drinking is not; (d) drinking is not viewed as proof of adulthood virility; and (e) there are well established rules for drinking behavior (Aronow, 1980).

Alcohol related problems in the adoptive family only predict adoptee alcohol abuse when there was a

concomitant genetic predisposition suggested by the fact that one of the adoptee's parents was an alcoholic (Cadoret et al., 1987; Cloninger, 1987). There is some speculation that environments that contribute to alcohol vulnerability: (a) do not encourage impulse control, (b) view drunkenness as acceptable behavior, (c) restrict a person's cognitive ability to appraise information that might limit alcohol consumption, and (d) do not provide alternative non-drug forms of gratification (Heilbrun, Cassidy, Diehl, Haas, & Heilbrun, 1986). Interestingly, Khavi and Harmon (1982) suggest that those who consider themselves very "religious" consume less alcohol and less psycho-active drugs than those who describe themselves as "not religious at all". Spickard and Thompson (1985) declare, however, that children of "dogmatic teetotalers" are at high risk of developing alcohol addiction. A possible explanation for this is that these parents may themselves be ACAs. There is a need for further research into the etiology of alcoholism from the basis of a model that includes both inherited and environmental factors (Lewis & Williams, 1986).

There is no question that the consequences of alcohol abuse are undesirable. Criminal activity such as homicides, robbery, rape, and arson as well as family violence, including spouse beating and child abuse, are alcohol related. In approximately half of the reports of these activities, the victims or the perpetrators were found to be under the influence of alcohol (Guze et al., 1986).

Family System

Dinning and Berk (1989) studied 494 (276 male) adolescents in Grade 11 in Nova Scotia and found that adolescent children of alcoholics who express concerns about parental alcoholism report a perception of their family as having greater conflict, less family cohesion, and less overall family support than those who do not express concerns about parental alcoholism.

The alcoholic family is organized around alcohol and the alcoholic. Denial distorts reality as the family focuses on the alcohol use (Brown, 1987; Steinglass, 1980). A broad range of family problems ensues, as reported earlier. There have been several theories attempting to explain a family's toleration of alcoholism. These include denial and financial

dependence (Kaufman, 1985; Lewis & Williams, 1986). The family somehow functions around the alcoholism in such a manner as to benefit from it. Goodman (1987) suggests that roles (behaviors) in a family system are forms of reciprocal communication that help to organize and stabilize a family. Alcohol and drug abuse may actually serve to stabilize a family that may have experienced excessive distress otherwise. The chemical abuse may allow family members to engage in roles and behavioral exchanges that would normally be unacceptable. In some alcoholic families the alcohol abuser may provide the family with its only stability. Lewis and Williams (1986) for example, describe the alcoholic as closed emotionally from the family when not drinking. Although the next drinking episode may include an explosion of accumulated emotions, the family does receive feedback. Smilkstein (1980) describes this as a "pathological equilibrium" which stabilizes the family systems with great cost to the individual family members. This system approach to understanding alcoholism in families helps to explain the behavior of family members which seem to enable the continued drinking (Johnson, 1980).

Children of Alcoholic Families

Giglio and Kaufman (1990) summarize the methodological shortcomings in the children of alcoholic (COA) literature: "lack of controls or the need of better controls, absence of studies comparing COAs to children from other dysfunctional families, the lack of blind data collection, poorly defined criteria for alcoholism, restricted range of tests used for assessment, oversimplified reasoning about cause and effects, and lack of longitudinal studies and selective sampling with a pathology bias for those already in treatment" (p. 264).

In addition to the lack of a unifying theoretical framework, Giglio & Kaufman (1990) cite sampling problems as further shortcomings in COA literature. Most studies have drawn from participants in support groups or those in psychotherapy. However, there does seem to be a growing understanding of the characteristics of children of alcoholics.

Benson (1980) believes that children of alcoholics are casualties of parental drinking problems. It is reported that children of alcoholics often experience school and social problems (Chafetz, 1979). They are

more likely than their peers to experience drinking problems (Cotton, 1979), legal problems (Werner, 1986) emotional disturbance (Moos & Billings, 1982), external locus of control (Prewett, Spence, & Chaknis, 1981), and low self-esteem (Woititz, 1983). The studies by Moos and Billings (1982) and Callan & Jackson (1986) suggest that children of recovered or abstinent alcoholics are similar to controls while children of active or relapsed alcoholics are more subject to mental health problems or describe themselves as unhappy.

Alcoholic homes are usually unstable financially and emotionally and are characterized by unreliable childcare and are deficient in close parent-child relationships (Williams & Collins, 1986). Black (1981), Wegscheider (1981), and Woititz (1981) have suggested that children of alcoholics experience parental inconsistencies, double-bind messages, hidden feelings, incomplete information, shame, uncertainty, mistrust, and roles that restrict development and identity.

Wegscheider (1981) has described roles that she believes are specific to alcoholic families: the

Family Hero, the Scape Goat, the Lost Child, and the Mascot. The following discussion of these roles includes possible Axis I and Axis II parallels, based on the American Psychiatric Association Diagnostic and Statistical Manual (DSM-III-R, 1987). The Family Hero is often the oldest child and proves the family worth by external success. Inside, there is self criticalness, low self-esteem, hurt, loneliness, and inadequacy. This may parallel obsessive compulsive disorder. The Scapegoat is usually the second or middle child, acts out in order to get attention and may turn to drugs and alcohol in defiance. Inside loneliness, anger, hurt, and feelings of failure and guilt prevail. These people may develop substance abuse, conduct disorder, or anti-social personality. The Lost Child is usually the third or middle child, withdraws from the family physically and emotionally trying to ease the family's problems. Thought disorders and/or schizoid or schizotypal personalities may characterize this role. This child appears quiet and independent, but inside feels lonely, hurt, inadequate and has a strong fantasy life. The Mascot tends to be the youngest child and provides

fun and laughter which distracts from the tension of the alcoholic. This child is afraid of losing touch with reality, is hyperactive in school and feels anxious, lonely, insecure, and frightened. He or she may become histrionic, attention deficit disordered with hyperactivity, or hypomanic.

In their review of the literature, Goodwin and Guze (1979) found that there is an apparent excess of depression, criminality, sociopathy, and abnormal personality in the families of alcoholics. Females tend toward depressive syndromes and males manifested more sociopathy (Tunick, 1988).

Table 1 is a summary of the research on the childhood effects of parental alcoholism. Research indicates that COAs are affected by their parent's alcoholism in their own use of alcohol. There is an increased chance of being an alcoholic. Alcoholism is more prevalent in the family when the mother is alcoholic, and there is an earlier age of intoxication and treatment when two parents are alcoholic. Drinking at home tends to be more disruptive than away from home. COAs develop certain role behaviors and struggle with identity issues such as low self-esteem.

Personality characteristics of COAs include anxiety, affective disorders, hyperactivity, compulsivity, passive-aggressive traits, and anti-social traits.

Finally, the familial and extrafamilial interactions are areas of concern. There is poor communication including greater arguments and more family violence. Inadequate parenting, more separation and divorce, disturbed sibling relationships, disturbed family structure and rules, and problems in school and with the law are characteristic of these families.

Table 1

Childhood Effects of Parental Alcoholism

Effects on the Child's Use of Alcohol

Increased chance of becoming alcoholic.

Greater incidence of alcoholism in adoptees whose
biological parents were alcoholic than adoptees
whose biological parents were non-alcoholic
(Cloninger, 1987; Vaillant & Milofosky, 1982)

25% of male COAs became alcoholic vs. 4% of general
population (Goodwin, 1971); 33% incidence of
alcoholism in COAs vs. less than 1% in controls
(Cadoret & Gath, 1978)

21% of COAs had DSM-III diagnosis of alcoholism (Drake,
1987)

Alcoholism as a logical coping mechanism to the
adolescent COA (Morehouse, 1984)

(table continues)

Table 1 Continued

Effects of the alcoholic parent's gender.

Literature review of 39 studies showed alcoholism was more prevalent in the families of women alcoholics than of men alcoholics (Cotton, 1979)

No significant difference in mean age when first intoxicated or admitted for alcoholism treatment between children of alcoholic mothers vs. fathers (McKenna & Pickens, 1981)

Effects of the number of alcoholic parents.

Lower age when first intoxicated or admitted for alcoholism treatment in children of two alcoholic parents vs. children of one alcoholic parent vs. children of no alcoholic parents (McKenna & Pickens, 1981)

(table continues)

Table 1 Continued

Effects of parental alcohol intake.

No difference in reported drinking frequency in
adolescent children of heavy drinkers vs. children
of light drinkers vs. children of abstainers
(Rouse, Waller, & Ewing, 1973)

Parental intake correlates with child's intake (Zucker
& Barron, 1973)

Effects of parental drinking patterns.

Drinking at home more disruptive than drinking away
from home; frequent intoxication more disruptive
than rare intoxication (Wilson & Orford, 1978)

(table continues)

Table 1 Continued

Role Behavior and Identity Issues
The family hero, the scapegoat, the lost child, the mascot (Wegscheider, 1981)
The responsible one, the adjuster, the placater (Black, 1979)
<u>All-or-none behavior (clinical impression):</u>
By self-report (Bepko, 1985)
By clinical description (Gravitz, 1985)
Two categories of behavior: (Black, 1979)
(1) The misbehaving, troubled children, and
(2) The mature, stable overachievers
Two categories of personality: (Hecht, 1973)
(1) Rebellious, impulsive, anxious,
depressed, hostile, confused, and
(2) Rigid, moralistic, driven, energetic,
demanding, needing to dominate, and
control (Hecht, 1973)

(table continues)

Table 1 Continued

The "haves" and the "have nots":

- (1) The haves: are able to establish positive relationships outside the home; seek out others for help; are extremely mature for their age
- (2) The have nots: are unable to establish positive relationships outside the home; dissociate from family and avoid close contact with others; have adjustment problems, anxiety, depression; do poorly in school (Ackerman, 1983).

(table continues)

Table 1 Continued

Low self-esteem:

94% of COAs reported lack of self confidence (Cork, 1969)

Lower average score on Piers-Harris Children's Self Concept Scale in COAs vs. controls (Bennett & Wolin, 1985)

Significantly higher scores (indicating lower self-esteem) on the Rosenberg Self Esteem Scale in adolescent COAs vs. controls or vs. adolescent COAs who were Alateen members (Hughes, 1977)

College degree/COAs vs. controls were found to have lower self-concept on Tennessee Self Concept scale (Rearden & Markwell, 1989)

Lower cognitive competence by maternal and self-reports in COAs vs. controls (Johnson & Rolf, 1987)

(table continues)

Table 1 Continued

Personality Characteristics

Failure to develop an autonomous identify; feelings of uncertainty and fear (clinical impression and literature review) (Brown, 1985)

Failure to negotiate Erikson's (1963) psychosocial stages of development (Ackerman, 1983; Brooks, 1985)

Anxiety:

29% of COAs had anxiety neuroses or depression vs. 5% of controls (Nylander, 1960)

Greater state anxiety and the tendency for greater trait anxiety by self-report in COAs vs. controls (Johnson & Rolf, 1987)

8% of adolescent COAs vs. 0% of controls had anxiety-depression symptoms (Herjanic, B., Herjanic, M., Penick, Tometteri, & Armbuster, 1977)

More anxiety in COAs by clinical impression (Clemmons, 1979)

(table continues)

Table 1 Continued

Affective disorders:

See Nylander (1960), Herjanic et al., (1977) under
"Anxiety"

51% of female COAs had affective disorders vs. 6% of
male COAs, and 75% of daughters of female
alcoholics had affective disorders vs. 32% of
daughters of male alcoholics (Winokur, Reich,
Rimmer, & Pitts 1970)

17% of adolescent children of heavy drinkers reported
depression vs. 5% of adolescent children of
abstainers (Rouse et al., 1973)

Significantly higher scores on the negative scales of
the Profile of Mood States and significantly lower
scores on the positive scales in adolescent COAs
vs. controls or Alateen members (Hughes, 1977)

More affective problems by maternal and self-report in
COAs vs. controls (Johnson & Rolf, 1987)

Females tend toward more depressive syndromes (Tunick,
1988)

(table continues)

Table 1 Continued

Hyperactivity:

No differences in features which characterize
hyperactivity in delinquent adolescent male COAs
vs. delinquent adolescent controls (Tarter,
Hegedus, & Gavalier, 1985)

Failed to find a significantly higher incidence of
parental alcoholism for hyperactive children
compared with non-hyperactive children (Morrison
1980; Stewart, de Blois, & Cummings, 1980)

(table continues)

Table 1 Continued

Effects on DSM-III Axis II personality traits:
<u>Compulsivity:</u>
Clinical impression (of <u>compulsivity</u>) (Cermak, 1985)
Significantly higher scores in the neurotic triad
on the MMPI in adolescent sons of male alcoholics
vs. adolescent sons of nonalcoholics (Tarter,
Hegedus, Godstein, Shelly, & Alterman, 1984)
<u>Passive-aggressive traits:</u>
Teachers described male COAs as dependent and evading
unpleasantness more than classmates (Aronson &
Gilbert, 1963)
Greater indications of the existence of passive-
aggressive traits on projective testing in male
adolescent COAs vs. male adolescent controls
(Rouse et al., 1973)

(table continues)

Table 1 Continued

Antisocial traits:

Most common cause for psychiatric admission in male

COAs was antisocial traits (Nylander, 1960)

20% of male COAs demonstrated sociopathy vs. 7% of
female COAs (Winokur et al., 1970)

25% of adolescent COAs displayed antisocial traits on
psychologic testing and psychiatric interview vs.

0% of adolescent controls (Herjanic et al., 1977)

Males tend toward more sociopathy (Tunick, 1988)

(table continues)

Table 1 Continued

Familial and Extrafamilial Interactions

Poor communication (clinical impression):

Lack of fun and laughter (Cork, 1969)

Communication described as inconsistent, unclear, with
lies, denial, and double binds (Hecht, 1973)

More arguments:

Parental fighting and quarreling was a major focus of
concern for 85% of COAs (Cork, 1969)

65% of adolescent COAs reported problems at home vs.

31% of adolescent controls (Herjanic et al., 1977)

89% of COA families interviewed reported marital
conflict; 18% reported aggressive arguments
(Wilson & Orford, 1978)

Two-thirds of women alcoholics reported their children
had witnessed quarrels or fights in the home as a
result of drinking (Corrigan, 1980)

COAs reported low family cohesion, high family
conflict, low overall family support (Dinning &
Berk, 1989)

(table continues)

Table 1 Continued

More physical violence or abuse:

27% of families interviewed reported parental quarrels accompanied by violence; 36% reported violence toward the children (Wilson & Orford, 1978)

Physical violence more than twice as likely to occur in families with alcohol problems vs. families without alcohol problems (clinical impression) (Barnard, 1981)

(table continues)

Table 1 Continued

Inconsistent or inadequate parenting:

63% of children reported a lack of interest in them by both parents; 94% of children described parents as inconsistent, unpredictable (Cork, 1969)

Inconsistent discipline described as emotionally depriving; a disturbed parent described as inadequate (clinical impression) (Sloboda, 1974)

Inconsistency of alcoholic's mood and behavior expressed by many of the alcoholic families interviewed (clinical impression) (Wilson & Orford, 1978)

Inconsistent, inadequate, or nonexistent parenting causes COAs to seek surrogate parents (Perrin, 1985)

(table continues)

Table 1 Continued

More parental separation or divorce:

41% of families of COAs experienced either separation
or divorce vs. 11% of families of controls
(Chafetz, Blane, & Hill, 1971)

5% of families of COAs experienced either separation or
divorce vs. 0% of families of controls (Kammeier,
1971)

31% of adolescent children of heavy drinkers came from
broken homes vs. 11% of adolescent children of
light drinkers vs. 12% of adolescent children of
abstainers (Rouse et al., 1973)

(table continues)

Table 1 Continued

Disturbed sibling relationships:

98% of children reported their relationships within the family had been affected by parental alcoholism; most children reported poor sibling relationships (Cork, 1969)

The unusual tension and animosity in an alcoholic family described as promoting either a lack of sibling relationships or pathologically intense ones (clinical impression) (Barnard, 1981)

Sibling relationships are complicated by the roles that may be placed upon individual brothers and sisters (Lerner, 1986)

(table continues)

Table 1 Continued

Disturbed family structure:

Alcoholic families classified into four subtypes, each with specific implications for children's roles and treatment strategies: functional, neurotic enmeshed, disintegrated, and absent (Kaufman, 1985)

Alcoholic families are either underinvolved or overinvolved (clinical impression) (Lerner, 1986)

Family roles range from being rigidly defined to total ambiguity (clinical impression) (Ackerman, 1983)

Disturbed family rules:

Don't talk, don't trust, don't feel, be strong, be good, be right (clinical impression) (Black, 1985; Gravitz, 1985)

(table continues)

Table 1 Continued

Need for control in relationships:

Clinical impression (Black, 1979; Hecht, 1973)

19.5% of COAs described as constantly fighting by
maternal report vs. 9.8% of controls (Haberman,
1966)

Significantly higher scores in "inadequate need for
independence" and "social aggression" on the
Devereux Child Behavior Rating Scale in COAs vs.
controls (Fine, Yudin, Holmes, & Heineman, 1976)

(table continues)

Table 1 Continued

Problems at school:

Teachers assessed 48% of COAs to be problem children
vs. 10% of classmates (Nylander, 1960)

19.5% of COAs described as having trouble at school by
maternal report vs. 9.8% of controls (Haberman,
1966)

Many COAs develop school phobia (Scott, 1970)

60.2% of COAs had a history of school problems vs. 37%
of controls (Chafetz et al., 1971)

46% of adolescent COAs had been suspended from school
vs. 8% of controls (Herjanic et al., 1977)

COAs perform at lower cognitive levels than children of
nonalcoholics (literature review) (Johnson &
Bennett, 1988)

(table continues)

Table 1 Continued

Problems with the law:

17.1% of COAs had been to correctional agency, child guidance clinic, or attendance bureau vs. 2.4% of controls (Haberman, 1966)

30.6% of adolescent COAs had a history of problems with police or courts by maternal report vs. 2.9% of adolescent controls (Chafetz et al., 1971)

More likely to have legal problems than peers
(Werner, 1986)

Note. The data in Table 1 is adapted from "The Relationship Between Child and Adult Psychopathology in Children of Alcoholics" by J. Giglio and E. Kaufman, 1990, The International Journal of Addictions, 25(3), p. 275-280. Copyright 1990 by Marcel Drekker, Inc. Adapted by permission.

Adult Children of Alcoholic Families

Research on adult children of alcoholics issues was limited until recent years. Miller and Tuchfield, (1986) state, "Since research about problems of adult children of alcoholics is scant, and there is no formal diagnostic grouping for affected people, the most that can be done now is to communicate to clinicians typical problems to look for when a patient's history reveals exposure to alcoholism at home during childhood or adolescence" (p. 235). Now, with the results of such studies as Black, Bucky, and Wilder-Padilla (1986), Berkowitz and Perkins (1988) and Wilson (1988), the anecdotal, observational, and empirical conclusions show some consistency. They have been able to show that children of alcoholics retain the behaviors they adopted as children and are as adults different from most adults of non-alcoholic parents (Jackson, 1984).

There are certain characteristics of ACAs that often appear in the literature (Black, 1982; Cermak, 1985; Cermak & Brown, 1982; Seixas & Levitan, 1984; Wegscheider, 1981; Woititz, 1983). Empirical research

by Black, Bucky, and Wilder-Padilla (1986) provides further evidence for these characteristics.

Black et al. (1986) made a significant contribution to the empirical evidence by comparing 409 adults raised in alcoholic homes with 179 adults raised in non-alcoholic homes using an instrument they created. While reliability and validity issues may be raised about this instrument, their effort moves the literature in the empirical direction. The problem areas noted significantly more often by the adult children of alcoholics were in four categories: (a) trusting people, (b) problems identifying and experiencing needs and feelings, (c) problems with depression, and (d) problems with over-responsibility. Bepko (1985) found evidence for both over-responsibility and under-responsibility. According to Wilson (1988) these findings suggest that the earlier clinical impressions were accurately reflecting the core issues and characteristics of adult children of alcoholics. In addition, Berkowitz and Perkins (1988) found in their empirical study that adult children of alcoholics suffer more from self-depreciation than

their peers. Women were found to express greater self-depreciation than men.

Wilson (1988) summarized the research on characteristics of ACAs into the following five characteristics which are similar to the findings of Black et al. (1986): "(a) inability to trust others, (b) denial of one's own feelings and needs, (c) frequent depression, (d) guilt proneness and excessive sense of responsibility, and (e) need to control situations and relationships" (p. 2).

Wilson (1988) identified Evangelical Christian adult children of alcoholics as her population for study. Using her summary of characteristics as the basis for comparison, the adult children of alcoholics were significantly more depressed, distrusting, and self-blaming than the children of non-alcoholics. This was consistent with the clinical observations and provided empirical evidence for three of the five most often cited characteristics. She also investigated self-reported religious problems and concluded significant differences in the areas of experiencing God's love and forgiveness, trusting God's will, believing biblical promises, and forgiving others.

Most adults from alcoholic families will continue to interact with their families of origin. Wilson (1988) states that no matter how embarrassing or difficult it is for the adult children to interact with their alcoholic parents, they continue because they still feel responsible for stabilizing the family system. According to Cermak and Brown (1982), the members of their therapy groups for adult children of alcoholics were not only concerned about their issues but were feeling responsible for the welfare of their families of origin. Beletsis and Brown (1981) reported that adult children of alcoholics seeking help had the feeling that they were abandoning their families of origin since they were forced to confront the denial system that held the alcoholic system together. The same feelings were found by Perrin (1984) among participants in his therapy groups. He emphasized the theme of loss of love and the need to reconnect with the family of origin that he observed. He explained that this resulted from the adult children feeling they had betrayed and abandoned their families.

Table 2 summarizes the research on the effects of parental alcoholism on adult children.

Table 2

Effects of Parental Alcoholism on Adult Children

Effects on the Adult's Use of Alcohol

Increased chance of becoming alcoholic:

30 - 50% of sons become alcoholic (Kolata, 1988)

Nearly 4 times the alcoholism rate using Goodwin's
criteria in ACA adoptees vs. controls (Goodwin,
Schulsinger, Hermansen, Guze, & Winokur, 1973)

Literature review of 39 studies showed substantially
higher rates of alcoholism in relatives of
alcoholics vs. relatives of nonalcoholics (Cotton,
1979)

36.8% of ACAs described themselves as alcoholic vs.
9.5% of controls (Black et al., 1986)

Role Behavior and Identity Issues

Play roles in family relationships:

Outpatient ACAs described by 3 roles: the responsible
ones, the adjusters, and the placaters (clinical
impression) (Black, 1979)

(table continues)

Table 2 Continued

ACAs described as overresponsible or underresponsible
(Bepko, 1985)

Wegscheider's (1981) childhood roles related to their
adult results with and without help (Kern, 1985)

Roles as variants of the suggested codependency
personality disorder: the martyr, the persecutor,
the coconspirator, the drinking partner, the
apathetic codependent (clinical impression)
(Cermak, 1986)

Have role confusion:

Role conflict as a theoretical framework for
understanding COA psychopathology (Nardi, 1981)

Clinical impression (Gravitz, 1985)

More likely to have an alcoholic spouse:

Coalcoholic spouses described as often being
oldest daughters or oldest children of alcoholic
males (Bepko, 1985)

28.7% of ACAs reported having an alcoholic spouse vs.
12.9% of controls (Black et al., 1986)

(table continues)

Table 2 Continued

Clinical impression (Wegscheider-Cruse, 1986)

All-or-none behavior (clinical impression):

By clinical description (Black, 1979; Black, 1985;
Cermak, 1985; Geringer-Woititz, 1983; Gravitz,
1985; Gravitz & Bowden, 1984; Quick, 1990)

Female ACAs frequently describe themselves as "all-or-
none" people (Bepko, 1985)

Low self-esteem:

Try to please others (Bepko, 1985; Black, 1979)

Clinical impression (Cermak, 1985; Cermak, 1986;
Geringer-Woititz, 1983)

65.9% of ACAs reported "putting self first problems"
vs. 49.2% of controls (Black et al., 1986)

Greater self-depreciation than peers in study of young
ACAs (Berkowitz & Perkins, 1988)

Personality Characteristics

Problems with identification of feelings:

57.8% of ACAs reported "problems identifying feelings"
vs. 35.1% of controls; 46.2% of ACAs reported

(table continues)

Table 2 Continued

having confusion vs. 17.4% of controls (Black et al., 1986)
Failure to negotiate Erikson's psychosocial stages of development resulting in ACA characteristics (Brooks, 1985; Cermak, 1985; Kern, 1985)
<u>Anxiety:</u>
Clinical impression (Brown, 1985)
<u>Affective disorders:</u>
45.2% of ACAs reported depression vs. 23.1% of controls (Black et al., 1986)
See data from Winokur et al. (1970) in same section of childhood effect tabulation
Effects on DSM-III Axis II personality traits:
Higher levels of personality pathology and lower levels of object relational development found in ACAs compared with non-ACAs confirming presence of personality disorders and characterological defensive adaptation (Hubbard, 1989)

(table continues)

Table 2 Continued

Compulsivity: clinical impression (Cermak,
1985; Gravitz, 1985)

Passive-dependent traits:

Clinical impression (Cermak, 1986)

52.5% of ACAs reported "dependency problems" vs. 30.1%
of controls (Black et al., 1986)

Antisocial traits:

See data from Winokur et al. (1970) in same section of
childhood effects tabulation

More antisocial traits reported by 10/14 alcoholics who
had alcoholic parents (Goodwin, Schulsinger,
Hermansen, Guze, & Winokur, 1975)

Mean of 11.0 days in jail reported by male ACAs vs. 2.1
in controls; mean of 1.7 alcohol-related arrests
reported by male ACAs vs. 0.8 in controls; mean of
0.8 alcohol-related arrests in female ACAs vs. 0.3
in controls (McKenna and Pickens, 1981)

(table continues)

Table 2 Continued

Co-dependent personality disorder:

Suggested as a new diagnosis (Cermak, 1985; Cermak, 1986)

Posttraumatic stress disorder:

As a reaction to being a COA (Cermak, 1983; Cermak, 1985; Cermak, 1986; Clair and Genest, 1987)

Career indecision:

"chronically undecided", alternating between "any is possible" and "nothing is possible" (Schumrum and Hartman, 1988)

Lower Achievement:

Overall lower well-being and lower achievement than controls (Plescia-Pilus, Long-Suter, & Wilson, 1988)

Familial and Extrafamilial Interactions

Poor communication skills:

ACAs reported significantly less communication with significant others in childhood (Black et al., 1986)

(table continues)

Table 2 Continued

65.2% of ACAs reported "problems expressing feelings"

vs. 52.5% of controls (Black et al., 1986)

74.3% of ACAs reported "problems expressing needs" vs.

59.3% of controls (Black et al., 1986)

ACAs have difficulty asking for what is wanted or

needed (clinical impression) (Gravitz, 1985)

More arguments:

66.3% of ACAs reported frequent parental arguments

during childhood vs. 25.7% of controls (Black et

al., 1986)

More physical violence or abuse:

ACAs reported more frequent physical and sexual abuse

as children vs. controls (Black et al., 1986)

More separation or divorce:

46.4% of ACAs reported being previously married vs.

35.5% of controls (Black et al., 1986)

(table continues)

Table 2 Continued

Need for control in relationships:

ACAs can be expected to view control issues with particular intensity (clinical impression) (Cermak & Brown, 1982)

ACAs need for control may lead to career as social worker, psychiatrist, nurse, or other helping profession (Bepko, 1985)

Fear of losing control as one of the ACA characteristics (Cermak, 1985; Geringer-Woittitz, 1983)

62.1% of ACAs reported intimacy problems vs. 40.5% of controls (Black et al., 1986)

Problems with trust:

Lack of trust as one of the core issues for ACAs (Black, 1985; Cermak & Brown, 1982; Gravitz & Bowden, 1984)

60.3% of ACAs reported "problems with trusting people" vs. 34.9% of controls (Black et al., 1986)

(table continues)

Table 2 Continued

Denial as a defense mechanism:

ACAs live in a world of denial (clinical impression)
(Cermak, 1985; Gravitz, 1985)

Inappropriate loyalty:

Clinical impression (Cermak, 1986; Cermak & Brown,
1982; Geringer-Woitzitz, 1983; Gravitz, 1985)
ACAs have difficulty separating from their families of
origin (clinical impression) (Cermak, 1986)

Oppressive family rules:

Inconsistency, unpredictability, arbitrariness, chaos
(Quick, 1990).

Note. The data in Table 2 is adapted from "The
Relationship Between Child and Adult Psychopathology in
Children of Alcoholics" by J. Giglio and E. Kaufman,
1990, The International Journal of Addictions, 25(3),
p. 281-284. Copyright 1990 by Marcel Drekker, Inc.
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In summary, clinical impression and research of
ACAs have consistently shown that the impact of their
childhood exposure to alcoholic behavior often results

in far-reaching deficits in the emotional and interpersonal domains. ACAs have an increased chance of becoming alcoholics, have role confusion in the family, are more likely to have an alcoholic spouse, experiences all-or-none thinking, and have low self-esteem. They possess a variety of personality characteristics such as problems with identity, arrested developmental stages, anxiety, affective disorders, and a variety of Axis II personality traits.

Familial and extrafamilial interactions include poor communication skills, more arguments, more violence and abuse, more divorce and separation, problems with trust, denial, inappropriate loyalty, and oppressive family rules. It is significant to also expand investigation into the effects in the spiritual domain. The next section addresses this in terms of spiritual well-being.

Spiritual Well-Being

The United States experienced tremendous social and political changes in the 1960's and 1970's. Objective "Quality of life" indicators (i.e., education, income, health, and housing) were all moving

in a positive direction. Despite these changes, there were several indications of social deterioration. These included increases in alcohol and drug abuse, disintegration of families, and political and social unrest (Campbell, 1976). Concern began to grow regarding some previously overlooked factors that may account for this seeming discrepancy.

Quality of life research began to reveal that satisfaction in life cannot be measured simply through objective means. There are subjective qualities that must also be taken into consideration. One of these aspects of individuals is what Moberg (1971, 1979) called spiritual well-being. He proposed that humans demonstrate a horizontal relationship to the world and a vertical relationship to God which he described as the relational and spiritual aspects of individuals.

Assessing this subjective domain became more essential as research began to indicate that religious factors were related to predicting such behaviors as alcohol abuse and sexual conduct (Gorsuch, 1984).

A published instrument called the Spiritual Well-Being Scale (SWB) was designed by Ellison and

Paloutzian (Ellison, 1983) for the purpose of measuring one's relationship to God and to others.

There are 20 items in the SWB divided into two 10 item subscales. The items are rated in a six-point Likert-like scale with no midpoint. The Religious Well-Being (RWB) subscale contains the ten odd-numbered items which are intended to assess the vertical dimension of spirituality and refer to God. The Existential Well-Being (EWB) subscale includes the ten even numbered items which measure one's horizontal relationship to others as well as one's sense of purpose and satisfaction in life. Well-being is indicated with higher scores.

After promising research, it has been suggested that one problem with the SWB scale is that it is not able to measure higher levels of the construct of spiritual well-being. The fact that this scale has ceiling effects has been indicated in recent studies (Brinkman, 1989; Bufford, Paloutzian, & Ellison, 1991; Moody, 1988). Ceiling problems may be a common feature of scales measuring the religious domain.

Ledbetter, Smith, Vosler-Hunter, and Fischer (1991) found that SWB scores are negatively skewed in

religious samples which restricts the range of possible scores. These findings are consistent with expectations that the ceiling problem would surface with the population (religious) which would be likely to score high. It is suggested by Bufford, Paloutzian, and Ellison (1991) that the ceiling problem means that persons with high levels of spiritual well-being cannot be distinguished by the scale.

Brinkman, Capes, Kunkel, and Tackett (1988) found that variability of responses to many of the items in religious samples is almost non-existent. They propose that items may be added to the scale which have greater variability in highly religious samples in order to increase the ceiling. So far this has not been done. One problem is identifying or developing items with suitable variability in religious samples.

Although the effectiveness of the scale to distinguish above average scores is limited, Ledbetter, et al. (1991) concluded that low scores are useful in clinical settings to indicate problems in spiritual well-being. Bufford, et al. (1991) concur, suggesting that it appears from current validity data that the SWB Scale is a good general measure of well-being. Since

clinical samples score significantly lower than normal samples, this indicates that the scale may be effective in identifying persons who are experiencing distress. A considerable amount of research has been conducted with the SWB scale. Tables 3 and 4 are a summary of this research.

In Table 3, Renfroe (1990) states that the SWB has shown positive correlations with psychological health in areas such as assertiveness, self-esteem, internal locus of control, hopefulness, and general well-being. There have been correlations in marriage and family issues including father's self esteem, age, marital satisfaction, and perceived quality of parent-child relationships.

In the area of health measures, there have been positive correlations with Acceptance of Disability, Psychological General Well-Being, Self Report of Health, Ideal Body Weight, decrease in medication after treatment, attitude of seeking medical help, current health, and using religious means for coping with pain.

Table 3

Validity Studies of the Spiritual Well-Being Scale-
Positive Correlations

Psychological Health

K Scale of the Minnesota Multiphasic Personality
Inventory (MMPI) (Mullins, 1986)

Measures of assertiveness on the Interpersonal Behavior
Survey (IBS) (Bufford, Paloutzian, & Ellison,
1991; Bufford & Parker, 1985; Campbell, 1983;
Hawkins, 1986; Mullins, 1986; Sherman, 1987)

Self-esteem (Campise, Ellison, & Kinsman, 1979; Ellison
& Economos, 1981; Ellison, Rashid, Patla, Calica,
& Haberman, 1984; Marto, 1984; Paloutzian &
Ellison, 1979a)

Internal locus of control (Jang, Paddon, & Palmer,
1985; Marto, 1984; Palmer, 1985)

(table continues)

Table 3 Continued

Hopefulness (Palmer, 1985)

Psychological General Well-Being Scale (PGWB) (Temple,
1987)

Hope Index Scale (Palmer, 1985)

Marriage and Family

Father's self-esteem, but not his children's (Marto,
1984)

Age (Bressem, Waller, & Powers, 1985; Palmer, 1985)

Marital satisfaction as measured by the Marital
Satisfaction Index (Quinn, 1984)

Marital Satisfaction Scale (Mashburn, 1987)

Perceived quality of parent-child relationships,
memories of family togetherness as a child, and
childhood peer relationships (Campise, Ellison, &
Kinsman, 1979; Ellison & Paloutzian, 1978; Ellison
& Paloutzian, 1979)

Health Measures

Acceptance of Disability (Campbell, 1983)

Psychological General Well-Being (Temple, 1987)

(table continues)

Table 3 Continued

Self-Report of Health (Hawkins, 1986)

Ideal Body Weight (Hawkins & Larson, 1984)

Decrease in medication after treatment (Mullins, 1986)

Attitude of seeking medical help (Bufford, 1987)

Current health (Bufford, 1987)

Using religious means for coping with pain (Bonner,
1988; Campbell, 1983; Mullins, 1986)

Religiosity

Spiritual Maturity Index (Bressem, 1986; Bufford, 1984;
Carr, 1986; Cooper, 1987; Jang, Paddon, & Palmer,
1985; Mueller, 1986; Parker, 1984)

Spiritual Leadership Qualities Inventory (SLQI)
(Parker, 1984; Carr, 1986)

Religious Orientation Scale-Intrinsic (Ros-I) (Bufford,
1984; Ellison & Paloutzian, 1979; Mueller, 1986;
Quinn, 1984)

Supernatural Locus of Control (SLOC) (Durham, 1986)

(table continues)

Table 3 Continued

REL (Religious Fundamentalism Content) scale from the
MMPI (Frantz, 1985)

Importance of religion to an individual (Bufford, 1984;
Carr, 1986; Carson, Soeken, & Grimm, 1988; Davis,
Longfellow, Moody, & Moynihan, 1987; Durham, 1986;
Frantz, 1985, Jang, 1987)

Viewing God as causal agent (Durham, 1986)

Frequency and/or duration of personal devotions
(Bressem, 1986; Bressem, Waller, & Powers, 1985;
Bufford, 1984; Carr, 1986; Clarke, 1987; Colwell,
1987; Davis, Longfellow, Moody, & Moynihan, 1987;
Ellison & Economos, 1981; Huggins, 1988; Jang,
1987; Jang, Paddon, & Palmer, 1985; Renfroe, 1990)

Frequency of church attendance (Bufford, 1984; Colwell,
1987; Durham, 1986; Ellison & Economos, 1981;
Frantz, 1985; Hawkins, 1986; Huggins, 1988; Jang,
1987; Mitchell & Reed, 1983; Quinn, 1984; Sherman,
1987; Renfroe, 1990)

(table continues)

Table 3 Continued

Frequency of family devotions (Bufford, 1984)
Pastor/leader evaluations of present relationship to God (Bressem, Waller, & Powers, 1985)
RWB and one's attitude toward charismatic practices (Bressem, 1986)
Religious knowledge (Bressem, Colwell, Mueller, Neder, & Powers, 1985; Carr, 1986; Davis et al., 1987; Jang, 1987)
Church leadership experience (Moody, 1988)
Feeling accepted and valued by God (Ellison & Economos, 1981; Ellison, Rashid, Patla, Calica, & Haberman, 1984)
Estimation of one's spiritual maturity (Davis et al., 1987)
Attending seminary (Bufford, Bentley, Newenhouse, & Papania, 1986)
Participation in religious activities (Bonner, 1988)
Small Group participation (Huggins, 1988; Renfroe, 1990)

Note. The data in Table 3 are from "The Effect of Psychotherapy on Depression and Spiritual Well-Being in Outpatient Adults" by T. Renfroe, Doctoral Dissertation, George Fox College, 1990, p. 12-17. Adapted by permission.

There has been considerable research in the area of religiosity. Positive correlations have been found between SWB and the Spiritual Maturity Index, Spiritual Leadership Qualities Inventory, Religious Orientation Scale-Intrinsic, Supernatural Locus of Control, and Religious Fundamentalism Content Scale of the MMPI. SWB has also correlated positively with self reports including: importance of religion to an individual, viewing God as a causal agent, frequency and/or duration of personal devotions, frequency of church attendance, frequency of family devotions, and pastor/leader evaluations of present relationship with God. Other positive correlations have been shown between RWB and one's attitude toward charismatic practices, religious knowledge, church leadership experience, feeling accepted and valued by God, estimation of one's spiritual maturity, attending

seminary, participation in religious activities, and small group participation (Renfroe, 1990).

Negative correlations are the focus of Table 4. The SWB correlates negatively in the area of psychopathology with loneliness, depression, aggression, dependency, and passive aggressiveness. Negative correlations have been found between SWB and health measures related to blood pressure and age. In the area of marriage and family, the Existential Well-Being subscale is negatively correlated with number of marriages. Regarding values there is a negative correlation with individualism, success, and personal freedom (Renfroe, 1990).

Table 4

Validity Studies of the Spiritual Well-Being Scale-
Negative Correlations

Psychopathology

Loneliness (Ellison & Paloutzian, 1979; Paloutzian &
Ellison, 1979a; Paloutzian & Ellison, 1979b;
Paloutzian & Ellison, 1979c)

Depression as measured by the Beck Depression Inventory
(Campbell, 1983; Renfro, 1990)

Aggression, Physical Aggressiveness, Passive
Aggressiveness, Dependency, and Avoidance of
Conflict as measured by the Interpersonal Behavior
Survey (IBS) (Bufford et al, 1991; Bufford &
Parker, 1985; Campbell, Mullins, & Colwell, 1984;
Hawkins, 1986; Mullins, 1986)

Shyness and dependency as measured by the IBS (Bufford
& Parker, 1985)

MMPI clinical scales (Frantz, 1985; Mueller, 1986;
Mullins, 1986)

(table continues)

Table 4 Continued

Health Measures

Blood pressure (Hawkins, 1986)

Age (Bufford, 1984; Durham, 1986; Hawkins, 1986)

Marriage and Family

Existential Well-Being subscale (EWB) with number of
marriages (Hawkins, 1986)

Values

Individualism, success, and personal freedom (Campise,
Ellison, & Kinsman, 1979)

Note. The data in Table 4 are from "The Effect of
Psychotherapy on Depression and Spiritual Well-Being in
Outpatient Adults" by T. Renfro, Doctoral
Dissertation, George Fox College, 1990, p. 18-19.
Adapted by permission.

In summary, Moberg's model of human relationships has been studied extensively using the SWB scale. The scale has been used to study many topics and has been found to be profitable in studying such a complex concept as the spiritual domain. SWB is positively related to physical psychological and spiritual health.

Children of Alcoholics Screening Test

The Children of Alcoholics Screening Test (CAST) has been used with great success for some time to distinguish between ACAs and non-ACAs (Barnard & Spoentgen, 1986; Dinning & Berk, 1989; Rearden & Markwell, 1989; Wilson, 1988). It is a 30-item inventory that measures a child's psychological distress associated with a parent's drinking, perceptions of drinking-related marital discord between their parents, attempts to control a parent's drinking, efforts to escape from the alcoholism, exposure to drinking related family violence, tendencies to perceive their parents as being alcoholic, and desire for professional counseling (Jones, 1991).

Research has been presented that indicates the far-reaching effects of being an ACA. The spiritual domain

has been researched briefly by Wilson (1988) in an Evangelical Christian population. The CAST and SWB were chosen for this study to further investigate Wilson's findings and to give further insight into the spiritual domain of Evangelical Christians.

This study asks: Does being an ACA effect the spiritual well-being of Evangelical Christians?, and Can ACAs be differentiated from non-ACAs in the area of spiritual well-being?

Hypotheses

This study tests the hypothesis that the SWB scores of ACAs will be lower than the scores of non-ACAs. A further hypothesis is that Evangelical ACAs can be differentiated from non-ACAs on the basis of their spiritual well-being. In addition to these hypotheses, demographic and religious behavior variables will be compared between the two groups to identify differences.

CHAPTER 2

METHODS

The concepts of Chapter 1 are operationalized in this section of the study. The participants, procedures, and design of the study will be presented. Four sections will be used to accomplish this. First, a description of the participants will be given as to selection and demographics. Secondly, a discussion of the instruments will be given. Thirdly, the procedure of the study will be outlined. Finally, the design will be illustrated and discussed.

Participants

The participants in this study were adult members of three Evangelical Christian churches in the Portland, Oregon area: (a) Beaverton Christian Church, (b) New Hope Community Church, and (c) Mt. Scott Church of God. These participants were chosen in order to study the effect of being an ACA on the spiritual domain of Evangelical Christians.

The three churches were selected because they are distinctively Evangelical Christian in their doctrine as defined earlier in this study. The participants of the study were adult members of the churches who volunteered to take part in the study. They were mostly recruited from adult Sunday School classes. There were 143 participants in the study from the three churches.

Demographic information was gathered from all of the participants. This information included, age, gender, marital status, income, education, and counseling or support group experience.

Instruments

There were two instruments used in this study, the Spiritual Well-Being Scale (SWB) and the Children of Alcoholics Screening Test (CAST). Additional data were collected regarding demographics and religious values. The SWB was discussed in Chapter 1 including available validity studies.

Spiritual Well-Being Scale

In this section, the psychometric properties will be discussed.

Reliability

The SWB has provided reliability coefficients that are both fairly consistent and adequate. Test-retest coefficients found by Brinkman (1989) were lower than the original ones Ellison (1983) reported, but were above .70, thus within an acceptable range.

Ellison (1983) states that he found the SWB to have high reliability and internal consistency. Consistent Chronbach Alpha coefficients were found by Brinkman (1989) and Ellison (1983) which were both acceptable for assessment purposes. Reliability studies are summarized in Table 5.

Validity

The reader is referred back to Tables 3 and 4 for a summary of correlations between SWB and physical health, psychological health, and spiritual functioning. SWB appears to be a good measure of general subjective well-being. Validity is the most significant issue in assessing a psychological measure.

Table 5

Reliability Coefficients of the SWB Scale

	SWB	RWB	EWB
Test-Retest	.93	.96	.86
Ellison, 1983,			
Brinkman, 1989	.82	.88	.73
Cronbach's Alpha:			
Ellison, 1983	.89	.87	.78
Brinkman, 1989	.86	.82	.76
Brinkman, 1989	.92	.94	.86

Note. The data in Table 5 are from "The Effect of Psychotherapy on Depression and Spiritual Well-Being in Outpatient Adults" by T. Renfroe, 1991, Doctoral Dissertation, George Fox College, 1990, p.25.

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It has to do with the ability of an instrument to measure what it intends to measure and how well it accomplishes this task (Anastasi, 1988). There are three major types of validity: content related (face

and logical), criterion related (predictive ability and/or concurrent validation), and construct validity.

Bufford et al. (1991) state that the initial construction of the SWB insured a good content validity. As mentioned earlier, the ceiling effect of the SWB limits its effectiveness in assessing high scores since there is little variance. This affects criterion related validity in both predictive and concurrent validation since future spiritual well-being cannot be predicted and those with high spiritual well-being cannot be determined for a basis of comparison. Nonetheless, correlations with criterion measures have been consistently moderate to high for the SWB scale.

Construct validity looks at the extent to which a test measures a certain theoretical construct or trait (Anastasi, 1988). Renfroe (1990) concludes that construct validity is the most appropriate type of validity to evaluate the SWB. Brinkman's (1989) study was significant in establishing construct validity for the SWB. The SWB scale correlated with several religious scales and single item measures.

A significant positive correlation for the SWB scale was found with the Spiritual Maturity Index and a

moderately negative correlation was seen with the Religious Orientation Intrinsic Scale. These results were similar to those found by previous studies (Bufford, 1984; Carr, 1986; Davis et al. 1987; Quinn, 1984). The SWB scale had both moderate and significant correlations with the Concept of God (COG) subscales. Brinkman (1989) also found a high negative correlation between the SWB fullscale and the Spiritual Distress Scale.

Ellison (1983) reported three factor loadings from factor analysis to validate the SWB scale. In the context of the Spiritual Maturity Index, Cooper (1987) and Davis et al. (1987) looked at the SWB scale from a perspective of factor analysis and found different results from Ellison (1983). Ledbetter, Smith, Vosler-Hunter, and Fischer, (1991) did a confirmatory factor analysis of the SWB Scale and concluded that the factor structure of the SWB scale remains inconclusive even though the scale correlates strongly with other measures.

In summary, the construct validity of the SWB scale has strong support. The scale correlates in expected

directions with other scales that are theoretically similar to and discrepant from the SWB scale. Concern does exist in the area of factor analysis which has not produced consistent results.

Children of Alcoholics Screening Test

The Children of Alcoholics Screening Test (CAST) is a one page questionnaire developed by Jones (1991) which contains 30 items that measure the attitudes, feelings, perceptions, and experiences of children concerning their parent's drinking behavior. Items were constructed from clinical observations with children of alcoholics and from characteristics from published case studies. A score of 6 or more indicates that more likely than not the person is a child of an alcoholic.

According to Hart (1989) the CAST is intended for use: (a) in identifying "at risk" children in schools and clinics who have adult caretakers who are alcoholics, (b) to assist in the diagnosis of parental alcoholism, (c) as a counseling aid for children of alcoholics, and (d) for a research instrument on COAs.

Reliability

Reliability evidence is limited to the Spearman-Brown split-half internal consistency reliability coefficient of .98 in two studies reported by Pilat and Jones (1984). This leaves questions regarding stability of results over time.

Validity

Content (face validity) validity was established by the judgement of a number of alcoholism counselors and adult children of alcoholics. In addition, two empirical validity studies have been conducted. Pilat and Jones (1984) reported that in the first study the CAST was administered to 82 children of clinically diagnosed alcoholics, 15 self-reported children of alcoholics, and 118 randomly selected control group children. The 82 clinically diagnosed COAs lived in a home with at least one parent who had been diagnosed alcoholic by a psychiatrist, a psychologist, and a certified alcoholism counselor. The self-reported COAs reported that at least one of their parents went for alcoholism counseling either for themselves or because of their spouse's alcoholism.

Using analysis of variance the clinically diagnosed COAs and the self-reported COAs scored significantly higher on the CAST compared to controls. The score of 6 or more was found in 100% of the COA group as compared to 23% of the control group.

Pilat and Jones (1984) reported the CAST was administered to 81 adults ranging from 18-37 years of age. Five reported that one or more of their parents received treatment for alcoholism. These five formed the self-reported ACA group which scored significantly higher than the other 76 subjects. There were also significant positive correlations between the CAST scores of the 81 adults and their self-report of their observation of the amount of alcohol their parents consumed in a typical week. Jones (1991) suggests that the CAST is a valid screening test with an adult sample as well as a child sample. This provides some support for the construct validity of the CAST as a measure of the trait of ACA.

Although there have been a number of studies using the CAST, they have provided no further evidence to clarify reliability and validity (Hart, 1989).

Other Measures

In addition to the two empirical measures, demographic and religious information about the participants was obtained from a pencil-and-paper questionnaire. A booklet was given to the participants which contained the informed consent form, Spiritual Well-Being Scale (SWB), Children of Alcoholics Screening Test (CAST), a Demographic Questionnaire (DQ), and the Religious Behavior Questionnaire (RBQ). All of the information was obtained by self-report. Each of the participants was asked to report on age, gender, marital status, income level, and on counseling or support group participation.

The Religious Belief Questionnaire (RBQ) is a survey of religious beliefs, behaviors, and attitudes. This was included in the booklet because items of this nature have been shown to have high correlation with high commitment to religion (Gorsuch, 1984; Worthington, 1988). Studies using these items have shown significant correlations between these items and religious commitment and involvement (Brinkman, 1989; Bufford, 1984; Cooper, 1987; Davis et al., 1987; Renfro, 1990). The items include frequency of church

attendance, frequency of personal devotions, profession of Christian faith, length of being a Christian, importance of religion, and time investment in religious activities or service.

Procedures

Administration of the testing booklets was coordinated by a key contact person in each of the three churches selected for the study. A phone call to the key person enlisting their help was followed by a letter of instruction (see Appendix A). Participants were gathered in each church setting by this person from various organizations such as adult Sunday school classes, Bible studies, and specialty groups, (i.e., single's groups, recovery groups, etc.). Each booklet was introduced with a letter explaining anonymity, the person's freedom to participate, and instructions (see Appendix B).

The participant's identity was protected by using numbers for each booklet. The name was not needed for the study, thus no identifying information was placed on any of the material except the booklet number.

The key person in each church gave an identical booklet to each volunteer in the study. They were asked to fill out the booklet as honestly as they knew how based on their present thoughts and feelings. The participants were encouraged to fill out the booklets in one sitting without taking them home. The booklets were collected by the key person at each church and returned to the researcher for statistical analysis.

Design

Campbell and Stanley (1963) describe the design of this study as "The Static-Group Comparison" design. This is a pre-experimental design. "This is a design in which a group which has experienced X is compared with one which has not, for the purpose of establishing the effect of X" (p. 12).

Internal Validity

An internally valid design allows the researcher to determine if there is a causal relationship between the independent and dependent variables (Campbell & Stanley, 1963). Campbell and Stanley (1963) suggest

that there are two threats to internal validity in the design of this study. First, selection presents a threat to internal validity. If the two groups differ, is it possible they would have differed anyway, without the issue of ACA versus non-ACA. The second threat is mortality. This occurs when differences in the groups is due to drop-out of persons from the groups.

External Validity

External validity looks at the generalizability of the results of the study. Campbell and Stanley (1963) identify the threat of the interaction between selection and the independent variable of being raised in an alcoholic home. Generalizability was limited due to the focused population of volunteers from several local churches of an Evangelical Christian persuasion.

A schematic illustration of the design is presented in Table 6. The basis of the design is the comparison of the two group's scores on the dependent variable SWB, and subscales RWB and EWB and correlations with the other questionnaire measures.

Table 6

Schematic Representation of the Research Design

Non-ACA	Group 1		O_1
ACA	Group 2	X	O_2

Note: The O 's stand for the administration of the SWB to the non-ACA group (O_1) and to the ACA group (O_2). The X represents the experience of growing up in an alcoholic home.

The design utilized three t-tests to examine differences in the dependent variables SWB, RWB, and EWB. Roscoe (1975) describes the t-test as valid for samples of any size in which normal distribution is assumed. The procedure is used to determine whether the mean of a certain population differs significantly from the norm group. The independent variable was the ACA/non-ACA classification. T-tests were also used to examine demographic differences between the continuous and ordinal variables. The Chi-square test was used to examine differences between the groups for nominal variables. "The Chi-square statistic provides a

generalized procedure for testing hypotheses about the distribution of nominal and higher order data" (Roscoe, 1975, p. 247).

Since no significant differences were found in the SWB, RWB, and EWB scores between the two groups, a series of post hoc tests were performed. Analysis of variance (ANOVA), according to Roscoe (1975), is used for testing the hypothesis that two or more independent samples were drawn from a population having the same mean and comparing them on a single criterion variable. This technique was used to investigate possible mean differences in reclassified ACA groups. The technique was also used to examine the impact of Church Sample on SWB, RWB, and EWB. The Tukey post hoc test was used in further examining significant ANOVAs to discover which groups differed. This test determines the minimum "difference between treatment means that is necessary for significance" (Gravetter & Wallnau, 1985, p. 424).

Analysis of covariance (ANCOVA) was used to further clarify between church differences. The covariates were DQ8 (attending or not attending support groups), and DQ9 (level of professional counseling obtained). Benefits of this technique include: "(a) any variable

that influences the variation of the criterion variable may be controlled, and (b) the error variance in the analysis is substantially reduced" (Roscoe, 1975, p. 352).

Summary of Procedures

In an intact-groups design, participants from three churches were administered the CAST, SWB, DQ, and the RBQ. A key person from each church informed the participants regarding confidentiality and instructions for completing the testing booklet. This person was also responsible for administering and numbering the booklets. The completed booklets were returned to the researcher by the key person.

This study is a pre-experimental design, and thus has limitations on internal validity. The data was statistically analyzed using Chi-square, t-test, Pearson's correlation, and analysis of variance (ANOVA) using the statistical package (SPSS-PC+) on a micro-computer (Norusis, 1985).

The purpose of the study is to answer the question:
Does being an ACA affect the spiritual well-being of
Evangelical Christians?

CHAPTER 3

RESULTS

This chapter presents the results of the statistical analyses which were computed in this study. The first section presents the descriptive statistics and correlations among the demographic and scale variables along with statistical analyses to determine the demographic equivalency of the ACA and non-ACA groups. The next section reports a series of three t-tests which were computed to determine if significant differences exist between the ACA and non-ACA groups on RWB, EWB, and SWB. A number of post hoc analyses were computed in an attempt to further investigate the differences between these groups. Finally, the last section examines the model assumptions used in the statistical analyses.

Descriptive Statistics

Descriptive statistics for the demographic variables for the ACA and non-ACA group are presented in Table 7.

ACA Group

The ACA group members were predominately Caucasian, about two-thirds were females, and a majority were between the ages 30 and 50. About 80% were married and nearly 40% had been separated or divorced at one time. All participants had at least a high school education and about 65% had either taken college courses or completed a college or graduate degree. In describing their families of origin before age 18, about 60% lived with non-divorced parents, 17% of the parents were separated or divorced, and 17% were remarried.

About one-third of the ACA sample reported drinking alcohol socially, but over one-half reported current abstinence. Over 75% had received at least some professional counseling at one time in their lives and over two-thirds reported having attended a support group at some time.

Table 7

Descriptive Statistics for the Demographic Variables,
ACA Group and Non-ACA Group

Variable	Mean	Std Dev	Min	Max	<u>n</u>
DQ1 - AGE					
ACA	41.38	9.14	19	62	39
Non-ACA	42.84	12.70	18	74	96
RBQ1A - RELIGION					
ACA	6.77	.60	5	7	35
Non-ACA	6.66	.82	1	7	96
RBQ1B - FAITH					
ACA	6.29	1.27	1	7	31
Non-ACA	6.49	.92	1	7	9
RBQ4 - YEARS A CHRISTIAN					
ACA	16.10	14.66	0	50	36
Non-ACA	24.80	13.96	0	58	88
RBQ6 - SERVICE					
ACA	6.36	8.17	0	40	39
Non-ACA	6.09	12.36	0	70	93

(table continues)

Table 7 Continued

	<u>Count</u>		<u>Percentage</u>	
	ACA	NON-ACA	ACA	NON-ACA
Gender				
Male	14	51	35.9%	52.6%
Female	25	46	64.1%	47.4%
Present Marital Status				
Single (never married)	5	11	12.8%	11.3%
First Marriage	17	57	43.6%	58.8%
Separated or Divorced	11	15	28.2%	15.5%
Remarried	4	10	10.3%	10.3%
Living Together	0	0	0.0%	0.0%
Other	1	2	2.6%	2.1%
Missing	1	2	2.6%	2.1%
Highest Level of Education				
Less than High School	0	2	0.0%	2.1%
High School Graduate	7	9	17.9%	9.3%
Trade or Bus. School	2	6	5.1%	6.2%
Some College	13	29	33.3%	29.9%

(table continues)

Table 7 Continued

	<u>Count</u>		<u>Percentage</u>	
	ACA	NON-ACA	ACA	NON-ACA
Completed College	7	26	17.9%	26.8%
Some Graduate Work	4	9	10.3%	9.3%
A Graduate Degree	2	11	5.1%	11.3%
Missing	4	5	10.3%	5.2%
Ethnic Status				
Black	0	1	0.0%	1.0%
Hispanic	0	0	0.0%	0.0%
American Indian	0	1	0.0%	1.0%
Asian	0	0	0.0%	0.0%
Caucasian	37	93	94.9%	95.9%
Other	2	2	5.1%	2.1%
Marital Status of Parents				
Single (never married)	0	1	0.0%	1.0%
First Marriage	23	73	59.0%	75.3%
Separated or Divorced	7	7	17.9%	7.2%
Remarried	7	11	17.9%	11.3%

(table continues)

Table 7 Continued

	<u>Count</u>		<u>Percentage</u>	
	ACA	NON-ACA	ACA	NON-ACA
Living Together	1	0	2.6%	0.0%
Other	1	4	2.6%	4.1%
Drinking (Alcohol) Behavior				
Alcoholic				
(Still Drinking)	1	0	2.6%	0.0%
Alcoholic				
(Not Drinking)	7	4	17.9%	4.1%
Social Drinker	11	26	28.2%	26.8%
Abstain From Alcohol	20	66	51.3%	68.0%
Support Group or Mental Tx				
Never Attended	9	67	23.1%	69.1%
Attended	30	24	76.9%	24.7%
Professional Counseling/Tx				
Never Received	10	51	25.6%	52.6%
6 Sessions or less	4	15	10.3%	15.5%
7 - 29 Sessions	9	13	23.1%	13.4%

(table continues)

Table 7 Continued

	<u>Count</u>		<u>Percentage</u>	
	ACA	NON-ACA	ACA	NON-ACA
30 + Sessions	9	14	23.1%	14.4%
In-Patient Tx for				
Mental Health	3	1	7.1%	1.0%
Missing	4	3	10.3%	3.1%
Frequency of Church Attendance				
Less Than Once A Year	0	0	0.0%	0.0%
Once Or Twice A Year	0	1	0.0%	1.0%
3-12 Times Year	3	3	7.7%	3.1%
1-3 Times A Month	5	5	12.8%	5.2%
Weekly	11	42	28.2%	43.3%
More Than Once A Week	19	42	48.7%	43.3%
Missing	0	4	0.0%	4.1%
Profess To Be A Christian				
No	2	0	5.1%	0.0%
Yes, Follow				
Ethical Teachings	1	3	2.6%	3.1%

(table continues)

Table 7 Continued

	<u>Count</u>		<u>Percentage</u>	
	ACA	NON-ACA	ACA	NON-ACA
Yes, Received Christ	2	4	5.1%	4.1%
Yes, Received Christ and Follow Ethical Teachings	34	87	87.2%	89.7%
Missing	0	3	0.0%	3.1%
Frequency of Religious Devotions				
Not At All	2	3	5.1%	3.1%
Less Than Once A Week	3	12	7.7%	12.4%
Weekly	5	20	12.8%	20.6%
1-3 Times A Week	7	18	17.9%	18.6%
4-7 Times A Week	9	30	23.1%	30.9%
More Than Once A Day	13	12	33.3%	12.4%
Missing	0	3	0.0%	3.1%
Church Sample				
Church 1-Beaverton	8	39	20.5%	40.2%
Church 2-New Hope	27	20	69.2%	20.6%

(table continues)

Table 7 Continued

	<u>Count</u>		<u>Percentage</u>	
	ACA	NON-ACA	ACA	NON-ACA
Church 3-Mt. Scott	4	38	10.3%	39.2%

Note. n = (97) Non-ACA, (39) ACA.

The vast majority reported "receiving Christ," and about two-thirds have been Christians for a duration of 1 to 31 years; the average time since profession of faith was reported to be 16 years. ACAs reported that their religious beliefs and practice were extremely important and that their religious faith was at the center of their lives (both over 6 on a scale of 1 to 7). Over 80% have personal religious devotions at least once per week and about three-fourths reported attending church with the same frequency. The average time spent in some type of church ministry was 6 hours per week. Nearly 70% of the ACA sample came from church sample 2.

Non-ACA Group

The non-ACA group members were mostly of Caucasian origin and, in contrast to the ACA group, only about one-half were females. Their ages ranged from 18 to 74 years, but most were between the age of 30 and 55. Nearly 60% reported being in their first marriage and just over 10% had previously divorced and remarried. Overall, the non-ACA group was well educated; most everyone had at least some college and over 10% reported completing advanced graduate degrees. Nearly three-fourths came from non-divorced families prior to age 18. Eleven percent of their parents had remarried prior to their 18th birthday.

In contrast to the ACA group, over two-thirds reported alcohol abstinence and only 4% reported they were sober (i.e., not drinking) alcoholics. Over two-thirds of the non-ACA group had never attended a support group and over one-half had never received any professional counseling. However, nearly 29% reported receiving from 7+ counseling sessions.

About 94% of the non-ACA group reported having "received Christ," and about two-thirds had been Christians from 10 to 39 years. Similar to the ACA

group, non-ACAs reported that their religious beliefs and practice were extremely important and that their religious faith was at the center of their lives (both over 6 on a scale of 1 to 7). About 85% have personal religious devotions at least once per week; twelve percent of these reported religious devotions more than once per day. About 85% reported attending church at least once per week and they spend an average of 6 hours a week in some type of church related ministry.

Group Differences

A series of parametric and non-parametric statistical tests were computed to investigate demographic differences between the two groups. Table 8 shows t-tests (for continuous and ordinal variables) and Chi-square (for nominal variables) results between the ACA and non-ACA groups. Additionally, the Bartlett-Box tests for homogeneity of variances test statistic with the accompanying significance levels are shown.

The t-tests reveal two mean differences which are statistically significant. First, for years professing Christian, the non-ACA group reported being a Christian

an average of nine years longer than the ACA group

(Means = 24.80 and 16.10 years respectively).

Secondly, the ACA group reports receiving more

professional counseling than the non-ACA group (Means =

2.74 and 1.94 respectively).

In addition to these mean differences, the Chi-

square results (Table 8) revealed that three of the

nominal demographic variables were statistically

different: church attended, alcohol consumption, and

support group attendance.

Table 8

Tests of Differences Between Groups for Demographic Variables

Variable	Value	Sig.	Bartlett- Box F	Sig.
t-tests				
DQ1-Age	.75	.45	5.23	.02*
RBQ1A-Rel.	-.87	.38	4.46	.03*
RBQ1B-Faith	.78	.43	4.73	.03*
RBQ2-Attend.	.55	.58	1.76	.18
RBQ3-Christ.	1.18	.24	23.75	.00*
RBQ4-Years	3.11	.00*	.12	.72
RBQ5-Devot.	-1.69	.09	.70	.40
RBQ6-Service	-.15	.88	8.00	.00*
DQ4-Ed.	1.27	.20	.02	.87
DQ9-Counsel.	-3.36	.00*	1.07	.30
Chi-square				
Church	29.68	.00*		
DQ2-Gender	2.47	.11		

(table continues)

Table 8 Continued

Variable	Value	Sig.
DQ3-Mar. St.	3.63	.45
DQ5-Ethnic	1.70	.63
DQ6-Mar.St. of Parents	8.11	.15
DQ7-Alc.	10.27	.01*
DQ8-Group	26.68	.00*

Note. Importance of Religion = REL., Church Attendance = Attend., Christian Profession = Christ., Devotions = Devot., Education = Ed., Professional Counseling = Counsel., Marital Status = Mar. St., Alcohol = ALC.
* = $p < .05$.

An examination of the Group Comparisons in Table 9 reveal the following: (a) a greater number (69.2%) of the ACA sample were identified in Church sample 2 than would be expected by chance; (b) for Drinking Behavior, about 20% of the ACA group identified themselves as "alcoholic" compared to 4.1% of the non-ACA sample; and

(c) 76.9% of the ACA group had attended a support group while only about one-fourth of the non-ACA group reported doing so.

Table 9

Means and Variances for ACA and non-ACA groups with Significant Bartlett-Box Statistic for Demographic and Religious Variables

Variable	ACA Group			Non-ACA Group		
	Mean	Var.	<u>n</u>	Mean	Var.	<u>n</u>
DQ1-Age	41.38	83.61	39	42.84	161.33	96
RBQ1A-Rel.	6.77	.36	35	6.66	.68	90
RBQ1B-Faith	6.29	1.61	31	6.49	.85	78
RBQ3-Christ	3.74	.56	39	3.89	.16	94
RBQ6-Serv.	6.36	66.76	39	6.09	152.80	93

Note. Importance of Religion = Rel., Christian = Christ, Service = Serv.

Table 9 also reveals that the Bartlett-Box statistic was statistically significant for five of the demographic variables: DQ1 - Age, RBQ/A - Importance of Religion, RBQ1B - Importance of Faith, RBQ3 - Christian, and RBQ6 - Service. This suggests that the ACA and non-ACA groups had significantly different degrees of variability in their responses for these questions. Consequently, a separate variance estimate was used in computing the t value (as opposed to a pooled variance approach used in the other t -tests).

Table 9 reports the means and variances for those demographic variables in which the Bartlett-Box statistic was significant, indicating significantly different variances were found for the ACA and non-ACA groups. The ACA group was more homogeneous for: (a) age in years, (b) importance of religious beliefs and practices, and (c) hours per week spent in church ministry or service. The non-ACA group was more homogeneous for the variables: (a) have no religion vs. faith is the center of my life, and (b) type of religious profession.

In summary, the demographic characteristics of the ACA and non-ACA groups differed in a number of ways.

While equivalent in average age, the ACA group tended to be more homogeneous in age (i.e., more closely clustering around the mean). They tended to come from Church Sample 2 (New Hope) in greater numbers and were more recent Christians by an average of 9 years when compared to their non-ACA counterparts. Significantly, more alcoholics were identified in the ACA group and they were more likely to have attended a support group. The ACAs also reported receiving a greater amount of professional counseling. While no mean differences between the ACA and non-ACA groups were found for importance of religion and hours spent in weekly ministry, the ACAs were more homogeneous in their responses. Conversely, they were more heterogeneous in describing themselves on the "Have no religion--Faith is the center of my life" continuum and in responding to the various categories of their Christian profession.

Correlational Results

Finally, in describing the ACA and non-ACA groups, Pearson correlations among the continuous and ordinal variables were computed for the two groups separately.

These correlations matrices for the ACA and non-ACA groups are presented in Tables 10 and 11 respectively.

Table 10

Correlations Among the Study Variables for the ACAGroup

	DQ1	DQ4	TX	RBQ1A	RBQ1B	RBQ2
	AGE	ED.	GRP	REL.	FAITH	ATTEND.
DQ1	1.000					
DQ4	-.029	1.000				
TX	-.138	-.115	1.000			
RBQ1A	-.030	.146	-.031	1.000		
RBQ1B	.144	.150	.271	.723***	1.000	
RBQ2	.247	.111	.031	.526	.647***	1.000
RBQ3	.065	.226	.144	.753***	.724***	.632***
RBQ4	.531**	.230	-.053	.111	.296	.132
RBQ5	.161	.050	.131	.578***	.549***	.574*
RBQ6	.266	.056	-.025	.247	.280	.348*
RWB	-.002	.067	.009	.539***	.266	.436**
EWB	.127	.012	-.061	.287	.066	.473**
SWB	.099	.032	-.053	.454**	.169	.516***
CAST	-.295	.162	-.011	-.123	-.285	-.283

(table continues)

Table 10 Continued

	RBQ3	RBQ4	RBQ5	RBQ6	RWB	EWB
	Christ	Years	Devot.	Serv.		
RBQ3	1.000					
RBQ4	.233	1.000				
RBQ5	.660***	.084	1.000			
RBQ6	.196	.223	.406**	1.000		
RWB	.404*	-.129	.573***	.312	1.000	
EWB	.209	-.146	.391*	.230	.581***	1.000
SWB	.337*	-.162	.543***	.300	.862***	.913***
CAST	-.171	-.099	-.154	.052	.042	-.327

(table continues)

Table 10 Continued

	SWB	CAST
<hr/>		
SWB	1.000	
CAST	-.188	1.000

Note. Education = Ed., Support group and Professional Counseling = TX, Importance of Religion = Rel., Church Attendance = Attend., Christian profession = Christ, Devotions = Devot., Service = Serv. $n = 39$; * = .05, ** = .01, *** = .001

Table 11

Correlations Among the Study Variables for the Non-ACA Group

	DQ1	DQ4	TX	RBQ1A	RBQ1B	RBQ2
	Age	Ed.		Rel.	Faith	Attend.
DQ1	1.000					
DQ4	-.069	1.000				
TX	-.078	.069	1.000			
RBQ1A	.199	-.073	-.125	1.000		
RBQ1B	.113	-.011	-.172	.215	1.000	
RBQ2	.049	.226*	.062	-.030	-.006	1.000
RBQ3	-.067	.194	.014	-.113	-.094	.347***
RBQ4	.655***	.079	-.228*	.138	.204	.068
RBQ5	-.041	.085	-.007	.245*	.197	.204
RBQ6	.119	.144	-.080	.140	.152	.202
RWB	-.107	.153	-.083	.198	.364***	.215*
EWB	-.022	.029*	-.179	.250*	.307***	.148
SWB	-.073	.069	-.162	.213	.345**	.215*
CAST	-.065	-.015	.173	.020	.050	-.038

(table continues)

Table 11 Continued

	RBQ3	RBQ4	RBQ5	RBQ6	RWB	EWB
	Christ	Years	Devot.	Serv.		
RBQ3	1.000					
RBQ4	-.077	1.000				
RBQ5	.169	.082	1.000			
RBQ6	.090	.104	.182	1.000		
RWB	.264*	-.016	.379***	.223*	1.000	
EWB	.181	.072	.300**	.165	.621***	1.000
SWB	.274**	.059	.365***	.205	.878***	.920***
CAST	.099	-.235*	.182	.003	.094	.002

(table continues)

Table 11 Continued

	SWB	CAST
SWB	1.000	
CAST	.030	1.000

Note. Education = Ed., Support group and professional counseling = TX, Importance of religion = Rel., Church attendance = Attend., Christian profession = Christ, Devotions = Devot., Service = Serv. $n = 97$; * = .05, ** = .01, *** = .001

It is interesting to note than none of the Religious questions or SWB variables were significantly correlated with the CAST total score for the ACA group. For the non-ACA group, only (RBQ4) years professing to be a Christian was weakly correlated with the CAST. In general, the highest correlations were among the Religious Behavior Questionnaire (RBQ) variables and between the RBQ variables and RWB, EWB, and SWB. Correlation results for the total sample can be found in Appendix G.

T-test Results

Table 12 reports the descriptive statistics for the independent and dependent variables. As can be seen, the means and standard deviations for RWB, EWB, and SWB are very similar for both groups. As expected, the means for the CAST total score are very different since the ACA/non-ACA classification criteria separated those with low and high scores. While the mean CAST score was 18.31 for the ACA group, it was near zero for the non-ACA group.

A series of three t-tests were computed using RWB, EWB, and SWB as the dependent variables and the ACA/non-ACA classification as the independent variable. None of the three t-tests were statistically significant. The results are as follows: (a) RWB $t(131) = .30$, $p = .767$; (b) EWB $t(129) = 1.41$, $p = .160$; and (c) SWB $t(126) = 1.23$, $p = .219$. These results demonstrate that when classifying participants as ACAs using the CAST greater than 5 rule, no statistically significant differences in RWB, EWB, and SWB were found between the ACA and non-ACA groups.

Table 12

Descriptive Statistics for RWB, EWB, SWB, and CAST
Scores for the ACA and Non-ACA Groups

Variable	Mean	Std Dev	Min	Max	<u>n</u>
ACA Group					
RWB	53.63	6.55	34	60	38
EWB	47.68	8.16	26	57	38
SWB	101.46	13.25	73	117	37
CAST	18.31	6.94	6	29	39
Non-ACA Group					
RWB	54.00	6.43	33	60	95
EWB	49.78	7.55	28	60	93
SWB	104.46	12.15	61	120	91
CAST	.35	.92	0	4	97

Post Hoc Analyses

CAST and SWB

Post hoc analyses were conducted in an attempt to explain the lack of expected significant results in the above analyses. An investigation of the demographic differences and relationships suggested by the correlation matrices, resulted in studying two additional questions. First, it was thought that by using an alternate CAST classification scheme, significant differences might emerge. That is to say, reclassification would be based on the sheer number of symptoms, with the assumption that the greater number of symptoms would produce a severity-like symptom index. This may produce significant differences. An examination of the CAST total score frequency distribution suggested that a logical reclassification scheme was to divide the participants into 'NO ACA,' 'LOW ACA,' and 'HIGH ACA' symptom groups using CAST total score ranges of 0, 1 to 19, and 20 to 30 respectively. Descriptive statistics using the post hoc reclassification scheme are presented in Table 13.

Table 13

Descriptive Statistics for RWB, EWB, SWB, and CASTTotal Score for the No ACA, Low ACA and High ACA Groups

Variable	Mean	Std Dev	Min	Max	<u>n</u>
NO ACA Group					
RWB	53.75	6.71	33	60	80
EWB	49.94	7.61	28	60	78
SWB	104.49	12.44	61	120	76
CAST	.00	.00	0	0	82
LOW ACA Group					
RWB	54.28	6.51	34	60	36
EWB	49.51	6.48	38	60	37
SWB	103.92	11.66	74	120	36
CAST	8.78	6.36	1	19	37
HIGH ACA Group					
RWB	53.76	5.14	45	60	17
EWB	44.69	9.95	26	55	16
SWB	98.63	14.17	73	112	16
CAST	24.88	3.18	20	29	17

Three One-way Analysis of Variance tests were computed, using RWB, EWB, and SWB as the dependent variables, to investigate the possible mean differences between these newly reclassified groups. The 1 X 3 ANOVA results revealed that no mean differences were found for the dependent measures RWB [$F(2,130) = .0861$, $p = .9175$] and SWB [$F(2,125) = 1.4809$, $p = .2314$]. However, statistically significant differences were found for EWB [$F(2,128) = 3.1900$, $p = .0445$]. The ANOVA results for EWB are shown in Table 14. As can be seen, using the TUKEY Range Test for group comparisons, the HIGH ACA group was significantly lower than the NO ACA group, but significant differences between the LOW ACA and HIGH ACA groups were not demonstrated.

Table 14

ANOVA Results Using EWB as the Dependent Measure and No
ACA, Low ACA, and High ACA Groups As The Independent
Measure

Source	D.F.	Sum of Sqs	Mean Sqs	<u>F</u> Ratio	<u>F</u> Prob.
Between Groups	2	371.602	185.801	3.190	.045
Within Groups	128	7455.360	58.245		
Total	130	7826.962			

Bartlett-Box F = 2.099, P = .123

Multiple Range Test, Tukey-HSD Procedure

(*) Denotes pairs of groups sig. different at the .050
level

		G G G
		r r r
		p p p
Mean	Group	3 2 1
44.688	Grp 3	
49.514	Grp 2	
49.936	Grp 1	*

Church Group and SWB

A second issue which arose after examining the demographic statistics was the potential impact of Church Sample on the RWB, EWB, and SWB dependent measures. Specifically, does Church Sample account for the significant differences on the dependent variables regardless of ACA classification? Descriptive statistics for the three dependent variables are shown in Table 15. Three 1 X 3 ANOVAs were computed using RWB, EWB, and SWB as the dependent variables and the results are shown in Tables 16-18. A significant F test was obtained for each of the three analyses. However, each analysis failed to pass the Bartlett-Box homogeneity of variance test which suggests that caution should be exercised in interpreting mean differences due to the heterogeneity of variances. An examination of variances in Table 15 reveals that Church 2 respondents consistently exhibited more response heterogeneity than Churches 1 and 3.

Table 15

Descriptive Statistics for RWB, EWB, and SWB By Church Sample

Variable	Mean	Std Dev	Min	Max	<u>n</u>
Church 1					
RWB	55.58	5.05	33	60	48
EWB	51.76	5.32	39	60	49
SWB	107.48	9.21	72	120	48
Church 2					
RWB	51.88	7.84	33	60	50
EWB	45.09	8.92	26	60	46
SWB	97.59	14.57	61	120	46
Church 3					
RWB	53.67	6.16	40	60	42
EWB	50.28	7.13	33	60	43
SWB	104.63	11.70	80	120	41

Note. Beaverton Christian Church = Church 1, New Hope Community Church = Church 2, Mt. Scott Church of God = Church 3.

Table 16

ANOVA Results for RWB By Church Sample

Source	D.F.	Sum of Sq.	Mean Sq.	<u>F</u> Ratio	<u>F</u> Prob.
Between Groups	2	335.891	167.946	3.992	.020
Within Groups	137	5764.280	42.075		
Total	139	6100.171			

Bartlett-Box F = 4.582, P = .010

Multiple Range Test, Tukey-HSD Procedure

(*) Denotes pairs of groups sig. different at the .050 level

		G G G
		r r r
		p p p
Mean	Group	2 3 1
51.880	Grp 2	
53.667	Grp 3	
55.583	Grp 1	*

Table 17

ANOVA Results for EWB By Church Sample

		Sum of	Mean	<u>F</u>	<u>F</u>
Source	D.F.	Sq.	Sq.	Ratio	Prob.
Between Groups	2	1145.911	572.955	10.930	.000
Within Groups	135	7075.365	52.410		
Total	137	8221.275			

Bartlett-Box F = 5.971 , P = .003

Multiple Range Test, Tukey-HSD Procedure

(*) Denotes pairs of groups sig different at the .050 level

		G G G
		r r r
		p p p
Mean	Group	2 3 1
45.087	Grp 2	
50.279	Grp 3	*
51.755	Grp 1	*

Table 18

ANOVA Results for SWB By Church Sample

Source	D.F.	Sum of Sq.	Mean Sq.	<u>F</u> Ratio	<u>F</u> Prob.
Between Groups	2	2412.290	1206.145	8.370	.000
Within Groups	132	19020.644	144.096		
Total	134	21432.933			

Bartlett-Box \underline{F} = 4.701 , \underline{p} = .009

Multiple Range Test, Tukey-HSD Procedure

(*) Denotes pairs of groups sig different at the .050 level

		G G G
		r r r
		p p p
Mean	Group	2 3 1
97.587	Grp 2	
104.634	Grp 3	*
107.479	Grp 1	*

The Tukey post hoc range test revealed that for RWB, Church 2 was significantly lower than Church 1 but

comparable to Church 3. In contrast for EWB and SWB, Church 2 was significantly lower than both Churches 1 and 3. No mean differences were found between Churches 1 and 3 for any of the three analyses.

To further clarify the source of the obtained differences between Churches, three additional analyses of covariance (ANCOVA) were computed using RWB, EWB, and SWB as the dependent measures. Church Sample was used as the independent variable, and DQ8 (attending or not attending a ACOA-type support group) and DQ9 (level of professional counseling obtained) were covariates. This was done to investigate the possibility that the demonstrated RWB, EWB, and SWB differences between the three Churches could be due to other factors (i.e., a history of involvement in a support group or having had professional counseling services in the past). Tables 19-21 display the ANCOVA results for RWB, EWB, and SWB respectively. As can be clearly seen, when the variance attributable to past involvement in a support group or a professional counseling situation is removed, the statistical mean differences in RWB, EWB and SWB are rendered non-significant.

Table 19

ANCOVA Results for RWB By Church Sample Using DQ8 and
DQ9 as Covariates

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Covariates	111.309	2	55.654	1.436	.242
DQ8 Group	36.972	1	36.972	.954	.331
DQ9 Couns.	4.760	1	4.760	.123	.727
Main Effects	113.249	2	56.624	1.461	.236
CHURCH	113.249	2	56.624	1.461	.236
Explained	224.558	4	56.139	1.449	.222
Residual	4728.198	122	38.756		
Total	4952.756	126	39.308		

Note. Counseling = Couns.

Table 20

ANCOVA Results for EWB By Church Sample Using DQ8 and
DQ9 as Covariates

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Covariates	1055.083	2	527.541	11.373	.000
DQ8 Group	690.104	1	690.104	14.878	.000
DQ9 Couns.	14.991	1	14.991	.323	.571
Main Effects	241.085	2	120.543	2.599	.078
CHURCH	241.085	2	120.543	2.599	.078
Explained	1296.168	4	324.042	6.986	.000
Residual	5658.887	122	46.384		
Total	6955.055	126	55.199		

Note. Counseling = Couns.

Table 21

ANCOVA Results for SWB By Church Sample Using DQ8 and
DQ9 as Covariates

Source of Variation	Sum of Squares	DF	Mean Square	<u>F</u>	Signif of <u>F</u>
Covariates	1815.290	2	907.645	6.736	.002
DQ8 Group	1046.544	1	1046.544	7.766	.006
DQ9 Couns.	2.856	1	2.856	.021	.884
Main Effects	682.067	2	341.034	2.531	.084
CHURCH	682.067	2	341.034	2.531	.084
Explained	2497.357	4	624.339	4.633	.002
Residual	16439.635	122	134.751		
Total	18936.992	126	150.294		

Note. Counseling = Couns.

Test of Model Assumptions

This last section discusses the model assumptions used in these analyses. For both the t-tests and the ANOVA analyses there are two statistical assumptions (Gravetter & Wallnau, 1985):

1. The distribution of the sample mean differences should be normal;
2. The two populations from which the samples are selected must have the same variances.

In testing the first assumption, substantive departure from normality was unlikely, since both samples were relatively large (i.e., n greater than 30). Nevertheless, the first assumption was tested by examining frequency distributions of the study variables. It did not appear that any of the variables departed dramatically from normality. It is concluded that this model assumption had been met.

The second assumption (homogeneity of variance) was tested by computing the Bartlett-Box homogeneity of variance test statistic for all appropriate mean comparisons. As discussed in the above sections, this model assumption was violated a number of times. For

the t-tests, an attempt was made to correct the t -value by using separate group variance estimates instead of the usual pooled group estimate. While this procedure does provide a degree of correction, the mean difference results should be interpreted with caution. Also, the three ANOVAs using RWB, EWB, and SWB as the dependent variables and Church as the independent variable failed to pass the homogeneity of variance test. These results should also be interpreted with caution.

CHAPTER 4

DISCUSSION

The purpose of this study was to further explore the relationship between ACA and spiritual well-being by examining for differences in scores on the Spiritual Well-Being Scale (SWB) between Evangelical Christian ACAs and non-ACAs. Wilson (1988) reports results which suggested that there are significant differences between Evangelical Christian Adult Children of Alcoholics (ACAs) and non-Adult Children of Alcoholics (non-ACAs) in religious well-being.

In this study, the Children of Alcoholics Screening Test (CAST) was used to form the ACA and non-ACA groups. The SWB was administered to each group and t-tests were used to look for differences in scores between the two groups. No significant differences were found for ACAs and non-ACAs on the Existential Well-Being (EWB) and Religious Well-Being (RWB) subscales as well as the total SWB scale.

Examination of demographic variables by t-test analysis revealed that ACAs tend to become Christians

later in life. It also showed that ACAs reported receiving more professional counseling than non-ACAs. Chi-squared tests revealed that a significantly greater proportion of ACAs were among participants from Church 2 (New Hope Community Church) which has a special ministry emphasis in the area of people coming from dysfunctional families. ACAs reported they had attended support groups more than the non-ACAs. Finally, ACAs identified themselves as "alcoholic" more often than non-ACAs.

Post hoc analysis was done by reclassification of the CAST total scores to "NO ACA", "LOW ACA", and HIGH ACA." An analysis of variance (ANOVA) using RWB, EWB, and SWB as the dependent variable resulted in statistically significant differences for EWB. Post hoc tests revealed that the HIGH ACA group was significantly lower on EWB than the NO-ACA group. A significant main effect was also found for Church group on RWB, EWB, and SWB.

Further post hoc results revealed that for RWB, Church 2 (New Hope) was significantly lower than Church 1 (Beaverton Christian), but comparable to Church 3 (Church of God). In contrast, for EWB and SWB, Church

2 was significantly lower than both Churches 1 and 3. No mean differences were found between Churches 1 and 3 for any of the three analyses. Subsequent analyses were done to investigate the possibility that the demonstrated RWB, EWB, and SWB differences between churches could be due to support group attendance or having obtained professional counseling. When these variables were controlled for by ANCOVA, no significant mean differences were found in RWB, EWB, and SWB.

Interpretation

According to Wilson's (1988) study, Evangelical ACAs described themselves as lower in religious well-being than non-ACAs. The present study did not find any differences in religious, existential, or spiritual well-being as measured by the SWB scale.

It is difficult to account for the contradiction in findings. An effort was made to explore for the answer to this question by using post hoc analyses. Between church differences did not help to solve the question, since these differences were lost when the variables of counseling and support group attendance

were controlled. This simply suggests for whatever reason, attendance in support groups and counseling explain the differences in SWB scores between the churches.

Recoding the CAST scores to "NO", "LOW" and "HIGH" produced differences within the new groupings. The categories were based on severity of symptoms in the alcoholic home of origin. The difference was found in the HIGH scores which is indicative of a continuum of effects resulting from being raised in a home with alcoholic parents. Those with non-alcoholic parents and those with moderate symptoms from an alcoholic home score at the same level on SWB. Perhaps those with moderate alcoholic influence find ways to compensate for their family dysfunction. Those with more severe symptoms, on the other hand, tend to have lower well-being. This occurs especially in the area of EWB, which has to do with interpersonal relationships.

It is noteworthy that these same subjects did not score significantly different on RWB or SWB. Wilson (1988) concluded it would seem that one's relationship to God would suffer along with interpersonal relationships. It is possible that social desirability

had an effect on these scores since the sample was drawn from a church-going population. Also, there may have been defensiveness about answering in a negative fashion as it related to God. This may be related to denial as far as the relationship to God is concerned.

There are a number of possible explanations for the contrast in results of this study and Wilson's (1988). First, the samples may simply differ. Her sample came from churches throughout the country while the present sample was from the Portland, Oregon area. The number of subjects was comparable between the two studies. It is interesting to note that the samples compare favorably in several ways, including age, gender, and CAST scores; the exception is that in the present study no differences were found in religious well-being.

Second, the measures of religious well-being are different. As stated earlier, Wilson did not use an established instrument when she concluded that ACAs report lower religious well-being. She used four yes/no questions which were for the purpose of examining her sample's religious problem areas. Since the Spiritual Well-Being scale is a proven instrument

in assessing the religious domain (e.g., Bufford et al., 1991), it is unlikely that the present study's measurement was inferior to Wilson's.

Third, the present sample is unusual in that the relationships among the religious variables and between them and other variables are weak, a finding which differs from other studies using SWB (Bufford, 1984; Carr, 1986; Carson, Soeken, and Grimm, 1988; Davis, Longfellow, Moody, and Moynihan, 1987; Renfroe, 1990). This supports the view that there may be something unique about the present sample.

Fourth, post hoc analyses suggests that Evangelical ACAs with more severe childhood parental alcoholism may experience less well-being especially in relationship to other people and the world around them (EWB). It seems then that there are differences in the religious domain within the population of Evangelical Christian ACAs. Plescia, Long-Suter, and Wilson (1988) suggest that ACAs score higher and lower in general well-being which further supports heterogeneity among ACAs seen in the present study. Homogeneity among ACAs has been challenged since many believe that not all ACAs are affected in the same way (Ackerman, 1984;

Goodman, 1989; Jones & Pilat 1984; Rouse et al., 1973; and Windle & Searles 1990). They argue that the effects of being an ACA differ as well as the need for treatment and the kind of intervention. This is especially significant in relationship to generalizability of results with any given sample of ACAs. Wilson (1988) concluded that Evangelical ACAs struggle as a group in the area of their religious well-being. The present study does not support her conclusion. Based on the results from this study, it appears that overall Evangelical ACAs are comparable in spiritual well-being to their non-ACA counterparts, though it is possible that those with more severe alcoholic backgrounds (higher CAST scores) show impaired spiritual well-being.

Fifth, the CAST may misidentify up to 23% of non-ACAs (Jones & Pilat, 1984). Thus the ACA group in this study may have many false positives, perhaps as many as half of the ACAs. It is likely that most of the false positives had moderate CAST scores.

Sixth, it is possible that denial could have influenced the ACA results (Cermak, 1985; Geringer - Woititz, 1983; Gravitz, 1985).

A seventh possibility relates to the order of questions in the testing booklet. It may be that a different order would effect the results.

An eighth suggestion is that a high percentage of ACAs attended support groups. Perhaps this intervention helped to ameliorate the effects of childhood experiences of parental alcoholism in the present sample. Support group attendance was not investigated in the Wilson study. However, Wilson (1988) reported a similar percentage of ACAs attending professional counseling as in this study.

In summary, the following are possible explanations for contrasting results between the present study and Wilson's (1988): (a) the samples may simply differ, (b) the measures of religious well-being are different, (c) the present sample is unique in that there is a weak relationship among the religious variables and between them and other variables, (d) there are heterogeneous results found among the ACA sample, (e) false positives may misidentify some ACAs, (f) denial in ACAs may have influenced results, (g) the order of questions may have affected responses, (h) a high percentage of ACAs in this study have attended

support groups. Caution should be taken in generalizing results of any ACA sample.

Implications for Church Ministry

The results of this study question the generality of Wilson's (1988) conclusion that ACAs have unique ministry needs. On the contrary, the present findings suggest that they have similar needs to non-ACAs in their spiritual growth. These findings offer hope that being an ACA does not necessarily mean that one will struggle more than others in spiritual well-being.

Current findings offer some suggestions that may aid in the strategy of ministering to ACAs. First, churches that offer an openness to the needs of ACAs may see an increase in ACA participation. This may include classes with a focus on education about the effects of being raised in an alcoholic home. Also, offering support groups for those who share a common background helps ACAs to normalize their experience by sharing with others who understand. It seems that those who struggle interpersonally will often seek out opportunities for growth that are found in support

groups. This need for interaction may come as a result of the deficits in family interaction in the family of origin.

ACAs offer a possible target group for churches in the area of pre-evangelism and evangelism. Since ACA's become Christians later in life, churches will want to consider evangelism strategies that take into account findings that may indicate interpersonal trust issues for ACAs. It appears that ACAs with more severe family symptoms struggle in interpersonal relationships. Evangelism may require developing a trusting relationship with ACAs over time before results will be seen.

Recommendations for Further Study

It seems obvious that further research is needed in the area of spiritual well-being in the ACA population. The following recommendations are made for encouraging further research:

1. It may be helpful to use Wilson's (1988) four questions in addition to other instruments that measure spiritual well-being. This would allow for more direct

replication of her results.

2. The use of another instrument other than the CAST for establishing the ACA group may offer more information in identifying ACAs. This may require more specificity in criteria regarding an adult population of children of alcoholics.

3. The idea that the subgroups may exist among ACAs is worthy of more study. If these differences do exist, how can they be more readily identified? What criteria could be used to establish these subgroups?

4. The notion that ACAs struggle in interpersonal relationships is worthy of further investigation. Other measurements may be used to gather more insight into the way in which ACAs have difficulty in their relationships with people such as the Interpersonal Behavior Survey (IBS).

5. It would seem helpful to consider adjusting the CAST cutting score to reduce the number of false positives which may strongly affect results in smaller samples.

6. An examination of the order effects of questions, as mentioned earlier, could result in differences in scores.

7. More study is needed in the area of the spiritual domain as it relates to ACAs as well as other populations.

Summary

This study compared Evangelical Christian ACA and non-ACA scores on the Spiritual Well-Being Scale. The purpose was to explore for differences in religious well-being between the two groups.

The hypothesis that Evangelical Christian ACAs would score lower than Evangelical Christian non-ACAs on the Spiritual Well-Being Scale was not supported by this study. ACAs became Christians later in life; those who attended counseling and/or support groups had lower EWB scores. Post hoc analyses revealed (showed) that ACAs with more severe symptoms scored lower on the EWB which indicates difficulty in interpersonal relationships. Since these are post hoc results, they should be taken with caution as they may not generalize to other samples. Replication and further research into the spiritual domain of ACAs is recommended.

REFERENCES

- Ackerman, R. (1983). Children of alcoholics: A guidebook for educators, therapists, and parents. Holmes Beach, FL: Learning Publications.
- Ackerman, R. (Producer and Director). (1984). Adult children of alcoholics: Choices in growth [videotape]. Indianapolis: Access.
- American Psychiatric Association (1987). Diagnostic and statistical manual of mental disorders (3rd. ed., Revised). Washington, D.C.: Author.
- Anastasi, A. (1988). Psychological Testing (6th ed.). New York: Macmillan.
- Aronow, L. (1980). Alcoholics, alcohol abuse, and related problems: Opportunities for research. Washington, D.C.: National Academy Press.
- Aronson, A., & Gilbert A. (1963). Preadolescent sons of male alcoholics: An experimental study of personality patterning. Archives of General Psychiatry, 9, 235-241.

- Aycock, D., & Noaker, S. (1985). A comparison of the self-esteem levels in evangelical Christians and the general population. Journal of Psychology and Theology, 13(3), 199-208.
- Barnard, C. P. (1981). Families alcoholism and therapy. In C. P. Barnard (Ed.), Alcoholism and the family (pp. 239-252). Springfield, IL.: Charles C. Thomas.
- Barnard, C., & Spoentgen, P. (1986). Children of alcoholics: Characteristics and treatment. Alcoholism Treatment Quarterly, 3(4), 47-65.
- Barnes, D. (1988). Drugs: Running the numbers. Science, 240, 1731.
- Beletsis, S., & Brown, S. (1981). A developmental framework for understanding adult children of alcoholics. Journal of the Addictions and Health, 2(4), 187-203.
- Bennett, L., & Wolin, S. (1985). A comparison of children from alcoholic and nonalcoholic families: Cognitive and psychosocial functioning. Paper presented as part of the panel on Children of Alcoholics: Research Needs and Challenges. National Council on Alcoholism meetings, Washington, DC.

- Benson, C. (1980). Coping and support among daughters of alcoholics. Dissertation Abstracts International, 41, 2305-B. (University Microfilms No. 80-29,210).
- Bepko, C. (1985). Pride and paradox: Dealing with resistance to change. In C. Bepko (Ed.), The responsibility trap: A blueprint for treating the alcoholic family. New York: The Free Press.
- Berkowitz, A., & Perkins, H. (1988). Personality characteristics of children of alcoholics. Journal of Clinical Psychology, 56(2), 206-209.
- Black, C. (1979). Children of alcoholics. Alcohol Health and Research World, 4(2), 23-27.
- Black, C. (1981). Innocent bystanders at risk: The children of alcoholics. Alcoholism, 1(3), 22-26.
- Black, C. (1982). It will never happen to me. Denver: M.A.C.
- Black, C. (1985). The family law in alcoholic homes- don't talk. In M. Miller (Ed.), Changing legacies: Growing up in an alcoholic home. Pompano Beach, FL: Health Communications.
- Black, C. (1986). An interview with Claudia Black. Changes, 1(4), 4-18.

- Black, C., Bucky, S., & Wilder-Padilla, S. (1986). The interpersonal and emotional consequences of being an adult child of an alcoholic. The International Journal of the Addictions, 21(2), 213-231.
- Bonner, C. M. (1988). Utilization of spiritual resources by patients experiencing a recent cancer diagnosis. Unpublished master's thesis, University of Pittsburgh, PA.
- Booz-Allen, F., & Hamilton, D. (1974). An assessment of the needs of and resources for children of alcoholic parents: Final report. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.
- Bressem, M. P. (1986). The relationship between individual differences in imaginal ability, Christian imaginal frequency, and Christian spirituality (Doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR, 1986). Theological Research Exchange Network, 002-0412.
- Bressem, M. P., Colwell, J., Mueller, E., Neder, R., & Powers, H. (1985). Validity of the SMI. Unpublished manuscript, Western Conservative Baptist Seminary, Portland, OR.

- Bressemer, M., Waller, D., & Powers, H. (1985). The verbalizer-visualizer cognitive styles and spiritual well-being of church attenders. Unpublished manuscript, Western Conservative Baptist Seminary, Portland, OR.
- Brinkman, D. D. (1989). An evaluation of the Spiritual Well-Being Scale: Reliability and response measurement. Dissertation Abstracts International, 50, 2201B. (University Microfilms No. 89-17, 573).
- Brinkman, D., Capis, L., Kunkel, E., & Tackett, C. (1988). Item content and variance of the Spiritual Well-Being Scale. Unpublished manuscript, Western Conservative Baptist Seminary, Portland, OR.
- Brooks, K. (1985) Psychosocial stages of development in adult children of alcoholics. In M. Miller (Ed.), Changing legacies: Growing up in an alcoholic home. Pompano Beach, FL: Health Communications.
- Brown, S. (1985). Treating the family of the alcoholic. In S. Brown, (Ed.), Treating the alcoholic: A developmental model of recovery. New York: Wiley, 241-246.

Brown, S. (1987, June). Treatment of adult children of alcoholics: An advanced clinical seminar.

Presentation at professional workshop, Cherry Hill, NJ.

Bufford, R. K. (1984). Empirical correlates of the Spiritual Well-Being and Spiritual Maturity Scales.

Unpublished manuscript, Western Conservative Baptist Seminary, Portland, OR.

Bufford, R. K. (1987, June). The relationship between spiritual well-being and physical health. Paper

presented at the Western Regional meeting of the Christian Association for Psychological Studies, Seattle, WA.

Bufford, R. K., Bentley, R. H., Newenhouse, J. M., &

Papania, A. J. (1986). The relationship among groups using the Spiritual Well-Being Scale.

Unpublished manuscript, Western Conservative Baptist Seminary, Portland, OR.

Bufford, R., Paloutzian, R., & Ellison C. (1991).

Norms for the Spiritual Well-Being Scale. Journal of Psychology and Theology, 19(1), 56-70.

Bufford, R. K., & Parker, T. G. (1985, August).

Religion and well-being: Concurrent validation of the Spiritual Well-Being Scale. Paper presented at the annual meeting of the American Psychological Association, Los Angeles, CA.

Cadoret, R., & Gath, A. (1978). Inheritance of alcoholism in adoptees. British Journal of Psychiatry, 132, 252-258.

Cadoret, R., Troughton, E., & O'Gorman, T. (1987). Genetic and environmental factors in alcohol abuse and antisocial personality. Journal of Studies on Alcohol, 48, 1-8.

Callan, V., & Jackson, D. (1986). Children of alcoholic fathers and recovered alcoholic fathers: Personal and family functioning. Journal of Studies on Alcohol, 47, 180-182.

Campbell, A. (1976). Subjective measures of well-being. American Psychologist, 31, 117-124.

- Campbell, C. D. (1983). Coping with hemodialysis: Cognitive appraisals, coping behaviors, spiritual well-being assertiveness, and family adaptability and cohesion as correlates of adjustment (Doctoral disseration, Western Conservative Baptist Seminary, Portland, OR, 1983). Theological Research Exchange Network, 002-0199.
- Campbell, C., Mullins, W., & Colwell, J. (1984). Spiritual well-being and assertiveness: A correlational study. Unpublished manuscript, Western Conservative Baptist Seminary, Portland, OR.
- Campbell, D., & Stanley, J. (1963). Experimental and quasi-experimental designs and research. Chicago: Rand McNally.
- Campise, R. L., Ellison, C. W., & Kinsman, R. (1979, September). Spiritual well-being: Some exploratory relationships. In R. F. Paloutzian (Chair), Spiritual well-being, loneliness, and perceived quality of life. Symposium presented at the annual meeting of the American Psychological Association, New York.

- Carr, S. A. (1986). A theoretical and empirical examination of the construct validity of the Spiritual Leadership Qualities Inventory. (Doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR, 1986). Theological Research Exchange Network, 002-0428.
- Carson, V., Soeken, K. L., & Grimm, P. M. (1988). Hope and its relationship to spiritual well-being. Journal of Psychology and Theology, 16, 159-167.
- Cermak, T. (1983). The children of alcoholics. California Society for the Treatment of Alcoholism and Other Drug Dependencies News, 10(4), 1-3.
- Cermak, T. (1984). The case for a new diagnostic category of co-dependency for children of alcoholics. Alcohol Health and Research World, 8(4), 30-38.
- Cermak, T. (1985). A primer of adult children of alcoholics. Pompano Beach, FL: Health Communications.
- Cermak, T. L. (1986). Diagnosing and treating co-dependence: A guide for professionals who work with chemical dependents, their spouses and children. Minneapolis, MN: Johnson Institute Books.

- Cermak, T., & Brown, S. (1982). Interactional group therapy with the adult children of alcoholics. International Journal of Group Therapy, 32(3), 375-389.
- Chafetz, M. (1979). Children of alcoholics. New York University Education Quarterly, 10(3), 23-39.
- Chafetz, M. E., Blane, H. T., & Hill, M. J. (1971). Children of alcoholics: Observations in a child guidance clinic. Quarterly Journal of Studies on Alcohol, 32, 687-698.
- Clair, D., & Genest, M. (1987). Variables associated with the adjustment of offspring of alcoholic fathers. Journal of Studies on Alcohol 48(4), 345-355.
- Clarke, D. E. (1987). Predictors of spiritual well-being among full-time Youth for Christ/USA staff members. Dissertation Abstracts International, 47, 4680B. (University Microfilms No. 87-04, 710).
- Clemmons, P. (1979). Issues in marriage, family and child counseling in alcoholism. In V. Burtle (Ed.), Women who drink: Alcoholic experience and psychotherapy. Springfield, IL: Charles C. Thomas.
- Cloninger, C. R. (1987). Neurogenetic adoptive mechanisms in alcoholism. Science, 236, 410-416.

- Colwell, J. C. (1987). A correlational study of self-concept and spirituality in seminarians. Dissertation Abstracts International, 47, 4635B. (University Microfilms No. 87-04, 712).
- Cooper, R. L. (1987). An empirical examination of the construct validity of the Spiritual Maturity Index. Dissertation Abstracts International, 47, 4653B. (University Microfilms No. 87-04, 712).
- Cork, R. M. (1969). The forgotten children: A study of children with alcoholic parents. Toronto: Alcoholism and Drug Research Foundation.
- Corrigan E. M. (1980). Marriages, children, and husbands. In E. M. Corrigan (Ed.), Alcoholic women in treatment (pp. 86-106). New York: Oxford University Press.
- Cotton, N. (1979). The familial incidence of alcoholism. Journal of Alcohol Studies, 40, 89-112.
- Davis, W. W., Longfellow, D., Moody, A., & Moynihan, W. (1987). Spiritual Maturity Index: Construct validation. Unpublished manuscript, Western Conservative Baptist Seminary, Portland, OR.

- Dinning, W., & Berk, L. (1989). The children of alcoholics screening test: Relationship to sex, family, environment, and social adjustment in adolescents. Journal of Clinical Psychology, 45(2), 335-339.
- Drake, R. (1987). Unpublished research reported in C. F. Brown, Research on children of alcoholics begins to piece puzzle together. Psychiatric News, July 17.
- Durham, M. L. (1986). Denominational differences in supernatural locus of control and spiritual well-being (Doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR, 1985). Theological Research Exchange Network, 002-0422.
- El-Guebaly, N., & Orford, D. (1977). The offspring of alcoholics: A critical review. American Journal of Psychiatry, 134(4), 357-365.
- Ellison, C. W. (1983). Spiritual well-being: Conceptualization and measurement. Journal of Psychology and Theology, 11(4), 330-340.
- Ellison, C. W., & Economos, T. (1981, April). Religious orientation and quality of life. Paper presented at the annual meeting of the Christian Association for Psychological Studies, San Diego.

- Ellison, C. W., & Paloutzian, R. F. (1978). Assessing quality of life: Spiritual well-being. Paper presented at the annual meeting of the American Psychological Association, Toronto.
- Ellison, C. W., & Paloutzian, R. F. (1979, September). Religious experience and quality of life. In R. F. Paloutzian (Chair), Spiritual well-being, loneliness, and perceived quality of life. Symposium presented at the annual meeting of the American Psychological Association, New York.
- Ellison, C. W., Rashid, I., Patla, P., Calica, R., & Haberman, D. (1984). Personality, religious orientation, and spiritual well-being. Unpublished manuscript.
- Erikson, E. H., (1963). Children and Society (2nd ed.). New York: Norton.
- Fine, E. W., Yudin, L. W., Holmes, J., & Heinemann, S. (1976). Behavioral disorders in children with parental alcoholism. Annual New York Academy of Science, 273, 507-517.

- Frantz, J. L. (1985). MMPI and DSM III diagnosis related to selected measures of religious and demographic variables in adult outpatients (Doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR 1985). Theological Research Exchange Network, 002-0398.
- Geringer-Woititz, J. (1983). Adult Children of Alcoholics. Hollywood, FL: Health Communications.
- Giglio, J., & Kaufman, E. (1990). The relationship between child and adult psychopathology in children of alcoholics. The International Journal of Addictions, 25(3), 263-290.
- Goodman, R. (1987). Adult children of alcoholics. Journal of Counseling and Development, 66, 162-163.
- Goodwin, D. W. (1971). Is alcoholism hereditary? A review and critique. Archives of General Psychiatry, 25, 545-549.
- Goodwin, D., & Guze, S. B. (1979). Psychiatric diagnosis. New York: Oxford University Press.
- Goodwin, D. W., Schulsinger, F., Hermansen, L., Guze, S. B., & Winokur, G. (1973). Alcohol in adoptees raised apart from biological parents. Archives of General Psychiatry, 28, 238-243.

- Goodwin, D. W., Schulsinger, F., Hermansen, L., Guze, S. B., & Winokur, G. (1975). Alcoholism and the hyperactive child syndrome. Journal of Nervous and Mental Disorders, 160(5), 349-353.
- Gorsuch, R. L. (1984). Measurement: The boon and bane of investigating religion. American Psychologist, 39, 228-236.
- Gravetter, F., & Wallnau, L. (1985). Statistics for the Behavioral Sciences. St. Paul: West Publishing.
- Gravitz, H. L. (1985). Children of alcoholics handbook. South Laguna, CA: The National Association for Children of Alcoholics.
- Gravitz, H. L., & Bowden, J. D. (1984). Therapeutic issues of adult children of alcoholics. Alcohol Health Research World (NIAAA), 8(4), 25-36.
- Grilley, D. (1989). Drugs and Human Behavior. Boston: Allyn and Bacon.
- Guze, S., Cloninger, C., Martin, R., & Clayton, P. (1986). Alcoholism as a medical disorder. Comprehensive Psychiatry, 27, 501-510.
- Haberman, P. W. (1966). Childhood symptoms in children of alcoholics and comparison group parents. Journal of Marriage and Family, 28, 152-154.

- Hart, S. (1989). Review of the children of alcoholics screening test. In J. Conoley & J. Kramer (Eds.) The Tenth Mental Measurement Yearbook. Lincoln, NE: University of Nebraska Press.
- Hawkins, D. B. (1986). Interpersonal behavior traits, spiritual well-being, and their relationship to blood pressure (Doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR). Theological Research Exchange Network, 002-0413.
- Hawkins, D., & Larson, R. (1984). The relationship between measures of health and spiritual well-being. Unpublished manuscript, Western Conservative Baptist Seminary, Portland, Oregon.
- Hecht, M. (1973). Children of alcoholics are children at risk. American Journal of Nursing, 73(10), 1764-1767.
- Heilbrun, A., Cassidy, J., Diehl, M., Haas, M., & Heilbrun, M. (1986). Psychological vulnerability to alcoholism: Studies in internal scanning deficit. British Journal of Medical Psychology, 59, 237-244.
- Heller, K., Sher, K., & Benson, C. (1982). Problems associated with risk overprediction in studies of offspring of alcoholics: Implications for prediction. Clinical Psychology Review, 2, 183-200.

- Herjanic, B. M., Herjanic, M., Penick, E. C.,
Tomelleri, C. J., & Armbuster, R. B. (1977).
Children of alcoholics. In F. Seixas (Ed.),
Currents in Alcoholism: Vol. 2. New York: Grune and
Stratton.
- Hubbard, S. (1989). Personality and object relational
pathology in young adult children of alcoholics.
Psychotherapy, 26(4), 504-509.
- Huggins, S. M. (1988). The effect of small group
attendance, personal devotions, and church
attendance on spiritual well-being. Dissertation
Abstracts International, 49, 1943B. (University
Microfilms No. 88-14, 665).
- Hughes, J. M. (1977). Adolescent children of alcoholic
parents and the relationship of Alateen to these
children. Journal of Consulting Clinical
Psychology, 45(5), 946-947.
- Jackson, J. (1984). The personality characteristics of
adult daughters of alcoholic fathers as compared
with adult daughters of non-alcoholic. Dissertation
Abstracts International, 45, 2324B. (University
Microfilms No. 85-06,428).

- Jang, S. T. (1987). The effects of acculturation and age on spiritual well-being among ethnic Chinese church-goers. Dissertation Abstracts International, 47, 4652B. (University Microfilms No. 87-04, 714).
- Jang, S., Paddon, T., & Palmer, W. (1985). Locus of control in relation to spiritual well-being and spiritual maturity. Unpublished manuscript, Western Conservative Baptist Seminary, Portland, OR.
- Johnson, V. (1980). I'll quit tomorrow. New York: Harper & Row.
- Johnson, J., & Bennett, L. A. (1988). School aged children of alcoholics: Theory and research. Center of Alcohol Studies, Pamphlet Series. New Brunswick, NJ: Alcohol Research Documentation.
- Johnson, J., & Rolf, J. (1987). Unpublished research reported in C. F. Brown, Research on children of alcoholics begins to piece puzzle together. Psychiatric News, July, 17.
- Jones, J. (1991). The Children of Alcoholics Screening Test Manual. Chicago: Camelot Unlimited.

- Kammeier, M. L. (1971). Adolescents from families with and without alcohol problems. Quarterly Journal of Studies on Alcohol, 32, 364-372.
- Kaufman, E. (1985). Family systems and family therapy of substance abuse: An overview of two decades of research and clinical experience. The International Journal of the Addiction, 20(6,7), 897-916.
- Kern, J. C. (1985). Management of children of alcoholics. In S. Zimberg, J. Wallace, & S. B. Blume (Eds.), Practical Approaches to Alcoholism Psychotherapy. New York: Plenum Press.
- Khavi, K., & Harmon, T. (1982). The relationship between the degree of professed religious belief and use of drugs. The International Journal of the Addictions, 17, 847-857.
- Kolata, G. (1988). Alcoholic genes or misbehavior? Psychology Today, 22, 34-37.
- Ledbetter, M., Smith, L., Vosler-Hunter & Fisher, J. W. (1991). An evaluation of the research and clinical usefulness of the Spiritual Well-Being Scale. Journal of Psychology and Theology, 19(1), 49-55.

- Lerner, R. (1986). Children of alcoholics: Their special needs. In Wegscheider-Cruse & R. W. Esterly (Eds.), Alcoholism and the family: A book of readings. Hollywood, FL: Health Communications.
- Lewis, D., & Williams, C. (1986). Providing care for children of alcoholics: Clinical and research perspectives. Pompano Beach, FL: Health Communications.
- Marto, R. P. (1984). A father's locus of control, spiritual well-being, and self-esteem in a Catholic parochial high school population (Doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR, 1983). Theological Research Exchange Network, 002-103.
- Mashburn, D. J. (1987). Effect of sex-role combinations in couples on marital satisfaction and spiritual well-being. Dissertation Abstracts International, 48, 269B. (University Microfilms No. 87-04, 717).
- Mauger, P. A. (1976). Specialized personality inventories for Christians. In W. J. Donaldson, Jr. (Ed.), Research in mental health and religious behavior (pp. 420-440). Atlanta: Psychological Studies Institute.

- McKenna, T., & Pickens, R. (1981). Alcoholic children of alcoholics. Journal of Studies on Alcohol, 42(11), 1021-1029.
- Mello, R. (1978). Alcoholism and the behavioral pharmacology of alcohol: 1967-1977. In M. A. Lipton, A. Dimascio , & K. F. Killman (Eds.), Psychopharmacology (pp. 1619-1638). New York: Raven Press.
- Miller, S. & Tuchfeld, B. (1986). Adult children of alcoholics. Hospital and Community Psychiatry, 37(3), 235-236.
- Mitchell, E. A., & Reed, S. K. (1983). A study of the interaction between spiritual well-being, self-concept, and social desirability. Unpublished manuscript, Western Conservative Baptist Seminary, Portland, OR.
- Moberg, D. O. (1971). Spiritual well-being: Background and issues. Washington DC: White House Conference on Aging, (vi, 63 pp.; out of print).
- Moberg, D. O. (Ed.). (1979). Spiritual well-being: Sociological perspectives. Washington DC: University Press of America.

- Moody, A. V. (1988). The effect of deliberate faking good and faking bad on Spiritual Well-Being Scale scores in a church sample (Doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR 1988). University Microfilms International.
- Moos, R. & Billings, A. (1982). Children of alcoholics during the recovery process: Alcoholic and matched control families. Addictive Behaviors, 7, 155-163.
- Morehouse, E. R. (1984). Working with alcohol-abusing children of alcoholics. Alcohol Health Research World, 8(4), 14-19.
- Morrison, J. (1980). Adult psychiatric disorders in parents of hyperactive children American Journal of Psychiatry, 137, 825-827.
- Mueller, E. E. (1986). The relationship between religious beliefs/attitudes and psychopathology in an evangelical seminary sample (Doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR). Theological Research Exchange Network, 002-0429.

- Mullins, W. H. (1986). Chronic pain: A study of treatment outcome as relates to coping behaviors, assertiveness, spiritual well-being, and MMPI scores (Doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR 1986). Theological Research Exchange Network, 002-0406.
- Naiditch, B. (1983). Intervention or enabling - where are the trainers? Focus on Alcohol and Drug Issues, 6(2), 23-27.
- Nardi, P. M. (1981). Children of alcoholics: A role theoretical perspective. Journal of Social Psychology, 115, 237-245.
- Norusis, M. J. (1985). SPSSX: Advanced Statistics Guide. Chicago: SPSS, Inc.
- Nylander, I (1960). Children of alcoholic fathers. Acta Paediatr. (Stockh), 49 (Suppl. 121), 1-134.
- Palmer, W. C. (1985). Generalized hope, expectancies, locus of control, and spiritual well-being in relation to quitting smoking (Doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR 1985). Theological Research Exchange Network, 002-0376.

- Paloutzian, R. F., & Ellison, C. W. (1979a, September).
Developing a measure of spiritual well-being. In R.
F. Paloutzian (Chair), Spiritual well-being,
loneliness, and perceived quality of life.
Symposium presented at the annual meeting of the
American Psychological Association, New York.
- Paloutzian, R. F., & Ellison, C. W. (1979b). Religious
commitment, loneliness, and quality of life. Paper
presented at the meeting of the Christian
Association for Psychological Studies, Minneapolis.
- Paloutzian, R. F., & Ellison, C. W. (1979c).
Loneliness, spiritual well-being, and quality of
life. In L. A. Peplau & D. Perlman (Eds.),
Loneliness: A sourcebook of current theory, research
and therapy, (1982, pp. 224-237). New York: Wiley
Interscience.
- Parker, T. G., Jr. (1984). An empirical examination of
the construct validity of the Spiritual Leadership
Qualities Inventory (Doctoral dissertation, Western
Conservative Baptist Seminary, Portland, OR 1984).
Theological Research Exchange Network, 002-353.

- Perrin, T. (1984). Psychotherapy with adult children of alcoholics: A structured group model.
Rutherford, NJ: Thomas W. Perrin.
- Perrin, T. (1985). Inadequate, inconsistent, nonexistent parenting: A dilemma for children from alcoholic families. In M. Miller (Ed.), Changing legacies: Growing up in an alcoholic home, Pompano Beach, FL: Health Communications.
- Pilat, J., & Jones, J. (1984/1985). Identification of children of alcoholics: Two studies. Alcohol, Health and Research World, Winter, 26-36.
- Plescia-Pikus, M., Long-Suter, E., & Wilson, J. (1988). Achievement, well-being, intelligence, and stress reaction in adult children of alcoholics. Psychological Reports, 62(2) 603-609.
- Prewitt, M., Spence, R., & Chaknis, M. (1981). Attribution of causality by children with alcoholic parents. International Journal of the Addictions, 16, 367-370.
- Princeton Religious Research Center (1984). Religion in America: The Gallup report. Princeton, N.J.: Princeton Religious Research Center.

- Quick, D. (1990). The healing journey for adult children of alcoholics. Downers Grove, Ill.: Inter-Varsity.
- Quinn, J. (1984). The relationship between religiosity and marital satisfaction: Correlations among the Religious Orientation Scale, the Spiritual Well-being Scale, and the Marital Satisfaction Scale (Doctoral dissertation, Western Conservative Baptist Seminary, Portland, OR, 1984). Theological Research Exchange Network, 002-0354.
- Rearden, J., & Markwell, B. (1989). Self concept and drinking problems of college students raised in alcohol abused homes. Addictive Behaviors, 14(2), 225-227.
- Renfro, W. (1990). The effect of psychotherapy on depression and spiritual well-being in outpatient adults. Unpublished dissertation, George Fox College, School of Graduate Psychology, Newberg, OR.
- Robertson, I., Heather, N., Dzialdowski, A., Crawford, J., & Winton, M. (1986). A comparison of minimal versus intensive controlled drinking treatment interventions for problem drinkers. British Journal of Clinical Psychology, 25, 185-194.

- Roscoe, J. (1975). Fundamental research statistics for the behavioral sciences (2nd ed.). New York: Holt, Rinehart & Winston.
- Rouse, B., Waller, P., & Ewing, J. (1973). Adolescent's stress levels, coping activities, and father's drinking behavior. American Psychological Association, 81, 681-682.
- Russell, M., Henderson, C., & Blume, S. B. (1985). Children of alcoholics: A review of the literature. Buffalo: New York State Division of Alcoholism and Alcohol Abuse, Research Institute on Alcoholism.
- Schuckit, M., & Rayeses, V. (1979). Ethanol injection: Differences in blood acetaldehyde concentrations in relatives of alcoholics and controls. Science, 202, 54-56.
- Schumrum, T., & Hartman, B. (1988). Adult children of alcoholics and chronic career indecision. Career-Develoment-Quarterly, 37(2), 118-126.
- Scott, E. M. (1970). Children of alcoholic marriages. In E. M. Scott (Ed.), Struggles in an alcoholic family. Springfield, IL: C. C. Thomas.
- Seixas, J., & Levitan, M. (1984). A supportive counseling group for adult children of alcoholics. Alcoholism Treatment Quarterly, 1, 123-132.

- Sherman, D. B. (1987). A comparison of interpersonal behavior traits and spiritual well-being among eating-disordered patients and medical outpatients. Dissertation Abstracts International, 47, 4664B-4665B. (University Microfilms No. 87-04, 722).
- Sloboda, S. B. (1974). The children of alcoholics: A neglected problem. Hospital and Community Psychiatry, 25(9), 605-606.
- Smilkstein, G. (1980). The cycle of family function: A conceptual model for family medicine. Journal of Family Practice, 11(2), 223-232.
- Spickard, A., & Thompson, B. (1985). Dying for a drink, Waco, Texas: Word.
- Steinglass, P. (1980). A life history model of the alcoholic family. Family Process, 19(3), 211-226.
- Stewart, M., deBlois, S., & Cummings, C. (1980). Psychiatric disorder in the parents of hyperactive boys and those with conduct disorder. Journal of Child Psychology, Psychiatry and Allied Discipline, 21, 283-292.
- Tarter, R. E., Hegedus, A. M., & Gavalier, J. S. (1985). Hyperactivity in sons of alcoholics. Journal of Studies on Alcohol, 46(3), 259-261.

- Tarter, R. E., Hegedus, A. M., Godsteing, G., Shelly, C., & Alterman, A. (1984). Adolescent sons of alcoholics: Neuropsychological and personality characteristics. Alcoholism Clinical and Experimental Research, 8(2), 216-222.
- Temple, D. B. (1987). Psychological well-being, life events, and religiosity. Dissertation Abstracts International, 47, 4667B. (University Microfilms No. 87-04, 723).
- Tunick, J. (1988). The adjustment of adult daughters and adult sons of alcoholics and the gender of their alcoholic parents (Doctoral dissertation, University of Southern California, 1988). Dissertation Abstracts International, 49(7) 2931B.
- Vaillant, G., & Milofsky, E. (1982). The etiology of alcoholism. American Psychological, 37, 494-503.
- Wegscheider, S. (1981). Another chance: Hope and health for the alcoholic family. Palo Alto: Science & Behavior Books.
- Wegscheider-Cruse, S. (1986). Thirst for freedom. In Wegscheider-Cruse & R. W. Esterly (Eds.), Alcoholism and the family: A book of readings. Hollywood, FL: Health Communications.

- Werner, E. (1986). Resilient offspring of alcoholics: A longitudinal study from birth to age 18. Journal of Studies on Alcohol, 47(1), 34-40.
- West, O., & Prinz, R. (1987). Parental alcoholism and childhood psychopathology. Psychological Bulletin, 102(2), 204-218.
- Williams, C., & Collins, E. (1986). The connection between alcoholism, child maltreatment, and family disruption. In D. C. Lewis & C. N. Williams (Eds.), Providing care for children of alcoholics: Clinical and research perspectives, (pp. 91-101). Pompano Beach, FL: Health Communications.
- Wilson, C., & Orford, J. (1978). Children of alcoholics: Report of a preliminary study and comments on the literature. Journal of Studies on Alcohol, 39, (1), 121-142.
- Wilson, S. (1988). A comparison of evangelical Christian adult children of alcoholics and non-alcoholics on selected personality and religious variables. Doctoral dissertation, Union Graduate School of the Union for Experimenting Colleges and Universities.

- Windle, M., & Searles, Jr. (Eds.). (1990). Children of alcoholics: Critical perspectives. New York: Guilford Press.
- Winokur, G., Reich, T., Rimmer, J., & Pitts, F. N. (1970). Alcoholism III. Diagnosis and familial psychiatric illness in 259 alcoholic probands. Archives of General Psychiatry, 23, 104-111.
- Woititz, J. (1981). Adult children of alcoholics. Paper presented at National Council on Alcoholism Annual Forum.
- Woititz, J. (1983). Adult children of alcoholics. Pompano Beach, FL: Health Communications.
- Worthington, E. (1988). Understanding the values of religious clients: A model and its application to counseling. Journal of Counseling Psychology, 35(2), 166-174.
- Zucker, R. A., & Barron, F. H. (1973). Parental behaviors associated with problems drinking and antisocial behavior among adolescent males. First Alcoholism Conference NIAAA, 276-293.
- Zucker, R., & Gamberg, E. (1986). Etiology of alcoholism reconsidered. The case for a biopsychosocial process. American Psychologist, 41, 783-792.

Appendices

Appendix A

Key Person Letter

Dear Key Person,

Thank you for your assistance in this project. Please follow the instructions below:

- 1) Please distribute the numbered survey booklets to approximately 50 (fifty) participants age 18 (eighteen) or over.
- 2) It is important that you attempt to balance the participation by including both Adult Children of Alcoholics (ACA's) and non-Adult Children of Alcoholics. It is okay to use known ACA's, but please include groups such as Sunday School classes that have a more general population as well.
- 3) Please make sure that the participants read the Informed Consent Statement and indicate their agreement to participate by placing the number of their booklet at the bottom.
- 4) The completed booklets will be returned to you and I will be in contact with you soon to pick them up.

Your help is invaluable to me and I greatly appreciate it.

Sincerely,

Dennis W. Henderson, MS, MA

(503) 659-5515

Appendix B

Informed Consent Statement

INFORMED CONSENT STATEMENT

It is important that the following information be read and understood before agreeing to participate in this study.

I agree to participate in a research study which examines differences in the personal characteristics and perceptions of Evangelical Christian adults who were raised in alcoholic homes and those Evangelical Christian adults raised in non-alcoholic homes.

It is my responsibility to fill out the research booklet which contains four (4) different forms. The first form, the Demographic Questionnaire, will ask me personal information about myself. Secondly, the Spiritual Well-Being Scale which will ask me to assess my spiritual attitudes. Thirdly, the Children of Alcoholics Screening Test (C.A.S.T.) will ask me about my parent's alcohol use. The last form is the Religious Behavior Questionnaire which will explore my religious activities and beliefs.

It will take approximately fifteen (15) minutes to complete the booklet. Confidentiality will be maintained since my name will not be written on my booklet. Instead, a number will be assigned to my booklet.

It is possible that answering some of the questions may cause some personal discomfort since they may cause me to reflect on past or present painful emotions or memories.

I may ask questions about this study by contacting Dennis Henderson at (503) 659-5515. I reserve the right to withdraw from the study at any time. Results of this study will be available in approximately sixty days. If you would like a copy, please tell the person who administered your booklet.

My check next to the number of my booklet below indicates my understanding of the above and agreement to participate.

Booklet Number _____

Date

Appendix C
Demographic Questionnaire

DQ

- Q1 What is your age? _____ Years
- Q2 Your gender: (circle number of your answer)
- 1 Male
 - 2 Female
- Q3 Your present marital status: (circle number)
- 1 Single (Never Married)
 - 2 First Marriage
 - 3 Separated or Divorced
 - 4 Remarried
 - 5 Living Together
 - 6 Other (Please Specify) _____
- Q4 What is the highest level of education that you have completed? (circle number)
- 1 Did Not Finish High School
 - 2 Completed High School (or G.E.D.)
 - 3 Attended or Completed Trade or Business School
 - 4 Some College
 - 5 Completed College
 - 6 Some Graduate Work
 - 7 A Graduate Degree
- Q5 Which of the following best describes your racial or ethnic background? (circle number)
- 1 Black
 - 2 Hispanic
 - 3 American Indian
 - 4 Asian
 - 5 Caucasian
 - 6 Other (Please Specify) _____
- Q6 Which best describes the marital status of your parents before you were 18 years old?
(circle number)
- 1 Single (Never Married)
 - 2 First Marriage
 - 3 Separated or Divorced
 - 4 Remarried
 - 5 Living Together
 - 6 Other (Please Specify) _____

- Q7 Which of the following best describes your drinking (alcohol) behavior?
- 1 I Am An Alcoholic (Still Drinking)
 - 2 I Am An Alcoholic (No Longer Drinking)
 - 3 I Am A Social Drinker
 - 4 I Abstain From Alcohol
- Q8 Please choose one of the following.
- 1 I Have Never Attended Support Groups or Sought Professional Treatment For My Mental Health.
 - 2 I Have Attended Support Groups (i.e., ACOA, CODA, ALANON, etc.)
- Q9 Please choose one of the following.
- 1 I Have Never Received Professional Counseling.
 - 2 I Have Received Professional Counseling (6 Sessions or Less)
 - 3 I Have Received Professional Counseling (7 - 29 Sessions)
 - 4 I Have Received Professional Counseling (30 Sessions or More)
 - 5 I Have Received In-Patient Treatment For My Mental Health Needs

Appendix D

Spiritual Well-Being Scale

SWB

For each of the following statements circle the choice that best indicates the extent of your agreement or disagreement as it describes your personal experience:

SA = Strongly Agree A = Agree MD = Moderately Disagree

MA = Moderately Agree D = Disagree SD = Strongly Disagree

I don't find much satisfaction in private prayer with God.	SA	MA	A	D	MD	SD
I don't know who I am, where I came from, or where I'm going.	SA	MA	A	D	MD	SD
I believe that God loves me and cares about me.	SA	MA	A	D	MD	SD
I feel that life is a positive experience.	SA	MA	A	D	MD	SD
I believe that God is impersonal and not interested in my daily situations.	SA	MA	A	D	MD	SD
I feel unsettled about my future.	SA	MA	A	D	MD	SD
I have a personally meaningful relationship with God.	SA	MA	A	D	MD	SD
I feel very fulfilled and satisfied with life.	SA	MA	A	D	MD	SD
I don't get much personal strength and support from my God.	SA	MA	A	D	MD	SD
I feel a sense of well-being about the direction my life is headed in.	SA	MA	A	D	MD	SD
I believe that God is concerned about my problems.	SA	MA	A	D	MD	SD
I don't enjoy much about life.	SA	MA	A	D	MD	SD
I don't have a personally satisfying relationship with God.	SA	MA	A	D	MD	SD
I feel good about my future.	SA	MA	A	D	MD	SD
My relationship with God helps me not to feel lonely.	SA	MA	A	D	MD	SD
I feel that life is full of conflict and unhappiness.	SA	MA	A	D	MD	SD
I feel most fulfilled when I'm in close communion with God.	SA	MA	A	D	MD	SD

Life doesn't have much meaning.

SA MA A D MD SD

My relation with God contributes to my sense of well-being.

SA MA A D MD SD

I believe there is some real purpose for my life.

SA MA A D MD SD

Appendix E

Children of Alcoholics Screening Test

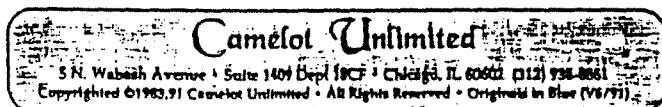
C. A. S. T.

Please check the answers below that best describe your feelings, behavior, and experience related to a parent's alcohol use. Take your time and be as accurate as possible. Answer all 30 questions by checking either "Yes" or "No".

Gender: Male _____ Female _____ Age: _____

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

___ TOTAL NUMBER OF "Yes" ANSWERS



Appendix F

Religious Behavior Questionnaire

RBQ

For each of the following statements circle the number, check the correct blank, or fill in the space with a number as it describes your personal experience:

- Q1 How important are your religious beliefs and practices?
No importance 1 2 3 4 5 6 7 Extremely important
Have no religion 1 2 3 4 5 6 7 Faith is the center of my life
- Q2 How frequently have you attended church during the past year?
____ Less than once per year
____ Once or twice a year
____ Between 3 & 12 times a year
____ Between 1-3 times a month
____ Weekly
____ More than once per week
- Q3 Do you profess to be a Christian? (Mark the number corresponding to the response which best describes you).
1 No
2 Yes, I respect and attempt to follow the moral and ethical teachings of Christ.
3 Yes, I have received Jesus Christ into my life as my personal Savior and Lord.
4 Yes, I have received Jesus Christ as my personal Savior and Lord and I seek to follow the moral and ethical teachings of Christ.
- Q4 For how many years have you been a professing Christian (If not a profession Christian, enter 0)?
____ Number of years
____ Months if less than one year
- Q5 In the past year how often have you had personal religious devotions (such as personal Bible study, prayer and meditation)?
____ Not at all
____ Less than once per week
____ Weekly
____ 1-3 times a week
____ 4-7 times a week
____ More than once a day
- Q6 How many hours per week have you spent (averaged over the last year) in some form of church ministry or service (for example, teaching, serving on elder or deacon boards, visitation, personal evangelism, counseling, discipleship, child care, preparation of food, providing practical helps to others, and the like)?
____ Hours per week

Appendix G
Correlations of Total Sample

The Effect of ACA on SWB

183

Correlations:	DQ1	DQ4	TX	RBQ1A	RBQ1B	RBQ2
DQ1	1.0000 (0) P= .	-.0617 (132) P= .482	-.0969 (142) P= .251	.1455 (131) P= .097	.1027 (115) P= .275	.0775 (137) P= .368
DQ4	-.0617 (132) P= .482	1.0000 (0) P= .	-.0576 (133) P= .510	-.0526 (122) P= .565	.0259 (107) P= .791	.2493 (128) P= .005
TX	-.0969 (142) P= .251	-.0576 (133) P= .510	1.0000 (0) P= .	-.0606 (132) P= .490	-.0204 (115) P= .829	.0042 (138) P= .961
RBQ1A	.1455 (131) P= .097	-.0526 (122) P= .565	-.0606 (132) P= .490	1.0000 (0) P= .	.3637 (109) P= .000	.0820 (128) P= .357

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

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Correlations:	DQ1	DQ4	TX	RBQ1A	RBQ1B	RBQ2
RBQ1B	.1027 (115) P= .275	.0259 (107) P= .791	-.0204 (115) P= .829	.3637 (109) P= .000	1.0000 (0) P= .	.2181 (111) P= .021
RBQ2	.0775 (137) P= .368	.2493 (128) P= .005	.0042 (138) P= .961	.0820 (128) P= .357	.2181 (111) P= .021	1.0000 (0) P= .
RBQ3	-.0217 (139) P= .800	.1718 (131) P= .050	.0615 (140) P= .471	.2136 (130) P= .015	.4729 (113) P= .000	.4365 (136) P= .000
RBQ4	.6164 (130) P= .000	.1538 (121) P= .092	-.2391 (131) P= .006	.0843 (122) P= .356	.2222 (105) P= .023	.0941 (127) P= .293

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

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Correlations:	DQ1	DQ4	TX	RBQ1A	RBQ1B	RBQ2
RBQ5	-.0165 (140) P= .846	.0875 (131) P= .321	.0432 (141) P= .611	.3264 (131) P= .000	.3305 (114) P= .000	.3421 (137) P= .000
RBQ6	.1258 (138) P= .142	.0520 (129) P= .558	-.0294 (139) P= .731	.1506 (129) P= .088	.1672 (114) P= .075	.1524 (135) P= .078
RWB	-.0826 (139) P= .334	.1819 (130) P= .038	-.0738 (140) P= .386	.2803 (130) P= .001	.3613 (113) P= .000	.3251 (135) P= .000
EWB	.0223 (137) P= .796	.0925 (129) P= .297	-.2031 (138) P= .017	.2269 (127) P= .010	.2022 (112) P= .033	.2757 (133) P= .001

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

Page 22	SPSS/PC+					6/23/92
Correlations:	DQ1	DQ4	TX	RBQ1A	RBQ1B	RBQ2
SWB	-.0244 (134) P= .780	.1315 (126) P= .142	-.1794 (135) P= .037	.2563 (125) P= .004	.2907 (110) P= .002	.3515 (130) P= .000
CASTTOT	-.1065 (135) P= .219	-.0682 (127) P= .446	.2318 (136) P= .007	.0441 (125) P= .625	-.1596 (109) P= .097	-.1175 (131) P= .182

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

Page 23	SPSS/PC+					6/23/92
Correlations:	RBQ3	RBQ4	RBQ5	RBQ6	RWB	EWB
DQ1	-.0217 (139) P= .800	.6164 (130) P= .000	-.0165 (140) P= .846	.1258 (138) P= .142	-.0826 (139) P= .334	.0223 (137) P= .796
DQ4	.1718 (131) P= .050	.1538 (121) P= .092	.0875 (131) P= .321	.0520 (129) P= .558	.1819 (130) P= .038	.0925 (129) P= .297
TX	.0615 (140) P= .482	-.2391 (131) P= .000	.0432 (141) P= .000	-.0294 (139) P= .625	-.0738 (140) P= .000	-.2031 (138) P= .000
RBQ1A	.2136 (130) P= .015	.0843 (122) P= .356	.3264 (131) P= .000	.1506 (129) P= .088	.2803 (130) P= .001	.2269 (127) P= .010

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

Page 24	SPSS/PC+					6/23/92
Correlations:	RBQ3	RBQ4	RBQ5	RBQ6	RWB	EWB
RBQ1B	.4729 (113) P= .000	.2222 (105) P= .023	.3305 (114) P= .000	.1672 (114) P= .075	.3613 (113) P= .000	.2022 (112) P= .033
RBQ2	.4365 (136) P= .000	.0941 (127) P= .293	.3421 (137) P= .000	.1524 (135) P= .078	.3251 (135) P= .000	.2757 (133) P= .001
RBQ3	1.0000 (0) P= .	.0624 (129) P= .482	.3749 (139) P= .000	.1136 (137) P= .186	.3202 (137) P= .000	.1589 (135) P= .066
RBQ4	.0624 (129) P= .482	1.0000 (0) P= .	.0211 (130) P= .811	.0821 (129) P= .355	-.0012 (130) P= .989	.0710 (127) P= .428

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

Page 25 SPSS/PC+ 6/23/92

Correlations:	RBQ3	RBQ4	RBQ5	RBQ6	RWB	EWB
RBQ5	.3749 (139) P= .000	.0211 (130) P= .811	1.0000 (0) P= .	.1817 (138) P= .033	.4400 (138) P= .000	.3024 (136) P= .000
RBQ6	.1136 (137) P= .186	.0821 (129) P= .355	.1817 (138) P= .033	1.0000 (0) P= .	.1258 (137) P= .143	.1018 (134) P= .242
RWB	.3202 (137) P= .000	-.0012 (130) P= .989	.4400 (138) P= .000	.1258 (137) P= .143	1.0000 (0) P= .	.5982 (135) P= .000
EWB	.1589 (135) P= .000	.0710 (127) P= .000	.3024 (136) P= .000	.1018 (134) P= .000	.5982 (135) P= .000	1.0000 (0) P= .000

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

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Correlations:	RBQ3	RBQ4	RBQ5	RBQ6	RWB	EWB
SWB	.2820 (132) P= .001	.0552 (126) P= .539	.4113 (133) P= .000	.1167 (132) P= .183	.8732 (135) P= .000	.9129 (135) P= .000
CASITOT	-.1658 (133) P= .057	-.2055 (124) P= .001	.1083 (134) P= .213	.0187 (132) P= .832	-.0077 (133) P= .930	-.1873 (131) P= .032

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

Page 27 SPSS/PC+ 6/23/92

Correlations:	SWB	CASITOT
DQ1	-.0244 (134) P= .780	-.1065 (135) P= .219
DQ4	.1315 (126) P= .142	-.0682 (127) P= .446
TX	-.1794 (135) P= .037	.2318 (136) P= .007
RBQ1A	.2563 (125) P= .004	.0441 (125) P= .625

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

Page 28 SPSS/PC+ 6/23/92

Correlations: SWB		CASTTOT		
RBQ1B	.2907 P= .002	-.15961 P= .097	(110)	(109)
RBQ2	.3515 (130) P= .000	-.1175 (131) P= .182		
RBQ3	.2820 (132) P= .001	-.1658 (133) P= .057		
RBQ4	.0552 (126) P= .539	-.2855 (124) P= .001		

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

Page 29 SPSS/PC+ 6/23/92

Correlations: SWB		CASTTOT		
RBQ5	.4113 (133) P= .000	.1083 (134) P= .213		
RBQ6	.1167 (132) P= .183	.0187 (132) P= .832		
RWB	.8732 (135) P= .000	-.0077 (133) P= .930		
EWB	.9129 (135) P= .000	-.1873 (131) P= .032		

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

Page 30 SPSS/PC+ 6/23/92

Correlations: SWB		CASTTOT		
SWB	1.0000 (0) P= .	-.1402 (128) P= .114		
CASTTOT	-.1402 P= .114	1.00001 P= .	(128)	(0)

(Coefficient / (Cases) / 2-tailed Significance)

" . " is printed if a coefficient cannot be computed

Appendix H

Raw Data

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DATA LIST FILE='DENNIS.DAT' / ID 1-3 DQ1 5-6 DQ2 TO DQ7 7-12
  DQ8 14 DQ9 15 SWBQ1 TO SWBQ20 17-36 CASTQ1 TO CASTQ30 39-68
  RBQ1A 71 RBQ1B 72 RBQ2 73 RBQ3 74 RBQ4A 76-77 RBQ4B 79-80
  RBQ5 82 RBQ6 84-85.
MISSING DQ2 TO DQ9 SWBQ1 TO SWBQ20
  CASTQ1 TO CASTQ30 RBQ1A TO RBQ3 RBQ5 (9)
  /DQ1 RBQ4A RBQ4B RBQ6 (99).
COMPUTE RBQ4=(RBQ4A*12)+RBQ4B.
COMPUTE CASTTOT=CASTQ1+CASTQ2+CASTQ3+CASTQ4+CASTQ5+CASTQ6
  +CASTQ7+CASTQ8+CASTQ9+CASTQ10+CASTQ11+CASTQ12+CASTQ13
  +CASTQ14+CASTQ15+CASTQ16+CASTQ17+CASTQ18+CASTQ19+CASTQ20
  +CASTQ21+CASTQ22+CASTQ23+CASTQ24+CASTQ25+CASTQ26+CASTQ27
  +CASTQ28+CASTQ29+CASTQ30.
RECODE SWBQ3 SWBQ4 SWBQ7 SWBQ8 SWBQ10 SWBQ11 SWBQ14 SWBQ15
  SWBQ17 SWBQ19 SWBQ20 (1 = 6)(2 = 5)(3 = 4)(4 = 3)(5 = 2)(6 = 1).
COMPUTE RWB=SWBQ1+SWBQ3+SWBQ5+SWBQ7+SWBQ9+SWBQ11+SWBQ13+
  SWBQ15+SWBQ17+SWBQ19.
COMPUTE EWB=SWBQ2+SWBQ4+SWBQ6+SWBQ8+SWBQ10+SWBQ12+SWBQ14+
  SWBQ16+SWBQ18+SWBQ20.
COMPUTE SWB=RWB+EWB.
VARIABLE LABELS ID 'PARTICIPANT ID #'
  /DQ1 'AGE IN YEARS'
  /DQ2 'GENDER'
  /DQ3 'PRESENT MARITAL STATUS'
  /DQ4 'HIGHEST ED LEVEL'
  /DQ5 'ETHNIC BACKGROUND'
  /DQ6 'MARITAL STATUS OF PARENTS'
  /DQ7 'ALCOHOL CONSUMPTION'
  /DQ8 'ALCOHOL SUPPORT GROUPS'
  /DQ9 'COUNSELING'
  /SWBQ1 TO SWBQ20 'SWB QUESTION #'
  /CASTQ1 TO CASTQ30 'CAST QUESTION #'
  /RBQ1A 'RELIGION IMPORTANT?'
  /RBQ1B 'FAITH'
  /RBQ2 'FREQ CHURCH ATTEND'
  /RBQ3 'PROFESS CHRISTIAN'
  /RBQ4A 'YEARS PROFESSING CHRISTIAN'
  /RBQ4B 'MONTHS PROFESSING CHRISTIAN'
  /RBQ5 'FREQ OF DEVOTIONS'
  /RBQ6 'HOURS PER WEEK OF MINISTRY'
  /RBQ4 'MONTHS PROFESSING CHRISTIAN'
  /CASTTOT 'CAST TOTAL SCORE'
  /RWB 'RELIGIOUS WELL BEING'
  /EWB 'EXISTENTIAL WELL BEING'
  /SWB 'SPIRITUAL WELL BEING'.
VALUE LABELS DQ2 1 'MALE' 2 'FEMALE'
  /DQ3 1 'SINGLE (NEVER MARRIED)'
  2 'FIRST MARRIAGE'
  3 'SEPARATED OR DIVORCED'
  4 'REMARRIED'
  5 'LIVING TOGETHER'
  6 'OTHER'
  /DQ4 1 'NOT HS GRAD'
  2 'HS GRAD'

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3 'TRADE OR BUSINESS SCH'
4 'SOME COLLEGE'
5 'COMPLETED COLLEGE'
6 'SOME GRAD SCH'
7 'GRAD DEGREE'
/DQ5 1 'BLACK'
      2 'HISPANIC'
      3 'AMERICAN INDIAN'
      4 'ASIAN'
      5 'CAUCASIAN'
      6 'OTHER'
/DQ6 1 'SINGLE (NEVER MARRIED)'
      2 'FIRST MARRIAGE'
      3 'SEPARATED OR DIVORCED'
      4 'REMARRIED'
      5 'LIVING TOGETHER'
      6 'OTHER'
/DQ7 1 'DRINKING ALCOHOLIC'
      2 'NOT DRINKING ALCOHOLIC'
      3 'SOCIAL DRINKER'
      4 'ABSTAIN FROM ALCOHOL'
/DQ8 1 'NO SUPPORT GRP OR CNCL'
      2 'HAVE ATTEND SUPPORT GRP'
/DQ9 1 'NO PROFESSIONAL CNCL'
      2 'CNCL < 6 SESSIONS'
      3 'CNCL 7-29 SESSIONS'
      4 'CNCL 30+ SESSIONS'
      5 'IN-PT TX FOR MENTAL HEALTH'
/RBQ2 1 '< ONCE PER YEAR'
      2 '1 OR 2 X A YEAR'
      3 '3-12 X A YEAR'
      4 '1-3 X A MONTH'
      5 'WEEKLY'
      6 'MORE THAN 1X A WEEK'
/RBQ3 1 'NO'
      2 'RESPECT ETHICAL TEACHINGS'
      3 'RECEIVED CHRIST'
      4 'RECEIVED CHRIST+FOLLOW TEACHINGS'
/RBQ5 1 'NOT AT ALL'
      2 '<1 X A WEEK'
      3 'WEEKLY'
      4 '1-3 X A WEEK'
      5 '4-7 X A WEEK'
      6 'MORE THAN 1X A DAY'.
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069 41234523 22 65216662611661251611 100110111001000000100000000010 7764 03 00
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064 36233543 23 14136114441563342611 100000000000000000000000110010000 6634 01 00
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071 46125544 24 36126534433543333632 0100001100010100011000100000000 9954 28 05
075 36234524 24 64116523631453353533 00000000000000000000000000000000 7962 20 00
043 62222524 11 66136593631263651511 100000010101001001110010000000 9754 99 00

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Appendix I

Vita

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Educational Background

Psy.D. (Doctor of Psychology in Clinical
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Intern 1990-1992, Western Psychological and
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M.A. 1990, Western Conservative Baptist Seminary,
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Practicum 1/89 to 9/89, Clackamas Family Counseling
Services, Clackamas, Oregon

M.S. 1984, Texas A&M University,
College Station, Texas, Counseling
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Practicum 9/83 to 8/84, The Answer Counseling Center,
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Practicum 9/82 to 12/82, Educational Psychology
Counseling Services, Texas A&M University,
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Practicum 1/82 to 5/82, Counseling the Elderly, Texas
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M.A. 1977, Columbia Graduate School of Bible and
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B.A. 1975, Free Will Baptist Bible College,
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Employment

1988 - Present Staff Therapist, Clackamas Family
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1985 - 1987 Alcohol and Drug Abuse Counselor,
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The Effect of Being An Adult Child of An Alcoholic On
the Spiritual Well-Being of Evangelical Christians

