FAMILY HISTORY OF ALCOHOLISM, FAMILY OF ORIGIN CHARACTERISTICS, INDIVIDUAL CHARACTERISTICS AND ADULT ALCOHOL USE

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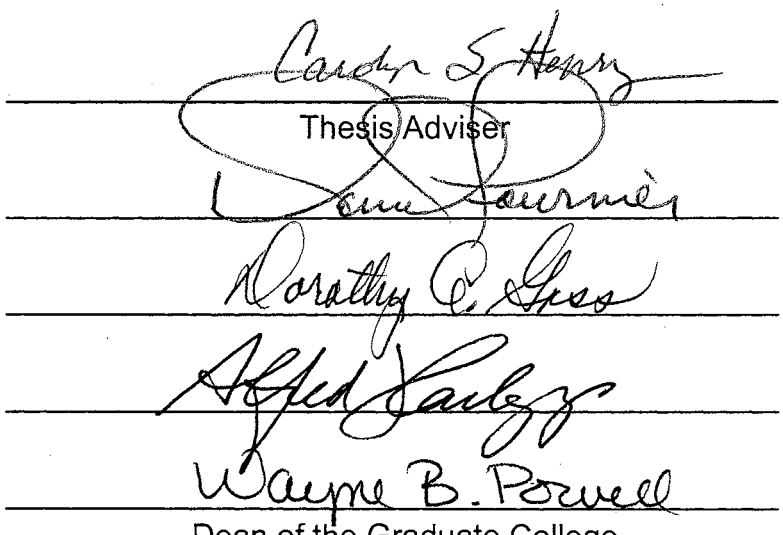

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Family History of Alcoholism, Family of Origin Characteristics, Individual Characteristics, and Adult Alcohol Use

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This manuscript is based on the doctoral thesis of the author conducted under the direction of Dr. Carolyn Henry, Professor, Oklahoma State University

Abstract

This project examines the extent to which: (1) perceptions of interactions within the family of origin relates to adult alcohol use, and (2) reports of problems with alcohol in the family of origin and selected individual qualities may mediate the relationship of interactions in the family of origin and adult problems with alcohol. Self-report questionnaire data were collected from a sample of 224 college students. Pearson correlation coefficients and a series of multiple regression analyses were used to examine the extent to which individual variables mediated relationships between family functioning in the family of origin and adult substances use...

Depression, internal locus of control, life satisfaction, and family of origin drinking history were found to be mediating variables between family functioning and adult alcohol use. Work/school satisfaction was found to not meet the criteria of mediation variable. The results suggest that while perceptions of family functioning are significant and positively related to adult alcohol use, interactions targeted at enhancing selected individual characteristics hold potential for reducing the risk for adult alcohol use.

Family History of Alcoholism, Family of Origin Characteristics, Individual Characteristics, and Adult Alcohol Use

Introduction

Recent studies indicate that the harmful consequences of alcohol use are not confined to the individual, but are intertwined with the interaction patterns within the overall family system (Anderson & Henry, 1994; Barnes, 1990; Glen & Parsons, 1989; & Krestan & Bepko, 1989). During the past century, researchers have increasingly explored the family's role in the development and course of alcohol dependence (Jacob & Johnson, 1997). A systems perspective suggests that interactions in the family of origin may be related to adult alcohol use patterns. However, the majority of previous studies concerned with alcohol and familial relationships have focused on adult's family of procreation with the greatest emphasis on the alcoholic's spouse, with greater attention to the wives of male alcoholics than with the husbands of female alcoholics (Jacob, 1987). Minimal empirical research has explored the relationship between how individuals perceive the family history of alcoholism, qualities in the overall family system in the family of origin, and individual characteristics in relation to adult alcoholism. This project examines the extent to which: (1) perceptions of interactions within the family of origin relates to adult alcohol use, and (2) reports of problems with alcohol in the family of origin and selected individual qualities may mediate the relationship of interactions in the family of origin, and adult problems with alcohol.

ADULT ALCOHOL USE: FREQUENCY AND DEFINITION

Alcohol is the most commonly used psychoactive drug in the United States (Substance Abuse and Mental Health Services Administration, 1997). Brown (1995) posits that the norm in American society encourages drinking alcohol, but those individuals are expected to not develop problems with alcohol. Fifty-one percent of Americans age 12 and older report they are currently alcohol users (Substance Abuse and Mental Health Services Administration, 1997). The majority of drinkers stay within the limits of what is culturally accepted as a drinking behavior and consuming alcohol predominantly as an expression of the broader culture.

The general public has come to apply the term alcoholism as a designation for any form of excessive drinking (Jellinek, 1994). Professionals tend to define alcoholism with more precise definition. Alcoholism is a difficult condition to define (Steinglass, Bennett, Wolin, & Reiss, 1987). For this project the criteria for psychoactive substance abuse and dependence found in the Diagnostic and Statistical Manual of Mental Disorders (4^{th} ed.) (American Psychiatric Association, 1994) was used for alcoholism, substance addiction, and chemical dependency. The Diagnostic and Statistical Manual of Mental Disorders (4^{th} ed.) states that substance dependence is a maladaptive pattern of substance use leading to clinically significant impairment or distress (American Psychiatric Association, 1994). The impairment or distress is manifested by three or more of

11 listed symptoms occurring at any time in the same 12-month period. Several of the criteria are (1) tolerance, as defined by a need for markedly increased amounts of the substance to achieve intoxication or desired effect and/or a markedly diminished effect with continued use of the same amount of the substance; (2) withdrawal, as manifested by either the characteristic withdrawal syndrome for the substance or the substance is often taken in larger amounts or over a longer period than was intended; and, (3) there is a persistent desire or unsuccessful efforts to cut down or control substances use (American Psychiatric Association, 1994).

A Systems Perspective on Alcoholism

Alcohol use disorders are thought to be reflections of systemic family problems (Clark, Neighbors, Lesnick, Lynch, & Donovan, 1998). The concept of the family as a system has its roots in the general systems theory that was developed by Bertalanffy (1934). The idea of system incorporates the concept that change in one part brings about changes in other parts of the system (Hill, 1971). A major premise of a systems perspective is that the behavior of family members is interconnected and that such behavior can best be understood in the family context (Whitchurch & Constantine, 1993). From a systems perspective, alcoholism is not viewed as emerging from a single cause (Freeman, 1993).

One predominant model for examining family systems is the Circumplex Model of Marital and Family Systems which was designed and developed in an attempt to bridge a gap which exists between theory, research, and practice

(Olson, 1986). The Circumplex Model integrates ideas from general systems theory and concepts describing marital and family dynamics to understand levels of family functioning (Olson, 1986; Olson, Russell, & Sprenkle, 1980). Varied hypotheses have been developed and tested using the Circumplex Model. Olson (1986) reports that some of the research has attempted to look at the relationship between family functioning and family symptoms.

The Circumplex Model addresses the issue of balance (Olson, Russell, and Sprenkle, 1989), postulating that families that have moderate levels of both flexibility and cohesion (or emotional bonding) provide more adequate family functioning. Olson, McCubbin, Barnes, Larsen, Muxen, and Wilson (1992) suggest that, using FACES II, a measure of family functioning, that the levels of balance in family functioning can be identified as ranging from high to low. Previous theoretical and empirical literature suggests that families who have higher levels of functioning are at less risk for problems with alcohol.

Certainly, it is possible that higher functioning levels in either the family of origin or the family of procreation can be important to understanding the relationship of family functioning to adult problems with alcohol. However, in research with college students who may live in a variety of household arrangements it is reasonable to focus on reports of family functioning in the family of origin since this is the element of family configuration that will be common to the greatest number of students. Further, systems theorists suggest that within the families of origin, individuals learn patterns of interaction that have

implications for both individual development and for future relationships. Based upon these ideas, it was hypothesized that there would be a negative relationship between college student's reports of higher levels of family functioning in their families of origin and their own reported adult alcohol use.

Individual Characteristics and Adult Alcohol Use

The longest tradition in the study of alcoholism focuses upon how individual characteristics increase the risk for alcoholism (Jacob, 1987). It is possible that individual characteristics may mediate the relationship between perceptions of family functioning in the family of origin and adult problems with alcohol. Specifically, some individual qualities, such as the levels of anxiety, depression, and locus of control represent qualities of college students that may exacerbate or buffer the relationship between family functioning in the family of origin and adult problems with alcohol.

Previous scholarship shows that anxiety and depression are associated with chemical dependency (Maxmen & Ward, 1995). Alcoholics appear to show greater levels of anxiety (Glenn & Parsons, 1989). Persons who self-refer for alcoholism frequently complain of depression or anxiety (Daley, Moss, & Campbell, 1987).

Locus of control is concerned with the effects of reward or reinforcement on preceding behavior (Johnson, Nora, Tan, & Bustos, 1991). Some findings have indicated that alcoholics cannot be differentiated from non-alcoholics using the

dimension of internal-external locus of control; some studies have determined alcoholics tend to be more externally controlled (Johnson et al., 1991).

In addition to the personality qualities of individuals, it is also possible that the evaluations individuals make of their lives and life roles may mediate the relationship between family functioning in the family of origin and adult problems with alcohol. Johnson (1990), for example, posits that satisfaction with life, relationships, and work and/or school can decrease incidences of adult alcohol use in the non-dependent individual. Alcohol has a history as being a means to cope with stress encountered in day to day life (Johnson, 1990). Jellinek (1994) termed this occasional relief drinking, to put stress and worry aside. In addition, for individuals who are married, it is possible that marital satisfaction may serve as a factor relating to alcohol use patterns.

Because previous scholarship notes that age, gender, and marital status may explain some variation in adult alcohol use patterns, these variables were examined as potential "control variables." Specifically, previous work has found that males frequently report greater levels of alcohol use than females, that drinking often increases with age, and that alcohol problems are more predominant among single adults (Barnes, 1990).

Family of Origin Problems with Alcohol and Adult Problems with Alcohol

Based upon these ideas, a conceptual model (see Figure 1) was developed that illustrates that perceptions of family functioning in the family of origin were expected to be negatively related to adult substances use. Further, age was

expected to report males were more likely to be adult alcohol users than were females.

Insert Figure 1 about here

It also was hypothesized that the relationship between family functioning and adult alcohol use would be mediated by selected individual qualities. Specifically, family drinking history, anxiety, depression, locus of control, life satisfaction, relationship satisfaction, work/school satisfaction, and marital satisfaction were expected to mediate the relationships between reports of family functioning in the family of origin and adult alcohol use.

Demographics and Adult Alcohol Use

Several theoretical approaches have been used to understand alcoholism. Biological and clinical scientists have sought to understand the ravages to the body caused by alcoholism. National Institute on Alcohol Abuse and Alcoholism (NIAAA) (1985) stated that both heredity and environment are involved in the making of most alcoholics. Further, every alcoholic directly affects the lives of at least four to five other people (Krestan & Bepko, 1989) and 25% of all hospital admissions are alcohol related (Vaillant, 1983). The literature suggests that family members may be more willing to report alcohol or drug problems than are persons with alcohol use problems (Del Toro, Larsen, & Carter, 1994).

The model developed for the project incorporated four sets of variables (see Figure 1). Family of origin family functioning and problems with drinking in the family of origin were two predictor variables. Individual characteristics as a predictor variable were listed as anxiety, depression, internal locus of control, and satisfaction with life, relationships, work and/or school, and marriage (if married). Demographic variables of age, gender, and marital status were also part of the original model. The criterion variable was problems adult alcohol use.

Based upon these ideas, it was hypothesized that the relationship between family functioning and adult alcohol use would be mediated by selected individual qualities. Specifically, reports of problems with alcohol in the family of origin, anxiety, depression, locus of control, life satisfaction, relationship satisfaction, work/school satisfaction, and marital satisfaction were expected to mediate the relationships between reports of family functioning in the family of origin and adult problems with alcohol.

Method

Sample and Procedure

The sample for this study consisted of a convenience sample of 224 college students from a community college and from a university in a southwestern state. Both of the colleges are located in same community of approximately 50,000 residents (see Table 1).

The subjects ranged in age from 18 years of age to 55 years of age with a mean age of 25.34 years.

Insert Table 1 about here

The racial composition was 87.5% white, 3.6% black, 2.2% Native American, 4.9% Hispanic, .9% Asian, and .9% other. The sample consisted of 96 (42.9%) men and 128 (57.1%) women who reported the following college classifications: 106 (48.6%) freshmen; 57 (26.1%) sophomores, 33 (15.1%) juniors, and 22 (10.2%) seniors. There were 123 single subjects (56.2%), 58 married subjects (26.5%), 22 divorced students (10%), 3 students were widowed (1.4%), 6 were remarried (2.7%), and 7 students (3.2%) reported themselves in the other category.

Measurement

A survey instrument composed of existing instruments combined by the researcher and standard fact sheet items was used to collect the data. To measure levels of adult problems with alcohol, the study utilized the brief four-item Cut down, become Annoyed, feel Guilt, or need an Eye-opener in the morning (CAGE) (Mayfield, McLeod, & Hall, 1974). CAGE is an acronym (Crowe, Kramer. Hesselbrock, Manos, Bucholz, 1997; Russell, 1994; Spak & Hallstrom, 1995) based on the four clinical interview questions: (1) Have you ever felt you ought to Cut down on your drinking?; (2) Have people Annoyed you by criticizing

your drinking? (3) Have you ever felt bad or Guilty about your drinking? (4) Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (Eye-opener)?

The measure of family functioning variable used the Family Adaptability and Cohesion Evaluations Scales II (FACES II). FACES II is a 30-item Likert-type instrument that can be used to assess the level of balance within family functioning. Subjects were asked to respond to the items regarding their families of origin. Sample items are: (a) "Family members feel very close to each other" and (b) "Each family member has input regarding major decisions." Response choices were: 1 = almost never, 2 = once in awhile, 3 = sometimes, 4 = frequently, and 5 = almost always. This project utilized the linear scoring for obtaining scores for the levels of balance in family functioning (Olson et al., 1992). Scores for FACES II could range from 1 = extreme level of family functioning to 8 = balanced family functioning Olson et al.) Cronbach's alpha for the total scale was reported by Olson et al. (1992) at .90. Using the current data, Cronbach's alphas were established for family type at .76.

Beck's Anxiety Inventory (BAI) is a 21-item scale developed to assess the severity of anxiety symptoms (Osman, Kopper, Barrios, Osman, & Wade, 1997). The BAI contains 21 Likert-type items and was constructed to assess symptoms which are characteristic of anxiety disorders, but which are not characteristic of depressive disorders (Jolly, Wiesner, Wherry, Jolly, & Dykman, 1994). The inventory asked respondents to rate the severity of each symptom using a 4-

point scale anchored by (0) "Not at all"; (1) "Mildly - It did not bother me much"; (2) "Moderately - It was very unpleasant but I could stand it"; and (3) "Severely "I could barely stand it." (Steer, Clark, Beck, & Ranieri, 1995). A total score was established by summing the subjects' ratings for all 21 symptoms. Scores can range from 0 to 63 (Steer et al., 1995). Earlier studies show that internal consistency reliability coefficient of the BAI is high (α = .92) (Beck, Brown, Epstein, & Steer, 1988). Using the present data, a Cronbach's alpha of .84 was established.

The Beck Depression Inventory (BDI) is a 21-item report questionnaire used to assess depression of the respondents. The BDI is one of the most widely used research instruments for quantifying the severity of depression (Heiligenstein, Guenther, Hsu, & Herman 1996). The scale rates cognitive, effective, somatic and behavioral symptoms of depression on a scale from 0 to 3 (Beck & Steer, 1987). Subjects are asked to choose between a set of questions. For example, "I do not feel sad". = 0, "I feel sad". = 1; "I am sad all the time and I can't snap out of it". = 2; and, "I am so sad or unhappy that I can't stand it". = 3. The total score on the Beck Depression Inventory is computed by combining responses to the 21 self-administered items. Total scores can range from 0 to 63 (Steer, Kumar, Ranieri, & Beck, 1995). Using the current data, a Cronbach's alpha of .89 was established.

Internal locus of control of the participants was measured using an abbreviated version of Rotter's I-E Scale (Bridges, 1989; Rotter, 1966). Rotter's

scale assesses a person's perception of personal control over events and their own behavior. The scale was modified in the response format from the original yes or no format. Subjects were asked to indicate their level of agreement with the statements on a scale of 1 to 5 (1 = strongly disagree, 5 = strongly agree). Bridges (1989) selected ten items from the total scale based on correlation coefficients and item content and those ten items were included in this project. A sample item follows: *a)"I have often found that what is going to happen will happen."; and, b) "What happens to me is my own doing."* The total score is the sum of the responses to the 10 items. Internal locus of control was represented by a high score and a low score represented external locus of control (Bugaighis & Schumm, 1983). Rotter (1966) reported a Cronbach's of .70. In the current study four of the ten items were deleted from the scale after a reliability analysis for item-total statistics demonstrated the alpha level could be raised by deleting items 1, 6,7, and 8; and, by recoding items 5, 3, and 9.The current data demonstrated a Cronbach's alpha of .52 for the revised 6 item scale.

Measures of Satisfaction with Life, Relationships, Work/School, and Marital Satisfaction

Three Likert-type questions, written specifically for this project, were included in the survey to assess the participants' reports of their own satisfaction with life, relationships, and work or school. Participants were asked to respond to the following questions with a five-point response scale ranging from 1 (very unsatisfied) to 5 (very satisfied): (a) "*All in all, how satisfied are you with your*

life?" (overall life satisfaction), (b) *"All in all, how satisfied are you with your relationships?"*(relationship satisfaction); and (c) *"All in all, how satisfied are you with your work or school?"* (work/school satisfaction). Each question was used as a single item indicator of the corresponding variable.

The Kansas Marital Satisfaction Scale was used to determine the relationship between adult problems with alcohol and marital satisfaction. The Kansas Marital Satisfaction Scale is strongly correlated with the Dyadic Adjustment Scale and the Martial Adjustment Test (Schumm & Silliman, 1996). Subjects were asked to choose from 1 to 5 on a Likert-type scale (1 = very unsatisfied and 5 = very satisfied) in response to questions such as, "How satisfied are you with your marriage?" Shek (1998) reports a Cronbach's alpha of .93; the survey sample provided an alpha of .94.

Assessment of Family History of Alcohol Use

An experimental modified CAGE was developed for family members (Del Toro, Larsen, & Carter, 1994) and included in this project. Del Toro et al. (1994) report that preliminary results indicate that an approach utilizing family members may be a helpful.format. The CAGE modified for family members asked four questions in a yes or no format about members in the family of origin. Question one asked if the family member ever thought that another family member ought to cut down and/or stop his/her use of drugs or alcohol? Questions two and three asked if the respondent became annoyed or defensive when others criticized or commented on another family member's use of drugs or alcohol; or,

if the respondent had ever felt angry, anxious, or depressed about another family member's use of drugs or alcohol. The fourth question asked the respondent to indicate if he/she had ever been embarrassed by a another family member's behavior when he/she had been drinking alcoholic beverages or using drugs. The project data showed a reliability of α=.85. Del Toro et al. did not report a reliability on the modified cage assessment for the family.

Standard fact sheet items were used to assess the demographic variables of age, gender, and marital status.

Analysis and Results

Means and standard deviations were established for family type, family history of problems with alcohol in the family of origin, internal locus of control, life satisfaction, relationships satisfaction, work/school satisfaction, depression, and marital satisfaction and adult alcohol use (see Table 2).

Insert Table 2 about here

Data analysis consisted of Pearson correlation coefficients and a series of regression analyses (see Table 3).

Insert Table 3 about here

A dummy variable for gender of adult was included as a predictor in each regression equation to test for differences in responses by adult males and females (Pedhazur, 1982, Tabachinick & Fidell, 1989). Since these variables were conceptualized as "control" variables and the relationships were not significantly correlated to adult alcohol use, they were not retained in further analyses.

As expected, a significant correlation was found between family functioning in the family of origin and adult alcohol use. Further, family history of problems with alcohol and depression were significantly and positively correlated with adult alcohol use while locus of control, overall life satisfaction, relationship satisfaction, and work/school satisfaction were negatively correlated with adult alcohol use. Anxiety and marital satisfaction were not significantly correlated with increased adult alcohol use. The bivariate correlations supported the further investigation of multivariate regression models and the mediational hypotheses for family history, depression, locus of control, life satisfaction, relationship satisfaction, and work/school satisfaction.

Depression as a Mediator Between Family Functioning and Adult Alcohol Use

In general, if a given variable accounts for the relation between the predictor variable and the criterion variable, the variable can be said to be a mediator variable (Baron & Kenny, 1986). For example, to determine the extent to which adult depression mediated the relationship between reported family functioning in

the family of origin and adult problems with alcohol, three simple regression analyses were run see Table 4).

Insert Table 4 about here

Family functioning was regressed on adult problems with alcohol, family functioning was regressed on adult depression, and depression was regressed on adult problems with alcohol.

Next, a hierarchical multiple regression analysis was run with family functioning being entered in Step 1 and depression entered in Step 2 (see Table 5). If the beta between depression and adult problems with alcohol yielded a significant beta in Step 2 and family functioning yielded a significant beta in Step 1, but not Step 2, it was concluded that depression was a mediating variable.

Insert Table 5 about here

The results supported the mediation hypothesis for the variables involved. In the simple regression analysis between family of origin functioning and adult problems with alcohol, the F-value was significant at the $p<.05$ level. (see Table 4). Family of origin functioning regressed on depression showed a significant negative relationship ($p<.01$. Depression regressed on adult alcohol use demonstrates a significant positive beta ($p<.01$, see Table 4).

As noted in Table 4, when family of origin functioning was regressed on adult alcohol use as Step 1 in the hierarchical multiple regression model, a significant negative beta was found. However when depression was entered in with family functioning in Step 2, family functioning was no longer significant whereas depression yielded a significant negative beta in relation to alcohol use. These results support depression as a mediator between family of origin functioning and adult problems with alcohol.

Locus of Control as a Mediator Between Family Functioning and Adult Alcohol Use

In the simple regression analysis between family of origin functioning and adult problems with alcohol, the F-value was significant at the $p<.05$ level. (see Table 4). Family of origin functioning regressed on internal locus of control showed a significant relationship between the variables ($p<0$) showing that variations in the mediator (internal locus of control) significantly account for variations in the criterion variable. Internal locus of control regressed on adult alcohol use demonstrates a significant relationship ($p<.01$) (see Table 5).

As noted in Table 5, when family of origin functioning was regressed on adult alcohol use as Step 1 in the hierarchical multiple regression model, a significant relationship ($p<.05$) was found. However, when internal locus of control was entered in with family functioning in Step 2, family functioning was no longer significant whereas internal locus of control yielded a $p<.05$ in relation to alcohol

use. These results support internal locus of control as a mediator between family of origin functioning and adult problems with alcohol.

Life Satisfaction as a Mediator Between Family Functioning and Adult Alcohol Use

The results overall supported life satisfaction as a mediation between reports of family functioning in the family of origin and adult alcohol use. In the simple regression analysis between family of origin functioning and adult problems with alcohol, the beta was significant at the $p<.05$ level (see Table 4).

Family of origin functioning regressed on life satisfaction showed a significant relationship between the variables ($p<.01$) showing that variations in the mediator (life satisfaction) significantly account for variations in the criterion variable. Life satisfaction regressed on adult alcohol use demonstrates a significant negative beta ($p<.01$, see Table 4).

As noted in Table 5, when family of origin functioning was regressed on adult alcohol use as Step 1 in the hierarchical multiple regression model, a significant beta was found. However, when life satisfaction was entered in with family functioning in Step 2, family functioning was no longer significant whereas life satisfaction yielded a significant beta in relation to alcohol use. These results support life satisfaction as a mediator between family of origin functioning and adult problems with alcohol.

Relationship Satisfaction as a Mediator Between Family Functioning and Adult Alcohol Use

The results did not support relationship satisfaction as a mediational variable between family functioning in the family of origin and adult alcohol use. In the simple regression analysis between family of origin functioning and adult problems with alcohol, the beta was significant at the $p<.05$ level (see Table 4). When family functioning was regressed on relationship satisfaction a significant positive relationship was found. However, when relationship satisfaction was regressed on adult alcohol use, there was no significant relationship.

As noted in Table 5, when family of origin functioning was regressed on adult alcohol use as Step 1 in the hierarchical multiple regression model, a significant negative beta was found. However, when relationship satisfaction was entered in with family functioning in Step 2, family functioning was no longer significant whereas relationship satisfaction yielded a beta of non-significance in relation to alcohol use. These results do not support relationship satisfaction as a mediating variable.

Work/School Satisfaction as a Mediator Between Family Functioning and Adult Alcohol Use

The results did not support the mediational hypothesis for work/school satisfaction as a mediator between family functioning in the family of origin and adult alcohol use. In the simple regression analysis between family of origin

functioning and adult problems with alcohol, the beta was significant at the $p<.05$ level. (see Table 4).

Family of origin functioning regressed on work/school satisfaction did not show a significant relationship between the variables. Work/school satisfaction regressed on adult alcohol use demonstrates a significant negative relationship at the $p<.01$ level (see Table 4).

As noted in Table 5, when family of origin functioning was regressed on adult alcohol use as Step 1 in the hierarchical multiple regression model, a relationship ($p<.05$) was found. However when work/school satisfaction was entered in with family functioning in Step 2, family functioning was no longer significant whereas work/school relationship yielded a significant negative beta ($p<.01$) in relation to alcohol use. These results did not support work/school relationships as a mediator between family of origin functioning and adult problems with alcohol.

Problems with Family Drinking in the Family of Origin as a Mediator Between Family Functioning and Adult Alcohol Use

The results supported the mediational hypothesis for the reported history of family problems with alcohol as a mediator between reported family functioning in the family of origin and reported adult problems with alcohol. In the simple regression analysis between family of origin functioning and adult problems with alcohol, the beta was significant at the $p<.05$ level (see Table 4). Family of origin functioning on reported family of origin problems with alcohol showed a significant positive relationship between the variables ($p< .01$). Variations in

family history of family of origin accounted for significant variations in adult problems with alcohol ($p < .01$).

In the hierarchical multiple regression model (see Table 5) the relationship between family of origin functioning and adult alcohol use is significant and negative in Step1. However, in Step 2, family functioning is no longer significantly related to adult alcohol use, but the reported family history of alcohol problems shows a significant positive relationship with adult problems with alcohol. Since the previously significantly relationship between family functioning and alcohol use is no longer significant and the relationship between reported history of problems with family of origin alcohol use is significantly related to adult problems with alcohol, it was concluded that a mediating relationship exists. Specifically, the reported family history of problems with alcohol use mediates the relationship between reported family of origin functioning and adult alcohol use.

Discussion

The results provide support for the expectation that reported family functioning in the family of origin is negatively related to reported problems with alcohol use in college students. Student perceptions of level of family functioning appeared to influence the amount of alcohol use reported by the student. If a student perceived a high level of functioning in the family of origin, the student's use of alcohol was lower than a student from a family of perceived lower level functioning. From a systems perspective these findings are consistent. Becvar and Becvar (1982) report there is abundant empirical evidence suggesting that

family systems have a significant impact upon the individuals within the family system.

The data supports previous research that family of origin is important and significant in human development. An alcoholic is more likely to have a mother, father, or relative who is an alcoholic than a nonalcoholic (Glenn & Parson, 1989). Family systems develop qualities that may encourage or support alcohol use among one or more members. Family structural variables have been related to the development of drinking behaviors (Leonard, 1990).

Most alcoholics live in intact families. Previous research has attempted to explain why a person from a family with an alcoholic member will have serious problems with alcohol use themselves while others, coming from a similar family background, will not experience difficulties with alcohol use. Mattessich and Hill (1987) posit families are resilient and have the ability to adapt to changes.

For the clinician, the study reinforces the need for a good family history during the intake process. The results also suggest that in dealing with what seems to be an individual problem, a strong background in family systems cannot help but be beneficial to the practicing therapist. Finally, the concept of working with the family, not just the identified person with a problem, is re-validated.

This study, while demonstrating the relationship between level of family functioning and adult alcohol use, also supported the expectation that selected variables would mediate this relationship. Specifically, the results support the

expectation that the level of students reporting low levels of problems with alcohol use in the family of origin will be mediated by depression. The data showed a significant negative relationship between family functioning and depression. Students reporting a perceived high level of family functioning also reported low instances of depression in themselves. Depression as a predictor variable was positively and significantly related to adult alcohol use. Depression was found to be a mediating variable as it decreased the significance of perceived level of family functioning.

The data supports the expectation that the level of family functioning related to the level of alcohol use will be mediated by the reported level of the subject's internal locus of control. The literature review supports that persons with higher levels of internal control have fewer problems with adult alcohol use than do persons with higher levels of external control. Clinicians working with persons struggling with alcohol use and abuse may wish to measure, monitor, and develop attitudes in the patient which will lead to higher levels of internal locus of control.

The results support the expectation that the level of family functioning related to the level of alcohol use will be mediated by the reported level of the subject's satisfaction with life. The study shows a positive relationship between high levels of family functioning and satisfaction with life in general. There is a negative relationship between life satisfaction and adult alcohol use. When the

relationship between life satisfaction and perceived levels of family functioning are controlled, family functioning decreases in significance to adult alcohol use.

Results of this study indicate that adults who perceived their families of origin as having higher levels of functioning also reported lower levels of alcohol use. Support was found for the expectation the relationship between family functioning and adult problems with alcohol would be mediated by reports of family of origin alcohol problems.

In summary, the independent variables of depression, internal locus of control, life satisfaction, and family drinking history were found to mediate the predictor variable family function in the family of origin.

Future Areas for Research

Even though the original model which included selected individual characteristics (depression, anxiety, satisfaction with life, relationships, work and/or school, marital satisfaction, internal locus of control), level of family functioning in the family of origin, history of family drinking problems in the family of origin, age, gender, and marital status did not prove to be significant as a model does not mean the concept of the model should be discarded without further study. Because the study's sample is from two colleges overall age (mean =25.34) may have influenced the outcome. The sample may support the model if general community members were surveyed as opposed to the campus convenient sample. Not only may the model be supported, but also the sample could be extrapolated and have wider applications and implications.

The survey method called for self-report measures to be used. These responses were based on participant's perceptions of the drinking history in their family of origin and on the participant's memories of how their family functioned. For the survey to be helpful, the parents and life partners needed to have been present to complete a survey as well. Future research may want to include an identified clinical population and their families in the sample.

The CAGE literature stated results in terms of sensitivity and specificity, based on how well the instrument identified alcoholics from non-alcoholics. Due to the nature of the subject sample specificity and sensitivity could not be measured. However, the project did establish a level of reliability that can be used by others attempting to survey a general population.

Since the modified CAGE for family members is in the experimental phase, there were no reliabilities established. This project was able to determine a reliability for scale the assessment measure. Future research needs to be done to examine the subject's response to the response of other family members on both the CAGE and the modified CAGE for family members.

The researcher offered a variety of choices under marital status, i.e., single, married, divorced, remarried, widowed, and other. For the sake of simplicity in future research, it is suggested that the question, "Are you married?" have a yes or no for an response.

The study identified individuals with significant levels of adult alcohol use who came from homes where a parent in the family of origin was identified as a

problem drinker. However, the study also identified individuals with insignificant levels of alcohol use and who came from a family of origin with a parent who was identified as a problem drinker. Future research could benefit from incorporating measures for resilience in the individual and in the family.

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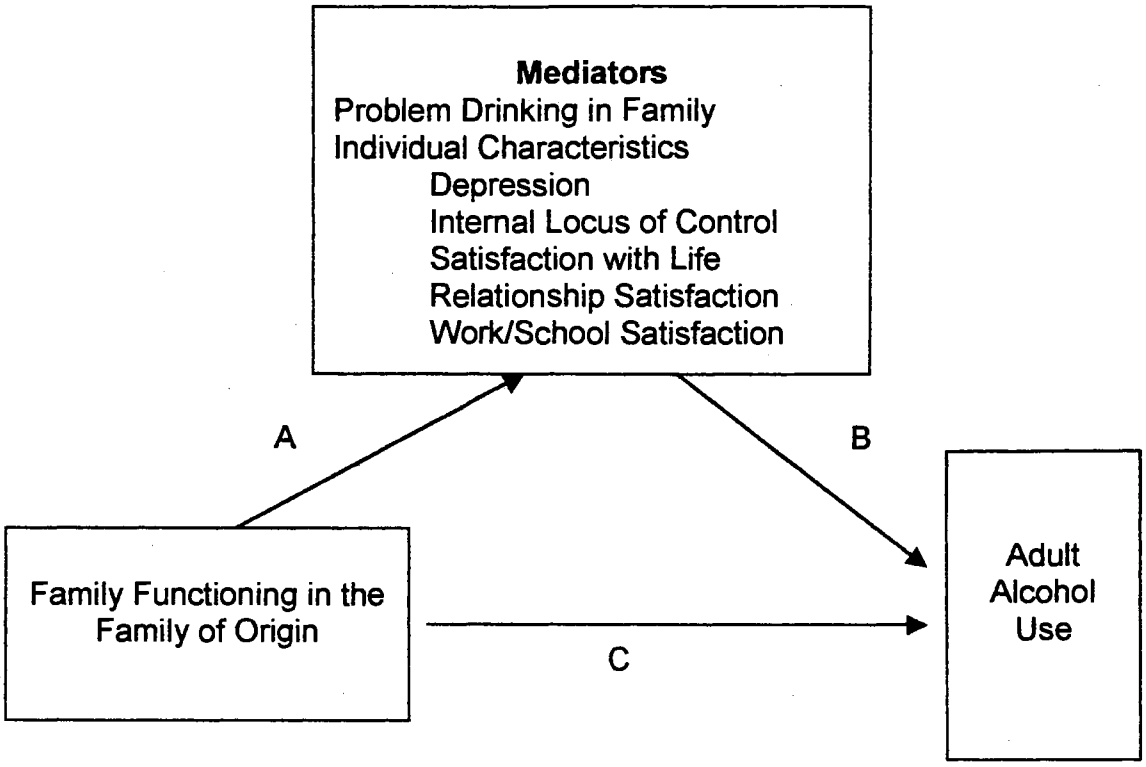
Figure 1


Mediators
Problem Drinking in Family
Individual Characteristics
Depression
Internal Locus of Control
Satisfaction with Life
Relationship Satisfaction
Work/School Satisfaction
A
B
Family Functioning in the Family of Origin
C
Adult Alcohol Use

List of Tables

Table 1: - Demographics

Group	Number	Number in Group	Percentage
Age	n = 211		
18 – 25		142	67.3
26 – 35		43	20.4
36 – 50		20	9.5
51 – 55		6	2.8
Range 18 to 55	Mean = 25.34	Standard Deviation = 8.34	
Year in College	n = 218		
Freshmen		106	48.6
Sophomores		57	26.1
Juniors		33	15.1
Seniors		22	10.2
Gender of Subject	n = 224		
Male		96	42.9
Female		128	57.1
Marital Status	n = 219		
Single		123	56.2
Married		58	26.5
Divorced		22	10.0
Widowed		3	1.4
Remarried		6	2.7
Other		7	3.2
Race	n = 224		
Caucasian		196	87.5
American Indian		5	2.2
Black		8	3.6
Hispanic		11	4.9
Asian		2	.9
Other		2	.9

Table 2: - Descriptive Statistics for the Study Variables

	Mean	Range	Number	Literature Alpha	Project Alpha
Individual Characteristics					
Internal locus of control (Rotter)	19.83	2 to 30	221	.70	.52
Satisfaction with life [a]	na	1 to 5	222	na	na
Satisfaction with relationships [a]	na	1 to 5	222	na	na
Satisfaction with work/school [a]	na	1 to 5	219	na	na
Depression (BDI)	1.34	1 to 4	224	.86	.89
Marital satisfaction (KMS)	11.43	3 to 15	82	.93	.94
Anxiety	1.34	1 to 4	224	.92	.84
Family Functioning					
FACES II levels of balance	3.92	1 to 8	224	.84	.76
Family History of Alcohol Use					
Problems in Family of Origin (Modified CAGE for Family) [b]	1.57	1 to 2	222	na	.85
Adult Alcohol Use					
CAGE [b]	.44	1 to 4	223	na	.86

[a] = measure developed for project, no previous alpha established

[b] = no previous reliability established for measures, only specificity and sensitivity reported previously

na = not available

Table 3: - Correlations among Family History of Substance Abuse, Family of Origin Functioning, and Individual Characteristics, and Adult Substance Use

		1	2	3	4	5	6	7	8	9	10	11	12	13
1.	Family history of substance use	1.00												
2.	Family of origin functioning	-.22**	1.00	.										
3.	Internal locus of control	.11	.25**	1.00										
4.	Depression	.16*	-.26**	.17**	1.00									
5.	Life satisfaction	.16*	.30**	.25**	-.31**	1.00								
6.	Relationship satisfaction	-.14*	.28**	.31*	-.30**	.58**	1.00							
7.	Work/school satisfaction	-.12*	.11	.24**	-.17**	.48**	.31*	1.00						
8.	Marital satisfaction	-.12	.29*	.23*	-.39**	.55**	.62**	.23*	1.00					
9.	Substance use	.17**	.14*	-.27**	.17**	.22**	.11*	-.23**	-.18	1.00				
10.	Age	.21**	.08	.01	.09	.01	.01	.11	.17	.10	1.00			
11.	Gender	.03	.07	.08	.09	-.01	.02	.05	-.01	.10	.06	1.00		
12.	Anxiety	.11	-.19**	-.29**	.37**	.26**	-.22**	-.18	-.10	-.01	-.10	.07	1.00	
13.	Marital status	.09	-.11*	.04	.07	-.10	.13*	.01	.08	.02	.39**	.15*	.01	1.00

**Correlation is significant at the 0.01 level (1-tailed)

*Correlation is significant at the 0.05 level (1-tailed)

Table 4: – Simple Regression Analyses of Adult Alcohol Use/Family Functioning and Predictor Variables

Simple Regression Analyses	b	β	F	R
Adult Alcohol Use Regressed on				
Family Type	-.08	-.14*	4.08*	.02
Depression	.24	.17**	6.27	.03
Internal Locus of Control	.37	.18**	7.51**	.03
Marital Satisfaction	-.06	-.18	2.71	.03
Life Satisfaction	-.27	-.22**	10.66**	.05
Relationship Satisfaction	-.11	-.12	2.81	.01
Work/School Satisfaction	-.26	-.23**	11.62**	.05
Family Problems with Alcohol	.11	.16**	6.50**	.03
Family Type Regressed on				
Depression	-.62	-.26**	16.22**	.07
Internal Locus of Control	.59	.18**	7.06**	.03
Marital Satisfaction	.14	.24*	4.78**	.06
Life Satisfaction	.58	.29**	20.19**	.08
Relationship Satisfaction	.46	.28**	18.63**	.08
Work/School Satisfaction	.20	.11	2.64	.01
Family Problems with Alcohol	-.21	-.22**	11.03**	.05

*p<.05 **p<.01 β = standardized beta coefficients; b = unstandardized beta coefficients

Table 5: - Hierarchical Multiple Regression Model with Mediating Variable

	Step 1				Step 2			
Mediating Variables	**b**	**β**	**F**	**R^2**	**b**	**β**	**F**	**R^2**
Depression as Mediating Variable								
Family Functioning	-.08	-.14*	4.08*	.02	-.06	-.10		
Depression					.21	.14*	4.15*	.04
Internal Locus of Control as Mediating Variable								
Family Functioning	-.08	-.14*	4.04	.02	-.06	-.10		
Internal Locus of Control					-.34	-.16*	5.02**	.04
Life Satisfaction as Mediating Variable								
Family Functioning	-.08	--.14*	4.04	.02	-.05	-.08		
Life Satisfaction					-.24	-.19**	5.98**	.05
Relationship as Mediating Variable								
Family Functioning	-.09	-.14*	4.32*	.02	-.07	-.12		
Relationship Satisfaction					-.08	-.08	2.81	.05
Work/School Satisfaction as Mediating Variable								
Family Functioning	-.08	-.14	4.08*	.02	-.07	-.11		
Work/School Satisfaction					-.24	-.21**	7.30**	.05
Family Problems with Alcohol as Mediating Variable								
Family Functioning	-.08	-.14*	4.08*	.02	-.07	-.11		
Family Problems with Alcohol					.09	.15*	4.45*	.04

*p<.05 **p<.01 β = standardized beta coefficients; b = unstandardized beta coefficients

APPENDIX A

LITERATURE REVIEW

ADULT ALCOHOL USE: FREQUENCY AND DEFINITION

Alcohol is the most commonly used psychoactive drug in the United States (Substance Abuse and Mental Health Services Administration, 1997). Drinking is the norm today in American society (Brown, 1995). Fifty-one percent of Americans age 12 and older report they are currently alcohol users (Substance Abuse and Mental Health Services Administration, 1997). From 1990 to 1991, approximately 14% of noninstitutionalized adults from ages 15-54 had alcohol dependence at some time in their lives (American Psychiatric Association, 1994). That same study indicated that 7% had experienced alcohol dependence during the past year based on the diagnostic criteria in the Diagnostic and Statistical Manual (4^{th} ed.) (American Psychiatric Association, 1994).

Non-drinkers, including those who cannot drink for physical reasons or who choose to abstain totally from alcohol, are sometimes seen as deviants among certain peer groups (Brown, 1995). The use of alcoholic beverages has a symbolic meaning in society, as well as a function (Jellinek, 1994). At times, Americans use alcohol in social contexts intending to manipulate emotional states and influence behavior (Nowinski, 1990). Other times, alcohol use represents a behavior encouraged as part of social interactions.

The majority of drinkers stay within the limits of what is culturally accepted as a drinking behavior and consuming alcohol predominantly as an expression of their culture. Brown (1995) posits that current cultural norms dictate that individuals are expected to drink, but are expected to not have drinking related problems. Despite Brown's observation that alcohol use may be prescribed by norms, other challenge the acceptance of alcohol consumption. The first challenge of social acceptance of alcohol consumption occurred in the 1700s by physician Benjamin Rush (Brown, 1995). Some social groups (e.g., selected religious groups) discourage the use of alcohol. Thus, individuals often either face a setting that encourages alcohol use or provides conflicting messages in different parts of the environment.

Approximately 109 million people in the United States age 12 and over report they currently use alcohol. These 109 million people represent 51% of the total population of the United States age 12 and older (Substance Abuse and Mental Health Services Administration, 1997). Given the large numbers of people using alcohol, the potential exists for substantial abuse of alcohol. With the social norms allowing for some alcohol use, but not alcohol abuse, it is important to distinguish among levels of use. The Substance Abuse and Mental Health Administration (SAMHSA) defines current use as at least one drink in the past month to include binge and heavy use (Substance Abuse and Mental Health Services Administration, 1997). Binge use is defined as five or more drinks on the same occasion at least once in the past month. Heavy use is defined as five

or more drinks on the same occasion on at least five different days in the past month (Substance Abuse and Mental Health Services Administration, 1997). In 1996, 32 million people (15.5%) are reportedly engaged in binge drinking and about 11 million Americans (5.4%) were reported to drink heavily (Substance Abuse and Mental Health Services Administration, 1997).

Daily drinking is more common among white males and the rate of daily drinking increases as a person ages. Levels of alcohol use over the lifetime, during the past year, and during the current year are two to three times higher among adults than among those ages 12 to 17 (Substance Abuse and Mental Health Services Administration, 1997).

The general public has come to apply the term alcoholism as a designation for any form of excessive drinking (Jellinek, 1994). The American Medical Association (Brown, 1995) labeled alcoholism a disease in 1956. Professionals tend to define alcoholism with more precise definition. Alcoholism is a chronic, progressive, and potentially fatal disease characterized by tolerance and physical dependency or pathologic organ changes (or both) as the indirect or direct consequence of ingesting alcohol (Flavin & Morse, 1991). Alcoholism as used in this study includes alcohol abuse and alcohol dependence. Egbert (1993) defined alcohol abuse as persistent alcohol use despite adverse social or physical consequences and alcohol dependence includes tolerance or withdrawal symptoms in addition to adverse consequences. Jellinek (1994) posited the proportion of alcoholics varies from country to country, but the ratio

does not seem to exceed 5 percent or 6 percent of all users of alcoholic beverages.

Alcohol use lends itself to research questions in number of ways, specifically in definitions and terminology. Alcoholism is a difficult condition to define (Steinglass, Bennett, Wolin, & Reiss, 1987). The diversity of definitions of alcohol use was illustrated by Levine (1985, p. 3) who stated that "the scholarly literature on opiate addiction seems to us chaotic and bewildering. It teems with theories in the vocabularies of all the major branches of psychology." For this project the criteria for psychoactive substance abuse and dependence found in the Diagnostic and Statistical Manual of Mental Disorders (4^{th} ed.) (American Psychiatric Association, 1994) will be used for alcoholism, substance addiction, and chemical dependency. The Diagnostic and Statistical Manual of Mental Disorders (4^{th} ed.) states that criteria for substance dependence is "A maladaptive pattern of alcohol use leading to clinically significant impairment or distress. The impairment or distress is manifested by three or more of the following, occurring at any time in the same 12-month period:

(1) tolerance, as defined by either of the following:

   (a) a need for markedly increased amounts of the substance to achieve intoxication or desired effect

   (b) markedly diminished effect with continued use of the same amount of the substance

(2) withdrawal, as manifested by either of the following:

(a) the characteristic withdrawal syndrome for the substance (refer to Criteria A and B of the criteria sets for Withdrawal from the specific substances)

(b) the same (or closely related) substance is taken to relieve or avoid withdrawal symptoms

(3) the substance is often taken in larger amounts or over a longer period than was intended

(4) there is a persistent desire or unsuccessful efforts to cut down or control substances use

(5) a great deal of time is spent in activities necessary to obtain the substance (e.g., visiting multiple doctors or driving long distances), use the substance (e.g., chain-smoking), or recover from its effects

(6) important social, occupational, or recreational activities are given up or reduced because of alcohol use

(7) the alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (e.g., current cocaine use despite recognition of cocaine-induced depression, or continued drinking despite recognition that an ulcer was made worse by alcohol consumption)" (American Psychiatric Association, 1994, p. 181)

Overview of Theoretical Approaches to Understanding Alcoholism

Several theoretical approaches have been used to understand alcoholism. Researchers in the psychological and social sciences have examined the causes of alcoholism for many years. Biological and clinical scientists have sought to understand the ravages to the body caused by alcoholism. National Institute on Alcohol Abuse and Alcoholism (NIAAA) (1985) stated that both heredity and environment are involved in the making of most alcoholics. Further, every alcoholic directly affects the lives of at least four to five other people (Krestan & Bepko, 1989) and 25% of all hospital admissions are alcohol related (Vaillant, 1983).

Since its inception in 1972, the NIAAA has given strong emphasis to research on the causes of alcoholism (National Institute on Alcohol Abuse and Alcoholism, 1985). NIAAA has funded projects designed to address the question of why alcoholism seems to run in families. Genetic research, for example, has attempted to identify a biological explanation for alcoholism. A predominant belief within the genetic approach is that it is possible to identify a gene or genes that would predispose individuals toward alcoholism. Schuckit (1989), however, concluded that research is unlikely to identify a single alcoholic gene that always expresses itself. Further, the observation that alcoholism tends to run in families is not proof of genetic transmission. It is also possible that a shared environment could also explain patterns of transmission of alcohol problems across generations within families.

A popular way of examining how the family environment may relate to alcohol patterns running in family is the systems perspective. The systemic perspective represents a radically different way of understanding symptoms exhibited in an individual than genetics. Bott (1994) stated that to understand some phenomenon, the systems theorist considers that phenomenon within the context of performing a function in relation to some family dilemma. Bott (1994) notes that family systems approaches are focused on current relationships. Family system thinkers are not interested in etiological explanations (Schultz, 1995). Instead, family-oriented research suggests that families with alcoholic members constitute highly complex behavioral systems (Steinglass et al., 1987). A systems perspective views the behavior of family members as intertwined (Anderson & Henry, 1994). Thus, from a systems perspective, alcoholism is seen as being associated with interaction patterns within families.

A Systems Perspective on Alcoholism

From the systems perspective, alcohol use disorders are viewed as reflections of systemic family problems (Clark, Neighbors, Lesnick, Lynch, & Donovan, 1998). When examining the family as a system, individual family members are viewed as having bonds that emerge through shared attributes (Anderson & Henry, 1994; Anderson, 1992). Family as a system has its roots in the general systems theory that was developed by Bertalanffy (1934). Before systems theory, families were seen as collections of individuals who functioned independently of the overall family dynamics. Clearly, family members do not act

or live alone; rather, a change in any part of the family affects the other parts. Interactions between family members and their behavior have consequences for all other members (Mattessich & Hill, 1987).

The concept of system incorporates the idea that change in one part brings about changes in other parts of the system (Hill, 1970). The family system is more open to disturbance than other social organizations because of the family's rapidly changing age composition and frequently changing plurality patterns (Hill, 1971). The family unit must continuously change and reorganize in order to survive and adapt to inevitable fluctuations of individual growth and family life cycle progression (Pill, 1990).

Families are complex social organizations that are hierarchical in nature and whose dynamics consist of stable, predictable patterns of relationships (Thombs, 1994). A major premise of a systems perspective is that the behavior of family members is interconnected and that such behavior can best be understood in the family context (Peterson & Rollins, 1987; Levine, 1985). The systems perspective examines each member of a family system in relation to other family members.

The family is a form of social organization (Nye, 1978) made up of individual people. Because of the interrelatedness of family members, the behavior of a family cannot be understood by examining the family members one at a time (Sieburg, 1985). The makeup of the family system cannot be known by knowing the nature of the various members. Whenever an individual changes or

a relationship between individuals changes, the family system is reformed (Sieburg, 1985). This means the dynamics of family interactions are much more complex than the simple addition or subtraction of members.

Families seldom think about what they are producing , or make the effort to change aspects of what families are doing automatically (Phillips, 1981). Systems theory lends itself easily to clarifying and elucidating previously unclear areas of family life which then reduces the apparent chaos to order (Nye, 1978).

A family system is a group of individuals related by marriage, blood, or adoption and which has an emotional history which continues into the future (Phillips, 1981). Mattessich and Hill (1987) posit families are resilient and have the ability to adapt to changes. The potential for change and adaptation is what allows for the growth and stabilization of the family system. The process of changing and adapting creates the need for the family to be flexible and incorporate new interactional patterns. The family system perspective examines each member of a family in relation to other family members. Each family member affects and is affected by the other members of the family. When viewing the family as a system, individual family members are viewed as having bonds that emerge through shared attributes. There is abundant empirical evidence suggesting that family systems have a significant impact upon the individuals within the family system (Becvar & Becvar, 1982).

As a systems approach is increasingly used to investigate family relationships, the importance of considering alcohol use from a systems

perspective becomes increasingly important (Barnes, 1990; Steinglass, 1989). Conceptual works emphasize the importance of examining family system functioning in relation to adult alcohol use (Barnes, 1990). Family systems develop qualities that may encourage or support alcohol use among one or more members. There is a growing recognition that family systems qualities serve as important variables in understanding the initiation, maintenance, cessation, and prevention of alcohol use by one or more of family members (Needle, McCubbin, Wilson, Reineck, Lazar, & Mederer, 1986). Alcoholism may be viewed as exerting an influence on family processes, either through properties which it shares with other family disruptions or through more specific properties which are unique to this condition (Leonard, 1990). Leonard (1990) states that family structural variables have been related to the development of drinking behaviors, especially the development of alcoholism in adult males.

History of Family Alcoholism and Adult Alcohol Use

The longest tradition in the study of alcoholism focuses upon how individual characteristics increase the risk for alcoholism (Jacob, 1987). Next, came the realization that a history of alcoholism in the family origin increased the risk for adult alcoholism. As the study of family system dynamics emerged, there was an increased recognition that selected types of family dynamics may be more prevalent in the families of alcoholics. From a systems perspective, alcoholism is not viewed as emerging from a single cause (Freeman, 1993) such as individual qualities, family history of alcoholism or family dynamics.

Consequently, the combination of factors at several levels of the system appear to be salient to consider in explaining variation in adult alcoholism (Nowinski, 1990).

A review of the literature suggests that an alcoholic is more likely to have a mother, father, or relative who is an alcoholic than a nonalcoholic (Glenn & Parson, 1989). The family is the most important part of these systems and it is the family in which all of these factors are transmitted, reinforced, or modified (Freeman, 1993). In families with an alcoholic member, Watzlawick, Weakland, and Fisch (1974) stated that "alcoholismic behavior becomes integrated into the family system and becomes part of the family's life and stability. The maintenance of one becomes the maintenance of the other" (p. 927). Thus, the presence of a family member in the family of origin with alcoholism creates a situation where alcoholism can have the capacity to become a central organizing principle around which family life is structured (Steinglass et al., 1987).

Alcoholism as a family-based problem has been firmly established (Synol, 1984). Alcohol or drug abuse plays a key part in maintaining the family balance (Thombs, 1994). Children whose parents use drugs are at increased risk for problem behavior and later drug use (Brook & Tseng, 1996). Women who have alcohol-dependent partners report significantly more marital and family disruption, in addition to higher levels of problem behaviors in their children (Tubman, 1993). The chronic nature of addiction gradually diminishes the quality of life and hope among family members (Freeman, 1993).

The concern has been that alcohol use has a detrimental impact on the level of family functioning and that alcohol use will lead to an increased risk of alcoholism in the offspring (Leonard, 1990). There is an interdependency between alcohol use and the marital-family system (Zweben, 1985). Relationship problems may stem from negative behaviors learned in a family of origin in which there was an alcoholic (Senchak, Greene, Carroll, & Leonard, 1996). Parental alcoholism could corrupt family process, which allows children to develop and learn social skills (Segrin & Menees, 1996). The majority of alcoholic individuals live in intact families (Steinglass, 1989). Leonard (1990) states there is a growing awareness that many alcoholic families remain intact and do achieve some degree of stability. This study will examine selected demographic variables, reports of family of origin qualities (history of alcohol problems), and selected individual characteristics in relation to adult problems with alcohol.

Uncertainty exists regarding how parental alcohol abuse increases their children's risk for alcohol problems (Jacob & Johnson, 1997; Ellis, Zucker, & Fitzgerald, 1997). The majority of children of alcoholics exhibit no evidence of significant alcohol problems during adulthood (Ellis et al., 1997). The value of tracing differences among alcoholic families is a way of better understanding why some, but not all, children of alcoholics' develop alcohol use-related difficulties (Jacob & Johnson, 1997).

Parental alcoholism is considered a risk factor in a child's future alcohol use (Brook & Tseng, 1996). The literature suggests that an alcoholic is more

likely than a nonalcoholic to have a mother or father who is an alcoholic (Glen & Parsons, 1989). Children of alcoholics are at a significantly higher risk of becoming alcoholic themselves (Leonard, 1990; Jacob & Johnson, 1997). There is empirical support (Steinglass, 1989; Ellis et al., 1997; Jacob & Johnson, 1997; Reich, 1997) which demonstrates that the amount of alcohol related problems among children of alcoholics can be predicted by the severity of parental alcohol use. Children of alcoholics show elevated rates of alcohol problems, approximately four to six times the rate of the general population (Ellis et al., 1997; Reich, 1997). Children of alcoholics, particularly sons, are at a greater risk to develop alcoholism (Leonard, 1990). Barnes (1990) stated that adult children with parents who drink heavily have a greater risk of dependent problem drinking that adult children without heavy drinking parents. In sum, while there are many examples of children of alcoholics who do not develop problems with alcohol, previous research strongly supports an increased risk of alcoholism among the children of alcoholics.

Measure of Family Functioning in the Family of Origin

Beyond the history of alcoholism in the family origin, there is also evidence that specific interaction patterns within the family of origin may be related to alcohol use patterns. One productive model for examining family functioning is the Circumplex Model of Family Systems. The Circumplex model was designed and developed in an attempt to bridge the gaps between theory, research, and practice relating to family systems (Olson, 1986). The Circumplex Model

integrates ideas from general systems theory and concepts describing marital and family dynamics to understand levels of family functioning (Olson, 1986; Olson, Russell, & Sprenkle, 1980). Varied hypotheses have been developed and tested using the Circumplex Model. Olson (1986) reports that some of the research has attempted to look at the relationship between family symptoms and types of family systems.

The Circumplex Model relates to the issue of balance (Olson, Russell, and Sprenkle, 1989), postulating that a balance of the dimensions is related to more adequate family functioning. Olson, McCubbin, Barnes, Larsen, Muxen, and Wilson (1992) provide for four categories of family types, balanced types, moderately balanced types, mid-range types, and extreme types. Family types are determined through a statistical scoring process in FACES II. FACES II is easy to administer and simple to score (Olson et al.). Olson et al. stated that empirical data suggest that the instrument does not capture the extremely high categories of chaotic and enmeshed families. Therefore the high scores on the adaptability and cohesion dimensions are reinterpreted as very connected and very flexible.

The scoring of FACES II illustrates the linear nature of FACES II scores and their correspondence to Family Types (Olson et al.). The researcher followed the scoring instructions in Family Inventories (Olson et al.). Cohesion was scored by summing items 3, 9, 15, 19, 25, and 29; subtracting that number from 36; summing all other odd numbers plus item 30. The result was added

together to obtain a total cohesion score. For adaptability, items 24 and 28 were summed with that figure subtracted by 12; then all other even numbers except item 30 were summed with and those two figures were added together (Olson et al.). To obtain the Family Type score, the cohesion score and the adaptability score were summed and divided by two (Olson et al.). The project's family type scores ranged from one to eight with one1 and two representing extreme family types and seven and eight showing a balanced family type (Olson et al.)

Individual Characteristics and Adult Alcohol Use

As a personality dimension, a widely studied psychological construct among addictive populations has been a locus of control orientation (Mills, 1991). Certain psychiatric disorders, such as anxiety and depression, are associated with chemical dependency (Maxmen & Ward, 1995; Steinglass et al., 1987). The study will incorporate the three individual characteristics, anxiety, depression, and locus of control, which have demonstrated relevance to individual functioning within family systems. Human life studies have to consider the emotional and mood states that the terms anxiety and depression evoke; there is strong consensus that these emotional states play an extremely important role in people's lives (Craig & Dobson, 1995). Relevant scholarship on anxiety, depression, and locus of control and their impact on individual functioning in the family system are discussed in the sections to follow.

Anxiety. Anxiety is an unpleasant state that is associated with feelings of uneasiness, apprehension, and heightened physiological arousal (Plotnik, 1999).

Alcoholics appear to show greater levels of anxiety (Glenn & Parsons, 1989). Daley, Moss, and Campbell (1987) report persons who self-refer for alcoholism frequently complain of anxiety. Many research studies fail to consider the implications of coexisting disorders and may not even report their existence (Hammen, 1995). Anxiety disorders and alcoholism are extremely common among those persons diagnosed with depression (Hammen, 1995).

Depression. Impairment from depression and its impact on productivity are of profound societal importance, costing an estimated $43.7 billion (Heiligenstein, Guenther, Hsu, & Herman, 1996). There is research supporting a correlation between parental substance abuse and depression (Nowinski, 1990). The main features of major depression are symptomology that has existed for two consecutive weeks; a depressed mood; and/or loss of interest or pleasure in most usual activities (American Psychiatric Association, 1994). People that self-refer for alcoholism frequently complain of depression or anxiety (Daley, Moss, & Campbell, 1987). Research suggests that alcoholics have greater incidences of depression than nonalcoholics (Glenn & Parsons, 1989). Five factors have been identified as contributing to confusion between alcoholism and major depression: (a) alcohol can cause depressive symptoms in anyone; (b) signs of temporary serious depression can follow prolonged drinking; (c) drinking can escalate during primary affective episodes in some clients; (d) depressive symptoms and alcohol problems occur in other psychiatric disorders; and (e) a small proportion

of clients have independent alcoholism and affective disorder (Daley et al., 1987).

Recurring depression arises in a family context for most people; the origins of their depression vulnerability are in childhood experiences (Hammen, 1995). Many persons who suffer from depression also report significant behavior problems such as alcoholism and anxiety disorders (Hammen, 1995).

Locus of Control. Locus of control is concerned with the effects of reward or reinforcement on preceding behavior (Johnson, Nora, Tan, & Bustos, 1991). Internal control is the generalized belief in the individual's capability to control reinforcements; external control involves belief that reinforcements are conditional upon external influences and so are beyond personal control (Johnson et al., 1991). A review of the literature demonstrates contradictions when locus of control is viewed in an alcoholic population. Some findings have indicated that alcoholics cannot be differentiated from nonalcoholics using the dimension of internal-external locus of control; some studies have determined alcoholics tend to be more internally controlled (Johnson et al., (1991). Mills (1991) posits that alcoholics have little belief in their ability to control other factors influencing their lives due to their inability to control their use of alcohol.

Satisfaction with Life Roles and Adult Alcohol Use

Johnson (1990) posits that satisfaction with life, relationships, and work and/or school can decrease incidences of adult problems with alcohol in the non-dependent individual. Alcohol has been used as a means of coping with stress,

which everyone encounters from time to time. Satisfaction with work and/or school is a consistent predictor of psychological well-being (Secret and Green, 1998). Job dissatisfaction tends to increase levels of anxiety and depression (Aneshensel, 1986). Work and school performance may suffer either from the aftereffects of drinking or from actual intoxication on the job site or at school (American Psychiatric Association, 1994).

Demographic Factors and Adult Alcohol Use

Age and gender have been linked to drinking in adults (Barnes, 1990). Marital status (Pill, 1990) have demonstrated to be factors in the level of family functioning. Age, gender, and marital status have selected as background variables for this project. The researcher anticipates that these control variables (Isaac & Michael, 1981) need to be held constant so that the effects are neutralized, canceled out, or equated for all conditions.

Statement of the Problem

This project was designed to examine two research questions: (a) To what extent do college students' reports of family functioning in the family of origin relate to current alcohol use? and (b) If the first question is supported, is this relationship mediated by reports of problems with alcohol use in the family of origin, and selected individual characteristics? The study will unify several variables which previously have been studied separately. the project will examine correlations and regressions to determine if a mediating factior is one of the reasons the variables have been studied separately in the past.

The study will benefit family therapy clinicians by providing new avenues to consider when assessing patients. Furthermore the study will include a practical, self-report assessment tool for individual alcoholism which can be useful to clinicians.

Based on the research questions, a research model (see Figure 1) was developed. The model tests the extent to which reports of family functioning in the family of origin predict alcohol use. Further, consistent with Baron and Kenny's (1986) approach to examining mediating variables, both history of problems with family of origin alcohol use and individual characteristics were expected to mediate that relationship.

The following conceptual hypotheses will be tested.

1. Males will report higher levels of alcohol use than females.
2. Age of the participants will be positively related to alcohol use.
3. Single persons will report higher levels of alcohol use than will married people.
4. The level of family functioning will be negatively related to the level alcohol use.
5. The level of subjects reporting low levels of problems with alcohol use in the family of origin family history will be mediated by depression.
6. The level of family functioning related to the level of alcohol use will be mediated by the reported level of the subject's depression.

7. The relationship between reports of family functioning in the family origin and alcohol use will be mediated by perceptions of problems with alcohol in the family of origin.
8. The relationship between reports of family functioning in the family of origin and alcohol will be mediated by depression.
9. The relationship between reports of family functioning in the family of origin and alcohol use will be mediated by the reported level of the subject's anxiety.
10. The relationship between reports of family functioning in the family of origin and alcohol use will be mediated by the reported level of the subject's internal locus of control.
11. The relationship between reports of family functioning in the family of origin and alcohol use will be mediated by the subject's overall life satisfaction.
12. The relationship between reports of family functioning in the family of origin and alcohol use will be mediated by the subject's relationship satisfaction.
13. The relationship between reports of family functioning in the family of origin and alcohol use will be mediated by the subject's satisfaction with work/school.

14. For married subjects, the relationship between reports of family functioning in the family of origin and alcohol use will be mediated by the reported level of the subject's' marital satisfaction.

METHODOLOGY

Design

The study was designed to examine the relationship between selected demographic variables, reports of family functioning in the family of origin, reports of family of origin history of alcohol use, and selected individual characteristics in relation to adult problems with alcohol. A cross-sectional correlational design was used since the goal of the study was to collect data at one point in time from the participants (Vogt, 1993). This design allowed the researcher to examine the strength and direction of the relationship between variables and to assess how well a specific outcome (i.e., adult problems with alcohol) was indicated by information provided by the participants.

Isaac and Michael (1981) stated that a correlational research design is appropriate where variables are very complex and the design permits the measurement of several variables and their interrelationships simultaneously and in a realistic setting. The correlational research design allowed the researcher to use measures of associations to study the relationships between the dependent and independent variables (Vogt, 1993). Specifically, correlational analyses were used in examining the interrelationships between reports of family of origin history of alcohol use, family of origin cohesion, family of origin adaptability, internal locus of control, depression, overall life satisfaction, relationship satisfaction, work or school satisfaction, and marital satisfaction. The use of a cross-sectional correlational design is limited in that it can only establish associations, not causal relationships. Consequently, the results can show associations, rather than

causal relationships between reports of family of origin variables and individual characteristics with reported adult problems with alcohol.

A survey instrument composed of existing instruments combined by the researcher was used to collect the data. Surveys are a means of gathering information that describes the nature and extent of a specified set of data (Isaac & Michael, 1981).

Sample

The sample for this study consisted of a convenience sample of 224 college students from a community college and from a university in a southwestern state. Both of the colleges are located in same community of approximately 50,000 residents.

Insert Table 1 about here

The subjects ranged in age from 18 years of age to 55 years of age with a mean age of 25.34 years. The racial composition was 196 (87.5%) white, 8 (3.6%) black, 11 (4.9%) Hispanic, 5 (2.2%) Native American, 2 (.9%) Asian, and 2 (.9%) other. The sample consisted of 96 (42.9%) men and 128 (57.1%) women who reported the following college classifications: (a) 106 (48.6%) freshmen; (b) 57 (26.1%) sophomores, (c) 33 (15.1%) juniors, (d) 22 (9.8%) seniors and 6 students not responding to this question. There were 123 single subjects (56.2%), 58 married subjects (26.5%), 22 divorced students (10%), 3 students were widowed (1.4%), 6 were remarried (2.7%), 7 students (3.2%)

reported themselves in the other category, and 5 students did not respond to this question.

Procedure

The researcher, a faculty member at the community college, arranged for the surveys to be distributed in selected classes in selected southwestern community college and university classes. Psychology and sociology classes can satisfy a portion of the general education requirements for graduation from both schools. The courses were selected in an effort to prevent overlapping subjects. Students are not encouraged to enroll in psychology and sociology in the same semester for fear of confusing concepts.

The researcher trained the instructors in the selected classes data collection in the proper distribution, completion, and collection procedures prior to administering the surveys. A prepared script was provided for the facilitators to read prior to administering the survey (see Appendix D). Participants were given a consent form (see Appendix D) by the facilitator and these were signed and collected prior to handing the student the survey form.

The researcher ensured an alternative was available for those students declining to participate in the study. Psychology and sociology students were given the assignment of reviewing a current chapter and developing five potential test questions and multiple-choice answers for an upcoming examination. A total of eleven students opted to do the written assignment rather than complete the survey.

Measurement

Measures of Adult Alcohol Use

The project utilized the CAGE measurement to determine adult substance use. CAGE is an acronym (Crowe et al., 1997; Spak & Hallstrom, 1995; Russell, 1994) based on the four clinical interview questions: (1) Have you ever felt you ought to Cut down on your drinking?; (2) Have people Annoyed you by criticizing your drinking? (3) Have you ever felt bad or Guilty about your drinking? (4) Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (Eye-opener)? In the literature, CAGE effectiveness is not measured by reliability, but by sensitivity and specificity (Nystrom, Perasalo, & Salaspuro, 1992; Kitchens, 1994). Sensitivity is defined as the number of times a person with a drinking problem is identified and specificity is defined as the number of times a person without a drinking problem is identified Nystrom et al., 1992; Kitchens, 1994). The CAGE has demonstrated sensitivity of .84 and specificity of .90 studies designed to assess its performance (Soderstrom, Smith, Kufera, Dischinger, Hebel, McDuff, Gorelick, Ho, Kerns, & Read, 1997). For validity purposes the project utilized the Alcohol use Indicator Revised (SUI-R). The CAGE was chosen based on reported sensitivity, specificity, ease of administration, cost-effectiveness, and suitability for a general community college population.

Measure of Problems with Alcohol in the Family of Origin

The literature suggests that family members may be more willing to report alcohol or drug problems than are persons with alcohol use problems (Del Toro,

Larsen, and Carter, (1994). An experimental modified CAGE was developed for family members and included in this project. Del Toro, Larsen, and Carter (1994) report that preliminary results indicate that an approach utilizing family members may be helpful.

Measures of Family Functioning in the Family of Origin

The measure of family functioning variable the Family Adaptability and Cohesion Evaluations Scales II (FACES II) which is a 30-item Likert-type instrument that can be used to assess the level of balance within family functioning. Subjects were asked to respond to the items regarding their families of origin. Sample items are: (a) "Family members feel very close to each other" and (b) "Each family member has input regarding major decisions." Response choices were: 1 = almost never, 2= once in awhile, 3= sometimes, 4 = frequently, and 5 = almost always. This project utilized the linear scoring for obtaining scores for the levels of balance in family functioning (Olson et al., 1992). Cronbach's alpha for the total scale was reported by Olson et al. (1992) at .90. Using the current data, a Cronbach's alphas was established for family type at .76.

Measures of Individual Characteristics

Measures of Anxiety

Beck's Anxiety Inventory (BAI) is a 21-item scale developed to assess the severity of anxiety symptoms (Osman, Kopper, Barrios, Osman, & Wade, 1997). The BAI contains 21 Likert-type items and was constructed to assess symptoms which are characteristic of anxiety disorders, but which are not characteristic of depressive disorders (Jolly, Wiesner, Wherry, Jolly, & Dykman, 1994). The

inventory asked respondents to rate the severity of each symptom using a 4-point scale anchored by (0) "Not at all"; (1) "Mildly - It did not bother me much"; (2) "Moderately - It was very unpleasant but I could stand it"; and (3) "Severely "I could barely stand it." (Steer, Clark, Beck, & Ranieri, 1995). A total score was established by summing the subjects' ratings for all 21 symptoms. Scores can range from 0 to 63 (Steer et al., 1995). Earlier studies show that internal consistency reliability coefficient of the BAI is high (α = .92) (B Beck, Epstein, Brown, & Steer, 1988). Using the present data, a Cronbach's alpha of .84 was established.

Measure of Depression. The Beck Depression Inventory (BDI) is a 21-item report questionnaire used to assess depression of the respondents. The BDI is one of the most widely used research instruments for quantifying the severity of depression ((Heiligenstein, Guenther, Hsu, & Herman (1996). The scale rates cognitive, effective, somatic and behavioral symptoms of depression on a scale from 0 to 3 (Beck & Steer, 1987). Subjects are asked to choose between a set of questions. For example, "I do not feel sad". = 0, "I feel sad". = 1; "I am sad all the time and I can't snap out of it". = 2; and, "I am so sad or unhappy that I can't stand it". = 3. The total score on the Beck Depression Inventory is computed by combining responses to the 21 self-administered items. A score of 0 to 9 on the BDI is generally defined as the absence of significant depression. Scores of 10 to 16 are classified as mild depression and scores of 17 to 29 are classified as moderate. Persons scoring 30 to 63 are described as severe (Beck et al, 1961). The Pearson *r* yielded a reliability coefficient of 0.86

(Beck, Ward, Mendelson, Mock & Erbaugh, 1961). Using the current data, a Cronbach's alpha of .89 was established.

Measure of Locus of Control.

Internal locus of control of the participants was measured using an abbreviated version of Rotter's I-E Scale (Rotter, 1966; Bridges, 1989). Rotter's scale assesses a person's perception of personal control over events and their own behavior. The scale was modified in the response format from yes/no. Subjects were asked to indicate their level of agreement with the statements on a scale of 1 to 5 (1 = strongly disagree, 5 = strongly agree). Bridges (1989) selected ten items from the total scale based on correlation coefficients and item content and those ten items were included in this project. A sample item follows: *a)" I have often found that what is going to happen will happen".; and, b) "What happens to me is my own doing."* The total score is the sum of the responses to the 10 items.

Internal locus of control was represented by a high score and a low score represented external locus of control (Bugaighis & Schumm, 1983). Rotter (1966) reported a Cronbach's of .70, Bridges (1989) reported a Cronbach's alpha of .20. Four of the ten items were deleted from the scale after a reliability analysis for item-total statistics demonstrated the alpha level could be raised by deleting items 1, 6,7, and 8; and, by recoding items 5, 3, and 9. This project demonstrated a Cronbach's alpha of .52.

Measures of Satisfaction with Life, Relationships, Work/School, and Marital Satisfaction

Three Likert-type questions, written specifically for this project, were included in the survey to assess the participants' reports of their own satisfaction with life, relationships, and work or school. Participants were asked to respond to the following questions with a five-point response scale ranging from 1 (very unsatisfied) to 5 (very satisfied): (a) "*All in all, how satisfied are you with your life?"* (overall life satisfaction), (b) *"All in all, how satisfied are you with your relationships?"* (relationship satisfaction); and (c) *"All in all, how satisfied are you with your work or school?"* (work/school satisfaction). Each question was used as a single item indicator of the corresponding variable.

The project used the Kansas Marital Satisfaction Scale to determine the relationship between adult problems with alcohol and marital satisfaction. The Kansas Marital Satisfaction Scale is a popular measure whose scores are correlated substantially with those on the Dyadic Adjustment Scale and the Martial Adjustment Test (Schumm and Silliman, 1996). Subjects were asked to choose from 1 to 5 on a Likert-type scale (1 being very unsatisfied and 5 being very satisfied) in response to questions such as, "How satisfied are you with your marriage?" Shek (1998) reports a Cronbach's alpha of .93; the survey sample provided an alpha of .94

Measurement of the Demographic Variables.

Single item standard fact sheet items were used to assess the demographic variables of age, marital status, and gender. Prior to the data analysis, a dummy variable for gender of adult was included as a predictor in each regression equation to test for differences in responses by adult males and

females (Pedhazur, 1982; Tabachnick and Fidell, 1989). The variable age was also included to determine if there are significant differences in adult problems with alcohol based on the subject's age. Finally, marital status was added as a demographic variable to explore the relationship between adult alcohol use and present marital status.

Operational Hypotheses

1. Males will score higher on the CAGE than females.
2. Age of the participants will be positively related to scores on the CAGE.
3. Single people will score higher on the CAGE than married people.
4. Subjects' scores on FACES II, family type, reported on the family of origin will be inversely related to subjects' scores on the CAGE.
5. Subjects' scores on the modified CAGE (family of origin history of drinking) will mediate the relationship between scores on FACES II (reported on the family of origin) and the participants' scores on the CAGE.
6. Subjects' scores on the Beck Depression Inventory will mediate the relationship between scores on FACES II (reported on the family of origin) and the participants' scores on the CAGE.
7. Subjects' scores on the modified Rotter's I-E scale will mediate the relationship between scores on FACES II (reported on the family of origin) and the participants' scores on the CAGE.
8. Subject's scores on the Beck Anxiety Scale will mediate the relationship between scores on FACES II (reported on the family of origin) and the participants' scores on the CAGE.

9. Subjects' scores will mediate the relationship between scores on FACES II (reported on the family of origin) and the participants' scores on the CAGE.
10. Subjects' scores on the overall life satisfaction item will mediate the relationship between scores on FACES II (reported on the family of origin) and the participants' scores on CAGE.
11. Subjects' score on the overall life satisfaction item will mediate the relationship between scores on FACES II (reported on the family of origin) and the participants' scores on the CAGE.
12. Subjects' scores on the relationship satisfaction item will mediate the relationship between scores on FACES II (reported on the family of origin) and the participants' scores on the CAGE.
13. Subject's scores on the work/school satisfaction item will mediate the relationship between scores on FACES II (reported on the family of origin) and the participants' scores on the CAGE.
14. Married subjects' scores on the Kansas Marital Satisfaction scale will mediate the relationship between scores on FACES II (reported on the family of origin) and the married participants' scores on the CAGE.

Analysis

Means and standard deviations were run for the predictor variables, family functioning in the family of origin, family history of problems with alcohol in the family of origin, internal locus of control, anxiety, life satisfaction, relationships satisfaction, work/school satisfaction, depression, marital satisfaction and the criterion variable, adult alcohol use (see Table 2). Data analysis consisted of

Pearson correlation coefficients and a series of regression analyses (see Table 3). Pearson correlations coefficients were examined to determine if (a) any of the individual variables are highly correlated with other predictor variables, and (b) to determine significant relationships to the criterion variable of adult problems with alcohol. The decision was made at this point not to pursue the five variables with no correlational significance.

Multiple regression analysis is suited for analyzing the collective and separate effects of two or more independent variables on a dependent variable (Pedhazur, 1982). Hierarchical multiple regression allowed the researcher to give priorities to independent variables before their contribution toward prediction of the dependent variable is assessed (Tabachnick & Fidell, 1989). The hierarchical order for this study has been outlined in the conceptual and operational hypotheses.

Baron and Kenny (1986) posit that a variable functions as a mediator to the extent that it accounts for the relations between two other variables, (i.e., a predicator variable and a criterion variable). After examining the bivariate correlations, as recommended by Baron and Kenny (1986), a series of regression analyses were run to examine the extent to which the other variables mediated the relationship between family functioning and adult problems with alcohol (see Figure 1). For example, the extent to which adult depression mediated the relationship between reported family functioning in the family of origin and adult problems with alcohol, three simple regression analyses were run: family functioning was regressed on adult problems with alcohol, family

functioning was regressed on adult depression, and depression was regressed on adult problems with alcohol. Next, a hierarchical multiple regression analysis was run with family functioning being entered in Step 1 and depression entered in Step 2. If the beta between depression and adult problems with alcohol yielded a significant beta in Step 2 and family functioning yielded a significant beta in Step 1, but not Step 2, it was concluded that depression was a mediating variable.

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APPENDIX C

INSTRUMENTS

Key to Family Survey

Questions	Instrument
1 to 6	General Demographic Information.
7 to 9	Kansas Marital Satisfaction Scale
10	Satisfaction with Life
11	Satisfaction with Relationships
12	Satisfaction with Work/School
13	Family Life Cycle*
14 to 33	FACES III*
34 to 37	CAGE
38 to 41	Modified CAGE for Family

Question numbers begin anew as subjects are asked to complete a ScanTron for the remaining questions.

1 to 20	Beck's Anxiety Inventory*
21 to 30	Locus of Control
31 to 40	Alcohol Use Disorder Identification*
41 to 49	Substance Use Inventory–Revised*
50 to 79	FACES II
80 to 100	Beck's Depression Inventory

OKLAHOMA STATE UNIVERSITY
COLLEGE OF HUMAN ENVIRONMENTAL SCIENCES
DEPARTMENT OF FAMILY RELATIONS AND CHILD DEVELOPMENT
FAMILY SURVEY

1. Gender _____Male _____Female 2. Age: _____

3. Ethnic Background: 1 = _____ Afro-American (Black) 4 = _____ Asian-American
2 = _____ Caucasian (White) 5 = _____ American Indian
3 = _____ Spanish Descent 6 = _____ Other _____

4. My overall physical heath is best described as: (circle one)
4 = Excellent 3 = Good 2 = Fair 1 = Poor

5. Give the number of college hours you have earned thus far (including this semester)_____

6. Your present marital status: (circle one)
1 = Single 2 = Married 3 = Divorced 4 = Widowed 5 = Remarried 6 = Other
If not married at the present time, please skip to question number 10. Thank you.

Please use the following scale to answer questions 7, 8, 9, 10, 11, & 12:

1	2	3	4	5
Very Unsatisfied	Unsatisfied	Undecided	Satisfied	Very Satisfied

7.	How satisfied are you with your marriage?	1	2	3	4	5
8.	How satisfied are you with your relationship with your husband/wife?	1	2	3	4	5
9.	How satisfied are you with your husband/wife as a spouse?	1	2	3	4	5
10.	All in all, how are things going in your life?	1	2	3	4	5
11.	All in all, how are things going in your relationships?	1	2	3	4	5
12.	All in all, how are things going in your work or school?	1	2	3	4	5

13. Please provide the requested information about YOUR BROTHERS AND SISTERS. List them in order from oldest (1st) to youngest including yourself at the appropriate spot.

	1st	2nd	3rd	4th	5th	6th	7th	8th
Age (years old) If deceased, give age at death								
Sex 1 = Male 2 = Female								
Current Marital Status (See ** Below)								
Number of Children								

* Use the following for marital status:

1=Married, first marriage
2=Married, previously married
3=Living together
4=Single; widowed
5= Single, never married
6=Single, previously married
7=Remarried
8=Married, separated

Please use the following response scale for the next set of questions.

1	2	3	4	5
Strongly Agree	Moderately Agree	Neither Agree Nor Disagree	Moderately Disagree	Strongly Disagree

14.	Family members asked each other for help.	1	2	3	4	5
15.	In solving problems, the children's suggestions were followed.	1	2	3	4	5
16.	We approved of each other's friends.	1	2	3	4	5
17.	Children had a say in their discipline.	1	2	3	4	5
18.	We liked to do things with just our immediate family.	1	2	3	4	5
19.	Different persons acted as leaders in our family.	1	2	3	4	5
20.	Family members felt closer to other family members than to people outside the family.	1	2	3	4	5
21.	Our family changed its way of handling tasks.	1	2	3	4	5
22.	Family members liked to spend free time with each other.	1	2	3	4	5
23.	Parent(s) and children discussed punishment together.	1	2	3	4	5
24.	Family members felt very close to each other.	1	2	3	4	5
25.	The children made the decisions in our family.	1	2	3	4	5
26.	When our family got together for activities, everyone was present.	1	2	3	4	5
27.	Rules changed in our family.	1	2	3	4	5
28.	We could easily think of things to do together as a family.	1	2	3	4	5
29.	We shifted household responsibilities from person to person.	1	2	3	4	5
30.	Family members consulted other family members on their decisions.	1	2	3	4	5
31.	It was hard to identify the leader(s) in our family.	1	2	3	4	5
32.	Family togetherness was very important.	1	2	3	4	5
33.	It was hard to tell who did which household chores.	1	2	3	4	5

Please continue on the following page.

The following questions have to do with the household you grew up in.

34. Did you ever think that a family member ought to cut down and/or stop his/her use of drugs or alcohol?
    1 = Yes
    2 = No
    If yes, then who? _____

35. Did you ever become annoyed or defensive when other people criticized or commented upon a family member's use of alcohol or drugs?
    1 = Yes
    2 = No
    If yes, then who? _____

36. Did you ever feel angry, anxious, or depressed about a family member's use of alcohol or drugs?
    1 = Yes
    2 = No
    If yes, then who? _____

37. Were you ever embarrassed by a family member's behavior when he/she had been drinking alcohol or using drugs?
    1 = Yes
    2 = No
    If yes, then who? _____

The following questions concern your personal use of alcohol.

38. Have you ever felt you should cut down on your drinking?		1	2	3	4	5
39. Have people annoyed you by criticizing your drinking?	1	2	3	4	5	
40. Have you ever felt bad or guilty about your drinking?		1	2	3	4	5
41. Have you ever had a drink first thing in the morning to steady your nerves or to get rid of an hangover?		1	2	3	4	5

This ends the section of the survey you are to answer on this form. From this point on, please mark your answers on the ScanTron form provided for you. When you have completed the entire survey put this form and the ScanTron form in the envelope provided for this purpose. Do not make any marks which could identify you. Thank you.

The following questions in the survey require the use of the enclosed ScanTron form. Please continue with question one and continue marking the ScanTron form until you have finished. The responses on the card are in "letter" form, instead of numerical as on your survey. Simply use the following scale on the ScanTron form:

A = 0 B = 1 C = 2 D = 3

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in the group which best describes the way you have been feeling the ***past week, including today!*** Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle each one. ***Be sure to read all the statements in each group before making your choice.***

1. Numbness or tingling.
   0 Not at all
   1 Mildly. It did not bother me much.
   2 Moderately. It was very unpleasant but I could stand it.
   3 Severely. I could barely stand it.

2. Feeling hot.
   0 Not at all
   1 Mildly. It did not bother me much.
   2 Moderately. It was very unpleasant but I could stand it.
   3 Severely. I could barely stand it.

3. Wobbliness in legs.
   0 Not at all
   1 Mildly. It did not bother me much.
   2 Moderately. It was very unpleasant but I could stand it.
   3 Severely. I could barely stand it.

4. Unable to relax.
   0 Not at all
   1 Mildly. It did not bother me much.
   2 Moderately. It was very unpleasant but I could stand it.
   3 Severely. I could barely stand it.

5. Fear of the worst happening.
   0 Not at all
   1 Mildly. It did not bother me much.
   2 Moderately. It was very unpleasant but I could stand it.
   3 Severely. I could barely stand it.

6. Dizzy or lightheaded.
   0 Not at all
   1 Mildly. It did not bother me much.
   2 Moderately. It was very unpleasant but I could stand it.
   3 Severely. I could barely stand it.

7. Heart pounding or racing.
   0 Not at all
   1 Mildly. It did not bother me much.
   2 Moderately. It was very unpleasant but I could stand it.
   3 Severely. I could barely stand it.

8. Unsteady.
   0 Not at all
   1 Mildly. It did not bother me much.
   2 Moderately. It was very unpleasant but I could stand it.
   3 Severely. I could barely stand it.

9. Nervous.
   0 Not at all
   1 Mildly. It did not bother me much.
   2 Moderately. It was very unpleasant but I could stand it.
   3 Severely. I could barely stand it.

10. Feelings of choking.
    0 Not at all
    1 Mildly. It did not bother me much.
    2 Moderately. It was very unpleasant but I could stand it.
    3 Severely. I could barely stand it.

11. Hands trembling.
    0 Not at all
    1 Mildly. It did not bother me much.
    2 Moderately. It was very unpleasant but I could stand it.
    3 Severely. I could barely stand it.

12. Shaky.
    0 Not at all
    1 Mildly. It did not bother me much.
    2 Moderately. It was very unpleasant but I could stand it.
    3 Severely. I could barely stand it.

13. Fear of losing control.
    0 Not at all
    1 Mildly. It did not bother me much.
    2 Moderately. It was very unpleasant but I could stand it.
    3 Severely. I could barely stand it.

14. Difficulty breathing.
    0 Not at all
    1 Mildly. It did not bother me much.
    2 Moderately. It was very unpleasant but I could stand it.
    3 Severely. I could barely stand it.

Please continue on the next page.

15. Fear of dying.
    0 Not at all
    1 Mildly. It did not bother me much.
    2 Moderately. It was very unpleasant but I could stand it.
    3 Severely. I could barely stand it.

16. Scared.
    0 Not at all
    1 Mildly. It did not bother me much.
    2 Moderately. It was very unpleasant but I could stand it.
    3 Severely. I could barely stand it.

17. Indigestion or discomfort in abdomen.
    0 Not at all
    1 Mildly. It did not bother me much.
    2 Moderately. It was very unpleasant but I could stand it.
    3 Severely. I could barely stand it.

18. Faint.
    0 Not at all
    1 Mildly. It did not bother me much.
    2 Moderately. It was very unpleasant but I could stand it.
    3 Severely. I could barely stand it.

19. Face flushed.
    0 Not at all
    1 Mildly. It did not bother me much.
    2 Moderately. It was very unpleasant but I could stand it.
    3 Severely. I could barely stand it.

20. Sweating (not due to heat).

    0 Not at all
    1 Mildly. It did not bother me much.
    2 Moderately. It was very unpleasant but I could stand it.
    3 Severely. I could barely stand it.

Please continue on the next page.

Please continue to use the ScanTron form for the following questions in the survey. Please continue with question twenty-one (21) and continue marking the ScanTron form until you have finished. The responses on the card are in "letter" form, instead or numerical as your survey. Simply use the following scale on the ScanTron form:

A = 1 B = 2 C = 3 D = 4 E = 5

Please select your answer from the following choices.				
Strongly Disagree	**Disagree**	**Neither Agree Nor Disagree**	**Agree**	**Strongly Agree**
1	**2**	**3**	**4**	**5**

21.	I have often found that what is going to happen will happen.	1	2	3	4	5
22.	Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.	1	2	3	4	5
23.	In the long run the bad things that happen to us are balanced by the good ones.	1	2	3	4	5
24.	In my case getting what I want has little or nothing to do with luck.	1	2	3	4	5
25.	Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.	1	2	3	4	5
26.	Many times we might just as well decide what to do by flipping a coin.	1	2	3	4	5
27.	What happens to me is my own doing.	1	2	3	4	5
28.	It is hard to know whether or not a person really likes you.	1	2	3	4	5
29.	Sometimes I feel that I don't have enough control over the direction my life is taking.	1	2	3	4	5
30.	How many friends you have depends on how nice a person you are.	1	2	3	4	5

Please continue to use the ScanTron form for the following questions in the survey. Please continue with question thirty-one (31) and continue marking the ScanTron form until you have finished. The responses on the card are in "letter" form, instead or numerical as your survey. Simply use the following scale on the ScanTron form:

A = 1	**B = 2**	**C = 3**	**D = 4**	**E = 5**
		OR		
A = 0	**B = 1**	**C = 2**	**D = 3**	**E = 4**

The following questions concern your personal use of alcohol. Some of the questions will appear to be repetitious but please answer them all.

Please circle your response.

31. How often do you have a drink containing alcohol?
    (0) Never
    (1) Monthly or less
    (2) 2 to 4 times a month
    (3) 2 to 3 times a week
    (4) 4 or more times per week

32. How many drinks containing alcohol do you have on a typical day when you are drinking?
    (1) 1 or 2
    (2) 3. or 4
    (3) 5 or 6
    (4) 7 or 9
    (5) 10 or more

33. How often do you have six or more drinks on one occasion?
    0 Never
    1. Less than monthly
    2. Monthly
    3. Weekly
    4. Daily or almost daily

34. How often during the past year have you found that you were unable to stop drinking once you started?
    0 Never
    1. Less than monthly
    2. Monthly
    3. Weekly
    4. Daily or almost daily

35. How often during the past year have you failed to do what was normally expected from you because of drinking?
    0 Never
    1. Less than monthly
    2. Monthly
    3. Weekly
    4. Daily or almost daily

Please continue on the next page.

36. How often during the past year have you needed a first drink in the morning to get yourself going after a heavy drinking session?
    0. Never
    1. Less than monthly
    2. Monthly
    3. Weekly
    4. Daily or almost daily

37. How often during the past year have you felt guilt or remorse after drinking?
    0 Never
    1. Less than monthly
    2. Monthly
    3. Weekly
    4. Daily or almost daily

38. How often during the past year have you been unable to remember what happened the night before because of drinking?
    0 Never
    1. Less than monthly
    2. Monthly
    3. Weekly
    4. Daily or almost daily

The question format has changed slightly, but please continue using the ScanTron form for your answers and the lettering format.

39. Have you or someone else been injured as the result of your drinking?
    0 No
    1. Yes, but not in the last year
    2. Yes, during the last year

40. Has a friend, relative, doctor, or other heath worker been concerned about your drinking or suggested you cut down?
    0 No
    1. Yes, but not in the last year
    2. Yes, during the last year

41. I find that I am drinking or using more alcohol/drugs now than I thought I would when I started.
    1. No
    2. Yes

42. I have tried to quit or cut down on my drinking/using more than once.
    1. No
    2. Yes

43. I spend some time thinking about the next time I am going to drink or use drugs.
    1. No
    2. Yes

44. Sometimes it seems like I get high or drunk faster on fewer chemicals or on less alcohol than I used to.
    1. No
    2. Yes

45. It seems like it takes more to get me drunk/high now than it used to.
    1. No
    2. Yes

46. I have driven when I was high or intoxicated.
    1. No
    2. Yes

47. Once I begin drinking or using I find it difficult to stop.
    1. No
    2. Yes

48. I drink or use at least once a week.
    1. No
    2. Yes

49. I have been in trouble at home or work, at school, or with the law because of drinking or using.
    1. No
    2. Yes

Please read the following statements and decide for each one how frequently, on a scale that ranges from 1 (almost never) to 5 (almost always), the described behavior occurred in your family.

Please select your answer from the following choices.

1=A Almost Never	2=B Once in Awhile	3=C Sometimes	4=D Frequently	5=E Almost Always

50. Family members were supportive of each other during difficult times.	1	2	3	4	5
51. In our family, it was easy for everyone to express his/her opinion.	1	2	3	4	5
52. It was easier to discuss problems with people outside the family than with each other.	1	2	3	4	5
53. Each family member had input regarding major family decisions.	1	2	3	4	5
54. Our family gathered together in the same room.	1	2	3	4	5
55. Children had a say in their discipline.	1	2	3	4	5
56. Our family did things together.	1	2	3	4	5
57. Family members discussed problems and felt good about the solutions.	1	2	3	4	5
58. In our family, everyone went his/her own way.	1	2	3	4	5
59. We shifted household responsibilities from person to person.	1	2	3	4	5
60. Family members knew each other's close friends.	1	2	3	4	5
61. It was hard to know what the rules were in our family.	1	2	3	4	5
62. Family members consulted other family members on personal decisions.	1	2	3	4	5

Please continue on the following page.

63. Family members said what they wanted.	1	2	3	4	5
64. We had difficulty thinking of things to do as a family.	1	2	3	4	5
65. In solving problems, the children's suggestions were followed.	1	2	3	4	5
66. Family members felt very close to each other.	1	2	3	4	5
67. Discipline was fair in our family.	1	2	3	4	5
68. Family members felt closer to people outside the family than to other family members.	1	2	3	4	5
69. Our family tried new ways of dealing with problems.	1	2	3	4	5
70. Family members went along with what the family decided to do.	1	2	3	4	5
71. In our family, everyone shared responsibilities. 1	2	3	4	5	
72. Family members liked to spend their free time with each other.	1	2	3	4	5
73. It was difficult to get a rule changed in our family.	1	2	3	4	5
74. Family members avoided each other at home.	1	2	3	4	5
75. When problems arose, we compromised.	1	2	3	4	5
76. We approved of each other's friends.	1	2	3	4	5
77. Family members were afraid to say what was on their minds.	1	2	3	4	5
78. Family members paired up rather than do things as a total family.	1	2	3	4	5
79. Family members shared interests and hobbies with each other.	1	2	3	4	5

Please continue to use the ScanTron form for the following questions in the survey. Please continue with question eighty (80) and continue marking the ScanTron form until you have finished. The responses on the card are in "letter" form, instead of numerical as your survey. Simply use the following scale on the ScanTron form:

A = 1	**B = 2**	**C = 3**	**D = 4**	**E = 5**
		OR		
A = 0	**B = 1**	**C = 3**	**D = 3**	**E = 4**

80. 0 I do not feel sad.
    1 I feel sad.
    2 I am sad all the time and I can't snap out of it.
    3 I am so sad or unhappy that I can't stand it.

81. 0 I am not particularly discouraged about the future.
    1 I feel discouraged about the future.
    2 I feel I have nothing to look forward to.
    3 I feel that the future is hopeless and that things cannot improve.

82. 0 I do not feel like a failure.
    1 I feel I have failed more than the average person.
    2 As I look back on my life, all I can see is a lot of failures.

Please continue on the next page.

83. 0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything anymore.
3 I am dissatisfied or bored with everything.

84. 0 I don't feel particularly guilty.
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.

85. 0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.

86. 0 I don't have any thoughts of killing myself.
1 I have thought of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

87. 0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance that make me look ugly.
3 I believe that I look ugly.

88. 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do any thing.
3 I can't do any work at all.

89. 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1 - 2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

90. 0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.

Please continue on the following page.

91. 0 I don't feel disappointed in myself
    1 I am disappointed in myself.
    2 I am disgusted with myself.
    3 I hate myself.

92. 0 My appetite is no worse than usual.
    1 My appetite is not as good as it used to be.
    2 My appetite is much worse now.
    3 I have no appetite at all anymore.

93. 0 I haven't lost much weight, if any lately.
    1 I have lost more than 5 pounds.
    2 I have lost more than 10 pounds.
    3 I have lost more than 15 pounds.
    4 I am purposely trying to lose weight by eating less.

94. 0 I am no more worried about my heath than usual.
    1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
    2 I am very worried about physical problems and it's hard to think of much else.
    3 I am so worried about my physical problems that I cannot think about anything else.

95. 0 I have not noticed any recent change in my interest in sex.
    1 I am less interested in sex than I used to be.
    2 I am much less interested in sex now.
    3 I have lost interest in sex completely.

96. 0 I don't cry any more than usual.
    1 I cry more now than I used to.
    2 I cry all the time now.
    3. I used to be able to cry, but now I can't cry even though I want to.

97. 0 I am no more irritated now than I ever am.
    1 I get annoyed or irritated more easily than I used to.
    2 I feel irritated all the time now.
    3 I don't get irritated at all by things that used to irritate me.

98. 0 I have not lost interest in other people.
    1 I am less interested in other people than I used to be.
    2. I have lost most of my interest in other people.
    3. I have lost most of my interest in other people.

Please continue on the next page.

99. 0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all anymore.

100. 0 I don't feel I am being punished.
1 I feel I may be punished.
2. I expect to be punished.
3. I feel I am being punished.

This concludes the survey. Please put the survey form and the ScanTron form in the manilla envelope provided for you. Seal the envelope carefully, making sure there are no marks nor notations which could identify you in any way.

Thank you very much for your cooperation in this project.

PERMISSION AND CONSENT FORMS

LIFE INNOVATIONS, Inc.®
P.O. Box 190 • Minneapolis, MN • 55440-0190
800-331-1661 • 651-635-0511 • FAX: 651-635-0716
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In exchange for providing this permission, we would appreciate a copy of any papers, theses or reports that you complete using **FACES II**. This will help us to stay abreast of the most recent developments and research regarding this scale. We thank you for your cooperation in this effort.

In closing, I hope you find **FACES II** of value in your work with couples and families. I would appreciate hearing from you as you make use of this inventory.

Sincerely,

David H. Olson

David H. Olson, Ph.D.

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In closing, I hope you find **FACES III** of value in your work with couples and families. I would appreciate hearing from you as you make use of this inventory.

Sincerely,

David H. Olson

David H. Olson, Ph.D.

UNIVERSITY of PENNSYLVANIA

PHILADELPHIA 19104-3246

Please reply to:
Room 754, The Science Center
3600 Market Street
Phila., PA 19104-2648
215-898-4100
Fax: 215-898-1865

Dear Mr. Anderson:

On behalf of Aaron T. Beck, M.D., I am responding to your recent inquiry regarding our research scales.

You have Dr. Beck's permission to use and reproduce the scale(s) checked below only for the designated research project that you described in your letter. There is no charge for this permission.

However, in exchange for this permission, please provide Dr. Beck with a complimentary copy of any reports, preprints, or publications you prepare in which our materials are used. These will be catalogued in our central library to serve as a resource for other researchers and clinicians.

- ✓ **Beck Depression Inventory (BDI)**
- ✓ **Beck Anxiety Inventory (BAI)**
- ___ **Hopelessness Scale (HS)**
- ___ **Suicide Intent Scale (SIS)**
- ___ **Scale for Suicide Ideation (SSI)**
- ___ **Cognition Checklist (CCL)**
- ___ **Sociotropy-Autonomy Scale (SAS)**
- ___ **Weekly Activity Schedule (WAS)**
- ___ **Daily Record of Dysfunctional Thoughts (DRDT)**
- ___ **Patient's Guide to Cognitive Therapy (PGCT)**
- ___ **Patient's Report of Therapy Session (PRTS)**
- ___ **Anxiety Checklist (ACL)**
- ___ **Beck Self-Concept (BSCT)**
- ___ **Dysfunctional Attitude Scale (DAS)**
- ___ **Other** _____

If you have any further questions, feel free to contact me.

Sincerely,

Rachael Teacher

Rachael Teacher
Research Assistant to Aaron T. Beck, M.D.

NOTE: Permission for inclusion of the BDI, BAI, HS, SSI, and BSCT in any publication must be obtained from The Psychological Corporation; telephone # 1-800-228-0752.

Appendix D

"I, _____, hereby authorize or direct Allan R. Anderson, or associates or assistants of his choosing, to perform the following treatment or procedure."

1. Administer the Family Survey as part of project entitled *Family History of Alcoholism, Family of Origin Characteristics, Individual Characteristics, and Adult Alcohol Use.*

2. It has been explained to me that the process is: (a) completely voluntary; (b) completely confidential; and, (c) will take me approximately 30 to 40 minutes to complete.

3. I understand that my responses are confidential and that no one will access to these records except for the researchers.

4. I understand the Family Survey has questions regarding my household I grew up in, including; (a) individual characteristics, such as anxiety, depression, life satisfaction, and internal locus of control; (b) how my family handled problems and situations; and, (c) my own personal use of alcohol.

5. It has been explained to me that this study will unify several variables for study which previously have been studied separately. The study will benefit family therapy clinicians by providing new avenues to consider when assessing patients. Furthermore, the study will include a practical self-report assessment tool for individual alcoholism which can can be useful to clinicians.

"This is done as part of an investigation entitled *Family History of Alcoholism, Family of Origin Characteristics, Individual Characteristics, and Adult Alcohol Use.*
The purpose of the procedure is to gather information which will be used as a data base to run statistical analyses.

"I understand that participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty after notifying the project director." I may contact Dr. Carolyn Henry at telephone number (405) 744-5057. I may also contact Gay Clarkson, IRB Executive Secretary, 203 Whitehurst, Oklahoma State University, Stillwater, OK 8\74078; telephone number: (405) 744-5700.

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.

Date:_____ Time: _____(a.m./p.m.)

Signed: _____
Signature of Subject

I certify that I have personally explained all elements of this form to the subject before requesting the subject to sign it.

Signed: _____
Project Director or her authorized representative

INSTITUTIONAL REVIEW BOARD

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD

DATE: 02-25-99 **IRB #: HE-99-075**

Proposal Title: FAMILY HISTORY OF ALCOHOLISM, FAMILY OF ORIGIN CHARACTERISTICS, INDIVIDUAL CHARACTERISTICS, AND ADULT ALCOHOL USE

Principal Investigator(s): Carolyn S. Henry, Allan R. Anderson

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

Signature: Carol Olson Date: February 25, 1999

Carol Olson, Director of University Research Compliance
cc: Allan R. Anderson

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modification to the research project approved by the IRB must be submitted for approval. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

VITA[2]

Allan R. Anderson

Candidate for the Degree of

Doctor of Philosophy

Thesis: FAMILY HISTORY OF ALCOHOLISM, FAMILY OF ORIGIN CHARACTERISTICS, INDIVIDUAL CHARACTERISTICS, AND ADULT ALCOHOL USE

Major Field: Human Environmental Sciences

Biographical:

Education: Graduated for Central High School, Sioux City, Iowa in May 1962; received Bachelor of Arts degree in English from Morningside College, Sioux City, Iowa in December 1972. Completed the requirements for the Master of Science degree with a major in Family Relations and Child Development at Oklahoma State University in June, 1992. Completed the Requirements for the Doctor of Philosophy degree at Oklahoma State University in July, 1999.

Experience: Employed in mental health services since 1978. In 1996 became an instructor at Northern Oklahoma College's Enid campus until the present.

Professional Memberships: Licensed Professional Counselor (#1318), Kappa Omicron Nu.