

**THE FAMILIES OF BULIMIC AND ALCOHOLIC WOMEN**

**By**

**JATINDER KAUR SINGH**

**Bachelor of Science  
University of Colorado  
Denver, Colorado  
1983**

**Master of Science  
Oklahoma State University  
Stillwater, Oklahoma  
1985**

**Submitted to the Faculty of the  
Graduate College of the  
Oklahoma State University  
in partial fulfillment of  
the requirements for  
the Degree of  
DOCTOR OF PHILOSOPHY  
May, 1992**

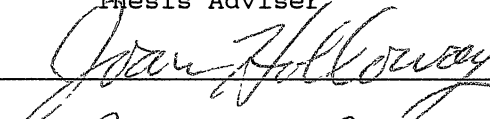
Thesis  
1992D  
5617f


THE FAMILIES OF BULIMIC AND ALCOHOLIC WOMEN

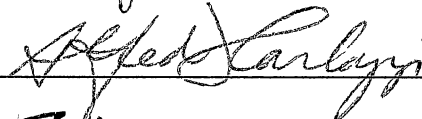
Thesis Approved:

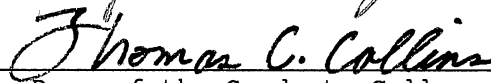


Thesis Adviser









Dean of the Graduate College

## ACKNOWLEDGEMENTS

I would like to express great appreciation to Donald Fromme, Ph.D. and Joan Holloway, Ph.D., for their input and help as co-advisers on this project. In addition, many thanks are owed to my other committee members, Jim Price Ph.D. and Al Carlozzi, Ed.D., who have been incontrovertably flexible and helpful every step of the way. Thanks also to Rex Finnegan, who first believed I could accomplish this project and helped me to also believe. A special thanks is owed to Joseph Malancharuvil, Ph.D., for his generous consultation, encouragement, and guidance. In addition, Dr. Milo Scherer who provided time and resources to complete this project as well as frequent words of encouragement.

I would like to express my heartfelt gratitude to the program directors and therapists who kindly gave time and energy by collecting data; Faye Hermann, Mary Hess, Lisa Hilder, and Jeff McDonald. I would further like to express gratitude to dear friends who have offered love, support and laughter; Chona P. Anglo, Michael Butterfield, Willard Davis, Dana Deardeuff, Alyssa Frank, Michael Lewin, Joe Muga, Jeanne Panell, Michele Reed, Barbara Starr, and Barbara Wettstein.

Finally, words could not express the degree of appreciation I feel towards my family for their continuous love and support: my brother Surinder Pal Singh who continues to be "the smartest guy I

know" and my best friend and sister Parveen Kaur Singh who is a true inspiration and was the impetus for my starting and ending this project. Thanks also to Jim Sharkey, who continues to show me how beautiful life can be. Finally, I'd like to dedicate this work with much gratitude to my parents, Gursharan and Ranjit K. Singh, who bravely brought their family to this country for a better life and have inspired each of us to achieve our dreams.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION. . . . .	1
II. REVIEW OF LITERATURE. . . . .	3
The Role of Familial Factors in the Etiology of Bulimia. . . . .	3
The Role of Familal Factors in the Etiology of Alcohol Abuse. . . . .	7
Problems with Previous Research. . . . .	11
Summary. . . . .	13
III. METHODS AND PROCEDURES. . . . .	15
Subjects and Procedure . . . . .	15
Procedure. . . . .	21
Training of Therapists . . . . .	22
Materials. . . . .	23
Family Questionnaires. . . . .	25
IV. RESULTS . . . . .	31
Family Questionnaires. . . . .	40
V. SUMMARY AND DISCUSSION. . . . .	61
Differences Found Between Bulimic and Alcoholic Women. . . . .	65
Drug and Alcohol Use . . . . .	69
Depression . . . . .	70
Conclusion . . . . .	73
REFERENCES . . . . .	81
APPENDIXES . . . . .	97
APPENDIX A - CRITERIA FOR SUBJECT INCLUSION . . . . .	98
APPENDIX B - CONSENT FORM . . . . .	100
APPENDIX C - INSTRUCTIONS TO SUBJECTS . . . . .	104
APPENDIX D - DEMOGRAPHIC INFORMATION SHEET. . . . .	106

Chapter	Page
APPENDIX E - BECK DEPRESSION INVENTORY. . . . .	109
APPENDIX F - EATING DISORDERS INVENTORY . . . . .	113
APPENDIX G - MICHIGAN ALCOHOL SCREENING TEST (SMAST). . . . .	117
APPENDIX H - GENERAL HEALTH QUESTIONNAIRE . . . . .	119
APPENDIX I - EATING HABITS QUESTIONNAIRE. . . . .	121
APPENDIX J - ALCOHOL AND DRUG USE QUESTIONNAIRE . . . . .	125
APPENDIX K - FAMILY ADAPTABILITY AND COHESION SCALES (FACES - III). . . . .	130
APPENDIX L - THE FAMILY ASSESSMENT DEVICE (FAD) . . . . .	133
APPENDIX M - THE FAMILY ASSESSMENT MEASURES (FAM - III) . . . . .	136
APPENDIX N - SURVEY OF FAMILY ATTITUDES TOWARD WEIGHT AND SUBSTANCE ABUSE. . . . .	143

LIST OF TABLES

Table	Page
1. Means on Demographic Characteristics of the Groups. . .	18
2. Group Percentages on Marital Status, Race, Income, and Education . . . . .	19
3. Means by Group on Beck Depression Inventory . . . . .	32
4. Responses to General Health Questions . . . . .	32
5. Means by Group on Eating Disorders Inventory. . . . .	34
6. Responses to Questions about Eating Behavior. . . . .	36
7. Means by Group on How Affected by Weight Gain or Loss .	37
8. Mean Responses to Drinking Questions. . . . .	39
9. Drug Use History. . . . .	39
10. Means for Responses on the FACES - III. . . . .	42
11. FACES - III Real and Ideal Cohesion by Adaptability . .	43
12. Means for Responses on Family Assessment Device (FAD) .	45
13. Family Assessment Measures (FAM - III)-General Scale. .	48
14. Family Assessment Measures (FAM - III)-Dyadic Scale . .	49
15. Family Assessment Measures (FAM - III)-Self Scale . . .	51
16. Mean Number of Overweight Family Members. . . . .	53
17. Percentage of Overweight Family Members . . . . .	55
18. Number of Relatives with Alcohol or Substance Abuse Problems. . . . .	55
19. Familial Alcohol Abuse and Attitudes Toward Alcohol Use . . . . .	56
20. Family Members Emphasis on Subject's Physical Appearance. . . . .	57



Table	Page
21. Percentage of Family Members Who Encouraged Subject to Diet . . . . .	58
22. Family's Attitudes Toward Obesity and Substance Abuse .	60

## CHAPTER I

### INTRODUCTION

Recently, parallels have been drawn in the literature between the urge to drink in the alcoholic and binge eating (e.g. Ogden & Wardle, 1990) among bulimics. Bulimia and alcohol abuse are similar in that both are examples of behavior in excess (Crowther & Chernyk, 1984) with a number of similar behaviors observed in both disorders including: denial and craving for substances, a sense of loss of control once consumption has started and exposure to the forbidden substance resulting in emotional stress (Ogden & Wardle, 1990; Wardle, 1987). The fact that bulimia and substance abuse are often present within the same families (e.g. Hatsukami, Mitchell, Eckert & Pyle, 1986; Herzog, 1982) and sometimes even the same individuals (e.g. Hatsukami, Eckert, Mitchell & Pyle, 1984; Hudson, Pope, Yurgelson-Todd, Jonas & Frankenberg, 1987) suggests that family factors might be important in the development of these disorders. Thus, an important question to ask is how the families of bulimics and alcoholics might be both similar and different from one another. The answer to this question is important and might have some bearing on treatment issues.

The role of the nuclear family in the etiology and maintenance of various psychiatric disorders has been of great interest to investigators over the years. A large number of studies have been

conducted comparing the milieus of normal families with disturbed families. In a review of the literature, Doane (1978) discussed a number of differences between normal and disturbed families. Weaker parental coalitions and a relatively stronger parent-child coalition are common in dysfunctional families (Faunce & Riskin, 1970; Gilbert, Christensen & Margolin, 1984; Solvberg & Blakar, 1975). Not surprisingly, a breakdown of the parental coalition results in marital discord (Gorad, 1971; Wilson & Orford, 1978). In some families one or more of the children may be drawn into a coalition with one parent against the other parent and become enmeshed in cross-generational relationships, which is likely to be detrimental to the child's growth and development. In dysfunctional families, an alliance between generations results in a child being given both more power and greater responsibility for family functioning. Both may be handicapping as a heightened sense of belonging usually requires a yielding of autonomy (Minuchin, Rosman, & Baker, 1978) thus making the task of acquiring independence from the family more difficult.

In addition to being enmeshed, dysfunctional families have also been described as less flexible in their interactions with one another (e.g. Anderson & Henderson, 1983; Steinglass, 1975) and actively non-supportive of one another (e.g. Alexander, 1973; Schuham, 1970). Also, conflicting messages (Bugental, Love & Kaswan, 1971) and confused communication (Glazer, 1976; Solvberg & Blaker, 1975) have been noted among dysfunctional families.

## CHAPTER II

### REVIEW OF LITERATURE

#### The Role of Familial Factors in the Etiology of Bulimia

Both clinical and empirical data suggest that the attitudes and characteristics of the family, and the type of relationship that a woman has with her parents, play an important role in the development of bulimia (Kent & Clopton, 1988). The highest incidence of disordered eating appears to occur during adolescence and young adulthood when the family system is most powerfully influential (Levine, 1987). Family systems theory suggests that parents may influence their children's eating behavior directly through the process of modeling, particularly attitudes and behaviors surrounding eating and weight issues (Ausubel, Montemayor, & Svajian, 1977; Pike & Rodin, 1991). It is thus logical to assume that eating attitudes and behaviors passed from parent to child might contribute to how a child will view food and whether she will choose to manifest her emotional and psychological conflicts involving food.

Eating disorders generally and bulimia more specifically have been associated with abnormal patterns of family interaction (e.g., Kog & Vandereycken, 1985; Stuart, Laraia, Ballenger & Lydiard, 1990) and poor family adjustment (Mitchell, Hatsukami, Eckert & Pyle,

1985). Slade (1982) suggested that family interaction may be related to the low self-esteem and perfectionism that "triggers" eating disorders. Minuchin et al. (1978) noted that eating disordered women appeared to come from remarkably similar family backgrounds and theorized that these families were often enmeshed, rigid, overprotective and avoided conflict. Research in the field of bulimia has generally supported this hypothesis. It has been noted that bulimic families appear to be enmeshed with one another and isolated from the outside world (Kog, Vandereycken & Vertommen, 1985). The outside community may be seen as competitors or threats to family well-being and cohesiveness (Harkaway, 1986).

Bulimic families have further been described as containing family members who are hostile toward self-assertion and personal control (Waller, Calam & Slade, 1989), rigid (Selvini-Palazzoli, 1974), with parents who are intrusive, overprotective, and controlling (Humphrey, 1983; Saba, Barrett, & Schwartz, 1983), all of which inhibit the child's sense of autonomy (Bruch, 1981; Williams, Chamove & Millar, 1990). Further, early deficits in autonomy due to inappropriate parental attitudes result in a relentless battle for control. Williams et al. (1990) found this control to be fairly subtle, and familial dominance may be the consequence of a failure to promote autonomy rather than an attempt to suppress it.

Several researchers (Johnson & Flach, 1984; Ordman & Kirschenbaum, 1986; Saba et al., 1983) have compared the perceptions of family of origin of normal-weight bulimics and a normal

comparison group and found that bulimics reported more conflicted relationships and less family cohesiveness. Further, there is much less emphasis on the open expression of feelings among bulimic families than normal families. Conflict resolution difficulties have also been noted in bulimic families. There is an apparent lack of sustained conflict and an inability to resolve conflict when it appears (Katzman, 1986; Singh et al., 1988). Typically, attempts to resolve conflict are more likely to involve the excessive use of threats and coercion (Stuart et al., 1990). This last finding suggests that bulimics might have been raised in households with significantly more tension, threats, and physically coercive behaviors. However, the incidence of physical violence is not higher among bulimic families (Stuart et al., 1990).

Difficulties in the mother-daughter relationship were predicted by Bruch (1981). Based on clinical observations, she noted that the mothers of bulimics appear to be overprotective and overpowering, and bulimic women often reported feeling closest to their mothers. Bruch (1981) further observed that fathers of bulimics are viewed as distant and ineffectual. Krener et al. (1986) studied Bruch's hypotheses and found that many bulimics reported feeling closest to their mothers. In contrast, Pole et al. (1988) compared 56 bulimics with 30 normal controls and found bulimics reported their mothers as significantly less caring. Ratings of their fathers on this measure also approached significance. Stuart et al. (1990) also found bulimics perceived their mothers to be emotionally "cold," and both parents were viewed as rejecting. One difference between the Krener

et al. (1986) study and the other two studies cited (Pole et al., 1988; Stuart et al., 1990) is that the former study examined the perceptions of women who had not sought help and the latter examined attitudes of women who had received treatment for their eating disorder.

Finally, it has been suggested that the emphasis placed on physical appearance in eating disordered families may also be a contributing factor to the development of this disorder (Roberto, 1986; Schwartz, Barrett & Saba, 1985). Among the family members of bulimic women, negative attitudes toward obesity appear to be common (Pike & Rodin, 1991) and family members are more distressed about weight (Wold, 1985). Mothers of bulimics have been found to be more critical of their daughters, especially in the area of weight. In a study of 39 women with a bulimic daughter to 38 women without an eating disordered daughter, Pike and Rodin (1991) found that the mothers of the bulimics were more critical of their daughters weight and rated their daughters as significantly less attractive than the daughters rated themselves. In addition, mothers of the bulimics reported wanting their daughters to be thinner while the mothers of the normal group generally wanted their daughters to gain weight.

In summary, bulimic families appear to be different from normal families in a number of areas. First, they are enmeshed with one another but lack cohesiveness. Parents are viewed as overprotective, controlling and discouraging independence in subtle ways. They have difficulty resolving conflict and discourage expression of emotion. Further, members of bulimic families tend to

have negative attitudes toward obesity and are more distressed about being overweight than the families of normal women. Mothers of bulimic women are critical of their daughters appearance and encourage them to lose weight more than do the mothers of normal women.

#### The Role of Familial Factors in the Etiology of Alcohol Abuse

The majority of research on the influence of the family in the development of alcohol abuse has been focused on a biological basis for alcoholism or the transmission of alcohol abuse among family members (e.g. Frances, Timm & Bucky, 1980; Latcham, 1985). Many studies have reported a higher incidence of alcohol abuse and alcoholism among family members of individuals with a history of alcohol problems than in the general population. Bohman et al. (1987) studied 862 male and 913 female adoptees in Sweden along with both their biological and adoptive parents. Both men and women were at greater risk to develop alcohol abuse if their biological parents were alcoholics. Adoptive parents drinking patterns had little influence on whether the child would become an alcoholic. These results seem to indicate that there is, indeed some genetic basis to alcoholism. In addition, a high incidence of alcoholism in first degree relatives of alcoholic men and women has frequently been noted. It has been reported that 61% of alcoholic women have one or more relatives with a drinking problem (Corrigan, 1980). This appears to be higher than the rates reported on men and



their relatives (Cotton, 1979). These studies offer support that a genetic factor is involved in the development of alcoholism, and would argue against environmental or family factors. However, since all children with alcoholic parents do not subsequently develop problems with alcoholism, it is likely that in addition to some biological predisposition, there are other environmental factors involved in the development of alcoholism (Orford & Velleman, 1991). In other words, there is likely an interaction of sociocultural influence and biological variables which might result in the development of alcoholism.

Although the biological contributors to the development of alcoholism have been studied at great length over the years, there has been comparatively less research on the sociocultural factors that might be involved in the development of alcoholism. This might be due to a belief of many researchers in the field that the alcoholic population is more heterogenous in both personality and family characteristics (e.g. Cloninger, 1987), thus making it much more difficult to describe the "typical" alcoholic family. One approach to studying the influence of familial factors in the development of alcoholism has been to examine adolescents and their families and the factors which might predict excessive alcohol use.

Current research on the environmental factors which influence the development of alcoholism among adolescents indicates that individuals with strong family support who have developed positive relationships with their parents and others may have the confidence and skills to assert positive (prosocial) values and resist

pressures to engage in alcohol and drug use (Hawkins & Weiss, 1988). Positive relationships with parents who are consistent and caring have also been shown to be contributing factors in making high-risk youth more resilient and skilled at handling the deleterious effects of stress (Cowan & Work, 1988) and may also have some influence on alcohol abuse. On the other hand, weak relationships with parents and siblings and a lack of perceived support and encouragement accompanied with a high degree of parental problems are positively correlated with adolescent alcohol and drug abuse (Rhodes & Jason, 1990).

There have been a few studies on the nature and influence of family factors in adults who are alcoholics (e.g. Harbin & Mazur, 1975; Klagsbrun & Davis, 1977). Various authors have proposed that a variety of structural dysfunctions seem to characterize families with an alcoholic member. These families have been described as containing one parent who is intensely involved with the abuser, while the other is more punitive, distant or absent resulting in cross-generational alliances (Gilbert, Christensen & Margolin, 1984; Stanton, 1983; Ziegler-Driscoll, 1979) and a lack of cohesiveness in the marital dyad (Wilson & Orford, 1978). The alcoholic family has thus been described as enmeshed and discouraging independent behavior (Kaufman & Kaufman, 1979). Family members have trouble expressing feelings with the open expression of anger especially discouraged (Reilly, 1979). Rather than expressing anger directly, a youth in such a family discharges anger indirectly. In this light, alcohol abuse might be seen as an excellent

passive-aggressive vehicle for misdirected rage and can thus be viewed as a hostile and rebellious act.

Although there has been a relative lack of research exploring the effect of environment on the development of alcoholism in women, there have been three studies to date. In the first study, alcoholic women's perception of their family of origin was compared to their sister's perceptions (Corrigan, 1980). In this study, the alcoholic women more often remembered an unhappy childhood marked by their parents being "less approving" or lacking interest in them than their non-alcoholic sisters (Corrigan, 1980). Schilit and Gomberg's (1987) research support these findings and further reported that alcoholic women reported fewer social supports both as children and adolescents and maintain fewer current supports than do their nonalcoholic peers. In the final study, the early recollections of 27 alcoholic women in treatment were compared with those of 30 normal women. Alcoholic women were found to mention family members significantly less often and had more memories associated with negative affect than the normal women, whose stories were associated with either neutral or positive affect (Hafner, Fakouri & Chesney, 1988). This finding suggests more distant and conflicted relationships with family members and significantly greater negativity.

In summary, alcoholic families also appear to be different from normal families in a number of areas. They appear enmeshed with one another but lack closeness or social support. In addition, parents are viewed as controlling and discouraging independent

thinking. Finally, poor communication and discouraging the expression of emotion have also been noted in the families of alcoholic women.

#### Problems with Previous Research

There are a number of similarities noted between the families of bulimic and alcoholic women. Both alcoholics and bulimics describe their families as enmeshed, unsupportive of one another, discouraging independent behaviors, controlling, and having communication difficulties. However, there are a number of problems in the research in these areas which make comparison of the two groups difficult.

The primary problem is the methodological issues cited previously. The bulk of the bulimic family research has been focused on perceived attitudes toward the family of origin with relatively few studies (e.g. Humphrey, 1983) actually observing familial interaction patterns. In contrast, the familial work on alcoholism has focused primarily on the incidence of alcoholism among family members with only a few preliminary studies focusing on alcoholic women's perceptions of functioning within their family of origin.

Another problem noted in the research on both bulimia and alcoholism is the lack of adequate control groups. Both inpatient and outpatient eating disordered women have been compared most often with a normal college female population (e.g. Humphrey, 1983; Johnson & Flach, 1984; Ordman & Kirchenbaum, 1986) or researchers

have failed to use a comparison group altogether (e.g. Saba et al., 1983; Schwartz, 1982). This lack of an adequate comparison group has been observed in all previous studies reviewed.

Finally, despite the fact that one third of the estimated 10 million alcoholics in this country are believed to be women (Lester, 1982), there has been a surprising lack of research on the female alcoholic (Burman & Allen-Meares, 1991; Gordis, 1990). Many of the tests, measurements and treatment strategies developed have been based on the physiological and sociological effects of alcohol abuse on the male and then results generalized to the alcoholic population as a whole. The few studies focusing on female alcoholics have generally examined physical differences and results suggest that there are differences between men and women in a number of different areas. For instance, female alcoholics begin drinking later in life than do men, but have a more rapid advancement of problem drinking and alcoholism (Kinney & Leaton, 1987). In addition, women are more likely to experience depressive reactions following excessive drinking and have a higher percentage of suicide attempts than men (Gearhart, Beebe, Milhorn & Meeks, 1991; Lester, 1982). Women also appear to suffer more serious physical complications as a result of alcoholism than do men, even when their drinking histories are shorter. Alcoholism decreases a woman's average life expectancy by 15 years (Roman, 1988). In addition, female alcoholics are more likely to suffer from disorders such as: liver disease and cerebral atrophy (Murray, 1989); gynecologic disorders (Gavaler, 1988); and obstetric complications (Abel & Sokol, 1986; Warren & Bast, 1988).

These studies indicate the importance of studying the female alcoholic separate from the male rather than generalizing findings from studies on men to women.

#### Summary

Although it is commonly believed (e.g. Waller, Slade & Calam, 1990) that specific symptoms of psychopathology are related to specific types of familial dysfunction, there are virtually no data to support this idea. The literature suggests that families of bulimic and alcoholic women may be similar in some ways. Primarily, these families seem to be enmeshed and isolated from the outside world. In addition, there are difficulties in the areas of control, communication and the ability to resolve conflicts.

Based on these considerations, the focus of this study will be to examine several issues: (1) the similarities and differences between bulimic and alcoholic women's perceptions of their families of origin, especially in the areas of, familial cohesion, communication, conflict resolution and attitudes toward weight and alcohol abuse, and (2) to compare women in treatment for bulimia and alcoholism with normal women who have recently participated in inpatient treatment for a non-psychiatric problem.

Consistent with assignment to the diagnostic groups, it is predicted that bulimic women will exhibit greater problems on measures of eating behavior and the alcoholics will exhibit significantly problems on measures alcohol and other substance abuse. In addition, it is predicted that both the bulimic and

alcoholic groups will report significantly greater perceived problems of their families of origin as contrasted to the normal comparison group. Bulimic and alcoholic women will report their families are more controlling, overprotective, and discouraging of independent behavior. In addition, problems in the relationship between bulimics and their mothers will also be reported. It is likely the bulimic women will report their mothers as being more concerned about weight and appearance than the mothers of the women in the other groups. Finally, the women in both criterion groups will report significantly greater difficulties among family members in both communication and expression of affect than the comparison group women.

## CHAPTER III

### METHODS AND PROCEDURES

#### Subjects and Procedure

Forty-five subjects were recruited for participation in this study. Bulimic (n=15) and alcoholic (n=15) women were recruited through outpatient treatment facilities and recommended for participation by their therapist. Due to concerns about patient confidentiality, the examiner had no contact with subjects. Instead, the therapists approached potential subjects about participating in a research project on "eating and drinking habits." All subjects in the diagnostic groups met DSM-III-R criteria for either normal weight bulimia or substance abuse (based on therapist reports) and had previously received inpatient treatment for this disorder. Bulimics all reported a history of both bingeing and purging behavior. The average age of their first binge was 21 years (SD = 10.9 years). They also estimated that the average number of days since they had last bingeed was 41 days and the number of days since they had last purged was 218 days. The women in the alcoholic group reported that they had not ingested alcohol for an average of 294 days. Half of the alcoholic women (n=8) reported that they had maintained their sobriety for 6 months or more. The number of subjects who participated in the study was determined by the administrative practicalities of the number of referrals within the



study period. And although the size is small, the purpose of the study was not to find only statistically significant differences between groups, but rather to identify large differences between groups which might be useful in a clinical setting.

The comparison group members (n=15) were recruited from introductory psychology classes, advertisements and word of mouth. Criteria for inclusion in the comparison group were that the woman had been hospitalized for a medical problem within eighteen months prior to her participation in the study and that she had never been hospitalized for either bulimia, alcoholism or any other psychiatric disorder. The purpose of using a previously hospitalized group was so the women in the comparison group had some inpatient contact with medical personnel, which had not been the case in previous studies, even when the criterion groups had participated in inpatient treatment. Since hospitalization for alcohol abuse and bulimia is usually longer (3 weeks or greater for treatment programs surveyed), and hospitalization for younger women with medical problems is generally shorter, it was expected that the women in the criterion groups would have been hospitalized for a greater period of time than the comparison group. This, indeed, did turn out to be the case ( $\chi^2(8) = 32.4, p < .0001$ ). Only 7% of the normal comparison group as compared to 93% of the bulimics and 87% of the alcoholics reported being hospitalized for more than two weeks. Eighty-six percent of the normal women spent a week or less in the hospital. There were no differences between the groups on the number of previous hospitalizations ( $F(2,42) = .8, p < .46$ ). One

woman in each of the three groups responded to questions about familial functioning based on her perceptions of her adoptive or foster family. The rest of the participants reported on their biological families. Most demographic characteristics between samples did not differ (see Table 1). The three groups were approximately balanced on: age ( $F(2,42) = 1.5, p < .24$ ); height ( $F(2,42) = .31, p < .73$ ); self-reported weight ( $F(2,42) = .43, p < .66$ ); ideal weight ( $F(2,42) = 1.6, p < .21$ ); and the difference between current and ideal weight ( $F(2,42) = .06, p < .95$ ). Since half the women in the comparison group ( $n=8$ ) were hospitalized for childbirth, a comparison was also made between groups on the number of children with no significant differences between groups ( $F(2,42) = 2.28, p < .12$ ). Nor were there any differences on marital status ( $\chi^2(3) = 6.4, p < .17$ ).

There was no significant difference found between groups based on race ( $\chi^2(4) = 5.4, p < .25$ ). Subjects who participated in this study were primarily white, (bulimics-93%, alcoholics-67% and comparison - 80%). However, there did appear to be an overrepresentation of Black women in the alcoholic (27%) and comparison groups (20%) with no Black women in the bulimic group (see Table 2). In addition, one woman each in the bulimic and alcoholic groups reported being Asian. The presence of Black women in the alcoholic and normal group and the lack of these individuals in the bulimic group was, in part, due to the manner in which data was collected. The small numbers of Black and Asian women who present to clinics with bulimia has been previously reported (Dolan,

TABLE 1

Means on Demographic Characteristics of the Groups

	Bulimics	Alcoholics	Normal
Age	28.1 (9.6)	33.4 (8.3)	31.7 (7.9)
Height (inches)	65 (1.7)	64 (4.4)	65 (3.1)
Weight (pounds)	141 (28)	150 (25)	145 (30)
Ideal Weight (pounds)	120 (14)	130 (15)	127 (15)
Difference Weight	20.3 (17.1)	20.1 (19.1)	18.3 (8.0)
Number of Children	1.0 (1.4)	2.1 (1.4)	1.8 (1.5)

(Standard Deviation in Parentheses)

**NOTE:** No significant differences found between groups on these measures.

TABLE 2

Group Percentages on Marital Status, Race, Income and Education

	Bulimics	Alcoholics	Normals
<b>Marital Status</b>			
Single	53	40	27
Married	27	33	67
Divorced	20	27	7
<b>Race</b>			
White	93	67	80
Black	0	27	20
Asian	7	7	0
<b>Income</b>			
\$ 0 - 5,000	13	7	7
\$ 5,000 - 10,000	27	40	7
\$10,000 - 20,000	13	27	13
\$20,000 - 30,000	13	7	13
\$30,000 - 50,000	20	7	20
\$50,000 - 75,000	7	7	33
Greater	7	7	7
<b>Education</b>			
Less than HS	0	27	0
High school	7	20	7
1-2 years college	40	20	47
3-4 years college	27	7	33
Bachelors degree	20	13	0
Greater	7	13	13

**NOTE:** No significant differences found between groups on these measures.

Evans & Lacey, 1989; Holden & Robinson, 1988; Lacey & Dolan, 1988). In the Holden and Robinson (1988) study, out of 470 eating disordered clients at their British clinic, only 11 were Black. However, when these Black bulimics were compared to White bulimics matched for age and education, there were few differences found on most factors examined including: duration of illness, age at referral, height or weight. In contrast, when the Black women were compared to Black women who were not eating disordered, the bulimics were found to be more highly educated, more frequently employed, and of a higher social class than the comparison group women. These differences are similar to the differences found when comparing White bulimics with a comparison group of White women. Based on these findings, Holden and Robinson (1988) concluded that bulimia might be a social class problem rather than a racial one and higher social class may be an important etiological factor.

As with the lack of research on Black bulimics, there is little known about Black alcoholic women. However, this lack of knowledge probably has less to do with the lack of Black women seeking treatment as a general lack of research on alcoholic women. It has been found that the incidence of alcoholism among Black women is approximately equal to that of White women (Clark & Midenik, 1982; Wilsnack, Wilsnack & Klassen, 1984). It would then be logical to assume that the incidence of Black women seeking treatment for alcohol abuse would be high. In an effort to examine the effects of race, separate analyses were performed using data from only white subjects with very few differences in outcome. When minority

women's data was removed, there was a significant difference between groups on age. However, Scheffe's test showed no differences between groups. In addition, several of the drug use and abuse items which were significant in the original analyses were no longer significant suggesting that among white women, there are few differences between alcoholics, bulimics and normal women on self-reports of substance abuse. However, the differences between groups on reported amphetamine use remained, with both bulimics and alcoholics reporting using amphetamines significantly more often than the normal group. Although these findings are interesting, due to the small sample size of minority participants, these results must be viewed with caution and can only be preliminary at best. However, these findings certainly suggest further investigation is important in this area.

There were no significant differences between groups on education ( $\chi^2 (10) = 12.9, p < .11$ ) or income ( $\chi^2 (12) < 11.07, p < .52$ ) therefore neither variable was used as a covariate in subsequent analyses. However, when examining frequencies (see Table 2), some differences seem apparent. Several members of the comparison group were more highly educated and have higher incomes than either of the comparison groups. As with the problem with race, this is another problem resulting from the manner in which data were collected.

#### Procedure

At the onset of the study each subject was given a packet of

questionnaires to fill out and return the following session. The packet included a Consent Form which explained the purpose and nature of the study (see Appendix B). Also included in the packet was a letter from the examiner thanking subjects for their participation, and instructing them to respond to perceptions of their family of origin (see Appendix C).

Data collected from 11 women were not used for several reasons. First, although therapists were instructed that only women who did not meet criteria for both bulimia and substance abuse could be included as participants in the present study, data was collected from three women who reported previous inpatient treatment for both bulimia and substance abuse. In addition, two women who were recruited for the comparison group reported previous inpatient treatment for alcohol abuse or an eating disorder. Data packets from two bulimic and four alcoholic women were incomplete and therefore data from these subjects were not used in analyses but were replaced in order to have fifteen subjects in each group.

#### Training of Therapists

Therapists were instructed about the nature and purpose of the study during approximately one hour of individualized training with the examiner. During training sessions, therapists were given the opportunity to examine each test in order to familiarize themselves should subjects have any questions concerning how to respond. After subjects completed the packet of questionnaires, they returned the packet to their therapist who returned the packet to the examiner.

### Materials

Subjects were first asked to complete a demographic sheet asking questions such as age, race, education, and marital status (see Appendix D). The demographic sheet was placed at the beginning of the packet. Following this was a number of questionnaires that were randomly placed in the packet.

The Beck Depression Inventory (BDI, Beck, Ward, Mendelson, Mock & Erbaugh, 1961) was included to assess current level of depression (see Appendix E). It is a 21-item multiple choice test which was last revised in 1978. The test was developed to assess specific symptoms or attitudes which are specific to depressed patients. Each item corresponds to a specific category of depressive symptoms or attitude. There are several advantages to using this test to determine depression. One advantage is that the BDI is relatively easy to administer and score and has been used with a variety of populations. A positive relationship between BDI scores and patient's clinical states rated by clinicians are reported by the authors (reliability above .90). Beck (1976) reported a correlation of .75 between the BDI and the MM PI Depression scale. A score greater than 20 on the BDI is indicative of moderate to severe depression.

The Eating Disorders Inventory (EDI; Garner, Olmstead & Polivy, 1983) is a 64-item forced choice test developed to be a multi-dimensional measure of personal, interpersonal and behavioral characteristics common in both anorexia nervosa and bulimia (see Appendix F). Items were developed to reflect research and treatment



issues fundamental to the development of eating disorders and consists of eight scales:

- |                             |  |
|-----------------------------|--|
| (1) Drive for Thinness      | - excessive concern with dieting and weight gain                           |
| (2) Bulimia                 | - a tendency toward episodic binge eating followed by purging of food      |
| (3) Body Dissatisfaction    | - specific body parts are perceived as too large                           |
| (4) Ineffectiveness         | - feelings of general inadequacy and of not being in control of one's life |
| (5) Perfectionism           | - excessive personal expectations of superior achievement                  |
| (6) Interpersonal Distrust  | - sense of alienation from others  |
| (7) Interoceptive Awareness | - a lack of confidence in the recognition of emotions and hunger           |
| (8) Maturity Fears          | - a wish to return to the security of preadolescence                       |

All eight scales have acceptable levels of reliability and validity (Eberly & Eberly, 1985) ranging from .83 - .93 for women with eating disorders and .72 - .92 for controls.

The Michigan Alcohol Screening Test (MAST: Selzner, 1971) is a 25-item screening test for alcohol-related problems and alcoholism (see Appendix G). There is a high concordance between MAST scores and the extent of previous alcohol-related events such as previous arrests and treatment (Selzner, 1971). Items are scored on the basis of weights ranging from 1 to 5 points. For purposes of screening, Selzer et al. (1975) suggested that scores greater than 7

as indicative of a strong likelihood of alcohol abuse or alcoholism. Reliability and validity estimates appear adequate. Zung (1982) reports test-retest reliability coefficients to be .86 or greater one to three days following initial administration. An obvious problem with the test is that it is possible to "fake good," which might result in a high prevalence of false negatives. Although the MAST was developed using a male population, this screening test has been found to be useful in the assessment of females (Selzner, Gomberg, & Nordhoff, 1979).

Subjects were asked to respond to a short general health questionnaire (see Appendix H) in order to gain information about history of physical illnesses. In addition, subjects were asked a number of questions about their eating habits (Appendix I) and alcohol and drug intake histories (Appendix J). On the latter, subjects were asked to respond to two questions about their drug use histories: first, had they ever used the drug in question; and second, a more subjective rating of whether the drug use was heavy. For the purpose of the present study, "heavy" drug use was defined as using the drug on a daily basis for more than a week. Thus, if a subject reports that she smoked marijuana daily for three months during high school, she was classified as a "heavy" user.

#### Family Questionnaires

Subjects were asked to rate their families on four different self-report measures. The first three are well established measures of family functioning. The final questionnaire, the Survey of

Family Attitudes Toward Weight and Substance Abuse, was developed specifically for inclusion in this study.

The Family Adaptability and Cohesion Scales (FACES-III; Olson, Portner & Lavee, 1985) is a 40-item test based on the Circumplex model of family systems (Olson, Sprenkle & Russell, 1979) (see Appendix K). The premise of the Circumplex model is that two theoretical concepts, family cohesion and family adaptability, are major components in any family system. Cohesion is defined as the emotional bonding family members have with one another and the degree of individual autonomy an individual experiences within the family system (Olson, 1986). Within the dimension of cohesion, it is hypothesized that balanced levels of cohesion allow individuals to experience a positive balance between independence and connection to one's family. Scores at either extreme are indicative of familial dysfunction. Low scores indicate a family perceived as disengaged while high scores indicate a perception of enmeshment. Adaptability is defined as the ability of a family system to change its' power structure, role relationships and relationship rules in response to situational and developmental stress (Olson, 1986). An adaptive system requires a balance between change and stability. Again, extreme scores are indicative of familial dysfunction. Low scores indicate rigidity and resistance to change. High scores indicate chaos, with no rules governing change. By combining the four levels of cohesion and the four levels of adaptability, sixteen types of marital and family systems are revealed. Several studies (e.g. Miller, Epstein, Bishop & Kietman, 1985; Pratt & Hansen, 1987)

have been critical of the FACES-III instrument's capability to investigate the constructs of the model it was designed to examine. However, it is a widely used instrument with considerable literature available and thus useful for comparative purposes.

The Family Assessment Device (FAD; Epstein, Baldwin & Bishop, 1983) is a 60-item test based on the McMaster Model of Family Functioning (Epstein & Bishop, 1981; Epstein, Bishop & Baldwin, 1981; Epstein, Bishop & Levine, 1978; Westley & Epstein, 1969) (see Appendix L). The FAD is easy to administer, clinically relevant and useful in identifying problem areas within a family yielding scores on seven dimensions:

- |                              |  |
|------------------------------|--|
| (1) Problem Solving          | - the family's ability to resolve problems to a level that maintains effective family functioning            |
| (2) Communication            | - how information is exchanged within the family   |
| (3) Roles                    | - recurrent patterns of behavior through which family members fulfill family functioning                     |
| (4) Affective Responsiveness | - the ability of the family to respond to a range of stimuli with appropriate affect                         |
| (5) Affective Involvement    | - the degree to which the family shows interest in and values the activities and interests of family members |
| (6) Behavioral Control       | - the manner to which the family expresses and maintains standards for the behaviors of its' members         |
| (7) General Functioning      | - assesses overall health/ pathology of the family   |

Endorsing items in the "unhealthy" direction indicates family difficulty in these areas. The FAD has been found to be a useful measure in discriminating between women who have different types of eating disorders and normal women (Waller, Calam & Slade, 1989) with few false positives. Women who are bulimic report their families as unhealthy overall with specific problems in the areas of problem solving, communication and emotional involvement.

The Family Assessment Measure (FAM-III; Skinner, Steinhauser & Santa-Barbara, 1983) is a 134-item self report instrument which is based on the Process Model of Family Functioning (Steinhauer, Santa-Barbara & Skinner, 1984) (see Appendix M). It was developed to assess areas of family strengths and weaknesses and differentiate between families that are successfully coping, from dysfunctional families. In this model, the primary goal of the family is to successfully accomplish a variety of tasks. The successfully coping family is capable of accomplishing these developmental and crisis tasks necessary for healthy functioning. In addition to task accomplishment, there are three other dimensions essential in the Process Model of Family Functioning: affective involvement, or the amount of nurturance and support family members receive from one another; control, or how family members attempt to influence one another's behavior; and, norms and values. The FAM-III has seven subscales to assess these constructs:

- (1) Task Accomplishment                      - successful achievement of a variety of basic developmental crisis tasks

- (2) Role Performance - includes; assignment of specific activities to each family member, willingness of family members to assume assigned roles, and carrying out the assigned behaviors
- (3) Communication - whether family members send clear messages and are open to messages received
- (4) Affective Expression - the range, quality and appropriateness of affective communications
- (5) Affective Involvement - the degree and quality of family members interest in one another
- (6) Control - the process by which family members influence and attempt to manage each other
- (7) Values and Norms - how tasks are defined and how the family works to accomplish these tasks which may be greatly influenced by the specific culture and family background

Items on the FAM-III are organized around three different response formats; a general scale, which consists of 50 items focused on the health/pathology of the family as a whole, a dyadic relationship scale, which consists of 42 items focusing on relationship with a specific family member; and a self-rating scale, which consists of 42 items focusing on the individuals' perception of her own functioning within the family. In addition to the 7 previously described subscales, there are a number of questions designed to assess Denial and Social Desirability on the General scale. Raw scores are converted to T-scores and extreme scores are indicative of familial dysfunction. Although each subscale may be examined in

isolation, the most complete assessment of family functioning is provided by analysis of the combined scores (Skinner, 1987). Reported reliability scores are .93 for the general scale, .95 for the dyadic relationships scale and .89 for the self-rating scale (Skinner, Steinhauser & Santa-Barbara, 1983). The FAM-III has demonstrated as being useful in discriminating between clinical and non-clinical families (Skinner, 1987).

Finally, included in the group of questionnaires were a group of questions collectively referred to as the Survey of Family Attitudes Toward Weight and Substance Abuse (see Appendix N). This test consists of two primary types of questions; the occurrence of obesity and alcohol use among immediate and distant family members and perceived familial attitudes toward obesity and alcohol use.

## CHAPTER IV

### RESULTS

Multivariate analyses of variance (MANOVA) using Wilks Lambda criteria were conducted as a preliminary step in the data analysis to decrease the probability of experiment-wise error. The factors on the Eating Disorders Inventory (EDI), Family Assessment Device (FAD), FACES-III and Family Assessment Measure (FAM-III) were analyzed in four separate MANOVAs. The MANOVA revealed that the groups differed significantly from one another on all four analyses. Univariate analyses (ANOVAs) were then computed to determine which subscales differentiated between the groups. Finally, where significant differences were found between groups, multiple post hoc comparisons using the Scheffe procedure were performed.

Results from the Beck Depression Inventory (BDI) showed significant differences between groups ( $F(2,42) = 5.39, p < .008$ ) (see Table 3). Further analysis indicated that the bulimic group was significantly more depressed than the normal comparison group but the alcoholic group did not differ significantly from either group. These results are supported by results from the medical questionnaire (see Table 4), the groups were significantly different from one another on self-reported depression ( $\chi^2(2) = 9.36, p < .009$ ) as well as reports of suicidal thoughts ( $\chi^2(2) = 6.58, p < .04$ ). Using this method, 87% of bulimics reported that they had previously felt depressed, while 47% of the alcoholics and



TABLE 3

Means by Group on Beck Depression Inventory

	Bulimics	Alcoholics	Normals
BECK DEPRESSION * INVENTORY	13.6 <sup>a</sup> (11.2)	11.0 (9.3)	4.7 <sup>b</sup> (4.7)

(Standard Deviations in Parentheses)

\*  $F$  significant,  $p < .01$

TABLE 4

Responses to General Health Questions

	Bulimics	Alcoholics	Normals
Depressed *	87	47	33
Suicide Thoughts *	73	47	27
Suicide Attempts	40	20	7
Drug Addiction/Abuse **	33	87	0

(Percentages Reported)

\*\*  $\chi^2$  significant,  $p < .001$

\*  $\chi^2$  significant,  $p < .01$

33% of normals reported previous depression. In addition, 73% of bulimics reported having experienced suicidal thoughts as compared to 47% of alcoholics and 27% of normals. Although the difference between groups on actual suicide attempts was not significant, the differences did approach significance ( $\chi^2 (2) = 5.5, p < .06$ ) with 40% of bulimics, 20% of alcoholics and 7% of the normals reporting a previous suicide attempt.

MANOVA procedure on The Eating Disorders Inventory yielded significant differences between groups ( $\Lambda = .29, p < .0001$ ) (see Table 5). Univariate analyses indicated differences between groups on a number of the subscales: Drive for Thinness ( $F (2,42) = 10.33, p < .0001$ ); Bulimia ( $F (2,42) = 22.86, p < .0001$ ); Body Dissatisfaction ( $F (2,42) = 7.0, p < .002$ ); Ineffectiveness ( $F (2,42) = 7.61, p < .002$ ); Interpersonal Distrust ( $F (2,42) = 4.49, p < .02$ ); and Interoceptive Awareness ( $F (2,42) = 16.56, p < .0001$ ). Bulimics reported significantly greater problems in comparison to the other two groups on the following scales: Bulimia, Drive for Thinness, Body Dissatisfaction, and Interoceptive Awareness. Specifically then, the bulimic women were more likely to: report episodic periods of bingeing followed by purging; show excessive concern with dieting and weight gain; perceive body parts as too large; and have difficulty recognizing emotions as well as hunger. The alcoholic and normal groups did not differ significantly from one another on any of these scales. On two other scales, Interpersonal Distrust and Ineffectiveness, bulimics differed significantly from the normals but not from the alcoholics.

Table 5

Means by Group on Eating Disorders Inventory

	Bulimics	Alcoholics	Normals
Drive for ** Thinness	12.5 <sup>a</sup> (7.4)	6.1 <sup>b</sup> (5.8)	2.7 <sup>b</sup> (4.1)
Bulimia **	8.5 <sup>a</sup> (5.0)	1.9 <sup>b</sup> (1.9)	0.3 <sup>b</sup> (1.0)
Body * Dissatisfaction	19.1 <sup>a</sup> (10.3)	10.1 <sup>b</sup> (6.7)	8.9 <sup>b</sup> (6.8)
Ineffectiveness *	8.2 <sup>a</sup> (8.1)	5.1 (4.1)	0.7 <sup>b</sup> (1.2)
Perfectionism	7.9 (4.7)	7.4 (4.6)	4.2 (3.4)
Interpersonal * Distrust	5.7 <sup>a</sup> (5.0)	4.7 (2.8)	1.7 <sup>b</sup> (3.4)
Interoceptive ** Awareness	13.5 <sup>a</sup> (8.3)	4.7 <sup>b</sup> (6.2)	1.1 <sup>b</sup> (2.1)
Maturity Fear	3.2 (2.8)	3.7 (2.9)	1.6 (2.4)

(Standard Deviations in Parentheses)

\* F significant,  $p < .01$ \*\* F significant,  $p < .001$

This indicates that the bulimic women reported feeling less in control of their lives and socially isolated. There were no significant differences between groups on Perfectionism ( $F(2,42) = 3.29, p < .05$ ) or Maturity Fear ( $F(2,42) = 2.55, p < .09$ ).

On questions about their eating behavior (see Table 6), chi-square analyses showed no differences between groups on how often they weighed or measured their bodies ( $\chi^2(10) = 13.49, p < .20$ ) or frequency of exercise ( $\chi^2(10) = 14.66, p < .15$ ). However, subjects reported significant differences in whether they were teased about their weight as children ( $\chi^2(4) = 10.8, p < .03$ ). Sixty percent of the bulimics reported being teased for being overweight as a child as compared to 40% of the alcoholic and 13% of the normal women. Interestingly, 33% of the alcoholic women and 40% of the women from the comparison group reported being teased about being underweight. In contrast, none of the bulimic women reported being teased about being underweight as children. The groups also differed from one another on reports of how much both a two pound weight gain ( $F(2,42) = 13.19, p < .0001$ ) and a two pound weight loss ( $F(2,42) = 7.0, p < .002$ ) affected how they felt about themselves (see Table 7).

Bulimic women reported feeling significantly more concerned over both a gain and loss of two pounds than either the alcoholic or normal comparison groups, which did not differ significantly from one another. Finally, bulimic women reported feeling significantly more fat ( $F(2,42) = 8.11, p < .001$ ) than either the alcoholic or comparison group women, despite the fact that there were no

TABLE 6

Responses to Questions about Eating Behavior

	Bulimics	Alcoholics	Normals
How often do you weigh or measure your body?			
More than daily	7	7	0
Daily	27	7	7
More than weekly	13	13	20
Weekly	27	13	40
Monthly	0	40	13
Less than monthly	27	20	20
How often do you exercise?			
Do not Exercise	20	27	20
Daily	60	20	13
More than weekly	13	33	47
Weekly	0	20	13
Monthly	7	0	7
Teased about weight as child? *			
No	40	27	47
Yes - Overweight	60	40	13
Yes - Underweight	0	33	40

(Percentages Presented)

\*  $\chi^2$  significant,  $p < .05$

TABLE 7

Means by Group on How Affected by Weight Gain or Loss

	Bulimics	Alcoholics	Normals
How much does a 2 pound ** weight gain affect how you feel about yourself?	2.2 <sup>a</sup> (1.3)	3.8 <sup>b</sup> (1.1)	4.2 <sup>b</sup> (0.8)
How much does a 2 pound * weight <u>loss</u> affect how you feel about yourself?	2.5 <sup>a</sup> (1.4)	3.9 <sup>b</sup> (1.2)	3.9 <sup>b</sup> (0.8)
How Fat do you feel? **	2.1 <sup>a</sup> (1.1)	3.5 <sup>b</sup> (1.2)	3.6 <sup>b</sup> (0.9)
(Standard Deviations in Parentheses)			

\* F significant,  $p < .01$ \* F significant,  $p < .001$

difference between these groups on reported weight.

Subjects were also asked about their drinking and drug use history. The groups did not differ significantly from one another on how old they were when they had their first alcoholic drink ( $F(2,42) = 2.5, p < .09$ ) (see Table 8), although the alcoholic women were slightly younger than the normal and bulimic women. However, there were significant differences between groups on the Michigan Alcohol Screening Test (MAST) ( $F(2,42) = 138.4, p < .0001$ ). As expected, the alcoholics scored higher on the MAST than both the bulimics and the normal comparison groups and the normal and bulimic women did not differ significantly from one another. Further, there were significant differences between groups in self-reported drug abuse or addiction ( $\chi^2(2) = 23.89, p < .0001$ ) (see Table 4) with 87% of the alcoholic group admitting to drug abuse or addiction in the past as compared to 33% of the bulimics and 0% of the normal comparison group. There were also a number of significant differences on questions of drug use (see Table 9): marijuana use ( $\chi^2(2) = 7.8, p < .02$ ); heavy use of marijuana ( $\chi^2(2) = 7.97, p < .02$ ); cocaine use ( $\chi^2(2) = 6.66, p < .04$ ); heavy use of cocaine ( $\chi^2(2) = 5.8, p < .05$ ); amphetamine use ( $\chi^2(2) = 15.0, p < .0006$ ); heavy use of amphetamines ( $\chi^2(2) = 8.0, p < .02$ ); and heroin use ( $\chi^2(2) = 5.85, p < .05$ ). There were no differences between groups on: heavy use of heroin ( $\chi^2(2) = 2.05, p < .36$ ); hallucinogen use ( $\chi^2(2) = 4.6, p < .10$ ); or the use of prescription drugs ( $\chi^2(2) = 2.37, p < .31$ ). Most of the alcoholic (87%) and bulimic subjects (73%) reported having tried marijuana at

TABLE 8

Mean Responses to Drinking Questions

	Bulimics	Alcoholics	Normals
MAST **	5.5 <sup>a</sup> (5.5)	36.3 <sup>b</sup> (8.8)	2.1 <sup>a</sup> (2.9)
Age at first drink	15.7 (5.1)	11.1 (5.5)	13.9 (6.4)

(Standard Deviation in Parentheses)

\*\*  $F$  significant,  $p < .001$ 

TABLE 9

Drug Use History

	Bulimic	Alcoholics	Normals
<b>Marijuana</b>			
Ever Used *	73	87	40
Heavy Use *	13	47	7
<b>Cocaine</b>			
Ever Used *	47	67	20
Heavy Use *	13	40	7
<b>Amphetamines</b>			
Ever Used **	67	80	13
Heavy Use *	27	53	7
<b>Heroin</b>			
Ever Used *	7	27	0
Heavy Use	0	7	0
<b>Hallucinogens</b>			
Ever Used	0	27	13
Heavy Use	0	20	0

(Percentage of Yes Responses Reported)

\*\*  $\chi^2$  significant,  $p < .001$ \*  $\chi^2$  significant,  $p < .05$



least once as compared to the normal group (40%). In addition, 47% of the alcoholics reported heavy use of marijuana as compared to only 13% of the bulimics and 7% of the normal comparison group. Sixty-seven percent of the alcoholics, 47% of the bulimics and 20% of the normal women reported having tried cocaine with 40% of the alcoholics, 13% of bulimics and 7% of the normal comparison group reporting heavy use. Interestingly enough, a high number of alcoholics (80%) and bulimics (67%) as compared to normals (13%) reported having tried amphetamines; with 53% of alcoholics, 27% of bulimics and 7% of the normals reporting heavy use. Finally, 27% of alcoholics, 7% of bulimics and none of the normals reporting having ever used heroin.

#### Family Questionnaires

The bulimics and alcoholics tended to view their families as much more dysfunctional in most areas of functioning than the normal comparison group. In addition, there were several factors which differentiated between groups on the Survey of Familial Attitudes Toward Weight and Substance Abuse.

Results from the FACES-III (see Tables 10 and 11) using MANOVA indicated a significant difference between groups ( $\Lambda = .607$ ,  $p < .01$ ). One-way ANOVA's indicated significant differences between the groups on several of the scales. There was a significant difference between groups on ideal Adaptability ( $F(2,42) = 4.30$ ,  $p < .02$ ). On this factor, the bulimics reported ideally they would have wanted significantly greater flexibility in power structure and

relationship roles within their families of origin than the normals with no significant differences between either of these groups and the alcoholics. There was a significant overall difference between groups on real Cohesion ( $F(2,42) = 3.38, p < .04$ ). Although examining mean scores on this scale appear to indicate that both bulimic and alcoholic women viewed their families as more "disengaged" than the comparison group, the Scheffe test indicated no significant differences between any of the groups. The Satisfaction factor created by subtracting the real and ideal Cohesion rating showed significance ( $F(2,42) = 8.78, p < .0007$ ) with the normal group differing significantly from both the bulimics and alcoholics. Bulimics and alcoholics did not differ significantly from one another on this measure. This result indicates that the normal comparison group was much more satisfied with the closeness between family members than either criterion group. However, the groups did not differ from one another on the Satisfaction factor created by subtracting real and ideal Adaptability ( $F(2,42) = 1.62, p < .21$ ) indicating no significant differences between groups on satisfaction with the flexibility of family roles.

When Cohesion and Adaptability are examined together (see Table 11), and the data was converted from raw scores to meaningful scores, several interesting trends become apparent. First, by examining the reports of the family as it actually was, a number of subjects in all three groups report their families as "disengaged" (Normals - 68%, Alcoholics - 86%, and Bulimics 93%)

TABLE 10

Means for Responses on the FACES - III

	Bulimics	Alcoholics	Normals
Real Cohesion *	25.1 (7.0)	25.5 (9.5)	32.7 (10.3)
Ideal Cohesion	44.3 (3.6)	42.4 (7.8)	40.3 (5.7)
Satisfaction ** Cohesion	-19.3 <sup>a</sup> (5.6)	-16.9 <sup>a</sup> (9.9)	-7.5 <sup>b</sup> (8.2)
Real Adaptability	23.1 (5.9)	19.7 (4.4)	21.7 (6.2)
Ideal * Adaptability	36.5 <sup>a</sup> (6.0)	32.5 (5.4)	30.5 <sup>b</sup> (5.7)
Satisfaction Adaptability	-13.3 (8.9)	-12.8 (7.8)	-8.7 (5.9)

(Standard Deviations in Parentheses)

\*  $F$  significant,  $p < .05$ \*\*  $F$  significant,  $p < .001$

TABLE 11

FACES - III Real and Ideal Cohesion by Adaptability

		<u>REAL Cohesion</u>				
		Disengaged	Separated	Connected	Enmeshed	
ADABILITY	Rigid	B = 4	B = 0	B = 0	B = 0	
		A = 6	A = 1	A = 0	A = 0	
		N = 5	N = 0	N = 1	N = 0	
	Structured	B = 4	B = 1	B = 0	B = 0	
		A = 5	A = 0	A = 0	A = 0	
		N = 2	N = 2	N = 1	N = 0	
	Flexible	B = 3	B = 0	B = 0	B = 0	
		A = 2	A = 0	A = 0	A = 0	
		N = 1	N = 1	N = 0	N = 0	
	Chaotic	B = 3	B = 0	B = 0	B = 0	
		A = 0	A = 0	A = 0	A = 0	
		N = 1	N = 0	N = 0	N = 1	
			<u>IDEAL Cohesion</u>			
			Disengaged	Separated	Connected	Enmeshed
	ADAPTABILITY	Rigid	B = 0	B = 0	B = 0	B = 0
			A = 0	A = 0	A = 0	A = 0
N = 0			N = 0	N = 0	N = 0	
Structured		B = 0	B = 0	B = 0	B = 0	
		A = 1	A = 0	A = 0	A = 1	
		N = 3	N = 0	N = 1	N = 0	
Flexible		B = 0	B = 0	B = 0	B = 2	
		A = 1	A = 0	A = 0	A = 1	
		N = 0	N = 3	N = 1	N = 0	
Chaotic		B = 0	B = 0	B = 0	B = 13	
		A = 0	A = 2	A = 4	A = 5	
		N = 0	N = 3	N = 2	N = 2	

from one another on the cohesion factor. No particular trends are apparent on the Adaptability factor. A more interesting trend can be found on reports of how subjects would have wanted the family to interact ideally. On this measure, 86% of the bulimic women reported that ideally they would have wanted much more closeness ("enmeshment") on the Cohesion scale accompanied by less rigidity in decision making ("chaotic"). Thus, the bulimics reported ideally wishing for family members to have been much closer to one another with extremely more flexibility in decision making. A high percentage of the alcoholic women (73%) reported their ideal family situation as "chaotic" on the Adaptability dimension again indicating a desire for the family to have provided much greater flexibility in power structure. The comparison groups scores tended to be much more variable on this measure and no particular trends were evident.

Results from the Family Assessment Device (FAD) indicated a overall significant difference ( $\Delta = .40, p < .001$ ) Further analyses indicated differences between groups on all subscales (see Table 12): General Functioning ( $F(2,42) = 14.92, p < .0001$ ); Communication ( $F(2,42) = 7.15, p < .002$ ); Behavioral Control ( $F(2,42) = 6.27, p < .004$ ); Affective Responsiveness ( $F(2,42) = 6.23, p < .004$ ); and Affective Involvement ( $F(2,42) = 4.3, p < .02$ ). Further testing indicating a significant difference between groups on General Functioning within the family between the normals and both the bulimics and alcoholics, but the criterion groups did not differ from one another. This finding indicates that both the

TABLE 12

Means for Responses on Family Assessment Device (FAD)

	Bulimics	Alcoholics	Normals
General Functioning ***	3.03 <sup>a</sup> (.61)	2.83 <sup>a</sup> (.71)	1.91 <sup>b</sup> (.45)
Behavioral Control **	2.47 <sup>a</sup> (.76)	2.03 (.62)	1.70 <sup>b</sup> (.34)
Affective Involvement *	2.61 (.69)	2.81 <sup>a</sup> (.84)	2.08 <sup>b</sup> (.55)
Affective Responsiveness **	3.00 <sup>a</sup> (.69)	2.87 (.87)	2.05 <sup>b</sup> (.84)
Roles *	2.67 <sup>a</sup> (.67)	2.37 (.57)	2.12 <sup>b</sup> (.47)
Communication **	2.99 <sup>a</sup> (.58)	2.55 (.83)	2.08 <sup>b</sup> (.54)
Problem Solving *	2.85 <sup>a</sup> (.62)	2.57 (.54)	2.11 <sup>b</sup> (.58)

(Standard deviation in parentheses)

\*\*\* F significant,  $p < .001$

\*\* F significant,  $p < .01$

\* F significant,  $p < .05$

criterion groups perceived their families as significantly more dysfunctional overall than the normal comparison group. On the Communication scale, there was a significant difference found between the bulimic and normal group, but no differences between either of these groups and the alcoholics. This result indicates that bulimics note greater disturbances in the exchange of information within their families when compared to normal women and their families. There was also a significant difference between the groups on the Behavior Control scale with the bulimics and normals differing significantly from one another, but neither group differed from the alcoholics on this measure. This finding indicates that the bulimics perceived their families as significantly more controlling than the normal comparison group. Significant differences were also found on the Affective Responsiveness scale between the normals and both bulimics and alcoholics with no differences between these groups indicating difficulties among family members of the criterion groups to respond with appropriate emotions in particular situations. Finally, there was a significant difference on the Affective Involvement scale between the alcoholics and normals, but neither of these groups differed significantly from the bulimics. This finding indicates that the families of alcoholic women are perceived by them as more disengaged than the families of the normal comparison group.

Results from the Family Assessment Measure (FAM-III ) also indicated a significant overall difference between groups ( $\Lambda = .044$ ,  $p < .003$ ). Interestingly enough, the groups differed from one

another on both Denial ( $F(2,42) = 11.80, p < .0001$ ) and Social Desirability ( $F(2,42) = 14.16, p < .0001$ ) (see Table 13). Although the alcoholics and bulimics did not differ from one another on these scales, both scored significantly lower on both scales than did the normal comparison group indicating a greater tendency in the normal group to minimize familial problems as well as answer in a socially desirable manner. However, the scores of the comparison group on this scale were not high enough on either the denial or social desirability scales to suggest that the data were invalid.

On the General Family Functioning scales of the FAM-III (see Table 13), significant differences were found between groups on all subscales: Overall Rating ( $F(2,42) = 23.53, p < .0001$ ); Communication ( $F(2,42) = 15.90, p < .0001$ ); Control ( $F(2,42) = 10.06, p < .0001$ ); Involvement ( $F(2,42) = 13.56, p < .0001$ ); and Affective Expressiveness ( $F(2,42) = 17.70, p < .0001$ ). On all of these subscales, significant differences were found between the comparison group and both alcoholic and bulimic groups but the criterion groups did not differ from one another. Thus, both bulimics and alcoholics reported significantly greater family pathology in all areas of general functioning.

On ratings of the relationship between their mothers and themselves of the FAM-III (see Table 14), a number of differences on subscales were found: Overall Rating ( $F(2,42) = 11.58, p < .0001$ ); Communication ( $F(2,42) = 7.85, p < .001$ ); Control ( $F(2,42) = 5.89, p < .006$ ); Affective Involvement ( $F(2,42) = 9.51, p < .0001$ ); and Affective Expressiveness ( $F(2,42) = 11.41, p <$



TABLE 13

Family Assessment Measures (FAM - III) - General Scale

	Bulimics	Alcoholics	Normals
Denial **	28.3 <sup>a</sup> (13.1)	32.5 <sup>a</sup> (10.1)	47.3 <sup>b</sup> (10.3)
Social ** Desirability	27.9 <sup>a</sup> (10.2)	32.5 <sup>a</sup> (9.5)	45.5 <sup>b</sup> (8.3)
<u>General Functioning Scale</u>			
Overall ** Rating	73.5 <sup>a</sup> (9.4)	68.7 <sup>a</sup> (10.0)	51.5 <sup>b</sup> (8.2)
Values and ** Norms	71.2 <sup>a</sup> (15.2)	68.2 <sup>a</sup> (12.0)	50.5 <sup>b</sup> (9.7)
Control **	75.5 <sup>a</sup> (19.1)	70.1 <sup>a</sup> (14.9)	51.3 <sup>b</sup> (11.4)
Affective ** Expressiveness	76.8 <sup>a</sup> (11.1)	69.9 <sup>a</sup> (12.6)	53.0 <sup>b</sup> (10.0)
Affective ** Involvement	72.7 <sup>a</sup> (13.2)	73.1 <sup>a</sup> (14.8)	48.8 <sup>b</sup> (15.9)
Communication **	75.3 <sup>a</sup> (11.4)	65.8 <sup>a</sup> (13.5)	51.7 <sup>b</sup> (9.2)
Role ** Performance	66.8 <sup>a</sup> (10.8)	63.5 <sup>a</sup> (7.9)	50.7 <sup>b</sup> (9.3)
Task ** Accomplishment	72.8 <sup>a</sup> (20.1)	69.7 <sup>a</sup> (13.5)	52.0 <sup>b</sup> (10.2)

(Standard deviations in parentheses)

\*\* F significant,  $p < .001$

TABLE 14

Family Assessment Measures (FAM - III) - Dyadic Scale

	Bulimics	Alcoholics	Normals
Overall ** Rating	70.3 <sup>a</sup> (11.9)	63.1 <sup>a</sup> (15.2)	49.1 <sup>b</sup> (8.9)
Values ** and Norms	73.7 <sup>a</sup> (20.1)	61.0 (15.7)	48.8 <sup>b</sup> (9.2)
Control *	67.6 <sup>a</sup> (18.0)	63.1 (20.0)	47.7 <sup>b</sup> (10.6)
Affective ** Expressiveness	72.0 <sup>a</sup> (11.3)	59.3 <sup>b</sup> (15.2)	50.7 <sup>c</sup> (9.8)
Affective ** Involvement	72.5 <sup>a</sup> (13.5)	70.1 <sup>a</sup> (19.3)	50.4 <sup>b</sup> (11.9)
Communication **	69.7 <sup>a</sup> (11.7)	62.6 <sup>a</sup> (17.4)	49.1 <sup>b</sup> (13.5)
Role ** Performance	64.7 <sup>a</sup> (10.7)	61.6 <sup>a</sup> (13.7)	48.3 <sup>b</sup> (7.9)
Task ** Accomplishment	70.9 <sup>a</sup> (10.2)	63.1 <sup>a</sup> (16.5)	47.9 <sup>b</sup> (10.5)

(Standard deviations in parentheses)

\*\* F significant,  $p < .001$ \* F significant,  $p < .01$

.0001). On Overall Rating, Affective Involvement, and Communication, there were significant differences between the normals and both criterion groups with no significant differences between bulimics and alcoholics. Thus, the criterion groups reported greater pathology in the relationship with their mothers in the areas of general functioning, communication and how emotionally involved they are with one another. Further, the bulimic women expressed significantly greater difficulty in the area of Affective Expressiveness than either the normal or alcoholic groups, which did not differ significantly from one another. This finding indicates that bulimic women perceive the expression of emotions as significantly more problematic in the relationship with their mother. Finally, bulimics reported feeling significantly more controlled by their mothers than the normal women, but neither group differed significantly from the alcoholic group on this measure.

Subjects were next asked to rate how they perceived themselves functioning within their family of origin on the FAM-III (see Table 15). Again there were a number of differences between groups: Overall Rating ( $F(2,42) = 11.94, p < .0001$ ); Communication ( $F(2,42) = 6.13, p < .005$ ); Control ( $F(2,42) = 5.52, p < .007$ ); and Affective Expressiveness ( $F(2,42) = 12.12, p < .0001$ ). There was not a significant difference found on the Affective Involvement scale ( $F(2,42) = 2.33, p < .11$ ). Normal women differed significantly from both alcoholics and bulimics on Overall Rating indicating that the comparison group were much more satisfied with

TABLE 15

Family Assessment Measures (FAM - III) - Self Scale

	Bulimics	Alcoholics	Normals
Overall ** Rating	66.9 <sup>a</sup> (6.6)	61.5 <sup>a</sup> (11.4)	51.7 <sup>b</sup> (7.1)
Values ** and Norms	63.9 <sup>a</sup> (16.3)	61.8 <sup>a</sup> (13.3)	45.7 <sup>b</sup> (10.9)
Control *	63.7 <sup>a</sup> (13.1)	56.4 (12.4)	50.1 <sup>b</sup> (7.4)
Affective ** Expressiveness	75.6 <sup>a</sup> (13.5)	63.1 <sup>b</sup> (15.4)	51.7 <sup>c</sup> (10.6)
Affective Involvement	66.3 (13.4)	65.3 (15.7)	55.8 (14.7)
Communication *	68.9 <sup>a</sup> (12.8)	61.3 (18.8)	51.3 <sup>b</sup> (7.4)
Role Performance	61.3 (12.7)	61.3 (14.9)	53.7 (13.6)
Task ** Accomplishment	68.3 <sup>a</sup> (6.9)	60.7 (11.0)	54.9 <sup>b</sup> (7.2)

(Standard deviations in parentheses)

\*\* F significant, p &lt; .001

\* F significant, p &lt; .01

their own performance within their families of origin than either comparison group. In addition, there were significant differences between all three groups on Affective Expressiveness with bulimics admitting to the most difficulty followed by the alcoholics and finally the normal comparison group. Thus, bulimic and alcoholic women also reported significantly greater difficulty expressing emotions when rating themselves as compared to the normal women. On both the Control and Communication subscales the bulimics differed from the controls, but neither group differed from the alcoholics. Bulimics, thus, view themselves as having greater difficulty effectively communicating with their families and are more likely to attempt to manage the behavior of other family members.

There were several significant differences found between the three groups on the Survey of Family Attitudes Toward Weight and Substance Abuse. As reported previously, there was a difference between groups on whether they were teased about their weight as children. Bulimics reported being teased for being overweight much more often than the other two groups, and a significant number of alcoholic and normal women reported being teased about being underweight. There were no differences between the groups on either the frequency (see Table 16) of overweight family members ( $F(2,42) = 1.7, p < .19$ ) or overweight family members distressed about their weight ( $F(2,42) = 2.68, p < .08$ ). Neither were there any significant differences between groups on specific overweight family of origin members (mother, father, siblings) or whether these family

TABLE 16

Mean Number of Overweight Family Members

	Bulimic	Alcoholic	Normal
Family of Origin	2.0 (2.0)	.93 (.96)	1.4 (1.5)
Distressed	1.6 (2.0)	.40 (.83)	.73 (1.3)
Other Family	4.2 (3.6)	1.8 (2.6)	1.9 (2.3)

(Standard Deviations in Parentheses)

NOTE: No significant differences found between groups on these measures.

members were distressed about their weight (see Table 17). Although there appeared to be a difference in the number of other family members (e.g. grandmothers, uncles, cousins, etc.) reported as overweight ( $F(2,42) = 3.28, p < .05$ ), further analysis showed no significant differences between groups on this measure.

There were also no significant differences between groups on the number of overall immediate or distant family members who had difficulties with alcohol or substance abuse (see Table 18). When asked about specific members of their families of origin (see Table 19), there was a significantly higher proportion of alcoholics (53%) as compared to bulimics (33%) and normals (7%) who reported their mothers had experienced difficulties with either alcohol or other substance abuse ( $\chi^2(2) = 7.67, p < .02$ ). No significant differences were found between groups on occurrence of alcohol problems among their fathers or siblings.

Subjects were also asked to rate how important they believed the subjects' own physical appearance was to various family members and friends (see Table 20) with no significant differences found between groups on perceived importance of the subjects' weight to: themselves ( $F(2,42) = .54, p < .59$ ); mothers ( $F(2,42) = 1.7, p < .20$ ); fathers ( $F(2,42) = .52, p < .60$ ); siblings  $F(2,42) = 1.5, p < .24$ ); friends ( $F(2,42) = .84, p < .44$ ); or boyfriends ( $F(2,42) = .02, p < .98$ ). However, there were several significant differences found between groups when asked whether they were encouraged to diet by various family members (see Table 21).

TABLE 17

Percentage of Overweight Family Members

	Bulimic	Alcoholic	Normal
Mother	53 (47)	53 (27)	47 (20)
Father	40 (20)	13 ( 7)	40 (13)
Siblings	47 (40)	20 ( 7)	40 (27)

(Percentage of Distressed Family Members in Parentheses)

**NOTE:** No significant differences found between groups on these measures.

TABLE 18

Number of Relatives with Alcohol or Substance Abuse Problems

	Bulimic	Alcoholic	Normal
Family of Origin	1.4 (2.0)	1.9 (1.0)	.93 (.96)
Other Family	2.3 (3.1)	2.6 (3.4)	1.2 (2.5)

(Standard Deviation in Parentheses)

**NOTE:** No significant differences found between groups on these measures.



TABLE 19

Familial Alcohol Abuse and Attitudes Toward Alcohol Use

	Bulimic	Alcoholic	Normal
<b>Alcoholic Family Members</b>			
Mother *	33	53	7
Father	47	67	27
Siblings	47	53	27
Rules Against Drinking/Drugs	47	53	53
Religious Beliefs About Drinking/ Drugs	60	33	40
(Percentages of Yes Responses Presented)			

\*  $\chi^2$  significant,  $p < .05$

TABLE 20

Family Members Emphasis on Subject's Physical Appearance

	Bulimics	Alcoholics	Normals
Yourself	3.4 (0.9)	3.7 (0.5)	3.5 (0.7)
Mother	3.1 (1.0)	3.4 (1.1)	2.7 (0.9)
Father	2.9 (1.1)	2.7 (1.2)	2.5 (0.9)
Siblings	2.9 (1.0)	2.9 (1.3)	2.3 (0.8)
Friends	3.2 (1.1)	3.3 (1.2)	2.9 (0.6)
Boyfriend/Spouse	3.2 (1.1)	3.1 (1.3)	3.2 (0.6)

(Standard Deviation in Parentheses)

**NOTE:** No significant differences found between groups on these measures.

TABLE 21

Percentage of Family Members Who Encouraged Subject to Diet

	Bulimics	Alcoholics	Normals
Mother *	67	33	20
Father **	53	20	7
Siblings	47	13	20
Girlfriends	13	13	20
Boyfriends	33	33	47

\*  $\chi^2$  significant,  $p < .05$

\*  $\chi^2$  significant,  $p < .01$

Bulimics reported that both their mothers ( $\chi^2 (2) = 7.2, p < .03$ ) and fathers ( $\chi^2 (2) = 8.9, p < .01$ ) encouraged them to diet significantly more than either the alcoholic women or the women in the comparison group. However, there were no differences between groups on whether they were encouraged to diet by: siblings ( $\chi^2 (2) = 4.8, p < .09$ ); friends ( $\chi^2 (2) = .34, p < .84$ ); or boyfriends ( $\chi^2 (2) = .76, p < .69$ ).

Finally, on questions of familial attitudes toward obesity or substance abuse (see Table 22) there were several significant differences between groups. There was a significant difference between groups on the frequency of discussion among family members of what one should eat ( $F (2,42) = 4.0, p < .03$ ) with the bulimics describing their families as more likely to discuss what one should eat than the alcoholics women. Neither of the criterion groups differing significantly from the comparison group on this measure. Although there was a significant difference in the whether the family tended to ridicule individuals who were overweight ( $F (2,42) = 3.2, p < .05$ ), further analyses indicated no two groups differed significantly from one another. However, the bulimics were more likely to report their families would ridicule overweight individuals than the alcoholics or normal comparison groups. There were no differences between groups on whether their family ridiculed those who abused alcohol or other substances ( $F (2,42) = .91, p < .41$ ). Neither were there any differences between groups on reported rules/religious beliefs of the family against drinking or substance abuse.

TABLE 22

Family's Attitudes Toward Obesity and Substance Abuse

	Bulimics	Alcoholics	Normals
Family Ridiculed * Overweight	2.9 (1.2)	2.2 (1.0)	1.9 (0.8)
What One Should * Eat Discussed	3.2 <sup>a</sup> (1.1)	2.2 <sup>b</sup> (0.9)	2.4 (1.0)
Family Ridiculed Substance Abusers	2.5 (1.1)	2.3 (0.9)	2.1 (0.9)

(Standard Deviations in Parentheses)

\* F significant, p < .05

## CHAPTER V

### SUMMARY AND DISCUSSION

Bulimic and alcoholic women reported significantly more problems within their families of origin when compared to a normal comparison group. These differences were noted in the area of general family functioning, as well as in self-functioning and in the dyadic relationship with their mothers. These family problems have been well documented in numerous studies of bulimia (e.g. Waller, Slade & Calam, 1990). What makes this study unique, however, is that the perceptions of alcoholics toward their family of origin have not previously been examined using the same instruments. This has made it impossible to compare the perceptions of alcoholic and bulimic women. However, the present results indicate that bulimic and alcoholic women do view their families as having similar problems. There were very few distinguishing features between bulimic and alcoholic women in their views of their families. These findings appear to contradict both Cloninger (1987) and Waller et al. (1989) who suggested that alcoholic families are quite varied along a number of dimensions, and that it would be very difficult to find any particular trends either in individual or familial functioning. However, the current study supports Ordman and Kirschenbaum's (1986) hypothesis that family functioning problems are not unique to one particular psychiatric disorder but

general family problems will be noted in families where at least one member is receiving psychiatric treatment.

Results from the present study showed that both bulimic and alcoholic women reported a lack of closeness among family members as well as a dissatisfaction with this situation. Relationships while the women were growing up were viewed as distant and not particularly supportive, and the women reported some desire for increased emotional intimacy among family members. These findings support previous research (Moos, 1981; Pike & Rodin, 1991; Waller, Slade & Calam, 1990) that bulimic women hope for closer family ties. Communication difficulties between family members were also reported. These communication problems may have made it difficult for the adolescent in these families to express their desire for a closer and more supportive family.

Both bulimic and alcoholic women reported significant problems in the dyadic relationship with their mother. The communication problems evident in the general family functioning were also apparent in this dyadic relationship. There were also difficulties noted in the amount of emotional involvement between the women and their mothers, as well as in the ability to express how they felt to one another. Both bulimic and alcoholic women perceived a lack of interest towards them by their mothers. These findings are consistent with Stuart et al.'s (1990) findings that bulimic women view their mothers as more rejecting and emotionally "cold." Although these differences were not surprising for the bulimic women, previous research on alcoholism has not suggested

these problems would be found in the relationship between alcoholic women and their mothers. Prior to this study, the relationship between the alcoholic and her mother has not been explored. The high incidence of maternal alcohol abuse (53%) reported by alcoholic women might contribute to the problems expressed by the alcoholic women. This incidence of maternal alcoholism is much higher than previous reports which have estimated the incidence of alcoholism in mothers of alcoholic women from 3 to 12 percent (Corrigan, 1980; Mulford, 1977). More recent studies have reported the incidence of parental alcoholism at 55% (Schuckit, 1989), but have not broken this data down into the occurrence of alcoholism among mothers and fathers. Bulik (1987a, 1987b, 1991) also reported the incidence of parental alcoholism among bulimic women at 60%. The frequency of maternal alcoholism may be inflated and due to the self-report method of data collection in the present study, no collateral sources were available to verify reports of alcohol abuse among family members. Bulik (1987a, 1987b, 1991) also used self-report data without collateral sources, therefore reports of familial alcoholism among bulimic women in her studies might also be inflated.

On self-ratings, the women in the comparison group appeared to view their own functioning more positively than either the bulimic or alcoholic women. Generally the bulimic women reported more difficulties in functioning than did the alcoholic women. Further, both criteria groups admitted to having difficulty expressing emotions to family members when compared to the comparison group



women. However, the ratings on this scale showed many fewer differences between the three groups than previously reported scales. This indicates that although the bulimic and alcoholic women did admit to problems in their own functioning, they did not view themselves as entirely responsible for all the problems within the family system. To date, there have been no previous research examining self-perceptions within family of origin of bulimic or alcoholic women. It is therefore unknown whether these perceptions change over time or with treatment. Certainly, this is another area which could be further examined with both bulimic and alcoholic women.

The women in the comparison group had a greater tendency to deny familial problems and respond to questions in a socially desirable manner than did either the alcoholic and bulimic women. One explanation for this finding is that there are fewer actual problems in the comparison group families. Alternatively, this finding might suggest that actual family functioning may not be nearly as important as how one chooses to frame these interactions. In support of the second hypothesis, there is some evidence that for both bulimic (e.g. Waller et al., 1990 ) and alcoholic women (Corrigan, 1980), other family members do not necessarily share the perceptions of the family reported by the bulimic and the alcoholic women. Clinical experience, supported by research (Waller et al., 1990) shows that the actual event is not nearly as important in the development of some psychiatric disorders as how the patient perceived the event. These perceptual differences are an important

difference, and their implications for treatment will be discussed later in this paper.

#### Differences Found Between Bulimic and Alcoholic Women

There were only a few familial factors which appeared to differentiate between the bulimic and alcoholic groups. The most outstanding is that bulimic women reported that others in their family attempted to control their (the bulimics) behavior across all measures. This supports previous research (Johnson & Flach, 1984) which states that the families of bulimics discourage assertive, independent behavior. Further, bulimic women reported that they also attempted to control the behavior of family members. Although this particular finding has not previously been reported, it makes sense given the enmeshment frequently seen in bulimic families. Bulimics also reported they were encouraged to diet by their parents more than the parents of either alcoholic or normal women. This might be yet another example of enmeshment or the weak boundaries noted between family members of bulimic women and it supports Pike and Rodin's (1991) research that the mothers of bulimics were more likely to report that their normal-weight daughters needed to lose weight than were the mothers of nonbulimic women. Alcoholic women did not differ from the comparison group on any measure of control, indicating that alcoholic women did not believe as strongly that their families tried to control them.

There were some differences between the women in the alcoholic and bulimic groups on measures of emotional involvement and the expression of emotions. Although both bulimic and alcoholic women reported that they had difficulty both in being involved emotionally and expressing how they felt to family members, bulimics reported greater difficulty in these areas. However, the alcoholics expressed more problems than the normal comparison group in both emotional expression and involvement.

In addition to these factors, the bulimics also differed from the alcoholic group on a measure of recollections of whether they were teased about their weight as children. The bulimics reported a higher incidence of being teased about being overweight than either of the other two groups. Igoin-Apfelbaum (1985) has previously noted a tendency among eating disordered women to be overweight prior to the onset of the eating disorder and that dieting usually precedes the onset of an eating disorder. The alcoholic women reported a greater incidence of being teased about being underweight than either of the other groups.

There were no differences between the comparison group and the bulimics on what one should eat, which supports Wold 's (1985) finding. Interestingly, there was a significant difference between the alcoholic and bulimic women on family discussion of what one should eat. Bulimics reported that their families discussed what one should eat more frequently than the alcoholic group. Perhaps this is an area of common interest and focus in bulimic families, as well as a way of exerting control over the young woman's weight. In

the alcoholic family, this might be a further example of lack of familial interaction since the normal women reported their families did discuss what one should eat more frequently than did the alcoholic women.

There were several factors where differences were expected but not found. First, there were no differences found between the groups on the frequency of overweight family members. Previous research findings have been inconclusive in this area. Although there has been a consistent trend toward a greater incidence of parental obesity among eating disordered women (e.g. Garfinkel, Moldofsky & Garner, 1980; Strober, Morrell, Burroughs, Salkin & Jacobs, 1985), this difference usually approaches, but does not achieve, significance. Other studies (e.g. Wold, 1985) have found no differences in the incidence of overweight members in bulimic families but a higher frequency of overweight family members distressed about their weight. However, the present results showed no difference between groups in either incidence of overweight family members or overweight family members distressed about their weight. This discrepancy between the present study and Wold (1985) is probably due to methodological differences. Wold (1985) surveyed family members' attitudes, whereas in the present study subjects were asked about their perceptions of family members' weight and whether the family member was distressed about being overweight.

No differences between groups on general attitudes toward obesity were found. The families of bulimic women were reported as no more likely to ridicule those who were overweight than the

families of the other groups. This suggests that although family members might have negative attitudes about weight, the bulimic women might not be aware of these negative attitudes. Thus, family members might not express clearly these negative attitudes to the eating disordered woman, but expression of attitudes toward weight might be more subtle. Alternatively, the family members might not generally hold negative attitudes toward others, but may express negativity toward the weight or attractiveness of the bulimic woman. Pike and Rodin (1991) found that the mothers of bulimic women were more likely to express dissatisfaction with their daughters' appearance, but were not as concerned about their own attractiveness.

Finally, the alcoholic women reported a significantly higher proportion of alcohol abuse among their mothers than either the bulimics or the normal comparison group. The incidence of alcohol among fathers and siblings of the groups did not differ but was higher than expected. Corrigan (1980) reported that 13% of sisters and 32% of brothers were reported as having a drinking problem which is a great deal lower than the 53% sibling alcohol abuse rate reported by alcoholics and 47% reported by bulimics in the present study. As noted earlier, this elevation might be due to the self-report method of data collection. Using this method, there was little way to verify reports, so results might overestimate occurrence of alcoholism among family members. This problem can easily be corrected in future studies by incorporating collateral data.

### Drug and Alcohol Use

Although there were no differences between groups on the age at which they first tried alcohol, as expected the alcoholic women reported significantly greater abuse of alcohol and other illicit drugs than either the bulimic or the normal women. However, a significantly higher number of bulimic women than normal women also reported having had problems with alcohol or drugs in the past, (see also Brisman & Siegal, 1984; Bulik, 1987a, 1987b). Given that bulimics who had been through substance abuse treatment were excluded from this study, this is an interesting finding. A significant proportion of bulimic women reported having tried both cocaine and amphetamines, and half of those who reported any use of these drugs reported heavy use. This is not surprising since cocaine and amphetamines are both drugs which increase activity level and decrease food intake and these drugs are often the drug of choice among eating disordered women.

It should be noted that drug use was the only area where any differences were found when the minority subjects' data were removed. When only White subjects data were examined, no significant difference was found between groups in marijuana, cocaine or heroin use. Any inferences from these results would be both tentative and dangerous due to the small sample size. However, this is an area where a great deal more research is necessary. Since both Black and White women are likely to seek treatment for alcohol abuse, and it is important to explore the similarities and

differences between these two groups.

#### Depression

In the present study there were significant differences found between groups in the area of depression. The bulimic women reported significantly greater depression both at the time of testing as well as at prior times in their lives. This increase in reported depression is not unusual since affective disturbances among bulimics are well documented (e.g. Stern, Whitaker, Hagemann, Anderson & Bargman, 1984; Swift, Andrews & Barklage, 1986). In addition to self-reports of depression, a much greater proportion of the bulimic women reported previous suicidal ideation. Although, there were no differences between the groups on whether they had made a suicide attempt, bulimics who had attempted suicide reported having made many more attempts than the women in the other two groups. For example, one of the bulimic participants who had made suicidal attempts reported seventeen attempts. Among bulimics, the incidence of dangerous and problematic behaviors (including drug and alcohol abuse and suicide attempts) have been well documented (Stuart et al., 1990).

It is possible that these differences in depression contribute heavily to the negative perceptions of family seen in the bulimic women. It has been shown (Lewinsohn & Rosenbaum, 1987) that perceptions of relationships with parents are significantly influenced by a depressed mood state and remitted depressives did not display the negative parental perceptions characteristic of

persons in a depressed state. Therefore, a plausible explanation for these results might be a difference in perceptions due to a simple state effect of a depressed mood which results in a distorted perception of increased hostility in parental relationships.

The association between depression and alcohol abuse has been noted frequently in the literature (e.g. Parker, Parker, Harford & Farmer, 1987; Windle & Miller, 1990). Previous suicide attempts among alcoholic women has previously been reported at 27% (Corrigan, 1980). However, an appreciable decrease of psychiatric symptoms is concomitant with a reduction of drinking. In a retrospective study, Tucker et al. (1985) found that half of the individuals who started drinking reported this relapse episode being associated with depression.

In the present study, the bulimics were significantly more depressed than the alcoholics. Surprisingly, the alcoholic women did not differ from the normal women on ratings of depression. One possible explanation for the difference in self-reports of depression between the bulimics and alcoholic women is an economic one. Alcoholism treatment is currently viewed as a medical problem for which inpatient treatment is often covered by insurance companies. Eating disorders appear to be viewed as less of a medical problem and more of a psychiatric problem and fewer insurance companies carry coverage for inpatient treatment. Thus, money may be an important factor in determining how "serious" a disorder is before hospitalization is required. Bulimics, therefore, may suffer with this disorder for some time and only go



for treatment when the symptoms are so pronounced that management of symptoms is no longer possible. A good possibility exists that the bulimic subjects in the present study might have been at a significantly more advanced stage of their disorder than the alcoholic women and thus significantly more desperate and depressed.

Alternatively, it is well known that the relapse rate among bulimics is fairly high. Unlike alcoholics who are instructed to abstain entirely from alcoholic substances, the bulimic is unable to avoid food totally. Even following treatment, the recovering bulimic is faced daily with the choice to purge the food she has ingested. All of the alcoholics who participated in the present study had maintained their sobriety since the onset of their inpatient treatment. The bulimic subjects, on the other hand, reported that they continued to exhibit episodic bingeing and purging behavior, although the frequency of these behaviors had been reduced considerably since treatment onset. Thus, the increased level of depression might be due to feelings of failure among the bulimics and feelings of success among alcoholics. Future research could test this theory by examining perceptions of bulimic and alcoholic women with more comparable levels of depression.

The bulimics in this study tended to express greater dissatisfaction with their bodies. This is not an uncommon finding, since depressed normal women without a history of eating disorders also tend to overestimate body size (Taylor & Cooper, 1986). Whereas nondepressed individuals engage in optimistic, self-enhancing cognitive biases or positive distortion, the perceptions

of depressed persons have often been found to be surprisingly realistic (e.g. Alloy & Ahrens, 1987; Siegal & Alloy, 1990), particularly as they relate to the self. Further, negative mood states are significant precursors to binge behavior (Davis, Freeman & Solyom, 1985; Johnson & Larson, 1985), which usually precedes purging (Freeman, Beach, Davis & Solyom, 1985). An alternative explanation for greater depression among bulimic women in the present study could be persistent negative attitudes about their own body image as well as strong focus on slight weight gains and losses. Although there was no difference found between groups on either reported weight, ideal weight, or a difference between real and ideal weight, the bulimic women reported being much affected significantly more by both a slight (two pound) weight loss and gain. Even following treatment, bulimic women appear much more aware of slight fluctuations in body mass that other women might find perfectly normal or would not notice. Huon and Brown (1989) found that one third of the bulimic women in their study were dissatisfied with more than half of their body and another forty percent reported disliking more than a quarter of specific body parts, compared to 7% and 28% of the normal comparison group. Freeman et al. (1985) found that body image dissatisfaction at the end of treatment was the most potent predictor of relapse.

#### Conclusion

It has been suggested (e.g. Kumpfer, 1987; Rhodes & Jason, 1990) that the family is the single most influential factor in

buffering children and shaping later adaptation. The present investigation was designed to examine the similarities and differences in self-reported, perceived family functioning reported by women who are either bulimic or alcoholic. These two groups were compared to normal women. The purpose for this investigation was to determine the effects of perceived familial functioning and attitudes on the development or maintenance of bulimia and alcoholism and ultimately aid in determining treatment strategies. Although a link had been made previously between alcoholic and bulimic women, methodological differences did not allow a comparison of these groups. Also, prior to the present study, there have been no attempts to use women who had been hospitalized (for a non-psychiatric problem) as a comparison group, despite the fact that the criterion groups usually had this experience.

The results indicate that there are indeed many similarities in both individual and familial functioning between bulimic and alcoholic women, which set them apart from normal women. This study supports Ordman and Kirschenbaum's (1986) findings that the perceptions of family of origin might not influence the particular symptom, but rather there are general problems in functioning which can be found in families in which at least one member receiving psychiatric treatment. These findings dispute the idea that particular symptoms are related to particular areas of familial dysfunction. Although criterion subjects' families appear to exhibit both general and specific familial dysfunction, perceived family attitudes do not appear to be a distinguishing characteristic

between bulimic and alcoholic families.

It appears that a variety of family-related factors shape the development of bulimia as well as alcoholism. These factors seem to exert their influence through a number of pathways, including; poor self-regulation of affect, family-wide discord, and emotional deprivation. The only difference found between the alcoholic and bulimic group was in the area of control. Bulimic women reported that their families were much more controlling of them than either the alcoholic or normal women.

Several methodological problems of the present study warrant discussion. The first is the racial composition of the groups. Typically, few Black women present themselves for treatment for eating disorders, and it was therefore not surprising that no Black women participated in this study. Conversely, many more Black women seek treatment for alcohol related problems. It is unwise to ignore this significant portion of the alcoholic population when comparing groups on family measures. However, if there are few or no subjects available, researchers have little choice in this matter. There are very few studies in the area of alcoholism and women. Studies examining Black women and alcoholism are virtually non-existent. The need for more studies in both areas is apparent. Such studies are important as they might aid clinicians in better understanding how Black and White alcoholic women are the same and different. Treatment options and interventions might also rise through such research efforts. One possible area for further exploration might be poly-substance abuse among White and non-white women. With very

small numbers of women, the present study seems to suggest that there may be differences in this area.

Another problem area in the present study is the comparison group. An attempt was made to have a comparison group in this study which was similar to the criterion groups in several ways. In addition to the criteria typically used to match the comparison group to the criterion groups (e.g. age, marital status, height, weight, etc.), an attempt was made to match the women on experience with inpatient treatment. This was an important step because no other study to date has used this type of comparison group even though the criterion groups consistently had inpatient experience. The women in the comparison group differed from the criterion group in several ways which may have influenced results. First, the length of hospitalization was much shorter for the women in the comparison group. Second, although there were no significant differences between groups on race, education, and income level, close examination of frequency data suggests the groups were somewhat different on these criteria. The race issue has been previously discussed. On education and income, although differences were non-significant, due to high variability, the women in the comparison group did appear to be more highly educated and have higher incomes than the alcoholic group. This is clearly a deficiency in the present study and must be attended to in future research. It might be helpful in future research to explore the possibility of using alcoholic women more closely matched on education and income level with bulimic women and with comparison

groups.

The data in the present study are cross-sectional; therefore any inferences regarding causation are tentative at best . The limitations of retrospective and self-report data are familiar, and suggest the need for well-designed prospective study designs. There are no assumptions of causality in the data presented, and an awareness of the bidirectional influence of the variables in this study must be considered. In other words, the qualities of the child influence the behavior of the parent, just as the parents' behavior influences that of the developing child. Further explorations into this topic must include cross-sectional descriptions of clinical populations to consider how individual differences among patients covary with familial measures in such areas as illness duration, age at onset, associated psychopathology, chronicity of symptoms, and change in familial dynamics over time. Subjects in this study were diagnosed for their illness and participating in treatment. Thus, there is limited generalizability of the findings to a nonclinical population, or to those not actively seeking treatment (Kent & Clopton, 1988). In addition, examiners must use other measures and settings to gain additional information about familial functioning. A more precise description of actual familial functioning that does not rely exclusively on retrospective measures of the perception of familial functioning will be gained in this way.

Despite the problems that have been noted in the data collection, a number of clinical implications might be drawn from

the results of this study. The families of both bulimics and alcoholics appear to be enmeshed and deficient in affection and support. Both alcoholism and bulimia may be mediated, in part, through deficits in self-efficacy and self-regulation stemming from an inadequate and adverse early family environment characterized as rejecting, hostile, and filled with familial discord. With both groups, such an environment might result in behavioral deficits in coping and in feelings of being overwhelmed by painful and disruptive affective states. These vulnerabilities might lead to periodic episodes of dysregulation (binge eating or drinking) followed by self-reproach. These disorders might also reflect an unfulfilled craving for nurturance and a remedy for intensely painful feelings of rejection and loneliness.

There are several implications of these findings. First, it appears that clinical interventions must be made at both the individual and family level. Individual focus must be on the alcoholic or bulimic woman's cognitions as well as self-assessment. It is also important that clinicians working with bulimic and alcoholic women to understand these patients' childhood perceptions of rejection and unhappiness and explore in therapy the factors which have led to these perceptions. Autonomy and individuation issues, especially with bulimic women, must be explored. Finally, the depressive symptoms cannot be ignored since they appear to have influence on both perceptions of familial problems and the quality of other interpersonal relationships.

Family therapy would be an important intervention choice to work on issues such as cohesiveness and conflict resolution as well as allowing the individual to attain more autonomy. The clinician must consider helping the family to set and express appropriate levels of concern for each other and to establish clear, workable rules about behavior and dealing with problems. When the issues of intimacy are resolved, it would be important to work on individuation issues. Further, emotional expression and communication about rules might be valuable targets of intervention, or even simple means of evaluating treatment. Clinical experience and research (Strober & Humphrey, 1987) have shown that these familial problems are not transitory. They often persist long after the patient's acute symptoms have subsided and, in some families, seem quite resistant to change. It is therefore likely that long-term family therapy would be appropriate.

It is quite apparent from this and previous studies that both bulimia and alcohol abuse are etiologically complex. A narrow focus on certain variables to the exclusion of others will ultimately prove to be heuristically limited and misguided. Therefore, a great deal of further research is needed to understand better the familial and personality characteristics associated with the etiology of bulimia and alcoholism in women. Throughout this paper, suggestions for future research in the area have been provided. Generally, these include conducting many more studies using female (alcoholic) subjects, more representative comparison groups and individuals at different levels of treatment. In



addition to what has already been suggested, further research might include exploration of other societal and personality factors which might contribute to the development of bulimia or alcoholism. It is important to determine whether the similarities found here might be replicated using women at the onset of treatment for these problems or women who have never previously sought treatment. It might also be interesting to explore the relationship between bulimic and alcoholic women and their fathers, as there are some suggestions in the literature that bulimic women also have difficulties in this dyadic relationship (Bruch, 1981; Casper, Eckert, Halmi, Goldberg & David, 1981; Igoin-Apfelbaum, 1985). It might also be of interest to clinicians to conduct further research on siblings of alcoholic and bulimic women who do not develop these disorders and who are able to overcome their negative childhood experiences and become capable, coping members of society. In other words, what types of protective factors contribute to the absence of these disorders in siblings of women with these types of problems (Glenn & Parsons, 1989; Werner, 1986).

With respect to the paucity of research comparing alcoholic and bulimic women, this study answers some questions and suggests others. However, further research that could answer some of these questions will be an important step in furthering our understanding of the development of these disorders.

## References

- Abel, E.L. & Sokol, R.J. (1986). Fetal alcohol syndrome is now the leading cause of mental retardation. Lancet, 2, 1222.
- Alexander, J. (1973). Defensive and supportive communications in family systems. Journal of Marital and Family Therapy, 35, 613-617.
- Alloy, L.B. & Ahrens, A.H. (1987). Depression and pessimism for the future: Biased use of statistically relevant information in predictions for self versus others. Journal of Personality and Social Psychology, 52, 366-378.
- Anderson, S.L. & Henderson, D.C. (1983). Family therapy in the treatment of alcoholism. Social Work in Health Care, 8, 79-95.
- Ausubel, D.P., Montemayor, R. & Svajian, P. (1977). Theories and problems of development. New York: Grune and Stratton.
- Beck, A.T. (1976). Cognitive therapy and the emotional disorders. New York: International Universities Press.
- Beck, A.T., Ward, C.H., Mendelson, M., Mock, J. & Erbaugh, J. (1961). An inventory for measuring depression. Archives of General Psychiatry, 4, 561-571.
- Bohman, M., Cloninger, R., Sigvardsson, S. & von Knorring, A.L. (1987). The genetics of alcoholism and related disorders. Journal of Psychiatric Research, 21, 447-452.

- Brisman, J. & Siegal, M. (1984). Bulimia and alcohol: Two sides of the same coin? Journal of Substance Abuse Treatment, 1, 113-118.
- Bruch, H. (1981). Developmental considerations of anorexia nervosa and obesity. Canadian Journal of Psychiatry, 26, 212-217.
- Bugental, D., Love, L., Kaswan, J., & April, C. (1971). Verbal-nonverbal conflict in parental messages to normal and disturbed children. Journal of Abnormal Psychology, 77, 6-10.
- Bulik, C.M. (1991). Family histories of bulimic women with and without comorbid alcohol abuse or dependence. American Journal of Psychiatry, 148, 1267-1268.
- Bulik, C.M. (1987a). Drug and alcohol abuse by bulimic women and their families. American Journal of Psychiatry, 144, 1604-1606.
- Bulik, C.M. (1987b). Alcohol use and depression in women with bulimia. American Journal of Drug and Alcohol Abuse, 13, 343-355.
- Burman, S. & Allen-Meares, P. (1991). Criteria for selecting practice theories: Working with alcoholic women. Families in Society, 72, 387-393.
- Casper, R.C., Eckert, E.D., Halimi, K.A., Goldberg, S.C. & David, J. M. (1981). Bulimia. Archives of General Psychiatry, 37, 1030-1035.

- Clark, W.B. & Medinick, L. (1982). Alcohol use and alcohol problems among U.S. adults: Results of the 1979 national survey. Alcohol consumption and related problems. (DHHS Publication number ADM 82-1190). National Institute on Alcohol Abuse and Alcoholism. Washington, D.C.: U.S. Government Printing Office, 3-52.
- Cloninger, C.R. (1987). Neurogenetic adaptive mechanisms in alcoholism. Science, 236, 410-416.
- Corrigan, E.M. (1980). Alcoholic Women in Treatment. New York: Oxford Press.
- Cotton, N.S. (1979). The familial incidence of alcoholism: A review. Journal of Studies on Alcohol, 40, 89-116.
- Cowan, E.L. & Work, W.C. (1988). Resilient children, psychological wellness and primary prevention. American Journal of Community Psychology, 16, 591-607.
- Crowther, J.H. & Chernyk, B. (1984). Bulimia and binge eating in adolescent females: A comparison. Addictive Behaviors, 11, 415-424.
- Davis, R., Freeman, R., & Solyom, L. (1985). Mood and food: An analysis of bulimic episodes. Journal of Psychiatric Research, 19, 331-335.
- Doane, J.A. (1978). Family interaction and communication deviance in disturbed and normal families: A review of research. Family Process, 17, 357-376.

- Dolan, B.M, Evans, C. & Lacey, J.H. (1989). Family composition and social class in bulimia: A catchment area study of a clinical and a comparison group. The Journal of Nervous and Mental Disease, 177, 267-272.
- Eberly, C.C. & Eberly, B.W. (1985). A review of the Eating Disorder Inventory. Journal of Counseling and Development, 64, 285-289.
- Epstein, N.B., Baldwin, L.M., & Bishop, D.S. (1983). The McMaster Family Assessment Device. Journal of Marital and Family Therapy, 9, 171-180.
- Epstein, N.B. & Bishop, D.S. (1981). Problem-centered systems theory of the family. In A.S. Gurman & D.P. Kniskern (Eds.), Handbook of family therapy. New York: Brunner/Mazel.
- Epstein N.B, Bishop, D.S., & Baldwin, L.M. (1981). McMaster model of family functioning: A view of the normal family. In F. Walsh (Ed.), Normal family process. New York: Guilford.
- Epstein, N.B., Bishop, D.S. & Levine, S. (1978). The McMaster model of family functioning. Journal of Marital and Family Functioning, 40, 19-31.
- Faunce, E. & Riskin, J. (1970). Family interaction scales II: Data analysis and findings. Archives of General Psychiatry, 22, 513-526.
- Frances, R.J., Timm, S. & Bucky, S. (1980). Studies of familial and nonfamilial alcoholism. Archives of General Psychiatry, 37, 564-566.

- Freeman, R.J., Beach, B., Davis, R., & Solyom, L. (1985 ). The prediction of relapse in bulimia nervosa. Journal of Psychiatric Research, 19, 349-353.
- Garfinkel, P., Moldofsky, H., & Garner, P. (1980). The heterogeneity of anorexia nervosa: Bulimia as a distinct subgroup. Archives of General Psychiatry, 37, 1036-1 040.
- Garner, D.M., Olmstead, M.P. & Polivy, J. (1983). Eating Disorders Inventory. Odessa, FL: Psychological Assessment Resources.
- Gavaler, J.S. (1988). Effects of moderate consumption of alcoholic beverages on endocrine functioning in post-menopausal women: Bases for hypothesis. Recent Deve lopments in Alcohol, 6, 229-251.
- Gearhart, J.G., Beebe, D.K., Milhorn, H.T., & Meeks, G.R . (1991). Alcoholism in women. American Family Physician, 44, 907-913.
- Gilbert, R., Christensen, A. & Margolin, G. (1984). Patterns of alliance in non-distressed and multi-problem families. Family Process, 23, 75-87.
- Glazer, R. (1976). Family, spouse and individual Rorschach responses of families with and without young adult schizophrenic offspring. (Doctoral dissertation, University of California at Berkeley). Cited in Doane, J.A. (1978). Family interaction and communication deviance in disturbed and normal families: A review of research. Family Process, 17, 357-376.
- Glenn, S.W. & Parsons, O.A. (1989). Alcohol abuse and familial alcoholism: Psychosocial correlates in men and women. Journal of Studies on Alcohol, 50, 116-127.

- Gorad, S.L. (1971). Communication styles and interaction of alcoholics and their wives. Family Process, 10, 475-489.
- Gordis, E. (1990). Alcohol and women: A commentary. Alcohol Alert, 10, 1-4.
- Hafner, J.L., Fakouri, M.E., & Chesney, S.M. (1988). Early recollections of alcoholic women. Journal of Clinical Psychology, 44, 302-306.
- Harbin, H.T. & Mazur, H.M. (1975). The families of drug abusers: A literature review. Family Process, 14, 411-431.
- Harkaway, J.E. (1986). Structural assessment of families with obese adolescent girls. Journal of Marital and Family Therapy, 12, 199-201.
- Hatsukami, D.K., Eckert, E.D., Mitchell, J.E. & Pyle, R. L. (1984). Affective disorder and substance abuse among women with bulimia. Psychological Medicine, 14, 701-704.
- Hatsukami, D.K., Mitchell, J.E., Eckert, E.D. & Pyle, R. (1986). Characteristics of patients with bulimia only, bulimia with affective disorder and bulimia with substance abuse problems. Addictive Behaviors, 11, 399-406.
- Hawkins, J.G. & Weis, D. (1985). The Social Developmental Model: An integrated approach to delinquency prevention. Journal of Primary Prevention, 6, 73-97.
- Holden, N.L. & Robinson, P.H. (1988). Anorexia nervosa and bulimia nervosa in British Blacks. British Journal of Psychiatry, 152, 544-549.

- Herzog, D. (1982). Bulimia in the adolescent. American Journal of the Disabled Child, 136, 985-989.
- Hudson, J.I., Pope, H.G., Yurgelson-Todd, D., Jonas, J.M., & Frankenberg, F.R. (1987). A controlled study of lifetime prevalence of affective and other psychiatric disorders in bulimic outpatients. American Journal of Psychiatry, 144, 1283-1287.
- Humphrey, L.L. (1983). A sequential analysis of family processes in anorexia and bulimia. In Report of the fourth Ross conference on medical research. Columbus, OH: Ross Laboratories.
- Huon, G.F. & Brown, L.B. (1989). Assessing bulimics dissatisfaction with their body. British Journal of Clinical Psychology, 28, 283-284.
- Igoin-Apfelbaum, L. (1985). Characteristics of family background in bulimia. Psychotherapy and Psychosomatics, 43, 161-167.
- Johnson, C. & Flach, A. (1984). Family characteristics of 105 patients with bulimia. American Journal of Psychiatry, 142, 1321-1324.
- Johnson, C. & Larson, R. (1985). Bulimia: An analysis of moods and behavior. Psychosomatic Medicine, 44, 341-351.
- Katzman, M.A. (1986, August). A data based description of family functioning. Paper presented at the meeting of the American Psychological Association.



- Kaufman, E. & Kaufman, P. (1979). From a Psychodynamic orientation to a structural family therapy approach in the treatment of drug dependency. In E. Kaufman & P. Kaufman (Eds.), Family therapy and drug abuse. New York: Gardner.
- Kent, J. & Clopton, J. (1988). Bulimia: A comparison of psychological adjustment and familial characteristics in a nonclinical sample. Journal of Clinical Psychology, 44, 964-971.
- Kinney, J. & Leaton, G. (1987). Loosening the Grip. St. Louis: Times Mirror/Mosby College Publishing.
- Klagsbrun, M. & Davis, D. (1977). Substance abusers and family interaction. Family Process, 16, 149-174.
- Kog, E. & Vandereycken, W. (1985). Family characteristics of anorexia nervosa and bulimia: A review of the research literature. Clinical Psychology Review, 5, 159-180.
- Kog, E., Vandereycken, W., & Vertommen, H. (1985). Toward a verification of the psychosomatic family model: A pilot study of ten families with an anorexia/bulimia nervosa patient. International Journal of Eating Disorders, 4, 525-538.
- Krener, P.G., Abramowitz, S.I. & Walker, P.B. (1986). Relation of family factor to treatment outcome for bulimic patients. Psychotherapy and Psychosomatics, 45, 127-132.

- Kumpfer, K.L. (1987). Special populations: Etiology and prevention of vulnerability to chemical dependence in children of substance abusers. In B.S. Brown & A.R. Mills (Eds.). Youth at risk for Substance Abuse. (NIDA Publication No. ADM 87). Washington, D.C.: U.S. Government Printing Office.
- Lacey, J.H. & Dolan, B.M. (1988). Bulimia in British Black and Asian women: A catchment area study. British Journal of Psychiatry, 152, 73-79.
- Latham, R.W. (1985). Familial alcoholism: Evidence from 237 alcoholics. British Journal of Psychiatry, 147, 54-57.
- Lester, L. (1982). The special needs of the female alcoholic. Social Casework, 63, 451-456.
- Levine, M.P. (1987). Student eating disorders: Anorexia nervosa and bulimia. Washington, D.C.: National Education Association.
- Lewinsohn, P.M. & Rosenbaum, M. (1987). Recall of parental behavior by acute depressive, remitted depressives, and nondepressives. Journal of Personality and Social Psychology, 52, 611-619.
- Miller, I. W., Epstein, N. B., Bishop, D. S., & Kietmen, G. I. (1985). The McMaster Family Assessment Device: Reliability and validity. Journal of Marital and Family Therapy, 11, 345-356.
- Minuchin, S., Rosman, B. & Baker, L. (1978). Psychosomatic families: Anorexia nervosa in context. Cambridge: Harvard University Press.

- Mitchell, J. E., Hatsukami, D., Eckert, E. D., & Pyle, R. L. (1985). Characteristics of 275 patients with bulimia. American Journal of Psychiatry, 142, 482-485.
- Moos, R. (1981). Family Environment Scale manual. Palo Alto: Consulting Psychologists Press.
- Mulford, H.A. (1977). Women and men problem drinking: Sex differences in patients served by Iowa's community alcoholism centers. Journal of Studies on Alcohol, 38, 1627-1639.
- Murray, J.B. (1989). Psychologists and alcoholic women. Psychological Reports, 64, 627-44.
- Ogden, J. & Wardle, J. (1990). Control of eating and attributional style. British Journal of Clinical Psychology, 29, 445-446.
- Olson, D.H. (1986). Circumplex model VII: Validation studies and FACES III. Family Process, 25, 337-351.
- Olson, D.H., Portner, J., & Lavee, Y. (1985). FACES-III. St. Paul, MN: Family Social Science.
- Olson, D.H., Sprenkle, D. & Russell, C. (1979). Circumplex model of marital and family systems: Cohesion and adaptability dimensions, family types and clinical application. Family Process, 18, 3-28.
- Ordman, A.M & Kirschenbaum, D.S. (1986). Bulimia: Assessment of eating, psychological adjustment, and familial characteristics. International Journal of Eating Disorders, 5, 865-878.

- Orford, J. & Velleman, R. (1991). The environmental intergenerational transmission of alcohol problems: A comparison of two hypotheses. British Journal of Medical Psychology, 64, 189-200.
- Parker, D.A., Parker, E.S., Harford, T.C. & Farmer, G.C. (1987). Alcohol use and depression symptoms among employed men and women. American Journal of Public Health, 77, 704-707.
- Pike, K.M. & Rodin, J. (1991). Mothers, daughters and disordered eating. Journal of Abnormal Psychology, 100, 198-204.
- Pole, R., Waller, D., Stewart, S., & Parkin-Feigenbaum, L. (1988). Parental caring versus overprotection in bulimia. International Journal of Eating Disorders, 7, 601-606 . .
- Pratt, D.M. & Hansen, J.C. (1987). A test of the curvilinear hypothesis with FACES II and III. Journal of Marital and Family Therapy, 13, 387-392.
- Rhodes, J.E. & Jason, L.A. (1990). A social stress model of substance abuse. Journal of Clinical and Consulting Psychology, 58, 395-401.
- Roberto, L.G. (1986). Bulimia: The transgenerational view. Journal of Marital and Family Therapy, 12, 231-240.
- Roman, P.M. (1988). Biological features of women's alcohol use: A review. Public Health Report, 103, 628-637.
- Saba, G., Barrett, M.J. & Schwartz, R. (1983). All or nothing: The bulimia epidemic. Family Therapy Networker, 7, 43-44.

- Schilit, R. & Gomberg, E. (1987). Social support structures of women in treatment for alcoholism. Health and Social Work, 12, 187-195.
- Schuckit, M.A. (1989). Familial alcoholism. Drug Abuse and Alcoholism Newsletter, 18, 1-3.
- Schuham, A. (1970). Power relations in emotionally disturbed and normal family triads. Journal of Abnormal Psychology, 75, 30-37.
- Schwartz, R. (1982). Bulimia and family therapy: A case study. International Journal of Eating Disorders, 2, 75-82.
- Schwartz, R.C., Barrett, M.J. & Saba, G. (1985). Family therapy of bulimia. In D.M. Garner & P.E. Garfinkel (Eds.), Handbook of psychotherapy for anorexia nervosa and bulimia. New York: Guilford.
- Selvini-Palazzoli, M. (1978). Self-starvation: From individual to family therapy in the treatment of anorexia nervosa. New York: Jason Aronson.
- Selzner, M.L. (1971). The Michigan Alcoholism Screening Test: The quest for a new diagnostic instrument. American Journal of Psychiatry, 127, 1653-1658.
- Selzner, M.L., Gomberg, E.S. & Nordhoff, J.A. (1979). Men and women's responses to the MAST. Journal of Studies on Alcohol, 40, 502-504.
- Selzner, M.L., Vinokur, A. & van Rooijen, L. (1975). A self-administered Short Michigan Alcoholism Screening Test (SMAST). Journal of Studies on Alcohol, 36, 117-126.

- Siegel, S.J. & Alloy, L.B. (1990). Interpersonal perceptions and consequences of depressive significant-other relationships: A naturalistic study of college roommates. Journal of Abnormal Psychology, 99, 361-373.
- Singh, J. K., Jackson, G., Holloway, J., Fromme, D., DeVilliers, D., Lewin, M. & Prophet, X. (1988, August). Family and personality characteristics of college-age bulimic women. Paper presented at the meeting of the American Psychological Association, Atlanta, GA.
- Skinner, H.A. (1987). Self-report instruments for family assessment. In T. Jacobs (Ed.), Family interaction and psychopathology: Theories, methods, findings. New York: Plenum Press.
- Skinner, H.A., Steinhauser, P.D., & Santa-Barbara, J. (1983). The Family Assessment Measure. Canadian Journal of Community Mental Health, 2, 91-105.
- Slade, P. (1982). Toward a functional analysis of anorexia nervosa and bulimia nervosa. British Journal of Clinical Psychology, 21, 167-191.
- Solvberg, H. & Blaker, R. (1975). Communication efficiency in couples with and without a schizophrenic offspring. Family Process, 14, 515-534.
- Stanton, M.D. (1983). A family theory of drug abuse. In E. Gottheil, K.A. Druley, T.E. Skoloda & M. Waxman (Eds.), Etiologic Aspects of Alcohol and Drug Abuse (pp. 147-156). Springfield, IL: Charles C. Thomas Company.

- Steinglass, E. (1975). Experimenting with family treatment approaches to alcoholism, 1950-1975: A review. Family Process, 13, 97-123.
- Steinhauser, P.D., Santa-Barbara, J. & Skinner, H.A (1984). The Process Model of family functioning. Canadian Journal of Psychiatry, 29, 77-88.
- Stern, S., Whitaker, C. A., Hagemann, N. J., Anderson, R. B. & Bargman, G.J. (1984). Anorexia nervosa: The hospital's role in family treatment. Family Process, 20, 395-408.
- Strober, M. & Humphrey, L.L. (1987). Familial contributions to the etiology and course of anorexia nervosa and bulimia. Journal of Clinical and Consulting Psychology, 55, 65 4-659.
- Strober, M., Morrell, W., Burroughs, J., Salkin, B., & Jacobs, C. (1985). A controlled family study of anorexia nervosa. Journal of Psychiatric Research, 19, 239-246.
- Stuart, G.W., Laraia, M.T., Ballenger, J.C. & Lydiard, R .B. (1990). Early family experiences of women with bulimia and depression. Archives of Psychiatric Nursing, 4, 43-52.
- Swift, W.J., Andrews, D. & Barklage, N.E. (1986). The relationship between affective disorder and eating disorders: A review of the literature. American Journal of Psychiatry, 143, 290-299.
- Taylor, M.J. & Cooper, P.J. (1986). Body size overestimation and depressed mood. British Journal of Clinical Psychology, 25, 153-154.

- Tucker, J.A., Vuchinich, R.E. & Harris, C.V. (1985). Determinants of substance abuse relapse. In M. Galizo & S.A. Maisto (Eds.), Determinants of substance abuse (pp.383-421). New York: Plenum Press.
- Waller, G., Calam, R. & Slade, P. (1989). Eating disorders and family interaction. British Journal of Clinical Psychology, 28, 285-286.
- Waller, G., Slade, P., & Calam, R. (1990). Who knows best? Family interaction and eating disorders. British Journal of Psychiatry, 156, 546-550.
- Wardle, J. (1987). Compulsive eating and dietary restraint. British Journal of Clinical Psychology, 26, 47-55.
- Warren, K.R. & Bast, R.J. (1988). Alcohol-related birth defects: An update. Public Health Report, 103, 638-642.
- Werner, E.E. (1986). Resilient offspring of alcoholics: A longitudinal study from birth to age 18. Journal of Studies in Alcohol, 47, 34-40.
- Westley, W.A. & Epstein, N.B. (1969). The silent majority. San Francisco: Jossey-Bass.
- Williams, G., Chamove, A.S., & Millar, H.R. (1990). Eating disorders, perceived control, assertiveness and hostility. British Journal of Clinical Psychology, 29, 327-335.
- Wilsnack, R.W., Wilsnack, S.C. & Klassen, A.D. (1984). Women's drinking and drinking problems: Patterns from a 1981 national survey. American Journal of Public Health, 74, 1231-1238.



- Wilson, C. & Orford, J. (1978). Children of alcoholics. Journal of Studies on Alcohol, 39, 121-143.
- Windle, M. & Miller, B.A. (1990). Problem drinking and depression among DWI offenders: A three wave longitudinal study. Journal of Consulting and Clinical Psychology , 58, 166-174.
- Wold, P. N. (1985). Family attitudes toward weight in bulimia and in affective disorder: A pilot study. The Psychiatric Journal of the University of Ottawa, 10, 162-164.
- Wonderlich, S.A. & Swift, W.J. (1990). Perceptions of parental relationships in the eating disorders: The relevance of depressed mood. Journal of Abnormal Psychology, 99, 353-360.
- Zigler-Driscoll, G. (1979). The similarities in families of drug dependents and alcoholics. In E. Kaufman & P. Kaufman (Eds.), Family Therapy of Drug and Alcohol Abuse. New York: Gardner.
- Zung, B.J. (1982). Evaluation of the Michigan Alcoholism Screening Test (MAST) in assessing lifetime and recent problems. Journal of Clinical Psychology, 38, 425-439.

## APPENDIXES

APPENDIX A

CRITERIA FOR SUBJECT INCLUSION

## CRITERIA FOR SUBJECT PARTICIPATION

- (1) Subjects must be women over 18 years old.
- (2) Subjects must have participated in inpatient treatment for EITHER bulimia or alcohol abuse and are currently participating in outpatient therapy.
- (3) The control group will consist of women who have be enhospitalized for a medical reason and have not been hospitalized previously for either bulimia or substance abuse.

## PROCEDURE FOR COLLECTION OF DATA

- (1) Subjects will be asked to complete a consent form outlining the methods and materials for this study. This form will stay in the participant's patient/client file. They will be given the second copy of the consent form.
- (2) Subjects will be asked to fill out a group of questionnaires which will take approximately 45 minutes to one hour.
  - The questionnaires are self-explanatory. Participants likely to question which family they are being asked to answer questions about. Unless otherwise specified, subjects are asked to respond about their relationships with their families of origin.
- (3) After completing the questionnaires, subject will return the packet to the counselor who will return the packet to the examiner. I can be reached at the following numbers if you have any further questions:

Home 799-6748

Work 862-8121 ex. 7369  
862-8027

APPENDIX B

CONSENT FORM

## INFORMED CONSENT STATEMENT

Project Title: The Families of Bulimic and Alcoholic Women  
Experimenters: Joan A. Holloway, Ph.D. and Jatinder Singh, M.S.

---

I, \_\_\_\_\_ hereby authorize and direct Joan A. Holloway, Ph.D. and Jatinder K. Singh, M.S., or representatives of their choosing, to perform the procedures listed here.

- A. Purpose: This study is designed to investigate factors which contribute to the development of eating disorders and substance abuse.
- B. Procedures: In participating in this experiment, you will be asked to do the following things:
1. Complete a number of questionnaires about your eating and drinking habits and how this affects various areas of your life such as emotional, behavioral, and cognitive functioning.
  2. You will also be asked to respond to questions about your relationships, especially with family members.
- C. Duration of participation: Your participation will require 45 to 60 minutes.
- D. Confidentiality: All results and information about you and your relatives will be kept in a secure place. This Consent Form will remain in your confidential medical file at this hospital and remaining data collected will be maintained by the examiner. In addition, computer files of collected data will be numerically coded. Results from this experiment may be presented at professional meetings or in publication. However, this data will always be presented in group form, thereby preserving your anonymity.

Consent Form for "The Families of Bulimic and Alcoholic Women"  
Page Two

---

- E. **Risks:** The main risk in participating in this research is that your identity and facts about your life will be known to the investigators. However, every effort and precaution will be taken to protect your privacy and confidentiality as designated by the Code of Ethics for Psychologists which have been specified by the American Psychological Association. Another possible risk is that you might be uncomfortable when asked about your life or your perceptions of your relatives. Again, all information will be kept confidential.
- F. **Benefits:** As a research participant, you will be exposed to the conduct of scientific research and you may gain insight into your own thoughts and feelings about your family. The primary benefit is the knowledge that you have contributed to the understanding of factors associated with "addictive behaviors". Such an understanding might lead to greater understanding in the treatment and prevention of eating disorders and substance abuse.

I have been fully informed about the procedures listed here. I am aware of what I will be asked to do and the risks and benefits in this study. I also understand the following statements:

I certify that I am 18 years of age or older.

My participation today is part of an investigation entitled "The Families of Bulimic and Alcoholic Women".

The purpose of these procedures are to examine thoughts and feelings which may contribute to the development or maintenance of eating disorders and substance abuse problems.

I understand that my 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.

Consent Form for "The Families of Bulimic and Alcoholic Women"  
Page Three

---

I understand that I may contact any of the experimenters at the following address and telephone number should I desire to discuss my participation in this study and/or to request information pertaining to the study's outcome: 215 North Murray Hall, Department of Psychology, Oklahoma State University, Stillwater, OK 74078-0250, 405/744-6027. Additionally, I understand that I may contact Terry Macuila, University Research Services, 001 Life Sciences East, Oklahoma State University, Stillwater, OK 74078, 405/744-5700.

I have read and fully understand this consent form. I sign it freely and voluntarily. A copy of this form has been given to me. I hereby give permission for my participation.

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

Time: \_\_\_\_\_ AM PM

\_\_\_\_\_  
Signature of Witness

\_\_\_\_\_  
Date

I certify that I have personally completed all the blanks in this form and have explained them to the subject before requesting the subjects sign this consent form.

\_\_\_\_\_  
Signature of Project Director of Authorized Representative



APPENDIX C

INSTRUCTIONS TO SUBJECTS

Dear Participant:

I'd like to thank you in advance for participating in this study. Due to confidentiality reasons, I will not be able to thank you in person. I know that there are a lot of demands on your time and I greatly appreciate your taking the time to help me out. In this packet you will find a number of questionnaires for you to complete. Some of the questions on the different questionnaires will make perfect sense, other questions you may find unusual. It would be a great help if you would read and respond to each item, regardless of how unusual it may seem to you. I'd like to remind you to not write your name on any of the questionnaires. If you wish to access any of the information from this study in the future, you can contact your counselor who will be able to identify the information you provided me by your identification number. If you have any questions, please feel free to ask your counselor as I have been in touch with the counselors and they know what it is I am studying. If there is still a question that cannot be answered, please answer the question and write any comments you may have in the margin. Again, I'd like to thank you for your participation.

Sincerely,

Jatinder K. Singh

P.S. Unless otherwise specified, please respond to the questionnaires asking about your family on your Family of Origin (e.g. mother, father, brothers and sisters) rather than your current family. Thanks!

APPENDIX D

DEMOGRAPHIC INFORMATION SHEET



7. Are you financially dependent on your parents? YES NO

What is your approximate yearly income (if you are financially dependent on your parents, please estimate their yearly income as well as your own and indicate both of these):

- A. Under \$5,000
- B. \$5,001 - \$10,000
- C. \$10,001 - \$20,000
- D. \$20,001 - \$30,000
- E. \$30,001 - \$50,000
- F. \$50,001 - \$75,000
- G. Greater than \$75,000

8. Do you have any brothers or sisters? YES NO

A. If so, please list their ages and degree of relationship to you (e.g. full, half, step, adopted, etc. . . .)

Brothers

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Sisters

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

APPENDIX E

BECK DEPRESSION INVENTORY

CHOOSE ONE STATEMENT UNDER EACH LETTER THAT BEST DESCRIBES YOU FOR THE LAST SEVEN DAYS. Circle the number to the left of the statement you have chosen.

- A. 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.
- B. 0 I am not particularly discouraged about the future.  
1 I feel discouraged about the future.  
2 I feel that I have nothing to look forward to.  
3 I feel that the future is hopeless and that things cannot improve.
- C. 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.  
3 I feel I am a complete failure as a person.
- D. 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 any more.  
3 I am dissatisfied or bored with everything.
- E. 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.
- F. 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.
- G. 0 I don't feel disappointed in myself.  
1 I am disappointed in myself.  
2 I am disgusted with myself.  
3 I hate myself.

- H. 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.
- I. 0 I don't have any thoughts of killing myself.  
1 I have thoughts 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 a chance.
- J. 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.
- K. 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 the things that used to irritate me.
- L. 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 all of my interest in other people.
- M. 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.
- N. 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 unattractive.  
3 I believe that I look ugly.
- O. 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 anything.  
3 I can't do any work at all.



- P. 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.
- Q. 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.
- R. 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.
- S. 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.
- I am purposefully trying to lose weight. YES \_\_\_\_ NO \_\_\_\_
- T. 0 I am no more worried about my health 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.
- U. 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.

APPENDIX F

EATING DISORDERS INVENTORY

This is a scale which measures a variety of attitudes, feelings and behaviors. Some of the items relate to food and eating. Others ask you about your feelings about yourself. THERE ARE NO RIGHT OR WRONG ANSWERS SO TRY VERY HARD TO BE COMPLETELY HONEST IN YOUR ANSWERS. RESULTS ARE COMPLETELY CONFIDENTIAL. Read each question and place an "x" under the column which applies best to you. Please answer each question very carefully. Thank you.

- A = Always
- B = Usually
- C = Often
- D = Sometimes
- E = Rarely
- F = Never

	A	B	C	D	E	F
1. I eat sweets and carbohydrates without feeling nervous .....	___	___	___	___	___	___
2. I think my stomach is too big .....	___	___	___	___	___	___
3. I wish I could return to the security of childhood .....	___	___	___	___	___	___
4. I eat when I am upset .....	___	___	___	___	___	___
5. I stuff myself with food .....	___	___	___	___	___	___
6. I wish I could be younger .....	___	___	___	___	___	___
7. I think about dieting .....	___	___	___	___	___	___
8. I get frightened when my feelings are too strong .....	___	___	___	___	___	___
9. I think my thighs are too large .....	___	___	___	___	___	___
10. I feel ineffective as a person .....	___	___	___	___	___	___
11. I feel extremely guilty after overeating .....	___	___	___	___	___	___
12. I think that my stomach is just the right size .....	___	___	___	___	___	___
13. Only outstanding performance is good enough in my family .....	___	___	___	___	___	___
14. The happiest time in life is when you are a child .....	___	___	___	___	___	___
15. I am open about my feelings .....	___	___	___	___	___	___
16. I am terrified of gaining weight .....	___	___	___	___	___	___
17. I trust others .....	___	___	___	___	___	___
18. I feel alone in the world .....	___	___	___	___	___	___
19. I feel satisfied with the shape of my body .....	___	___	___	___	___	___
20. I feel generally in control of things in my life .....	___	___	___	___	___	___
21. I get confused about what emotion I am feeling .....	___	___	___	___	___	___
22. I would rather be an adult than a child .....	___	___	___	___	___	___
23. I can communicate with others easily ..	___	___	___	___	___	___

24. I wish I were someone else ..... \_\_\_\_\_
25. I exaggerate or magnify the importance  
of weight ..... \_\_\_\_\_
26. I can clearly identify what emotion  
I am feeling ..... \_\_\_\_\_
27. I feel inadequate ..... \_\_\_\_\_
28. I have gone on eating binges where I  
have felt I could not stop ..... \_\_\_\_\_
29. As a child, I tried very hard to avoid  
disappointing my parents and teachers ..... \_\_\_\_\_
30. I have close relationships ..... \_\_\_\_\_
31. I like the shape of my buttocks ..... \_\_\_\_\_
32. I am preoccupied with the desire to  
be thin ..... \_\_\_\_\_
33. I don't know what's going on inside me ..... \_\_\_\_\_
34. I have trouble expressing my emotions  
to others ..... \_\_\_\_\_
35. The demands of adulthood are too great ..... \_\_\_\_\_
36. I hate being less than best at things . \_\_\_\_\_
37. I feel secure about myself ..... \_\_\_\_\_
38. I think about bingeing (over-eating) .. \_\_\_\_\_
39. I feel happy that I am not a child  
anymore ..... \_\_\_\_\_
40. I get confused as to whether or not I  
am hungry ..... \_\_\_\_\_
41. I have a low opinion of myself ..... \_\_\_\_\_
42. I feel that I can achieve my standards ..... \_\_\_\_\_
43. My parents have expected excellence  
of me..... \_\_\_\_\_
44. I worry that my feelings will get out  
of control ..... \_\_\_\_\_
45. I think my hips are too big ..... \_\_\_\_\_
46. I eat moderately in front of others and  
stuff myself when they are gone ..... \_\_\_\_\_
47. I feel bloated after eating a normal  
meal ..... \_\_\_\_\_
48. I feel that people are happiest when  
they are children ..... \_\_\_\_\_
49. If I gain a pound, I worry that I will  
keep gaining ..... \_\_\_\_\_
50. I feel that I am a worthwhile person .. \_\_\_\_\_
51. When I am upset, I don't know if I am  
sad, frightened or angry ..... \_\_\_\_\_
52. I feel that I must do things perfectly  
or not do them at all ..... \_\_\_\_\_
53. I have the thought of trying to vomit  
in order to lose weight ..... \_\_\_\_\_
54. I need to keep people at a certain  
distance (feel uncomfortable if  
someone tries to get too close) ..... \_\_\_\_\_
55. I think that my thighs are just the  
right size ..... \_\_\_\_\_

- 56. I feel empty inside (emotionally) ..... \_ \_ \_ \_ \_
- 57. I can talk about personal thoughts or  
feelings ..... \_ \_ \_ \_ \_
- 58. The best years of your life are when  
you become an adult ..... \_ \_ \_ \_ \_
- 59. I think that my buttocks are too large \_ \_ \_ \_ \_
- 60. I have feelings that I can't quite  
identify ..... \_ \_ \_ \_ \_
- 61. I eat or drink in secrecy ..... \_ \_ \_ \_ \_
- 62. I think my hips are just the right size \_ \_ \_ \_ \_
- 63. I have extremely high goals ..... \_ \_ \_ \_ \_
- 64. When I am upset, I worry that I will  
start eating ..... \_ \_ \_ \_ \_

APPENDIX G

MICHIGAN ALCOHOL SCREENING TEST (SMAST)

Please answer each question by circling "Yes" or "No"

- |   |     |    |
|---|-----|----|
| 1. Do you feel you are a normal drinker?  | YES | NO |
| 2. Have you ever awakened the morning after some drinking the night before and found that you could not remember a part of the evening before?  | YES | NO |
| 3. Does your husband/boyfriend (or parents) ever worry or complain about your drinking?   | YES | NO |
| 4. Can you stop drinking without a struggle after one or two drinks?  | YES | NO |
| 5. Do you ever feel badly about your drinking?  | YES | NO |
| 6. Do friends or relatives think you are a normal drinker?  | YES | NO |
| 7. Do you ever try to limit your drinking to certain times of the day or to certain places?   | YES | NO |
| 8. Are you always able to stop drinking when you want to?   | YES | NO |
| 9. Have you ever attended a meeting of Alcoholics Anonymous (AA)?   | YES | NO |
| 10. Have you gotten in fights when drinking?  | YES | NO |
| 11. Has drinking ever created relationship problems?  | YES | NO |
| 12. Has a family member ever gone to anyone for help about your drinking?   | YES | NO |
| 13. Have you ever lost friends because of drinking?   | YES | NO |
| 14. Have you ever gotten into trouble at work because of drinking?  | YES | NO |
| 15. Have you ever lost a job because of drinking?   | YES | NO |
| 16. Have you ever neglected your obligations, your family or work for two or more days in a row because you were drinking?  | YES | NO |
| 17. Do you ever drink before noon?  | YES | NO |
| 18. Have you ever been told you have liver trouble?   | YES | NO |
| 19. Have you ever had delirium tremens (DT's), severe shaking, heard voices or seen things that weren't there after heavy drinking?   | YES | NO |
| 20. Have you ever gone to anyone for help about your drinking?  | YES | NO |
| 21. Have you ever been in the hospital because of drinking?   | YES | NO |
| 22. Have you ever been a patient in a psychiatric ward of a hospital where drinking was part of the problem?  | YES | NO |
| 23. Have you ever been seen at a psychiatric or mental health clinic, or gone to a doctor, social worker or clergymen for help with an emotional problem in which drinking played a part? | YES | NO |
| 24. Have you ever been arrested because of drunk behavior?  | YES | NO |
| 25. Have you ever been arrested for drunk driving or driving after drinking?  | YES | NO |

APPENDIX H

GENERAL HEALTH QUESTIONNAIRE



Please indicate if you have ever experienced problems in any of the following areas:

		<u>When/Treated Medically?</u>
1. High blood pressure	YES NO	_____
2. Depression	YES NO	_____
3. Suicidal Thoughts	YES NO	_____
4. Suicide Attempts	YES NO	_____
5. Premenstrual Syndrome	YES NO	_____
6. Anemia	YES NO	_____
7. Liver Disease	YES NO	_____
8. Seizures/Convulsions	YES NO	_____
9. Hepatitis/Pancreatitis	YES NO	_____
10. Drug Abuse	YES NO	_____
11. Drug Addiction	YES NO	_____
12. Fainting Spells	YES NO	_____
13. Head Injury	YES NO	_____
14. Have you ever:		
A. Had surgery?	YES ____ NO ____	
B. Been hospitalized for an alcohol or drug problem ?	YES ____ NO ____	
C. Other than alcohol or drug treatment, have you spent any time in the hospital?	YES ____ NO ____	
Why?	_____	
When/How long?	_____	

APPENDIX I

EATING HABITS QUESTIONNAIRE

Please answer the following questions as they apply to you  
CURRENTLY:

1. Do you believe you have a problem with your eating habits?

YES \_\_\_\_ NO \_\_\_\_

What? \_\_\_\_\_

- a. Have you ever spent time in a hospital (in-patient) for an eating problem? YES \_\_\_\_ NO \_\_\_\_

How long were you hospitalized? \_\_\_\_\_

How long ago did this occur? \_\_\_\_\_

2. Please approximate your current:

Height: \_\_\_\_\_ Weight: \_\_\_\_\_

3. How long have you been at your present weight? \_\_\_\_\_

a. Highest weight since age 18: \_\_\_\_\_ How long? \_\_\_\_\_

b. Lowest weight since age 18: \_\_\_\_\_ How long? \_\_\_\_\_

- c. As a child, were you ever teased about being:

Overweight? YES \_\_\_\_ NO \_\_\_\_

Underweight? YES \_\_\_\_ NO \_\_\_\_

- d. Are you involved in an occupation that requires you to maintain a certain weight? YES \_\_\_\_ NO \_\_\_\_

- e. How much does a 2 pound weight gain affect how you feel about yourself?

- A. extremely
- B. very much
- C. moderately
- D. slightly
- E. not at all

f. How much does a 2 pound weight loss affect how you feel about yourself?

- A. extremely
- B. very much
- C. moderately
- D. slightly
- E. not at all

g. How fat do you feel?

- A. extremely
- B. very much
- C. moderately
- D. slightly
- E. not at all

h. How often do you weigh or measure your body?

- A. more than daily
- B. daily
- C. more than weekly
- D. weekly
- E. monthly
- F. more than monthly

4. Does you weight regularly fluctuate by 10 pounds or more?  
YES \_\_\_\_ NO \_\_\_\_

5. How many meals do you eat a day? \_\_\_\_\_

6. Do you eat snacks? YES \_\_\_\_ NO \_\_\_\_  
How many times a day? \_\_\_\_\_

7. Have you ever been on a diet? YES \_\_\_\_ NO \_\_\_\_

Which of the following methods of dieting do you prefer  
(rank 1-9):

_____ skip meals	_____ complete fast
_____ restrict carbohydrates	_____ restrict sweets
_____ restrict fats	_____ reduce portions
_____ fad diets	_____ reduce calories
_____ other (specify) _____	

8. Do you binge eat? YES \_\_\_\_ NO \_\_\_\_

How often? \_\_\_\_\_

How long ago did you last binge? \_\_\_\_\_

9. Have you ever purged (gotten rid of food you've eaten by vomiting, using laxatives, exercising heavily or some other means other than digestion)? YES \_\_\_\_ NO \_\_\_\_
- How often? \_\_\_\_\_  
How long ago did you last purge? \_\_\_\_\_  
How old were you when you first purged? \_\_\_\_\_
10. What kinds of foods do you binge? \_\_\_\_\_
12. Do you exercise? YES \_\_\_\_ NO \_\_\_\_
- How often? \_\_\_\_\_  
What types of exercise? \_\_\_\_\_
13. In your opinion, how serious a problem is you bingeing and/or purging? \_\_\_\_\_
14. In your opinion, what is your ideal body weight? \_\_\_\_\_

APPENDIX J

ALCOHOL AND DRUG USE QUESTIONNAIRE

Please answer the following questions as they apply to you  
CURRENTLY:

SECTION ONE

1. How old were you when you had your first drink? \_\_\_\_\_
2. Do you consider yourself now, or have you ever considered yourself to be an alcoholic or problem drinker?  
YES \_\_\_\_\_ NO \_\_\_\_\_
  - a. If yes, how many years have you been an alcoholic or problem drinker? \_\_\_\_\_
3. Can you identify a specific even or events which caused you to begin drinking too much? YES \_\_\_\_\_ NO \_\_\_\_\_
4. Has there ever been a period of time in your life when you were just a social drinker; that is, when you drank mainly with other people and usually did not get drunk?  
YES \_\_\_\_\_ NO \_\_\_\_\_
5. If you take one or two drinks, do you generally continue to drink until you are drunk? YES \_\_\_\_\_ NO \_\_\_\_\_
6. Which, if any, of the following withdrawal symptoms have you experienced if you have not had a drink for a longer period of time than usual?
  - \_\_\_\_\_ Tremors (shakes)
  - \_\_\_\_\_ Hallucinations
  - \_\_\_\_\_ Delirium tremens (Dt's) or confusion, vomiting, headaches, dizziness
  - \_\_\_\_\_ Seizures
7. Have you ever had health problems which a doctor said may be due to your drinking, or has a doctor ever told you to cut down or stop drinking? YES \_\_\_\_\_ NO \_\_\_\_\_
8. Have you ever taken drinks of alcohol in the mornings?  
YES \_\_\_\_\_ NO \_\_\_\_\_

9. In the last six months, how often did you drink wine?

- A. Daily
- B. Five or six days a week
- C. Three or four days a week
- D. One or two days a week
- E. Three times a month or fewer
- F. Did not drink wine

A. When you drank wine, how much did you typically drink in a day? \_\_\_\_\_

B. Brand you most frequently drink? \_\_\_\_\_

10. In the last six months, how often did you drink beer?

- A. Daily
- B. Five or six days a week
- C. Three or four days a week
- D. One or two days a week
- E. Three times a month or fewer
- F. Did not drink beer

A. When you drank beer, how much did you typically drink in a day? \_\_\_\_\_

B. Brand you most frequently drink? \_\_\_\_\_

11. In the last six months, how often did you have drinks containing whiskey or liquor?

- A. Daily
- B. Five or six days a week
- C. Three or four days a week
- D. One or two days a week
- E. Three times a month or fewer
- F. Did not drink liquor

A. When you drank liquor, how much did you typically drink in a day? \_\_\_\_\_

B. Brand you most frequently drink? \_\_\_\_\_



12. Have you ever had troubles within relationships due to your drinking? YES \_\_\_\_ NO \_\_\_\_

What kinds of problems? \_\_\_\_\_

13. Approximately how long ago did you have your last drink?

\_\_\_\_\_

14. If you have not consumed any alcohol in the last six months, was there ever a time when you did drink?

YES \_\_\_\_ NO \_\_\_\_

How much and how often? \_\_\_\_\_

#### SECTION TWO

15. Please indicate which of the following drugs you have ever used:

A. Marijuana YES NO How often/much? \_\_\_\_\_

B. Cocaine YES NO How often/much? \_\_\_\_\_

C. Heroin YES NO How often/much? \_\_\_\_\_

D. Amphetamines YES NO How often/much? \_\_\_\_\_  
(Speed, uppers)

E. Minor Tranquilizers YES NO How often/much? \_\_\_\_\_  
(Librium, Valium, Xanax, etc...)

F. Major Tranquilizers YES NO How often/much? \_\_\_\_\_  
(Thorazine, Mellaril, Haldol, Prolixin)

G. Antidepressants YES NO How often/much? \_\_\_\_\_  
(Elavil, Prozac, Nardil, Parnate)

H. Inhalents YES NO How often/much? \_\_\_\_\_  
(glue, paint thinner, hair spray, etc...)

I. Other \_\_\_\_\_ How often/much? \_\_\_\_\_

17. Are you currently taking any drugs on a regular basis?

YES \_\_\_\_ NO \_\_\_\_

What drugs and how often? \_\_\_\_\_

18. Do you smoke cigarettes? YES \_\_\_\_ NO \_\_\_\_

How many packs a day? \_\_\_\_\_

How many years have you smoked? \_\_\_\_\_

19. Do you drink coffee? YES \_\_\_\_ NO \_\_\_\_

How many cups a day? \_\_\_\_\_

How many years have you been drinking coffee? \_\_\_\_\_

APPENDIX K

FAMILY ADAPTABILITY AND COHESION

SCALES (FACE S-III)

Real Scale

- 1 = almost never  
 2 = once in a while  
 3 = sometimes  
 4 = frequently  
 5 = almost always

Use the number of the response which most closely describes the family you grew up in. Put the number in the front of the item number.

- \_\_\_\_\_ 1. Family members ask each other for help.  
 \_\_\_\_\_ 2. In solving problems, the childrens' suggestions are followed.  
 \_\_\_\_\_ 3. We approve of each other's friends.  
 \_\_\_\_\_ 4. Children have a say in their discipline.  
 \_\_\_\_\_ 5. We like to do different things with just our immediate family.  
 \_\_\_\_\_ 6. Different persons act as leaders in our family.  
 \_\_\_\_\_ 7. Family members feel closer to other family members than to people outside the family.  
 \_\_\_\_\_ 8. Our family changes its way of handling tasks.  
 \_\_\_\_\_ 9. Family members like to spend free time with each other.  
 \_\_\_\_\_ 10. Parent(s) and children discuss punishment together.  
 \_\_\_\_\_ 11. Family members feel very close to each other.  
 \_\_\_\_\_ 12. The children make the decisions in our family.  
 \_\_\_\_\_ 13. When our family gets together for activities, everybody is present.  
 \_\_\_\_\_ 14. Rules change in our family.  
 \_\_\_\_\_ 15. We can easily think of things to do as a family.  
 \_\_\_\_\_ 16. We shift household responsibilities from person to person.  
 \_\_\_\_\_ 17. Family members consult other family members on their decisions.  
 \_\_\_\_\_ 18. It is hard to identify the leader(s) in our family.  
 \_\_\_\_\_ 19. Family togetherness is very important.  
 \_\_\_\_\_ 20. It is hard to tell who does which household chores.

Ideal Scale

- 1 = almost never  
2 = once in a while  
3 = sometimes  
4 = frequently  
5 = almost always

Use the number of the response which most closely describes how, ideally, you would have liked your family to be. Again, this is for the family you grew up in. Put the number in the front of the item number.

- \_\_\_\_\_ 1. Family members would ask each other for help.  
\_\_\_\_\_ 2. In solving problems, the childrens suggestions would be followed.  
\_\_\_\_\_ 3. We would approve of each other's friends.  
\_\_\_\_\_ 4. Children would have a say in their discipline.  
\_\_\_\_\_ 5. We would like to do different things with just our immediate family.  
\_\_\_\_\_ 6. Different persons would act as leaders in our family.  
\_\_\_\_\_ 7. Family members would feel closer to other family members than to people outside the family.  
\_\_\_\_\_ 8. Our family would change its way of handling tasks.  
\_\_\_\_\_ 9. Family members would like to spend free time with each other.  
\_\_\_\_\_ 10. Parent(s) and children would discuss punishment together.  
\_\_\_\_\_ 11. Family members would feel very close to each other.  
\_\_\_\_\_ 12. The children would make the decisions in our family.  
\_\_\_\_\_ 13. When our family got together, everybody would be present.  
\_\_\_\_\_ 14. Rules would change in our family.  
\_\_\_\_\_ 15. We could easily think of things to do as a family.  
\_\_\_\_\_ 16. We would shift household responsibilities from person to person.  
\_\_\_\_\_ 17. Family members would consult other family members on their decisions.  
\_\_\_\_\_ 18. We would know who the leader(s) was in our family.  
\_\_\_\_\_ 19. Family togetherness would be very important.  
\_\_\_\_\_ 20. We could tell who does which household chores.

APPENDIX L

THE FAMILY ASSESSMENT DEVICE (FAD)

The following pages contain a number of statements about families. Please read each statement carefully, and decide how well it describes your own family. You should answer according to how you see your family.

For each statement there are four (4) possible responses:

- |                       |  |
|-----------------------|--|
| 1 = Strongly agree    | Select 1 if you feel that the statement describes your family very accurately.           |
| 2 = Agree             | Select 2 if you feel that the statement describes your family for the most part.         |
| 3 = Disagree          | Select 3 if you feel that the statement does not describe your family for the most part. |
| 4 = Strongly disagree | Select 4 if you feel that the statement does not describe your family at all.            |

Try not to spend too much time thinking about each statement, but respond as quickly and as honestly as you can. If you have trouble with one, answer with your first reaction. Please be sure to answer every statement and mark all your answers in the space provided to the left of each statement.

- 1. Planning family activities is difficult because we misunderstand each other.
- 2. We resolve most everyday problems around the house.
- 3. When someone is upset, the others know why.
- 4. When you ask someone to do something, you have to check that they did it.
- 5. If someone is in trouble, the others become too involved.
- 6. In times of crisis, we can turn to each other for support.
- 7. We don't know what to do when an emergency comes up.
- 8. We sometimes run out of the things that we need.
- 9. We are reluctant to show our affection for each other.
- 10. We make sure members meet their family responsibilities.
- 11. We cannot talk to each other about the sadness we feel.
- 12. We usually act on our decisions regarding problems.
- 13. You only get the interest of others when something is important to them.
- 14. You can't tell how a person is feeling from what they are saying.
- 15. Family tasks don't get spread around enough.
- 16. Individuals are accepted for what they are.
- 17. You can easily get away with breaking the rules.
- 18. People come right out and say things instead of hinting at them.
- 19. Some of us just don't respond emotionally.

- \_\_\_ 20. We know what to do in an emergency.
- \_\_\_ 21. We avoid discussing our fears and concerns.
- \_\_\_ 22. It is difficult to talk to each other about tender feelings.
- \_\_\_ 23. We have trouble meeting our bills.
- \_\_\_ 24. After our family tries to solve a problem, we usually discuss whether it worked or not.
- \_\_\_ 25. We are too self-centered.
- \_\_\_ 26. We can express our feelings to each other.
- \_\_\_ 27. We have no clear expectations about toilet habits.
- \_\_\_ 28. We do not show our love for each other.
- \_\_\_ 29. We talk to people directly rather than through go-betweens.
- \_\_\_ 30. Each of us has particular duties and responsibilities.
- \_\_\_ 31. There are lots of bad feelings in the family.
- \_\_\_ 32. We have rules about hitting people.
- \_\_\_ 33. We get involved with each other only when something interests us.
- \_\_\_ 34. There's little time to explore personal interests.
- \_\_\_ 35. We often don't say what we mean.
- \_\_\_ 36. We feel accepted for what we are.
- \_\_\_ 37. We show interest in each other when we can get something out of it personally.
- \_\_\_ 38. We resolve most emotional upsets that come up.
- \_\_\_ 39. Tenderness takes second place to other things in our family.
- \_\_\_ 40. We discuss who is to do household jobs.
- \_\_\_ 41. Making decisions is a problem for our family.
- \_\_\_ 42. Our family shows interest in each other only when they can get something out of it.
- \_\_\_ 43. We are frank with each other.
- \_\_\_ 44. We don't hold to any rules or standards.
- \_\_\_ 45. If people are asked to do something, they need reminding.
- \_\_\_ 46. We are able to make decisions about how to solve problems.
- \_\_\_ 47. If the rules are broken, we don't know what to expect.
- \_\_\_ 48. Anything goes in our family.
- \_\_\_ 49. We express tenderness.
- \_\_\_ 50. We confront problems involving feelings.
- \_\_\_ 51. We don't get along well together.
- \_\_\_ 52. We don't talk to each other when we are angry.
- \_\_\_ 53. We are generally dissatisfied with the family duties assigned to us.
- \_\_\_ 54. Even though we mean well, we intrude too much into each others' lives.
- \_\_\_ 55. There are rules about dangerous situations.
- \_\_\_ 56. We confide in each other.
- \_\_\_ 57. We cry openly.
- \_\_\_ 58. We don't have reasonable transport.
- \_\_\_ 59. When we don't like what someone has done, we tell them.
- \_\_\_ 60. We try to think of different ways to solve problems.



APPENDIX M

THE FAMILY ASSESSMENT MEASURES (FAM-III)

General Scale

On the following pages you will find 50 statements about your family as a whole. Please read each statement carefully and decide how well the statement describes your family. Then, make your response beside the statement number on the separate answer sheet.

If you STRONGLY AGREE with the statement then circle the letter "a" beside the item number; if you AGREE with the statement then circle the letter "b".

If you DISAGREE with the statement then circle the letter "c"; if you STRONGLY DISAGREE with the statement then circle the letter "d".

Please circle only one letter (response) for each statement. Answer every statement, even if you are not completely sure of your answer.

1. We spend too much time arguing about what our problems are.
2. Family duties are fairly shared.
3. When I ask someone to explain what they mean, I get a straight answer.
4. When someone in our family is upset, we don't know if they are angry, sad, scared or what.
5. We are as well adjusted as any family could possibly be.
6. You don't get a chance to be an individual in our family.
7. When I ask why we have certain rules, I don't get a good answer.
8. We have the same views on what is right and wrong.
9. I don't see how any family could get along better than ours.
10. Some days we are more easily annoyed than on others.
11. When problems come up, we try different ways of solving them.
12. My family expects me to do more than my share.
13. We argue about who said what in our family.
14. We tell each other about things that bother us.
15. My family could be happier than it is.
16. We feel loved in our family.
17. When you do something wrong in our family, you don't know what to expect.
18. It's hard to tell what the rules are in our family.
19. I don't think any family could possibly be happier than mine.
20. Sometimes we are unfair to each other.
21. We never let things pile up until they are more than we can handle.
22. We agree about who should do what in our family.
23. I never know what's going on in our family.
24. I can let my family know what is bothering me.
25. We never get angry in our family.
26. My family tries to run my life.
27. If we do something wrong, we don't get a chance to explain.
28. We argue about how much freedom we should have to make our own decisions.
29. My family and I understand each other completely.
30. We sometimes hurt each others feelings.

31. When things aren't going well it takes too long to work them out.
32. We can't rely on family members to do their part.
33. We take the time to listen to each other.
34. When someone is upset, we don't find out until much later.
35. Sometimes we avoid each other.
36. We feel close to each other.
37. Punishments are fair in our family.
38. The rules in our family don't make sense.
39. Some things about my family don't entirely please me.
40. We never get upset with each other.
41. We deal with our problems even when they're serious.
42. One family member always tries to be the center of attention.
43. My family lets me have my say, even if they disagree.
44. When our family gets upset, we take too long to get over it.
45. We always admit our mistakes without trying to hide anything.
46. We don't really trust each other.
47. We hardly ever do what is expected of us without being told.
48. We are free to say what we think in our family.
49. My family is not a perfect success.
50. We have never let down another family member in any way.

Dyadic Relationship Scale

On the following pages you will find 42 statements about the relationship between yourself and YOUR MOTHER. Please read each statement carefully and decide how well the statement describes your relationship with your mother. Then, make your response beside the statement number on the separate answer sheet.

If you **STRONGLY AGREE** with the statement then circle the letter "a" beside the item number; if you **AGREE** with the statement then circle the letter "b".

If you **DISAGREE** with the statement then circle the letter "c"; if you **STRONGLY DISAGREE** with the statement then circle the letter "d".

Please circle only one letter (response) for each statement. Answer every statement, even if you are not completely sure of your answer.

1. This person and I never see family problems the same way.
2. This person accepts what I expect of her in the family.
3. I know what this person means when she says something.
4. I can tell when this person is upset.
5. This person and I aren't close to each other.
6. This person is reasonable when I make a mistake.
7. This person and I have the same views about right and wrong.
8. This person can never accept my answer to a problem.
9. This person takes her share of family responsibilities.
10. This person takes what I say the wrong way.
11. When I'm upset, this person usually knows why.
12. When I'm upset, I know this person really cares.
13. Even when I admit I'm wrong, this person doesn't forgive me.
14. This person and I argue about how we spend our spare time.
15. When I have a problem, this person helps me with it.
16. This person complains that I expect too much of her.
17. If this person is angry with me, I hear about it from someone else.
18. This person lets me know how she feels about me.
19. This person still loves me even when I argue with her.
20. I never know how this person will react when I make a mistake.
21. This person is all wrong about the importance of religion.
22. When there's a problem between us, this person finds a new way of working it out.
23. This person often ruins things for me.
24. This person is available when I want to talk to her.
25. When this person gets angry with me, she stays upset for days.
26. This person gets too involved in my affairs.
27. This person gives me a chance to explain when I make a mistake.
28. This person is right about the importance of education.
29. When problems come up between us, this person is all talk and no action.
30. This person expects too much of me.

31. Even if this person disagrees, she still listens to my point of view.
32. This person takes it out on me when she has had a bad day.
33. This person really trusts me.
34. This person is always on my back.
35. There's a big difference between what this person expects of me and how she behaves.
36. I can count on this person to help me in a crisis.
37. This person and I have the same views about who should do what in our family.
38. I often don't know whether to believe what this person says.
39. When this person is upset, she tries to get me to take sides.
40. This person worries too much about me.
41. I don't need to remind this person to do her share.
42. This person is right about the importance of being successful.

Self-Rating Scale

On the following pages you will find 42 statements about how your are functioning in the family. Please read each statement carefully and decide how well the statement describes you. Then, make your response beside the statement number on the separate answer sheet.

If you STRONGLY AGREE with the statement then circle the letter "a" beside the item number; if you AGREE with the statement then circle the letter "b".

If you DISAGREE with the statement then circle the letter "c"; if you STRONGLY DISAGREE with the statement then circle the letter "d".

Please circle only one letter (response) for each statement. Answer every statement, even if you are not completely sure of your answer.

1. My family and I usually see our problems the same way.
2. My family expects too much of me.
3. My family knows what I mean when I say something.
4. When I'm upset, my family knows what's bothering me.
5. My family doesn't care about me.
6. When someone in my family makes a mistake, I don't make a big deal out of it.
7. I argue a lot with my family about the importance of religion.
8. When my family has a problem, I have to solve it.
9. I do my share of duties in the family.
10. I often don't understand what other family members are saying.
11. If someone in the family has upset me, I keep it to myself.
12. I stay out of other family members' business.
13. I get angry when others in the family don't do what I want.
14. I think education is much more important than my family does.
15. I have trouble accepting someone else's answer to a family problem.
16. What I expect of the rest of the family is fair.
17. If I'm upset with another family member, I let someone else tell them about it.
18. When I'm upset, I get over it quickly.
19. My family doesn't let me be myself.
20. My family knows what to expect from me.
21. My family and I have the same views about what is right and wrong.
22. I keep on trying when things don't work out in the family.
23. I am tired of being blamed for family problems.
24. Often I don't say what I would like to because I can 't find the words.
25. I am able to let others in the family know how I really feel.
26. I really care about my family.
27. I'm not as responsible as I should be in the family.
28. My family and I have the same views about being successful.
29. When problems come up in my family, I let other people solve them.

30. My family complains that I always try to be the center of attention.
31. I'm available when others want to talk to me.
32. I take it out on my family when I'm upset.
33. I know I can count on the rest of my family.
34. I don't need to be reminded what I have to do in the family.
35. I argue with my family about how to spend my spare time.
36. My family can depend on me in a crisis.
37. I never argue about who should do what in our family.
38. I listen to what other family members have to say, even when I disagree.
39. When I'm with my family, I get too upset too easily.
40. I worry too much about the rest of my family.
41. I always get my way in our family.
42. My family leaves it to me to decide what's right and wrong.

APPENDIX N

SURVEY OF FAMILY ATTITUDES TOWARD WEIGHT  
AND SUBSTANCE ABUSE



SECTION ONE

1. Would you consider any of the following family members overweight?

Mother	YES	NO	
Father	YES	NO	
Brothers	YES	NO	How many? _____
Sisters	YES	NO	How many? _____
Grandmother	YES	NO	
Grandfather	YES	NO	
Aunts	YES	NO	How many? _____
Uncles	YES	NO	How many? _____
Cousins	YES	NO	How many? _____
Others	YES	NO	Who? _____

2. Place a "d" by anyone above who you believe is distressed about being overweight.

3. In your opinion, do your family members ridicule overweight people?

- A. never
- B. rarely
- C. sometimes
- D. often

4. Was the food that one "should" and "should not" eat a topic of conversation among family members?

- A. never
- B. rarely
- C. sometimes
- D. often

5. When you were growing up, how important was YOUR personal appearance (or the way you looked) to:

	Not Important	A Little Important	Somewhat Important	Very Important
You	1	2	3	4
Your mother	1	2	3	4
Your father	1	2	3	4
Your sisters	1	2	3	4
Your brothers	1	2	3	4
Your boyfriends	1	2	3	4
Your girlfriends	1	2	3	4

6. Which of the following individuals have encouraged you to go on a diet or lose weight (please check all which apply):

- mother  
 father  
 brother  
 sister  
 other relative \_\_\_\_\_  
 girlfriend  
 boyfriend/spouse  
 employer  
 teacher/coach  
 other (please specify) \_\_\_\_\_

**SECTION TWO**

7. Would you consider any of the following family members to have problems with alcohol/drugs?

Mother	YES	NO	
Father	YES	NO	
Brothers	YES	NO	How many? _____
Sisters	YES	NO	How many? _____
Grandmother	YES	NO	
Grandfather	YES	NO	
Aunts	YES	NO	How many? _____
Uncles	YES	NO	How many? _____
Cousins	YES	NO	How many? _____
Others	YES	NO	Who? _____

8. In your opinion, do your family ridicule those who abuse alcohol/drugs?

- A. never  
 B. rarely  
 C. sometimes  
 D. often

9. Does your family have rules about not drinking alcohol or using drugs? YES \_\_\_\_ NO \_\_\_\_

What? \_\_\_\_\_

10. Does your family have strong religious or moral beliefs against alcohol or drug use? YES \_\_\_\_ NO \_\_\_\_

What? \_\_\_\_\_

VITA<sup>2</sup>

Jatinder Kaur Singh

Candidate for the Degree of

Doctor of Philosophy

**Thesis:** THE FAMILIES OF BULIMIC AND ALCOHOLIC WOMEN

**Major Field:** Psychology

**Biographical:**

**Personal Data:** Born in New Dehli, India, September 1, 1962,  
the daughter of Gursharan and Ranjit K. Singh.

**Education:** Graduated from Westminster High School,  
Westminster, Colorado, in May, 1980; received Bachelor of  
Science Degree in Psychology from the University of  
Colorado in August, 1983; received Master of Science  
degree from Oklahoma State University in December, 1984;  
completed requirements for the Doctor of Philosophy degree  
at Oklahoma State University in May, 1992.

**Professional Experience:** Psychological Associate, Bi-State  
Community Mental Health Clinic, August 1984 to August,  
1985; Teaching Assistant, Department of Psychology,  
Oklahoma State University, August 1985, to May, 1986;  
Therapist, Psychological Services Clinic, Oklahoma State  
University, September 1985 to September, 1988;  
Psychological Assistant, Enid State School, September  
1986 to September 1988; Therapist, Marriage and Family  
Clinic, Oklahoma State University, September 1986 to  
September 1989; Research Assistant, Center for Alcohol and  
Drug Related Studies, University of Oklahoma Health  
Sciences Center, September 1988 to June 1989; Psychology  
Intern, Patton State Hospital, July 1989 to July 1990;  
Advanced Psychology Intern, Patton State Hospital, July  
1990 to August 1990; Psychotherapist, Bethlehem House  
Project, Inc., July 1990 to present.

Name: Jatinder Kaur Singh

Date of Degree: May, 1992

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: THE FAMILIES OF BULIMIC AND ALCOHOLIC WOMEN

Pages in Study: 146

Candidate for the Degree of  
Doctor of Philosophy

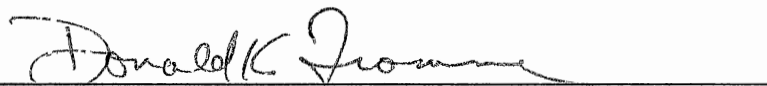
Major Field: Psychology-Clinical

Scope and Method of Study: The purpose of the study was to assess bulimic and alcoholic women's perceptions of functioning of their families of origin as compared to a normal comparison group. The study sought to answer questions of how these groups were similar and different in their perceptions and whether specific familial dysfunctions or attitudes would result in the development of either bulimia or alcohol abuse in women.

Each of the three subject groups (bulimics, alcoholics and comparison) consisted of 15 women. All subjects participated in in-patient treatment for either bulimia, alcoholism or some medical problem. Subjects were asked to complete a number of questionnaires assessing eating and drinking behavior as well as four questionnaires assessing perceptions of familial functioning.

Findings and Conclusions: Both bulimic and alcoholic women reported significantly greater difficulties in perceived familial functioning than the comparison group women suggesting general family functioning difficulties among families with a bulimic or alcoholic member. There were no differences noted on familial attitudes toward weight or substance abuse. Among the few differences noted between the criterion groups was that the bulimic women reported being significantly more depressed than the alcoholic or comparison group women. In addition, the alcoholic group reported a higher incidence of maternal alcohol abuse.

ADVISER'S APPROVAL

  
\_\_\_\_\_