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RELATIONS BETWEEN CODEPENDENCY AND
THE DEVELOPMENT OF EATING DISORDERS
DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Dinah Frances Meyer, B.A., M.A.

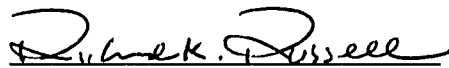
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The Ohio State University
1995

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To My Father

ACKNOWLEDGEMENTS

This project represents both the culmination of a long personal journey and the genesis of a new one. For this reason, it has truly come from my heart. I thank my adviser, Dr. Rich Russell, for his gentle support and unwavering belief in this research. Appreciation is also extended to my dissertation committee, Drs. Pam Highlen and Bruce Walsh, for their helpful suggestions and guidance. Deb Seriing has provided both informal consultation and caring friendship throughout this project. Sincere thanks is expressed to Barbara Tudas for serving as the primary instigator of the idea behind this project. I also thank Linda Hamilton for handling those computer layouts which were beyond my proficiencies. My family has been an invaluable resource of support for me, and I especially thank my mother, sister, Aunt Mary, and Bruno for their understanding throughout my many years in school. Finally, I thank Bruce Eaken for providing me with his wisdom, comic relief, and love.

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CHAPTER I

INTRODUCTION

One of the most pervasive problems encountered on college campuses and in clinical practice is that of treating women with eating disorders. While cases of anorexia and bulimia have been documented for over one hundred years, its incidence has recently increased in epidemic proportions, particularly among college women. Recent estimates postulate that up to 65% of college freshmen display some behavioral and psychological characteristics of disturbed eating habits (Mintz & Betz, 1988). Although the DSM-III-R criteria differ for anorexia and bulimia, both disorders typically involve an extreme drive for thinness, chronic dietary consciousness, and a distorted body image (American Psychiatric Association, 1987). Yet, each disorder is distinguishable on the basis of particular hallmark characteristics. Anorexics typically manifest a significant weight loss of 25% below normal weight, while bulimics engage in some form of binge eating and purging. The clinical picture is further complicated by the growing recognition of a "sub-clinical eating disorder", whereby many of the symptoms diagnostic of eating disorders are manifested, but not enough to meet the rigid DSM-III-R criteria (Scaif-Mclver & Thompson, 1989). Given these frightening numbers, it is little wonder that extensive efforts have been devoted to exploring the etiology and maintenance of these disorders.

Theory

In response to this need, a plethora of theory and research has attempted to elucidate the biological, familial, and psychosocial correlates of disordered eating behaviors. Many etiological perspectives have been offered, including sociocultural, cognitive-behavioral, and family systems (Friedlander & Siegel, 1990). Within the last 10 years, a major focus of attention has been on the separation-individuation model as providing a rich formulation for understanding eating disorders. This paradigm is based on the view that an individual's drive toward healthy personal adjustment is critically dependent on his or her ability to psychologically separate from the parents and gain a sense of identity as a separate individual (Hoffman, 1984). Stemming from psychodynamic, family systems, and object relations theory, a theoretical link exists between the cognitions and behaviors indicative of eating disorders, and a woman's difficulty separating from her parents in order to acquire a separate identity (Strober & Humphrey, 1987). This formulation appears to have arisen from both the object relations literature and Bowlby's work on attachment to caregiver and separation distress (Armstrong & Roth, 1989). Inasmuch as these theories provide the foundation of separation-individuation theory, a brief description of each is pertinent.

Object Relations Theory

Advocates of object relations theory trace the inception of eating disorders to early relationships with caregivers (usually maternal). When the caregiver is responsive to the child's needs, the child experiences a sense of security and control. The child is responded to appropriately and sensitively, and she gradually acquires the internal capacity to perform functions previously

executed by the parent (Heesacker & Neimeyer, 1990). She learns to conceptualize and differentiate her needs, and more importantly, to satisfy them by self-regulation. Thus, adequate parenting allows the object (mother) to be internalized and provides the child with a sense of security and self-directedness (Goodsitt, 1985). In contrast to the responsive parent, the inconsistent caregiver may be unresponsive or overanxious in meeting the child's needs. The parent may respond to the child at his or her own convenience, leaving the child doubting the legitimacy of her own needs and sensations (Bruch, 1973). In particular, the child is perplexed over differentiating between disturbances in her biological field (hunger) and emotional experiences (interpersonal needs). This later translates into an inability to discriminate between hunger and satiation, or hunger and other emotional discomforts. Eventually, the child comes to rely on external objects for meeting her needs as a replacement for a deficient self-regulatory system. The end result of this unfortunate process is feelings of fragmentation, helplessness, and ineffectiveness due to confused ego boundaries (Goodsitt, 1985).

In later childhood and adolescence, the caregiver's pattern of inappropriate responding may be manifested in discouragement of the child's expression of feelings (Bruch, 1973). Often, the parents of an anorexic child dismiss the child's feelings as unimportant, and proceed to inform her about the true nature of her feelings and needs. These experiences result in a young woman who is unable to identify and differentiate her own feelings, is extremely dependent on her parents, and feels an overwhelming sensation of powerlessness. The symptoms of an eating disorder begin to emerge when the young woman first

faces new situations which call for independence, typically during puberty. At this time, she is called to initial separation from her parents, but her feelings of inadequacy and helplessness make this a terrifying prospect, exacerbated by increased biological urges. This process offers a plausible explanation as to why the inception of eating disorders is often in college, usually the young woman's first true separation from her parents. She possesses no clear individuality, and her sense of ineffectiveness translates into a desperate attempt to gain self-control by rigidly controlling her eating (Heesacker & Neimeyer, 1990). In summary, eating disorders are a reactive attempt to control needs over which a woman has come to feel powerless. Unfortunately, this attempt for control occurs through the most accessible means - her own body.

Attachment Theory

A second theoretical underpinning of eating disorders is derived from Bowlby's attachment theory. Bowlby (as cited in Armstrong & Roth, 1989) posits a relationship between "secure attachment" to the caregiver, and lifelong security, comfort, and healthy functioning. The phenomenon of "anxious attachment" comes from situations in which attachment figures are fragile, frustrating, or unpredictable people who are inaccessible or insensitive when called upon for support. The hallmark of anxious attachment comes to be displayed as feelings of helplessness, insecure neediness, and basic inadequacy. For anorexic women, relying on weight loss and dieting is a desperate attempt to establish a sense of personal efficacy and control in those interpersonal attachments seen as tenuous (Armstrong & Roth, 1989). Similarly, bulimic women who binge may be seeking a readily available method

of self-soothing since they have learned to expect others to be unavailable or insensitive to their needs (Smolak & Levine, 1993).

While familial situations promoting anxious attachments may be a precursor to eating disorders, it is clear that not all women from such families develop symptomatology. Beattie (1988) portrays the most at-risk families with finer distinction. Families in which the mother cannot see her daughter as distinctively different from herself and places a high investment in the daughter as a narcissistic extension of herself tend to be the most controlling and manipulative. For most young women, the positive aspects of the mother-daughter relationship outweigh the ambivalent, negative ones. However, when the relationship is overly dependent and conflictual, the daughter cannot achieve physical or psychological separation, and the stage is set for the development of controlled eating behaviors. Thus, as with object relations theory, eating disorders appear to emanate from the struggle for psychological separation of a young woman from her parents.

Research Support

Although many theorists and clinicians assert the critical role of separation-individuation in the development of eating disorders, empirical research in this area is only slowly accumulating. However, the existing empirical evidence clearly suggests that women's eating problems may represent a failed separation-individuation process. Problems in this process appear to result largely from pervasive disturbances in family dynamics, role conflict, and suppressed affective expression among family members (Strober & Humphrey, 1987). Early work by Minuchin (as cited in Garner, Garfinkel, & Bemis, 1982)

elucidated four impaired familial patterns of interaction which characterize some families with an anorexic child. These patterns include: 1. enmeshment, 2. overprotectiveness, 3. avoidance of conflict, and 4. rigidity. Enmeshment refers to a repressive closeness, characterized by a discouragement of privacy and autonomy. As such, the child is unprepared to face the independent challenges inherent in adolescence. The overprotective tendencies of the parent further impede the child's developing sense of self-sufficiency. Interestingly, the anorexic family appears quite functional and peaceful. This is merely a facade, however, since these families avoid conflict and hostile feelings at all costs. As a result, the child learns that sad and angry feelings are unacceptable and must be dealt with privately on her own. The parents' reaction to their child's illness is further evidence of this dynamic. While the anorexic girl is miserable over her dependency and efforts to please, her parents see her as an obedient, happy child. Finally, the parents of an anorexic child typically maintain rigid demands for achievement, often leaving the child feeling as if her efforts are never at an acceptable level. While these dysfunctional patterns appear to be fairly consistent in the families of anorexics, caution is warranted against drawing conclusions regarding causation. It is difficult to make inferences as to whether these patterns are consistent over time, and in turn, how they are influenced by the presence of an anorexic illness. Additionally, these descriptive studies do not suggest what proportion in predisposition is accounted for by familial factors (Strober & Humphrey, 1987).

Support for Minuchin's work was garnered by Humphrey (1989), who compared family interactions among anorexic, bulimic, and normal families using direct observation. Mothers of anorexic women were found to be more

nurturing and comforting, yet also more ignoring and neglecting toward their daughters than were mothers of bulimics or normal controls. Humphrey concluded that excessive nurturance hinders the daughter's attempts to individuate, while the negation of her self-expressions keeps her submissive and dependent on her parents. Separation conflicts were also confirmed by Friedlander and Siegel (1990), who investigated psychological separation and eating disorders in undergraduate women. These researchers ascertained that women evidencing higher dependency conflicts and poor self-other differentiation reported higher self-estimates of interpersonal distrust, an inability to discriminate emotions, and an excessive drive for thinness. In a parallel study, Rhodes and Kroger (1992) identified two dimensions of parental behavior particularly relevant to the development of late adolescent eating disorders: Care and protection. Women with eating disorders reported greater emotional coldness, indifference, and rejection from their mothers, as well as more intrusion and prevention of independent behavior than non-eating disordered controls. While these studies must be interpreted prudently due to their retrospective nature, it appears that the inability to achieve a separate sense of identity may be a predisposing factor in the development of an eating disorder.

Evidence of insecure attachment as a correlate of eating disorders comes from a study assessing object relations in a sample of undergraduate women (Heesacker & Neimeyer, 1990). Subjects evidencing higher levels of disturbed eating demonstrated greater insecure attachment, social incompetence, fears of abandonment, loneliness, and autonomy as reflected in their current interpersonal relationships. Similarly, Armstrong and Roth (1989) discovered

that 96% of their eating disordered sample experienced anxious attachment to their mothers and viewed separation as a sign of rejection, attributable to their own deficiencies. Thus, the anorexic woman appears to use her illness and restrictive dieting behaviors as a means of sustaining interpersonal attachments. More recently, this finding was supported by an investigation which found that anorexics' retained excessive guilt, anxiety, and over-responsibility in relation to parents, while concurrently remaining emotionally and functionally dependent on their parents (Smolak & Levine, 1993).

Taken together, these studies suggest a picture of the anorectic family that is enmeshed, overprotective, conflict avoiding, and unresponsive to the daughter's self-expressions. While the psychological profile of anorexics characterize them as struggling for a sense of individuality and effectiveness, they present themselves in a manner that is quite disparate from this picture (Bruch, 1982). At the outset, the individual appears to be successful, well-adjusted, and a source of pride for her parents. However, she harbors a drive for thinness which embodies her quest for an identity and sense of competency. Further, she is plagued with guilt over her wish to grow up and maintain an identity separate from that of her parents. As such, a young woman finds herself feeling personally deficient, inadequate, and overly dependent on her parents. Upon facing developmental tasks requiring individuation, the woman focuses on eating and her weight in order to grasp a sense of control and personal power.

In contrast to the parents of anorexic women, families of bulimic women appear to be quite different in terms of their interactional patterns. Humphrey (1989) observed that bulimic families evidence hostile enmeshment,

characterized by mothers who are non-nurturing, nonempathic, and emotionally unresponsive. Familial interactions are frequently based on manipulative, blaming patterns, and the daughter's efforts to assert her sense of individuality are undermined by tendencies toward hostile submission. Hungry for affection and nurturance, the young woman uses food as a self-soothing mechanism. Furthermore, she has learned to project her negative feelings outward, with no means of tempering them internally. As such, purging becomes a means of relieving unpleasant feelings in the most expedient manner.

Several empirical studies have confirmed Humphrey's (1989) assertions, often using the separation-individuation model as a basis. Armstrong and Roth (1989) discovered that bulimic patients described their families as detached, conflictual, and riddled with problems such as alcoholism and marital discord. It has been hypothesized that the bulimic's high need for control and sense of ineffectiveness arises as a reaction to being unable to influence important attachment figures to respond to her needs (Armstrong & Roth, 1989). In a parallel study, it was revealed that bulimic behaviors were associated with inconsistent patterns of affection by the parents, along with decreased levels of family cohesion (Scalf-Mclver & Thompson, 1989).

More recently, Smolak and Levine (1993) examined various facets of psychological separation among women evidencing bulimic characteristics. In a sample of undergraduate women, these researchers found that bulimic behaviors corresponded with greater levels of conflictual dependence, evidenced by excessive guilt, mistrust, and resentment. Interestingly, this same group also showed greater overseparation in how much their beliefs, values,

and attitudes differed from their parents. It appears that bulimic women find themselves tied up in family conflicts and hostile environments, and find the most effective path to individuation to be overseparation and distance from their families. However, what is difficult to ascertain from existing research is the relative contribution of familial factors and the woman's own personality factors to the separation-individuation model. Yet, it seems clear from empirical investigations that families of bulimic women are often hostile, non-nurturing, and conflictual. In response to this environment, the daughter attempts to fill her needs for nurturance with food binges, and relieves feelings of guilt and anger over separation by purging. Thus, conflicting feelings resulting from a failure to form a strong identity independent from her parents appear to put women at serious risk for developing eating disorders, particularly when coupled with such developmental tasks as entering college.

Stressful Events and Eating Disorders

Consistent with the research elucidating the contribution of disturbed family environments to eating disorders, other studies propose that stress-provoking events may render some women vulnerable to the development of an eating pathology. Typically, previous research has failed to elaborate on the reasons for family dysfunction, but evidence exists that specific chronic and adverse family problems may increase the risk for development of an eating disorder (Strober & Humphrey, 1987). It is hypothesized that such conditions may include parental affective disorders, familial alcoholism, marital discord, and abusive relationships (Strober & Humphrey, 1987). In one study, a group of anorexic and bulimic women reported higher levels of negative life events, and

less confidence in their ability to solve problems than a comparison group (Soukup, Beiler, & Terrell, 1990). However, these subjects also displayed poorer coping skills than the control group, leading one to speculate whether stress leads to eating disorders, or conversely, whether dysfunctional eating patterns affect stress and coping style.

A more controlled study by Strober (1984) examined the temporal correspondence between stressful life events and the onset of anorexia and bulimia. Both groups of subjects, but particularly the bulimic women, reported more stressful events (i.e. parental illness, parental conflict) during the 18 months preceding illness onset than the nonpatient controls. Yet, as with Soukup and colleagues' (1990) study, these correlational results do not preclude the possibility of a spurious association between increased stress and eating disorders. More recently, Rosen, Compas, and Tacy (1993) used a longitudinal design to assess the relationship of stress to eating disordered behavior in a nonclinical sample. Undesirable stress was found to be an immediate predictor of eating disorder symptoms, while eating disorder symptoms predicted increased stress over a period of 4 months. Thus, the apparent bidirectional relationship between stress and disordered eating is rather clouded by these results.

The previously described studies have all utilized global measures of stressful events, without attempting to link any one stressor in particular to the involvement of eating disorders. However, Strober and colleagues (Strober, Salkin, Burroughs, & Morrell, 1982) attempted to do just that. These researchers found rates of alcoholism of 16% in the first-degree relatives of bulimics, as compared to 4% for anorexics. This finding was later confirmed by

a similar study showing a higher incidence of alcoholism in the relatives of bulimics than anorexics or nonclinical controls (Piran, Kennedy, Garfinkel, & Owens, 1985).

Recent research has also suggested a link between eating disorders and some history of sexual abuse or trauma. Lacey, Coker, and Birchnell (1986) found that 72% of bulimic women in their sample reported sexual conflicts such as being raped, feeling prematurely pressured into sex, and other types of sexual abuse. Similarly, Ronan-Woodburn (1989) discovered significant relationships between anorexia and sexual abuse, and bulimia and sexual abuse. This study also revealed that women who were not considered diagnostic for eating disorders, but were sexually abused, reported more disruptive eating behaviors and attitudes than non-abused women. Bass and Davis (1987) provide support for this finding from their clinical work, asserting that young girls who have been sexually abused may develop eating difficulties as a way to regain the power that was taken from them as children. Together, these findings lend credence to the very real possibility of an association between eating disorders and sexual abuse.

In summary, it seems likely that several different life stressors may precipitate an eating disordered illness. In particular, those events most closely tied to significant family relationships seem to be especially critical. However, the existing literature retains a void in that very few of these events have been explicitly identified.

Codependency

Upon examination of the literature, many of the cognitions and behaviors characteristic of the separation-individuation model of eating disorders pose a

striking parallel to those associated with the concept of codependency. A term emerging from the addictions treatment literature in the 1970's, codependency was thought to describe people whose lives had become unmanageable as a result of being involved with someone who was chemically dependent (Beattie, 1987). With a focus on family systems theory, it was believed that family members of an alcoholic often inadvertently supported the very behavior that they were trying to control. By intervening and protecting the alcoholic, the spouse (typically) was trying to compensate for the alcoholic's irresponsibility. Unfortunately however, these attempts at restoring control only sheltered the alcoholic from the serious consequences of his or her behavior. Furthermore, the spouse became entangled in these destructive patterns, and was given the name of "enabler" (Haaken, 1990).

Since its original inception, the term "codependency" has expanded well beyond its original boundaries, subsequently encompassing a larger proportion of the population. As Beattie (1987) says,

As professionals began to understand codependency better, more groups of people appeared to have it: adult children of alcoholics; people in relationships with emotionally or mentally disturbed persons; people in relationships with chronically ill people....people in relationships with irresponsible people; professionals-nurses, social workers, and others in "helping" occupations. (p. 34)

The commonality among all these people lies in having a relationship with a troubled or needy person, and the development of patterns of reacting and coping similar to those of people in relationships with alcoholics (Beattie, 1987). Given these extremely disparate conceptualizations of codependency, it is little

wonder that virtually every facet of the popular media has been flooded with self-help programs and promises for a cure.

Codependency - Definitions

Despite the construct's definitional ambiguity, several theorists have developed a more cohesive definition of codependency, largely based on their own clinical experience. Beattie (1987) defines a codependent person as one who "lets another person's behavior affect him or her, and who is obsessed with controlling that person's behavior" (p. 36). This definition encompasses a habitual system of thinking, feeling, and behaving toward self and others that causes pain. Interestingly, Beattie views codependency as a reaction to stress and the uncertainty of growing up in the midst of chronic family problems. An individual living in such a situation develops self-protective devices, but these eventually outgrow their usefulness and may become self-destructive (i.e., overeating). Subby (cited in Schaef, 1986) reiterates Beattie's reluctance to link codependency exclusively to alcoholism. He describes codependence as "an emotional, psychological, and behavioral pattern of coping that develops as a result of an individual's prolonged exposure to, and practice of , a set of oppressive rules" (p. 15). Furthermore, Whitfield (1989) describes codependency as any form of suffering which results from focusing on the behavior and needs of others.

A slightly different view of the codependency construct has been offered by Wegscheider-Cruse (cited in Scheaf, 1986) and Haaken (1990). Wegscheider-Cruse contends that codependency itself is an addictive disease, and those at greatest risk include families with a secret or trauma, and families that do not encourage independence among its members. Haaken endeavors to portray

codependency as the “emotional condition of the oppressed” (p. 397). This condition originates in one’s tendency to overcompensate for parental inadequacies by becoming excessively sensitive to the needs of others, while also adopting a caretaking role. Typically developing in the daughters of dysfunctional families, Haaken views such families as exhibiting impoverished emotional reactions, avoiding confrontation and healthy conflict resolution, and utilizing rigid family rules based on shameful events.

While the preceding definitions of codependency disagree somewhat with respect to specific etiology and symptomatology, their common component includes a harmful coping pattern resulting from exposure to an adverse familial environment. For purposes of this paper, the following definition by Potter-Efron and Potter-Efron (1989) is offered:

“A codependent is an individual who has been significantly affected in specific ways by current or past involvement in an alcoholic... or other long-term, stressful family environment” (Potter-Efron & Potter-Efron, 1989; p. 39).

Typically, codependents begin with good motives, in that they express worry and concern about another person. Unfortunately, these feelings come to take priority over their own needs, and codependents become obsessed with managing another person’s behavior.

Despite the sizable amount of anecdotal literature on codependency, very little empirical research has accumulated. One of the earliest studies sought to empirically validate the “typical” codependent characteristics described by clinical observations (Wright & Wright, 1990). Women who were deemed to be codependent by their involvement with an alcoholic partner scored significantly

different than noncodependent controls on the following relationship dimensions: Less emotional expression, higher control needs, greater feelings of responsibility, and a higher tendency to evaluate personal self-worth on the basis of her partner's opinion. While this study lends some validity to the concept of codependency, its rather narrow scope necessitates further investigation.

As previously mentioned, many of the psychological and behavioral characteristics exhibited by women with eating disorders also distinguish individuals deemed to be codependent. As such, a brief summary of the most salient codependent characteristics is relevant in order that parallels may be drawn. Several prominent theorists are in agreement as to the particular feelings, beliefs, and values which underlie codependency. The following descriptions summarize the work of Beattie (1987), Potter-Efron and Potter-Efron (1989), and Schaef (1986).

Characteristics of Codependence

Impaired Identity Development

Preoccupied with the problems of another, the codependent comes to find personal meaning and self-worth through interpersonal relationships. Such individuals clearly possess a lack of boundaries, as they adopt the feelings of others as their own and attempt to control others' perceptions of them. Perhaps most critically, codependents neglect their own needs in favor of another's, and demonstrate an exorbitant need to please others.

Caretaking

Caretaking is a special characteristic of codependency. Driven by a "need to be needed", codependents feel overly responsible for the well-being of others,

often doing things that exacerbate the family problem (i.e., making excuses for irresponsible behavior). Playing the martyr role may then result, as the codependent makes him or herself indispensable to others and is quick to point out how much personal sacrifice this causes.

Control Issues

Codependents appear to use control as their “modus operandi” in life. A high need to control the feelings and destinies of others is exhibited, and this need increases as situations become more and more chaotic. Much of a codependent’s need for control is reflective of an attempt to normalize family situations and minimize the seriousness of family problems. Additionally, controlling behaviors serve to delay an inevitable disaster, as the controller is often perceived as the family savior.

Self-Centeredness

Self-centeredness in codependency is typically seen as feelings of shame and guilt, usually over the problems of others. Codependents personalize everything, and firmly believe they are responsible for even the most minute troubles of other people. Consequently, they possess a desire to fix any difficulty, and honestly believe they have the power to do so.

Feelings

The notion of codependency and feelings poses a bit of an oxymoron: Codependents are rarely able to identify and/or express their own feelings. As children, codependents were taught to be nice and polite, and any hint of negative affect was disallowed and denied in the family. Furthermore, family secrets such as abuse or alcoholism may lead to unexpressed feelings. Eventually, these repressed and distorted feelings find expression by way of

frightening venues, including overeating and bulimia. While appearing calm and controlled, codependent individuals harbor much anger over their consuming situation, yet they fear the loss of control that may follow surrendering to that anger.

Fear and Rigidity

Complementing the codependent individual's need for control is a rigidity of thinking and behaving. Dichotomous thinking and inflexible daily routines represent a desperate attempt to hold a chaotic world together. Such individuals may also become extremely judgmental of others, adopting absolute standards for their own and others' behavior.

Family History

The family history of codependent individuals often include sexual, physical, or emotional abuse and neglect. Parental love and approval was scarce, and members were given little room to be vulnerable or imperfect. Poor communication was prototypical, and arbitrary rules prohibit discussion about problems or feelings of anger and sadness.

Physical Illness

If family discord persists and the codependent's self-destructive behaviors continue, physical illness is a likely result. In particular, codependent individuals become susceptible to eating disorders, hypertension, gastrointestinal disorders, or chemical addictions. Thus, the progressive nature of codependency poses an imminent danger to those caught in its grasp.

Codependence and Eating Disorders

While empirical research on codependency is sorely lacking, it seems clear that many of the concept's defining characteristics are highly reminiscent of the separation-individuation difficulties of eating disordered women.

Codependents try to cope with their pain by stifling feelings, and these are often later manifested in such self-destructive behaviors as eating disorders (Beattie, 1987; Haaken, 1990; Schaef, 1986; Whitfield, 1989). Both codependency and eating disorders appear to stem from a disruptive family environment, including alcoholism, sexual abuse, chronic illness, and poor communication and role structure in the family (Armstrong & Roth, 1989; Beattie, 1987; Ronan-Woodburn, 1989). Furthermore, prominent characteristics of both codependents and eating disordered women include: (a) a high need for control, exhibited by inflexible routines, dichotomous thinking, and indecisiveness over making the "right" choices (Beattie, 1987; Strober & Humphrey, 1987); (b) an inability to identify and express feelings, accompanied by a denial of one's own needs (Bruch, 1973; Schaef, 1986); (c) distorted self-other boundaries, with a failure to form an identity apart from that of an attachment figure (Friedlander & Siegel, 1990; Whitfield, 1989); (d) low self-worth and a sense of failure and powerlessness despite actual accomplishments (Beattie, 1987; Bruch, 1982); (e) avoidance and denial of interpersonal conflict and negative feelings (Haaken, 1990; Strober & Humphrey, 1987); and (f) a tendency to displace repressed feelings by way of overeating or purging (Humphrey, 1989; Schaef, 1986).

Despite these apparent similarities, a need exists to examine this affinity within the context of a single investigation, which could assess the relationship

between codependent characteristics and the cognitive-behavioral indicators of eating disorders. While some (e.g. Krestan & Bepko, 1989) argue that codependent qualities are simply exaggerations of the prescribed cultural female role, these characteristics may also be viewed as stemming from a necessity for immediate survival in a chaotic family environment. However, it has been posited that such patterns of thinking and behaving may lead to such serious problems as eating disorders. Thus, the confirmation of such an association would possess important treatment implications and further identify family dynamics which may play a role in predisposing women to disordered eating patterns.

Purpose and Hypotheses

The purpose of this study is to examine empirically the relationship between cognitive-behavioral indices of eating disorders and characteristics of codependency. This study also will help to establish an empirical base for the codependency construct, and potentially ascertain other codependency precipitators besides an alcoholic family member. Furthermore, the present study will examine psychological separation and individuation with two separate measures, in an attempt to capture the multidimensional nature of this construct. The following hypotheses are proposed in this study:

- 1.) Participants who are assessed as codependent will score higher on a set of cognitive and behavioral variables indicative of eating disorders, as compared to subjects who are not assessed as codependent.
- 2.) Participants who are assessed as codependent will exhibit lower levels of self-other differentiation, and evidence less parental separation, as compared to subjects who are not assessed as codependent.
- 3.) Participants who evidence lower levels of self-other differentiation and more conflictual parental separation will predict a greater number of eating disorder symptoms.

- 4.) Participants who report experience with an alcoholic significant other or other chronic stress will be more likely to be assessed as codependent, and will exhibit higher levels of eating disorder symptoms and lower levels of parental separation.

CHAPTER I I

METHOD

Participants

Participants were 95 women enrolled in an introductory psychology class at the Ohio State University and participated for course credit. The participants had an average age of 20.3 years, and were primarily in their first (N=51) or second (N=20) year of college. A power analysis revealed that 86 participants were needed to obtain a moderate effect size, and all participants were selected by means of a screening measure, described below.

Instruments

Screening Measure - Codependency Assessement

The screening measure consisted of the 34-item Codependency Assessment (CA) scale (Potter-Efron & Potter-Efron, 1989; see Appendix A). This self-report instrument comprises eight subscales considered diagnostic for codependency: Fear, shame/guilt, prolonged despair, rage, denial, rigidity, impaired identity development, and confusion. Each subscale contains between three and six questions, to which the respondent answers “yes” or “no”. At least two questions in each subscale must be endorsed for that subscale to be considered positive for codependency, and five of eight subscales must be positive for the individual to obtain a positive assessment for codependency. The items of the CA were derived from the authors’ clinical experiences, and a rationale for their scoring

system was not provided. McGlone (1992) reported significant test-retest reliabilities for each subscale, ranging from .53 to .86 over a 5-week interval. Cronbach's coefficient alpha for the CA was found to .97, indicating a high degree of internal consistency reliability (McGlone, 1992). The validity of the CA had yet to be investigated, but it appears to possess good face validity and thus was deemed appropriate for this study.

Psychological Separation Inventory (PSI)

Hoffman's (1984; see Appendix B) 138-item PSI was used to assess subjects' separation-individuation from parents. The four subscales of the PSI are designed to reflect the factors that theoretically underlie a psychodynamic model of psychological separation. The Functional Independence scale taps the ability to manage personal affairs without parental assistance, while the Attitudinal Independence scale assesses the degree to which one's values, beliefs, and attitudes differ from those of the parents. The Emotional Independence scale reflects freedom from an excessive need for parental approval, togetherness, and emotional support. Finally, the Conflictual Independence scale measures reported freedom from excessive guilt, responsibility, distrust, and resentment toward one's parents. Subjects respond to a 5-point scale from "not at all true of me" (1) to "very much true of me" (5), with half of the items pertaining to the mother and the other half to the father. Scales are scored by adding the ratings for each scale and subtracting this number from the total number possible for each scale, so that higher scores reflect greater psychological separation. Hoffman (1984) reported Cronbach's coefficient alpha for internal consistency to range from .84 to .92 for each of the four subscales. Test-retest reliability over a 3-week interval ranged from .70 to

.96 for female subjects (Hoffman, 1984). Evidence for construct validity comes from two studies ascertaining that greater psychological separation of females from their parents is associated with better personal adjustment (Hoffman, 1984; Hoffman & Weiss, 1987).

Differentiation of Self Scale (DS)

The 11-item DS scale (Olver et al., 1989; see Appendix C) was used to examine the subjects' perceived self-other differentiation. Each item is endorsed on a 4-point scale from "never" to "always" (using Friedlander & Siegel's [1990] modification), and reflects such aspects as deferring to others' wishes, adopting others' interests, relying on others for criteria of worth, lack of independent judgment, and vulnerability to criticism. Ratings are summed, with a potential range of 4-44, and higher scores reflect a greater lack of differentiation. Olver and colleagues (1989) report internal consistency reliabilities from .72 to .76, while Friedlander and Siegel's (1990) modified version evidenced a coefficient alpha of .91.

Eating Disorder Inventory-2 (EDI-2)

The EDI-2 (Garner, 1991; see Appendix D) is a self-report measure designed to assess of the behaviors and psychological features associated with eating disorders. Each of the 91 items is rated using a 6-point scale ranging from "always" to "never". The EDI-2 consists of eight subscales included in the original version of the EDI (Garner, Olmsted, & Polivy, 1983), along with three new provisional subscales. The Drive for Thinness scale assesses preoccupation with weight and dieting, the Body Dissatisfaction scale measures body image distortion, and the Bulimia scale assesses tendencies toward uncontrollable eating, self-induced vomiting, and laxative use.

These three scales contain items associated with behavioral manifestations of eating disorders.

The other five subscales of the EDI-2 are designed to tap the attitudes and personality characteristics which have been associated with eating disorders. The Ineffectiveness scale measures feelings of inadequacy, insecurity, and low perceived control over one's life. The Perfectionism scale assesses perfectionistic standards, and the Interpersonal Distrust scale taps feelings of alienation and difficulty forming close relationships. Items on the Interoceptive Awareness scale assess an inability to recognize emotional states or sensations such as hunger, while the Maturity Fears scale measures the desire to retreat to the security of childhood due to the overwhelming demands of adult life.

In addition to the original eight subscales, the EDI-2 includes three provisional subscales. The Asceticism scale measures the tendency to seek virtue through self-denial, self-discipline, and control of bodily urges. The Impulse Regulation scale assesses impulsivity, self-destructiveness and hostility, while the Social Insecurity scale taps the belief that social relationships are insecure, disappointing, and conflictual. Due to their relatively recent development and investigation in few empirical tests, these provisional scales were used in an exploratory fashion in the present study.

Test-retest reliability with normal subjects over a 3-week interval ranged from .65 to .97 (Wear & Pratz, 1987). Internal consistency measures ranged from .86 to .93 for eating disorder samples, while coefficient alphas of .80 and higher were reported for samples using college women (Garner & Olmsted, 1984). Additionally, estimates of internal consistency reliability for the three provisional

scales range from .44 to .80 (Garner, 1991). Evidence for construct validity of the EDI has been established by demonstrating convergent and discriminant validity with other psychometric instruments of eating disorder behaviors and attitudes (Garner & Olmsted, 1984). Criterion-related validity has also been shown through differences in EDI scores between eating disorder samples and nonpatient samples (Garner, Olmsted, & Polivy, 1983). Furthermore, Garner (1991) ascertains acceptable criterion validity for the provisional subscales. Finally, evidence for concurrent validity of the EDI includes established relationships between EDI scores and clinicians' ratings of eating disordered clients (Garner & Olmsted, 1984).

Procedure

The initial screening involved administering the Codependency Assessment to 177 women enrolled in the Psychology 100 course. From these participants, two groups were formed, comprising: (a) 50 participants who scored in the top 25th percentile of the CA, and (b) 45 participants scoring in the bottom 25th percentile of the CA. The first group consisted of those participants assessed as codependent, while the second group served as a noncodependent comparison.

After the initial screening, subjects selected for inclusion in the study were contacted by telephone by the experimenter for participation in the second part of the investigation, approximately three weeks later. The second phase involved administering the EDI-2, the PSI, the DS, and a demographic questionnaire (see Appendix E) asking for information about the subjects' age, association with chemically dependent persons, and experiences with chronic

stressors. To preserve confidentiality subjects completed these materials identified only by their subject number. These measures were presented in a counterbalanced manner to control for possible order effects. Additionally, the CA was administered as the final instrument to assess the test-retest reliability of the instrument, and to minimize the chance of subjects having a response set. Subjects were tested in groups of 10-20, and a uniform set of instructions was read by the experimenter (see Appendix F). Finally, subjects were given a debriefing statement and a list of resources (see Appendix G) upon completion of the questionnaires.

Data Analysis

The data were analyzed using analyses of variance (ANOVA) to determine differences between subjects assessed as codependent and noncodependent on subscales of the EDI-2, PSI, and the DS scale. ANOVAs also were performed to assess differences on the dependent variables between those subjects with an alcoholic family member and those without an alcoholic family member. Finally, a series of regression analyses were performed to assess the contribution of self-other differentiation (as measured by the DS) and conflictual parental separation (as measured by the PSI) to the eight criterion variables (subscales) of the EDI-2.

CHAPTER III

RESULTS

Results of the statistical analyses of the data will be presented in this section. The first subsection will discuss the demographic characteristics of the participants. Next will follow an examination of relationships among the eating disorder, parental separation, and self-other differentiation variables. Additionally, scores will be analyzed according to the participants' codependency and stressful event classification. Finally, the reliability and validity of the CA will be examined.

Demographic Information

Eighty percent (N=76) of the participants in this study were Caucasian, 11% (N=10) were Asian-American, 6% (N=6) African-American, and the remaining 3% (N=3) were either American Indian or Biracial. Of the 95 participants selected for this study, 33% (N=31) indicated that they had a close association with an alcoholic family member, while 67% (N=64) reported no such association. Furthermore, 34% (N=32) reported experiencing a chronic stressful event either now or in the past. Example responses of these events from subjects included the following: Physical and emotional abuse; long-term illness of a family member; death of a family member; parental divorce and remarriage; and mental illness of a family member.

Several participants listed stressors that are relatively common developmental adjustments, including school difficulties and relationship conflicts. Such events were not considered “chronic stressors” for this research, but the subjective strategy of this decision is noteworthy.

Codependency Category by Alcohol and Stress Category

The frequencies and number of subjects in each of the codependency, alcohol and stress categories are presented in Tables 1 and 2. Of the 95 subjects, 17 (18%) were assessed as codependent and reported an association with an alcoholic family member, while 14 (15%) of the subjects were not assessed as codependent yet reported such an association. The largest group consisted of 42 subjects (44%) who were not assessed as codependent and reported no association with an alcoholic family member. The second largest group was comprised of 22 subjects (23%) who were assessed as codependent and reported no association with an alcoholic family member. A chi square test failed to reach significance, $\chi^2(1, 95)=3.61$, NS. Consequently, there appears to be no relationship between the subjects’ association with an alcoholic family member and their assessment of codependency.

As shown in Table 2, 33 (35%) of the 95 subjects were assessed as codependent and reported either association with an alcoholic family member or exposure to a chronic stressful event. In contrast, 14 (15%) of the subjects were assessed as noncodependent and reported the alcohol or stress association. Among subjects not reporting the alcohol association or exposure to chronic stress, 18 (19%) were assessed as codependent, while 30 (32%) were not assessed as codependent. A chi square test was significant,

Table 1-
Number of Codependent and Noncodependent Subjects
by Association with an Alcoholic Family Member

Codependency (N=95)

	Alcoholic Family Member	No Alcoholic Family Member
Codependent	17 (18%)	22 (23%)
Noncodependent	14 (15%)	42 (44%)

Table 2
Number of Codependent and Noncodependent Subjects by
Association with Alcoholic Persons or Stress

Codependency (N=95)

	Alcoholic Family Member or Chronic Stress	No Alcoholic Family or Chronic Stress
Codependent	33 (35%)	18 (19%)
Noncodependent	14 (15%)	30 (32%)

$X(1, 95)=10.22, p<.01$, suggesting that codependents are more likely to experience stressful events within their families than noncodependent.

Relations Between Eating Disorder Characteristics and Parental Separation Variables

The means and standard deviations of the eating disorder, parental separation, and differentiation of self measures for all participants are presented in Table 3. Using these same measures, recent studies report similar results. The PSI means reported in the present study are consistent with Smolak & Levine's (1993) study of women displaying moderate amounts of eating disorder symptoms. Furthermore, Kenny and Hart (1992) report EDI-2 scores for their sample of college women consistent with those of the present study. However, they report a mean of 12.85 on the Body Dissatisfaction scale for an inpatient eating disorder sample, consistent with a mean of 12.5 for the same scale in the present study.

To assess the relations between cognitive and behavioral indicators of eating disorders and the parental separation indices, zero-order product moment correlations were computed between variables. Table 4 presents the correlations between scores on each of the EDI-2 subscales and those of the PSI scale. As expected, several of the parental separation indices were associated with characteristics of eating disorders. Scores on the Drive for Thinness scale were negatively related to paternal conflictual independence, $r(88)=-.32, p<.01$, maternal functional independence, $r(95)=-.22, p<.05$, and maternal emotional independence, $r(95)=-.24, p<.05$. Significant negative correlations also were found between scores on the Bulimia subscale and maternal conflictual independence, $r(95)=-.21, p<.05$, maternal emotional

Table 3
Descriptive Information: Eating Disorder, Parental
Separation, and Differentiation of Self Scores

<u>Scores</u>	<u>Mean</u>	<u>Standard Deviation</u>
Eating Disorder Inventory Scales		
Drive for Thinness	6.1	5.8
Bulimia	2.2	4.3
Body Dissatisfaction	12.5	8.4
Ineffectiveness	3.6	5.4
Perfectionism	6.6	4.2
Interpersonal Distrust	3.0	3.9
Interceptive Awareness	3.7	4.8
Maturity Fears	3.2	3.3
Asceticism	5.0	4.1
Impulse Regulation	3.7	4.8
Social Insecurity	3.7	4.1
Parental Separation Inventory Scales		
Conflictual Independent		
Maternal	73.3	19.0
Paternal	75.3	19.4
Functional Independence		
Maternal	30.7	11.8
Paternal	37.5	11.9
Attitudinal Independence		
Maternal	27.0	12.2
Paternal	32.0	14.5
Emotional Independence		
Maternal	37.9	14.3
Paternal	42.8	16.5
Differentiation of Self Scale	24.7	6.5

Table 4
Correlations Between EDI and PSI Subscales

	<u>PSI Subscales</u>							
	<u>Conflictual Independence</u>		<u>Functional Independence</u>		<u>Emotional Independence</u>		<u>Attitudinal Independence</u>	
	Maternal	Paternal	Maternal	Paternal	Maternal	Paternal	Maternal	Paternal
Drive for Thinness	.17	-.32**	-.22*	.02	-.24*	-.04	-.08	.12
Bulimia	-.21*	-.33**	-.14	.05	-.22*	.00	-.07	.05
Body Dissatisfaction	-.23*	-.35***	-.07	.11	-.15	-.05	.10	.18
Ineffectiveness	-.39****	-.33**	.12	.13	-.02	-.04	.09	.10
Perfectionism	-.22*	-.26*	-.09	-.14	-.11	-.17	-.23*	-.19
Interpersonal Distrust	-.34***	-.24*	.22*	.05	.00	-.08	.20	.10
Interoceptive Awareness	-.35***	-.27*	-.05	.00	-.24*	-.20	.11	.07
Maturity Fears	-.33***	-.19	.15	-.06	-.04	-.11	.18	.11
Asceticism	-.31**	-.41****	-.07	-.07	-.15	-.03	-.05	-.02
Impulse Regulation	-.40****	-.43****	.06	.20	-.11	.02	.18	.21*
Social Insecurity	-.45****	-.36***	.10	.08	-.06	-.08	.15	.13

* $p < .05$
 ** $p < .01$
 *** $p < .001$
 **** $p < .0001$

independence, $r(95)=-.21$, $p<.05$, and paternal conflictual independence, $r(88)=-.33$, $p<.01$. Both maternal conflictual independence, $r(95)=-.23$, $p<.05$, and paternal conflictual independence, $r(88)=-.35$, $p<.001$ were negatively associated with scores on the Body Dissatisfaction subscale. Thus, subjects who scored higher on the three EDI-2 subscales reflecting behavioral manifestations of eating disorders tended to evidence lower levels of conflictual, emotional, and functional independence from their parents.

As expected, negative correlations also were found between eating disorder attitudes and the parental separation indices. Scores on the Ineffectiveness subscale were negatively correlated with both maternal $r(95)=-.39$, $p<.0001$, and paternal conflictual independence, $r(88)=-.33$, $p<.01$. Negative associations also were found between scores on the Perfectionism subscale and maternal conflictual independence $r(95)=-.22$, $p<.001$, and paternal conflictual independence $r(88)=-.24$, $p<.05$. Values on the Interoceptive Awareness scale correlated negatively with conflictual independence from both mother, $r(95)=-.35$, $p<.001$, and father, $r(88)=-.27$, $p<.01$, and emotional independence from mother, $r(95)=-.24$, $p<.05$, and father, $r(88)=-.20$, $p<.05$. Finally, a negative association was revealed between scores on the Maturity Fears subscale and maternal conflictual independence, $r(95)=-.33$, $p<.001$.

Several correlations between the parental separation subscales and the three provisional subscales of the EDI-2 were somewhat higher than for the original EDI subscales. Scores on the Asceticism subscale correlated negatively with maternal conflictual independence, $r(95)=-.31$, $p<.01$, and paternal conflictual independence, $r(88)=-.41$, $p<.0001$. Furthermore, a strong negative association was revealed between scores on the Impulse Regulation

subscale and maternal conflictual independence, $r(95)=-.40$, $p<.0001$, and paternal conflictual independence, $r(88)=-.43$, $p<.0001$. Lastly, scores on the Social Insecurity subscale were negatively associated with maternal conflictual independence, $r(95)=-.45$, $p<.0001$, and paternal conflictual independence, $r(88)=-.36$, $p<.001$. In summary, the results of the correlational analyses point to conflictual and emotional independence from parents as the variables most frequently associated with eating disorder characteristics. Indeed, subjects who experienced lower levels of conflictual freedom from their mothers scored higher on 10 of the 11 subscales of the EDI-2.

Correlates of Self-Other Differentiation

Correlations between scores on the DS scale, EDI-2 subscales, and PSI subscales are reported in Table 5. Scores on the DS were found to be highly correlated with all of the following EDI-2 subscales: Drive for Thinness, $r(94)=.60$, $p<.0001$; Bulimia, $r(94)=.51$, $p<.0001$; Body Dissatisfaction, $r(94)=.48$, $p<.0001$; Ineffectiveness, $r(94)=.61$, $p<.0001$; Perfectionism, $r(94)=.31$, $p<.01$; Interpersonal Distrust, $r(94)=.31$, $p<.01$; Interoceptive Awareness, $r(94)=.59$, $p<.0001$; Maturity Fears, $r(94)=.31$, $p<.01$; Asceticism, $r(94)=.58$, $p<.0001$; Impulse Regulation, $r(94)=.44$, $p<.0001$; and Social Insecurity, $r(94)=.52$, $p<.0001$. Thus, subjects who evidenced high scores on the DS, signifying low levels of self-other differentiation, tended to exhibit higher scores on the eating disorder variables.

Further analyses of the DS scale were conducted through correlations with each PSI subscale. Significant negative correlations were revealed between scores on the DS scale and the following PSI subscales: Maternal conflictual independence, $r(94)=-.35$, $p<.001$; paternal conflictual independence,

Table 5
Correlates of the DS Scale

<u>EDI Subscales</u>	<u>DS Scale</u>
Drive for Thinness	.60****
Bulimia	.51****
Body Dissatisfaction	.48****
Ineffectiveness	.61****
Perfectionism	.31**
Interpersonal Distrust	.31**
Interceptive Awareness	.59****
Maturity Fears	.31**
Asceticism	.58****
Impulse Regulation	.44****
Social Insecurity	.52****
<u>PSI Subscales</u>	
Conflictual Independence	
Maternal	-.35***
Paternal	-.36***
Functional Independence	
Maternal	-.30**
Paternal	-.09
Attitudinal Independence	
Maternal	-.15
Paternal	-.05
Emotional Independence	
Maternal	-.33***
Paternal	-.21*

*p < .05

**p < .01

***p < .001

****p < .0001

$r(87)=-.36$, $p<.001$; maternal functional independence $r(94)=-.30$, $p<.01$; maternal emotional independence, $r(94)=-.33$, $p<.001$; and paternal emotional independence, $r(87)=-.21$, $p<.05$. As such, participants with lower self-other boundaries appear to display decreased levels of conflictual, emotional, and functional independence from their parents.

Analyses of the Codependent Variable

Analyses of variance (ANOVAs) were performed comparing subjects assessed as codependent versus noncodependent on the eating disorder and parental separation variables. Means and ANOVA results are reported in Table 6. Codependents significantly differed from noncodependents on the following EDI-2 subscales: Drive for Thinness, $F(1, 94)=14.80$, $p<.001$; Bulimia, $F(1, 94)=9.67$, $p<.01$; Body Dissatisfaction, $F(1, 94)=17.43$, $p<.0001$; Ineffectiveness, $F(1, 94)=34.65$, $p<.0001$; Interpersonal Distrust, $F(1, 94)=24.21$, $p<.0001$; Interoceptive Awareness, $F(1, 94)=34.26$, $p<.0001$; Maturity Fears, $F(1, 94)=12.42$, $p<.001$; Asceticism, $F(1, 94)=15.38$, $p<.001$; Impulse Regulation, $F(1, 94)=27.59$, $p<.0001$; Social Insecurity, $F(1, 94)=35.30$, $p<.0001$. Thus, subjects who were assessed as codependent evidenced significantly higher levels of eating disorder characteristics on 10 of the 11 EDI-2 subscales than subjects who were not assessed as codependent.

Results also were supportive of the hypothesized relationship between codependency and conflictual parental separation. Subjects assessed as codependent scored significantly lower on the maternal conflictual independence scale ($M=66.1$) than those subjects not assessed as codependent ($M=81.5$), $F(1, 94)=18.35$, $p<.0001$. Similarly, subjects in the

Table 6
Results of ANOVAs and Means of
Codependents versus Noncodependents

<u>EDI Scales</u>	Codependent <u>M</u>	Noncodependent <u>M</u>	<u>F</u>
Drive for Thinness	8.1	3.8	14.80***
Bulimia	3.4	0.8	9.67**
Body Dissatisfaction	15.6	8.9	17.43****
Ineffectiveness	6.2	0.6	34.65****
Perfectionism	7.0	6.1	1.02
Interpersonal Distrust	4.6	1.1	24.21****
Interceptive Awareness	6.0	1.0	34.26****
Maturity Fears	4.3	2.0	12.42***
Asceticism	6.4	3.3	15.38***
Impulse Regulation	5.8	1.2	27.59****
Social Insecurity	5.7	1.4	35.30****
<u>PSI Scales</u>			
Conflictual Independence			
Maternal	66.1	81.5	18.35****
Paternal	68.9	82.3	11.73***
Attitudinal Independence			
Maternal	27.8	26.1	.45
Paternal	33.4	30.3	1.01
Emotional Independence			
Maternal	35.0	41.2	4.66*
Paternal	40.0	45.7	2.68
Functional Independence			
Maternal	29.6	32.0	.99
Paternal	37.7	37.3	.02
<u>DS Scale</u>	28.2	20.8	44.36****

*p < .05
 **p < .01
 ***p < .001
 ****p < .0001

codependent group scored lower on the paternal conflictual independence scale ($M=68.9$) than those in the noncodependent group ($M=82.3$), $F(1, 87)=11.73, p<.001$. Thus, subjects who were assessed as codependent were found to evidence significantly lower levels of freedom from parental conflict than subjects not assessed as codependent. Also as expected, subjects in the codependent group scored significantly lower on the maternal emotional independence scale ($M=35.0$), than subjects in the noncodependent group ($M=41.2$), $F(1, 94)=4.66, p<.05$. No significant difference was found between the two groups for paternal emotional independence, maternal and paternal attitudinal independence, and maternal and paternal functional independence, $p>.05$.

Further analysis of the codependency variable revealed that subjects who were assessed as codependent scored significantly higher on the DS ($M=28.2$) than subjects who were not assessed as codependent ($M=20.7$), $F(1, 93)=44.36, p<.0001$ (see Table 6). Thus, this test revealed that subjects designated as codependent displayed a greater lack of self-other differentiation than those subjects not designated as codependent.

Analyses of Alcohol and Stressful Event Categories

To investigate differences in eating disorder and parental separation scores between subjects who reported a close association with an alcoholic family member and those who did not report this association, a second series of ANOVAs were computed. Results are reported in Appendix H, and no significant differences were found for the two groups on the EDI-2 subscales, PSI subscales, and the DS scale. Thus, subjects who reported a close association with an alcoholic family member did not differ significantly from

subjects without this association on the eating disorder and parental separation variables.

Differences were observed, however, between subjects reporting an association with an alcoholic family member or exposure to a chronic stressful event (designated as the “event” group) and those subjects who did not report experiencing either situation (designated as the “nonevent” group). Appendix I represents results from the ANOVA conducted on scores from the EDI, PSI, and DS scales. Subjects in the event group differed from those in the nonevent group on the following EDI subscales: Bulimia, $F(1, 94)=5.74, p<.05$; Ineffectiveness, $F(1, 94)=10.92, p<.01$; Interpersonal Distress, $F(1, 94)=5.34, p<.05$; Interoceptive Awareness, $F(1, 94)=6.27, p<.05$; Impulse Regulation, $F(1, 94)=6.23, p<.05$; Social Insecurity, $F(1, 94)=11.33, p<.01$. Differences also were revealed for one PSI scale, paternal conflictual independence, $F(1, 87)=4.64, p<.05$. In addition, the two groups differed on the DS scale, $F(1, 93)=4.55, p<.05$.

Prediction of Eating Disorder Symptoms

To test the hypotheses that self-other differentiation and parental separation predict eating disorder characteristics, separate regression analyses were performed. Table 7 presents the results of the multiple regression using the EDI-2 subscales as criterion variables and the PSI subscales as predictor variables. Table 8 reports the results of the regression analysis using the EDI-2 subscales as criterion variables and the DS scale as the predictor variable.

As seen in Table 7, parental separation accounted for 18% of the variance in predicting scores on the Drive for Thinness subscale, $F(8, 87)=2.16, p<.05$.

Semi-partial correlations revealed that a significant amount of unique variance

Table 7
Parental Separation Predictors of Eating Disorder Variables

Criterion	overall R ²	Predictors	SR ²
Drive for Thinness	.18*	Conflictual Independence	
		Maternal	.01
		Paternal	.05*
		Emotional Independence	
		Maternal	.003
		Paternal	.02
		Attitudinal Independence	
		Maternal	.009
		Paternal	.04
		Functional Independence	
Bulimia	.14	Maternal	.05*
		Paternal	.0004
		Conflictual Independence	
		Maternal	.01
		Paternal	.06*
		Emotional Independence	
		Maternal	.02
		Paternal	.006
		Attitudinal Independence	
		Maternal	.00
		Paternal	.004
		Functional Independence	
		Maternal	.03
		Paternal	.003

Table 7 (continued)

Criterion	overall R ²	Predictors	SR ²
Body Dissatisfaction	.19*	Conflictual Independence	
		Maternal	.004
		Paternal	.05*
		Emotional Independence	
		Maternal	.005
		Paternal	.08**
		Attitudinal Independence	
		Maternal	.00
		Paternal	.03
		Functional Independence	
Ineffectiveness	.22**	Maternal	.01
		Paternal	.01
		Conflictual Independence	
		Maternal	.05*
		Paternal	.06*
		Emotional Independence	
		Maternal	.01
		Paternal	.07**
		Attitudinal Independence	
		Maternal	.006
		Paternal	.00
		Functional Independence	
		Maternal	.006
		Paternal	.02

Table 7 (continued)

Criterion	overall R ²	Predictors	SR ²
Perfectionism	.20*	Conflictual Independence	
		Maternal	.03
		Paternal	.09**
		Emotional Independence	
		Maternal	.001
		Paternal	.008
		Attitudinal Independence	
		Maternal	.03
		Paternal	.02
		Functional Independence	
Interpersonal Distrust	.21*	Maternal	.00
		Paternal	.02
		Conflictual Independence	
		Maternal	.03
		Paternal	.04*
		Emotional Independence	
		Maternal	.04*
		Paternal	.05*
		Attitudinal Independence	
		Maternal	.00
		Paternal	.001
		Functional Independence	
		Maternal	.05*
		Paternal	.002

Table 7 (continued)

Criterion	overall R ²	Predictors	SR ²
Interoceptive Awareness	.26**	Conflictual Independence	
		Maternal	.04*
		Paternal	.02
		Emotional Independence	
		Maternal	.03
		Paternal	.14***
		Attitudinal Independence	
		Maternal	.02
		Paternal	.01
		Functional Independence	
Maturity Fears	.17*	Maternal	.005
		Paternal	.00
		Conflictual Independence	
		Maternal	.04*
		Paternal	.03
		Emotional Independence	
		Maternal	.03
		Paternal	.02
		Attitudinal Independence	
		Maternal	.003
	Paternal	.03	
	Functional Independence		
	Maternal	.02	
		Paternal	.003

Table 7 (continued)

Criterion	overall R ²	Predictors	SR ²
Asceticism	.21**	Conflictual Independence	
		Maternal	.03
		Paternal	.13**
		Emotional Independence	
		Maternal	.02
		Paternal	.02
		Attitudinal Independence	
		Maternal	.001
		Paternal	.002
		Functional Independence	
Impulse Regulation	.31***	Maternal	.02
		Paternal	.004
		Conflictual Independence	
		Maternal	.04*
		Paternal	.09**
		Emotional Independence	
		Maternal	.04*
		Paternal	.08**
		Attitudinal Independence	
		Maternal	.01
		Paternal	.01
		Functional Independence	
		Maternal	.00
		Paternal	.04*

Table 7 (continued)

Criterion	overall R ²	Predictors	SR ²
Social Insecurity	.25**	Conflictual Independence	
		Maternal	.05*
		Paternal	.07**
		Emotional Independence	
		Maternal	.02
		Paternal	.09**
		Attitudinal Independence	
		Maternal	.00
		Paternal	.008
		Functional Independence	
		Maternal	.005
		Paternal	.006

*p < .05
 **p < .01
 ***p < .001

was accounted for by paternal conflictual independence (5%, $p < .05$), and maternal functional independence (5%, $p < .05$). Parental separation accounted for 19% of the variance in Body Dissatisfaction scores, $F(8, 87) = 2.30$, $p < .05$. A significant amount of unique variance was accounted for by paternal conflictual independence (5%, $p < .05$) and paternal emotional independence (8%, $p < .01$). For scores on the Ineffectiveness subscale, parental separation predicted 22% of the variance, $F(8, 87) = 2.84$, $p < .01$. Semi-partial correlations revealed that a significant amount of unique variance was accounted for by maternal conflictual independence (5%, $p < .05$), paternal conflictual independence (6%, $p < .05$), and paternal emotional independence (7%, $p < .05$).

Parental separation scores accounted for 20% of the variance in scores on the Perfectionism subscale, $F(8, 87) = 2.41$, $p < .05$. Semi-partial correlations revealed that a significant amount of unique variance was accounted for by paternal conflictual independence (9%, $p < .01$). For the Interpersonal Distrust subscale, parental separation scores predicted 21% of the variance,

$F(8, 87) = 2.68$, $p < .05$. A significant amount of unique variance was accounted for by paternal conflictual independence (4%, $p < .05$), maternal emotional independence (4%, $p < .05$), paternal emotional independence (5%, $p < .05$), and maternal functional independence (5%, $p < .05$). Parental separation scores predicted 26% of the variance in scores on the Interoceptive Awareness subscale, $F(8, 87) = 3.53$, $p < .01$. A significant amount of unique variance was accounted for by maternal conflictual independence (4%, $p < .05$), and paternal emotional independence (14%, $p < .001$). Parental separation also accounted for 17% of the variance in predicting scores on the Maturity Fears subscale,

$F(8, 87)=2.05, p<.05$. Semi-partial correlations revealed that a significant amount of unique variance was accounted for by maternal conflictual independence (4%, $p<.05$).

Parental separation scores accounted for 21% of the variance in predicting scores on the Asceticism subscale, $F(8, 87)=2.69, p<.01$. Semi-partial correlations revealed that a significant amount of unique variance was accounted for by paternal conflictual independence (13%, $p<.01$). For scores on the Impulse Regulation subscale, parental separation predicted 31% of the variance, $F(8, 87)=4.44, p<.001$. A significant amount of unique variance was accounted for by maternal conflictual independence (4%, $p<.05$), paternal conflictual independence (9%, $p<.01$), maternal emotional independence (4%, $p<.05$), paternal emotional independence (8%, $p<.01$), and paternal functional independence (4%, $p<.05$). Finally, parental separation scores predicted 25% of the variance in scores on the Social Insecurity subscale, $F(8, 87)=3.35, p<.01$. Semi-partial correlations revealed that a significant amount of unique variance was accounted for by maternal conflictual independence (5%, $p<.01$), paternal conflictual independence (7%, $p<.01$), and paternal emotional independence (9%, $p<.01$).

As shown in Table 8, self-other differentiation accounted for a significant amount of variance in the following EDI-2 subscales: Drive for Thinness [35%, $F(1, 93)=50.83, p<.0001$], Bulimia [28%, $F(1, 93)=31.98, p<.001$], Body Dissatisfaction [23%, $F(1, 93)=27.32, p<.0001$], Ineffectiveness [37%, $F(1, 93)=54.53, p<.0001$], Perfectionism [10%, $F(1, 93)=9.92, p<.01$], Interoceptive Awareness [35%, $F(1, 93)=48.65, p<.0001$], Maturity Fears [10%,

Table 8
Self-Other Differentiation Predictors
of Eating Disorder Variables

Predictor	Criterion	R ²
Differentiation of Self Scale	Drive for Thinness	.35**
	Bulimia	.28**
	Body Dissatisfaction	.23**
	Ineffectiveness	.37**
	Perfectionism	.10*
	Interpersonal Distrust	.09*
	Interoceptive Awareness	.35**
	Maturity Fears	.10*
	Asceticism	.34**
	Impulse Regulation	.19**
	Social Insecurity	.27**

*p < .01

**p < .0001

$F(1, 93)=9.90, p<.01$], Asceticism [34%, $F(1, 93)=47.47, p<.0001$], Impulse Regulation [19%, $F(1, 93)=22.10, p<.0001$], and Social Insecurity [27%, $F(1, 93)=34.49, p<.0001$]. Thus, it appears that self-other differentiation was a significant predictor of all eating disorder characteristics as measured by the EDI-2.

Reliability and Validity of the Codependency Assessment

To ascertain the reliability of the Codependency Assessment, scores taken on the CA during the screening period were correlated with scores on the CA taken during the second part of the study. The average interval between the two administrations was three weeks.

The test-retest correlations for each subscale are presented in Table 9. On all eight subscales, scores from the first and second administrations were highly correlated, $p<.0001$. These findings are consistent with those of McGlone (1992), further substantiating the acceptable test-retest reliability of the CA.

The concurrent validity of the CA was examined through analysis of the relationship between assessment of codependency and scores on the DS scale. As the DS scale is designed to reflect underlying constructs of dependency and poor self-other boundaries, it was deemed to be theoretically similar to the codependency construct. Scores for codependent and noncodependent subjects on the DS scale are reported in Table 10.

Table 9
Test-Retest Correlations of the CA by Subscale

<u>Subscale (Items)</u>	<u>Correlation Coefficient</u>	<u>p value</u>
Fear (1, 5, 17, 26, 28, 31)	.74	.0001
Shame/Guilt (13, 15, 18, 21, 22)	.79	.0001
Prolonged Despair (6, 8, 25)	.73	.0001
Rage (2, 7, 9, 30)	.72	.0001
Denial (10, 12, 32)	.59	.0001
Rigidity (3, 11, 20, 27)	.70	.0001
Impaired Identity Development (14, 19, 24, 29)	.65	.0001
Confusion (4, 16, 23, 33, 34)	.80	.0001

TABLE 10
Means and Standard Deviations on the DS by Assessment of Codependency

	<u>DS Score</u>	<u>S.D.</u>
Codependent	28.2	6.09
Noncodependent	20.7	4.50

An analysis of variance revealed that subjects assessed as codependent scored significantly higher on the DS than subjects who were not assessed as codependent, $F(1, 93)=44.36, p<.0001$. This result lends credence to the validity of the CA. However, since a low level of self-other differentiation is one of several components of codependency, additional tests using measures of the other characteristics would further confirm the validity of the CA.

Chapter IV

DISCUSSION

The objectives of the present study were to investigate relationships between cognitive-behavioral indicators of eating disorders and characteristics of codependency. A second purpose of this study was to ascertain the possible relationships among eating disorders, parental separation, and experience with chronic stressors.

The interpretation and discussion of the results will focus on several components. The general findings of the study will be presented first, followed by their relationship to the hypotheses and previous research. Next, the limitations of the study will be presented, concluding with suggestions for counseling and future research.

Summary of Results

The findings from this investigation yielded several significant results. First, participants who were assessed as codependent were more likely than noncodependents to have experienced stressful events (such as alcoholism) within their families. Second, participants scoring higher on the eating disorder measures experienced lower levels of conflictual, emotional, and functional independence from their parents. Similarly, participants with lower self-other differentiation evidenced higher scores on the eating disorder variables and

decreased conflictual, emotional, and functional independence from their parents.

Third, with respect to analyses of the codependency variable, participants assessed as codependent scored significantly higher than noncodependents on 10 out of 11 EDI-2 subscales. Further, codependents reported significantly less parental conflictual and emotional independence than their cohorts, as well as a greater lack of self-other differentiation.

Fourth, participants reporting an association with an alcoholic family member or exposure to a chronic stressful event significantly differed from those participants without such experiences on several eating disorder variables and parental separation scales. However, such differences were not found on the dependent variables when groups were compared based only on their association with an alcoholic family member.

Lastly, participants' scores on the parental separation indices significantly predicted 10 out of 11 eating disorder characteristics. Furthermore, self-other differentiation significantly predicted all 11 eating disorder variables.

Interpretation of Codependent and Stressful Event Categories

One of the most striking findings of this study involved the sizable number of women reporting an association with an alcoholic family member (33%) or experience with a chronic stressful event (34%). Interestingly, those women reporting an association with an alcoholic family member were no more likely to be assessed as codependent than those women without such an association. This finding contrasts with the traditional addiction literature, which defines codependency as a response to a chemically dependent significant other (Beattie, 1987). However, the present study did reveal a relationship between

codependency and exposure to a chronic stressful event (which may include an alcoholic relative). As such, it appears that codependency may exist independently of alcoholism, and instead reflects a global tendency to focus on the external environment at the cost of losing touch with internal processes. This result coincides with contemporary experts, who view codependency as a coping mechanism used to escape the negative feelings of growing up in a constrained, volatile family environment (Morgan, 1991; O'Brien & Gaborit, 1992).

Relationships Between Eating Disorders and Parental Separation

As predicted, several significant correlations were found between the parental separation indices and eating disorder characteristics. In particular, women who experienced more conflictual separation and less emotional independence from both their mother and father were more likely to exhibit the cognitive and behavioral qualities of eating disorders. Furthermore, significant relationships were found between every EDI-2 subscale and scores on the DS scale. As such, it seems plausible that women who retain rather diffuse boundaries between themselves and others are more likely to develop eating disorder symptoms. The EDI-2 subscales of Interoceptive Awareness and Interpersonal Distrust seem particularly to tap a construct similar to the DS scale. A significant component of eating disorders involves a woman's reliance on externals for self-worth, and this tendency may generalize to other facets of her life.

These results are consistent with those of Friedlander and Siegel (1990). Both studies examined participants who were primarily in their first or second year of college. In essence, these studies are exemplary for investigating the

separation-individuation model of eating disorders, as entering college typically represents an adolescent's first real separation from her parents. Further, college women are disproportionately represented among eating-disorder clients, leading to the speculation of a relationship between the two events.

The fact that emotional independence and conflictual independence emerged as the key components in the link between parental separation and eating disorders is intriguing in light of Rhodes and Kroger's (1992) recent work on separation-individuation. These authors proposed two primary bipolar dimensions of parental behavior related to later adolescent eating difficulties. "Care" consists of parental affection, warmth, and empathy, or conversely, emotional coldness and rejection. "Protection" involves promotion of independence and autonomy, or negatively, intrusion and prevention of independence. Rhodes and Kroger (1992) reported that women displaying high quantities of eating disorder symptoms had parents who scored lower on the Care scale and higher on the Protection scale. Upon examining the results of the present study, numerous similarities may be noted. Women scoring lower on emotional independence and lower on conflictual independence appear to come from families that are overbearing, rejecting, and non-nurturing. Consequently, these women were more likely to display eating disorder symptoms than women without such dependency conflicts. Thus, it appears that parental promotion of independence and individuality as well as emotional connectedness is vital in order for adolescents to form a healthy separation from their parents and avert the possibility of disordered eating.

Interpretation of Codependency and Eating Disorder Variables

Analyses of the codependency variable yielded several significant results. As predicted, participants exhibiting characteristics of codependency were more likely to display eating disorder symptoms. Given that many of the defining characteristics of codependency (e.g., little internal awareness, high control needs, and insecurity) are often the psychological underpinnings of disordered eating, this result is expected. A surprising factor however, lies in the wide discrepancy between the two groups on most of the EDI-2 subscales. The Social Insecurity subscale measures one's insecurity and disappointment in relationships, similar to the codependent experience of putting others before self in an attempt to retain relationships. Also congruent are the EDI-2's Perfectionism and Impulse Regulation subscales, and the codependent's pervasive control issues. Both tap into an individual's difficulties with self-control and the illusions surrounding the sense of control. The Interoceptive Awareness subscale of the EDI-2 captures a primary codependent characteristic - an inability to recognize and differentiate emotional or physical states. Indeed, the external environment is so focused upon, be it the needs of others or physical appearance, that internal processes are lost (O'Brien & Gaborit, 1992).

While causation cannot be established between codependent behaviors and eating disorder symptoms, it may be surmised that disordered eating is used as a coping mechanism to deal with the stifled, uncomfortable feelings inherent in codependency. Yet, a debate exists as to the development of codependency. Some authors (e.g. Morgan, 1991) make the distinction between codependency as a personality disorder, which would be considered deviant, and

codependency as a set of personality traits, which predispose one to act in codependent ways. The latter definition places codependent characteristics on a continuum, with some amount being the norm. The relatively high number of participants in the present study who scored as codependent (53%) attest to the notion that it is not an unusual phenomenon, consistent with McGlone's (1992) findings. The problem arises however, when these personality traits become "inflexible and maladaptive and cause significant functional impairment or subjective distress" (Morgan, 1991). At this point, pathologies such as eating disorders become a strong possibility, and the task becomes one of learning to modify these traits into a more functional form.

What remains unclear however, is why all women displaying unusually strong codependent characteristics do not develop eating disorder symptomatology. One explanation of this may lie in Beattie's (1988) work on eating disorder etiologies. It is likely that other factors may mediate the codependency-eating disorder relationship, particularly a preoccupation within the family with food or physical appearance. It is plausible that the daughter learned very early that using these venues was the most effective way of exercising self-control, as her parents typically control most other aspects.

Interpretation of Codependency and Psychological Separation Variables

Given that a primary component of codependency deals with the separation between self and others, it was expected that differences would be found between codependents and noncodependents on the parental separation and differentiation of self variables. As hypothesized, participants assessed as codependent experienced significantly more conflictual separation from both parents, and less emotional independence from their mothers than participants

who were not assessed as codependent. Furthermore, codependents displayed significantly lower self-other boundaries than noncodependents. These results support those of previous research (e.g. Friedlander & Siegel, 1990; Smolak & Levine, 1993). Taken together, these findings lend themselves well to attachment theory, while adding a new implication. Parental attachments characterized by inconsistency, conflict, overprotection, and low nurturance may almost certainly be construed as "anxious attachments". In many ways, codependency is a potent form of anxious attachment, whereby feelings of helplessness, inadequacy, and repressed feelings are a result of such relationships. Thus, the model proposed by these results suggests that family environments that are conflictually enmeshed, nonempathic, and emotionally unresponsive lead to the formation of unhealthy codependent behaviors. Further, these behaviors and attachment patterns generalize to other relationships, leading to a sense of self that is defined by others. Once the individual finds herself ill-equipped to function autonomously, she turns to controlling her own body as her most available coping resource.

Codependency, Alcohol, and Stressful Event Variables

Further analyses of the codependency variable involved its relationship to familial alcoholism or chronic stress. Contrary to expectation, no significant differences were found on any of the eating disorder characteristics or parental separation variables between participants with a close alcoholic relative and those without an alcoholic relative. This finding is somewhat surprising given the established theoretical and empirical connection between alcoholism and codependency, and the findings of the present study of a connection between codependency, eating disorders, and parental separation. One potential

explanation for this finding may lie in the chi-square result that codependents were no more likely than noncodependents to be associated with an alcoholic relative. Thus, the absence of such a relationship may then invalidate any link between familial alcoholism and the development of eating disorders.

While the previously discussed result raises questions as to the validity of the codependency-alcohol link with this target population of college students, analyses of the stressful event category may add some clarification. As expected, participants who reported experience with an alcoholic significant other or a chronic stressful situation exhibited higher levels of eating disorder symptoms and lower levels of self-other boundaries. Interestingly, paternal conflictual independence was the only parental separation variable that differed for the two groups. While reasons for this are unclear, it may be that the stressful events reported by the participants pertained primarily to their fathers. A discussion of the particular stressors possibly serving as the backdrop for eating disorders is beyond the scope of this paper, but previous research has pointed to sexual abuse (Ronan-Woodburn, 1989). Van der Kolk and colleagues (Van der Kolk, Perry, & Herman, 1991) agree, noting that abuse may impair the capacity for self-regulation of emotion and the ability to form appropriate interpersonal relations. In effect, these authors are describing key dynamics to both codependency and eating disorders. Other parallels have been drawn between familial alcoholism and eating disorders (Strober & Humphrey, 1987) and parental illness and eating disorders (Strober, 1984). Thus, given the connections between stressful events, codependency, parental separation, and eating disorders, a developmental sequence is proposed. Perhaps codependency characteristics develop as a result of unusually

stressful family environments, including alcoholism, abuse, chronic conflict, or lack of nurturance and autonomy. The codependency then mediates the relationship between the family situation and the development of an eating disorder. Codependent thoughts and feelings become a coping mechanism for long-standing and adverse family problems, increasing the risk of an eating disorder as an outlet for these painful feelings. In the present study, 64% of those participants assessed as codependent also reported experience with such negative familial situations, lending further support to this notion.

Interpretation of Eating Disorder Predictors

Analyses of the eating disorder predictor variables indicated several significant results. Primarily, conflictual and emotional parental separation significantly predicted several eating disorder symptoms. What is curious however, is that the paternal separation indices predicted more eating symptoms than the maternal separation factors. This is congruent with the correlational data of the present study, which revealed that many correlations between these factors were higher for paternal separation than maternal separation. These results are in contrast with those of Kroger and Rhodes (1992) who reported that eating disordered women experienced more maternal rejection, intrusion, and prevention of independence in comparison with non-eating disordered controls. While their non-significant findings for fathers seems surprising, these authors utilized a small sample of 20 eating disordered inpatients and 20 non-patients controls. As the present study made no attempt to diagnose eating pathology, it may be that maternal conflicts are more critical to those women with diagnosed eating difficulties.

Another significant finding of the present study involved the prediction of eating disorder scores by differentiation of self scores. This finding is consistent with Friedlander & Siegel (1990) using the same measures. Additionally, object-relations and attachment theories (Bruch, 1973) point to the inability to discriminate one's own needs and an over-reliance on external cues as a foundation for eating disorders. The present study demonstrates that women with diffuse self-other boundaries are more prone to the exhibition of eating disorder thoughts and behaviors. Therein, an important implication of this finding is that a general tendency to rely on external feedback for feelings of self-worth may be an important precipitator of eating disorders.

Psychometric Properties of the Codependency Assessment (CA)

Correlations between each subscale of the CA indicate a moderately high test-retest reliability. These results confirm those of McGlone (1992), and indicate that the thoughts, feelings, and behaviors measured by this instrument are relatively stable. While reliability coefficients were not computed by individual item, McGlone (1992) reported consistently high levels.

The concurrent validity of the CA was shown to be acceptable by measuring its relationship to scores on the DS scale. As such, it appears that the CA taps similar constructs as measured by the DS scale, particularly dependency and diffuse boundaries. Since few psychometric tests have been performed on the CA, it will be necessary to pursue this issue further if it is to be used in future investigations.

Limitations of the Present Study

While a considerable number of significant findings were reported in the present study, some limitations should be noted. First, it is possible that the

method of using the CA to determine codependency was somewhat problematic. Scoring requirements called for participants to score positively on five out of eight subscales to be assessed as codependent. While an attempt was made in the present study to obtain participants clearly scoring in the top and bottom percentiles, a gray area existed where participants scored very close to the cut-off in either direction. As such, the extent to which these "middle road" participants may have contributed to the results is unknown. A more quantitative scoring system for the CA could serve to reduce some of this ambiguity. Second, the self-report nature of the instrument lends itself to the possibility of response bias. Several of the questionnaires were of a personal nature, and the potential for socially desirable responses must be considered.

The assessment of stressful situations presents another shortcoming. Asking participants whether they have experienced chronically stressful events is open to wide interpretation. While this study aimed to examine stressors that pose unusually adverse conditions, some participants described relatively common developmental difficulties. These situations were not considered "stressors" for purposes of this research, but perhaps the subjective perception of the individual participant deems it worthy of inclusion.

Similarly, the present study did not assess the temporality of the stressful event or involvement with alcoholic persons. Participants were asked whether the alcoholic relative was still closely involved in their lives, and only those responding affirmatively to this question were included in that category. While temporal contiguity is not necessary to find a connection between codependency and stressful events, a lack of it may somewhat cloud the relationship to eating disorders.

Two final potential limitations of the present investigation are causality and external validity. Due to the correlational design of this study, it is not possible to infer causal relationships between parental separation, codependency, and eating disorders. In fact, a bidirectional model cannot be dismissed, whereby codependent behaviors lend themselves to both parental separation and conflict, and to eating disorders.

Lastly, the sample consisted primarily of first-year college students, and the results may not be generalizable to all college women. This study, however, focused on separation-individuation issues, and first year college students may be presumed to be experiencing this conflict for the first time. Samples drawn from third and fourth year students could be used to investigate whether adjustment to parental separation impacts the codependency-eating disorder relationship.

Directions for Future Research

While the present study endeavored to uncover several previously unresearched relationships, further research is needed for additional clarification. First, other means of assessing codependency should be considered to more discretely separate codependent and noncodependent participants. Perhaps an evaluation of the particular relationships that are problematic for codependents would lend a more precise understanding to the relationship between codependency and eating disorders. As this study primarily assessed parental attachment and separation as the genesis for codependency, it would be interesting to investigate whether other codependent relationships impact disordered eating. Similarly, the present study did not entail diagnosing clinical eating disorders, but looked at

cognitions and behaviors underlying the pathology. Research investigating differences in parental separation and codependency between actual eating disordered and non-eating disordered groups could add to the understanding of this phenomenon.

Future research also should consider directly testing the postulation of the present study that codependency mediates the relationship between familial stress and eating disorders. While a causal model cannot be inferred from this study, it may well be that the relationship between the three factors is bidirectional. Additionally, if chronic stress does play a major role in the development of copendency and eating disorders, it may be important to assess each individual's perception of her own stress. Apparently, some women may experience stress without developing codependent forms of coping behaviors, thus reducing their risk for eating pathologies.

Lastly, the results of the present study suggest that father-daughter separation issues are under-investigated. The discovery of several significant paternal separation relationships with similar nonsignificant maternal relationships direct future research efforts toward this relatively unexplored area.

Implications for Counseling

The results of this study hold several implications for counselors, particularly when working with women. Evidence from the present study and previous research suggest that eating disorders are a startlingly common occurrence among college women. Thus, counselors should routinely screen all of their clients for clue behaviors such as strict dieting, over-exercise, purging, and distorted body perception. In addition, therapists need to be aware of the

multidetermined nature of eating disorders as a presenting problem. In particular, the present study points to such issues as abuse, familial alcoholism, and loss of a close relative as potential precipitators. Gleaves and Eberenz (1994) note that pathological eating may serve as an unhealthy mechanism for avoiding the traumatic feelings associated with memories of abuse. As such, interventions for abuse issues must be implemented prior to or contiguous with those for eating behaviors. Conversely, these concerns may be presented for counseling, with eating pathology being less manifested.

Clearly, the present study suggests that counselors evaluate their client's level of separation from parents and stage of identity development. It may be critical to focus on the client's "unfinished dependency" business in order for her to gain a necessary sense of self-efficacy and personal power. An important adjunct to this piece involves the counselor's ability to recognize codependent behaviors in all women clients, and be alerted to their increased risk of such long-term consequences as eating disorders, substance abuse, or chronic illness. Caution also is warranted against assuming that these issues are not relevant for men. In fact, males who are raised by overprotective, enmeshed parents may have even more of a separation difficulty than females. Given this culture's tendency toward viewing males as independent and self-efficacious, those who do not fit this picture particularly struggle with these issues and may be more likely to experience long-term, adverse consequences.

Several preventative and interventive strategies for counselors are suggested by the present study. Helping clients to learn appropriate boundaries and a realistic awareness of self-control may serve to limit the extent that codependent behaviors play themselves out in harmful ways.

Counselors should encourage clients' active recognition, exploration, and expression of both positive and negative emotions, in an effort to help eating disordered women regain awareness of a part of themselves that may have long been stifled. The building of a healthy selfishness and sense of personal responsibility may reduce a client's need to soothe herself through food or other harmful outlets.

Furthermore, underlying issues of parental separation conflicts may oftentimes best be addressed through family therapy (Garner, Garfinkel, & Bemis, 1982). By helping family members change unhealthy communication patterns and disengage enmeshed relationships, clients may come to own their feelings and needs and take responsibility for their own happiness. Similarly, family therapy provides a forum where clients learn that their independence will be accepted without destroying a sense of belonging within the family unit. Ultimately, the goal is to identify and remediate the psychosocial hurdles within the family that have thwarted the client's development.

While counselors have much to offer women through active interventions of problematic eating, primary prevention may be an even more crucial step. When considering an eating disorder as a developmental issue, measures can be taken to prevent such crises. Counselors may contribute through educational programs on eating disorders and the practice of self-control in healthy ways. Additionally, women should be helped to view themselves less in terms of physical attractiveness, and more on their internal source of goodness and beauty. By increasing awareness of the risk factors and underlying dynamics of eating disorders, women can begin to change their unhealthy behaviors and adopt a nurturing, self-accepting view of themselves.

APPENDIX A
CODEPENDENCY ASSESSMENT

Codependency Assessment

These questions are intended to get at some common feelings, thoughts, and behaviors that college students share. In the spaces provided, please check under "Yes" if you experience what the question describes, or under "No" if you don't.

	YES	NO
1. Do you often have anxious feelings or worry about what will happen next?	_____	_____
2. Do you ever get back at others in sneaky ways, perhaps without being fully aware of this behavior at the time?	_____	_____
3. Do you "get stuck" in certain feelings such as guilt, love, or anger?	_____	_____
4. Do you find it difficult at times to identify what you are feeling?	_____	_____
5. Do you avoid taking risks with others because it is hard for you to trust?	_____	_____
6. Do you often feel hopeless about changing the current situation?	_____	_____
7. Do you feel persistently angry with family members or yourself?	_____	_____
8. Do you have a sense of low self-worth or failure that does not reflect your skills and accomplishments?	_____	_____
9. Are you afraid of losing control if you let yourself get really mad?	_____	_____
10. Do you tell yourself that the basic problems in your family are not <u>that</u> bad?	_____	_____
11. Do you tend to think in either/or terms when there are problems, instead of looking at many alternatives?	_____	_____

	YES	NO
12. Do you feel yourself denying the basic problems in your family?	_____	_____
13. Do you ever cover up bad feelings about yourself by acting too confidently?	_____	_____
14. Do you need to have another person around in order for you to feel worthwhile?	_____	_____
15. Do you sometimes hate yourself?	_____	_____
16. Do you wonder what it means to be "normal"?	_____	_____
17. Do you take more than your fair share of responsibility for tasks that have to be done?	_____	_____
18. Do you often feel ashamed not only about your behavior, but also about the behavior of some others?	_____	_____
19. Do you worry a great amount about how others perceive you?	_____	_____
20. Do you feel troubled if anyone upsets your usual routines?	_____	_____
21. Do you feel guilty about the problems of others in your family?	_____	_____
22. Do you withdraw from social contact when you are feeling upset?	_____	_____
23. Do you sometimes think you must be "crazy"?	_____	_____
24. Do you have trouble asking for what you want and need?	_____	_____
25. Do you tend to be pessimistic about the world in general?	_____	_____
26. Do you become preoccupied with the problems of others?	_____	_____
27. Do you tend to see moral issues in black-and-white terms?	_____	_____

	YES	NO
28. Are you afraid to approach others directly?	_____	_____
29. Do you feel pain right along with another person who is in pain?	_____	_____
30. Are you angry at God or any other supreme being?	_____	_____
31. Do you try to "keep things under control" or "keep a handle" on situations?	_____	_____
32. Do you find reasons to justify the irresponsible behavior of others in your family?	_____	_____
33. Do you have a tendency to be taken in by others--to be gullible?	_____	_____
34. Do you have a hard time making up your mind--are you indecisive?	_____	_____

APPENDIX B
PSYCHOLOGICAL SEPARATION INVENTORY

The following list of statements describes different aspects of students' relationships with both their mother and father. Imagine a scale ranging from 1 to 5 that tells how well each statement applies to you. In the space next to the statement, please enter a number from "1" (Not at all true of me) to "5" (Very true of me). If the statement does not apply to you, please enter "1". Please be completely honest. Your answers are entirely confidential and will be useful only if they accurately describe you.

Not at all true of me	A little bit true of me	Moderately true of me	Quite a bit true of me	Very true of me
1	2	3	4	5

- ___ 1. I like to show my friends pictures of my mother.
- ___ 2. Sometimes my mother is a burden to me.
- ___ 3. I feel longing if I am away from my mother for too long.
- ___ 4. My ideas regarding racial equality are similar to my mother's.
- ___ 5. My mother's wishes have influenced my selection of friends.
- ___ 6. I feel like I am constantly at war with my mother.
- ___ 7. I blame my mother for many of the problems I have.
- ___ 8. I wish I could trust my mother more.
- ___ 9. My attitudes about obscenity are similar to my mother's.
- ___ 10. When I am in difficulty I usually call upon my mother to help me out of trouble.
- ___ 11. My mother is the most important person in the world to me.
- ___ 12. I have to be careful not to hurt my mother's feelings.
- ___ 13. I wish that my mother lived nearer so I could visit her more frequently.
- ___ 14. My opinions regarding the role of women are similar to my mother's.
- ___ 15. I often ask my mother to assist me in solving my personal problems.
- ___ 16. I sometimes feel like I'm being punished by my mother.
- ___ 17. Being away from my mother makes me feel lonely.
- ___ 18. I wish my mother wasn't so overprotective.
- ___ 19. My opinions regarding the role of men are similar to my mother's.
- ___ 20. I wouldn't make a major purchase without my mother's approval.
- ___ 21. I wish my mother wouldn't try to manipulate me.
- ___ 22. I wish my mother wouldn't try to make fun of me.
- ___ 23. I sometimes call home just to hear my mother's voice.
- ___ 24. My religious beliefs are similar to my mother's.
- ___ 25. My mother's wishes have influenced my choice of major at school.
- ___ 26. I feel that I have obligations to my mother that I wish I didn't have.
- ___ 27. My mother expects too much from me.
- ___ 28. I wish I could stop lying to my mother.
- ___ 29. My beliefs regarding how to raise children are similar to my mother's.
- ___ 30. My mother helps me to make my budget.
- ___ 31. While I am home on a vacation I like to spend most of my time with my mother.
- ___ 32. I often wish that my mother would treat me more like an adult.
- ___ 33. After being with my mother for a vacation I find it difficult to leave her.
- ___ 34. My values regarding honesty are similar to my mother's.

- | Not at all
true of me
1 | A little bit
true of me
2 | Moderately
true of me
3 | Quite a bit
true of me
4 | Very
true of me
5 |
|-------------------------------|---------------------------------|-------------------------------|--------------------------------|-------------------------|
|-------------------------------|---------------------------------|-------------------------------|--------------------------------|-------------------------|
-
- ___ 35. I often consult with my mother when I make plans for an out of town weekend.
 - ___ 36. I am often angry at my mother.
 - ___ 37. I like to hug and kiss my mother
 - ___ 38. I hate it when my mother makes suggestions about what I do.
 - ___ 39. My attitudes about solitude are similar to my mother's.
 - ___ 40. I consult with my mother when deciding about part-time employment.
 - ___ 41. I decide what to do according to whether my mother will approve of it.
 - ___ 42. Even when my mother has a good idea I refuse to listen because she made it.
 - ___ 43. When I do poorly in school I feel I'm letting my mother down.
 - ___ 44. My attitudes regarding environmental protection are similar to my mother's.
 - ___ 45. I ask my mother what to do when I get into a tough situation.
 - ___ 46. I wish my mother wouldn't try to get me to take sides with her.
 - ___ 47. My mother is my best friend.
 - ___ 48. I argue with my mother over little things.
 - ___ 49. My beliefs about how the world began are similar to my mother's.
 - ___ 50. I do what my mother decides on most questions that come up.
 - ___ 51. I seem to be closer to my mother than most people my age.
 - ___ 52. My mother is sometimes a source of embarrassment to me.
 - ___ 53. Sometimes I think I am too dependent on my mother.
 - ___ 54. My beliefs about what happens when people die are similar to my mother's.
 - ___ 55. I ask for my mother's advice when I am planning my vacation time.
 - ___ 56. I am sometimes ashamed of my mother.
 - ___ 57. I care too much about my mother's reactions.
 - ___ 58. I get angry when my mother criticizes me.
 - ___ 59. My attitudes regarding sex are similar to my mother's.
 - ___ 60. I like to have my mother help me pick out clothing I buy for special occasions.
 - ___ 61. I sometimes feel like an extension of my mother.
 - ___ 62. When I don't write my mother often enough I feel guilty.
 - ___ 63. I feel uncomfortable keeping things from my mother.
 - ___ 64. My attitudes regarding national defense are similar to my mother's.
 - ___ 65. I call my mother whenever anything goes wrong.
 - ___ 66. I often have to make decisions for my mother.
 - ___ 67. I'm not sure I could make it in life without my mother.
 - ___ 68. I sometimes resent it when my mother tells me what to do.
 - ___ 69. My attitudes regarding mentally ill people are similar to my mother's.
 - ___ 70. I like to show my friends pictures of my father.
 - ___ 71. Sometimes my father is a burden to me.
 - ___ 72. I feel longing if I am away from my father for too long.
 - ___ 73. My ideas regarding racial equality are similar to my father's.
 - ___ 74. My father's wishes have influenced my selection of friends.
 - ___ 75. I feel like I am constantly at war with my father.
 - ___ 76. I blame my father for many of the problems I have.

Not at all true of me	A little bit true of me	Moderately true of me	Quite a bit true of me	Very true of me
1	2	3	4	5

- ___ 77. I wish I could trust my father more.
- ___ 78. My attitudes about obscenity are similar to my father's.
- ___ 79. When I am in difficulty I usually call upon my father to help me out of trouble.
- ___ 80. My father is the most important person in the world to me.
- ___ 81. I have to be careful not to hurt my father's feelings.
- ___ 82. I wish that my father lived nearer so I could visit him more frequently.
- ___ 83. My opinions regarding the role of women are similar to my father's.
- ___ 84. I often ask my father to assist me in solving my personal problems.
- ___ 85. I sometimes feel like I'm being punished by my father.
- ___ 86. Being away from my father makes me feel lonely.
- ___ 87. I wish my father wasn't so overprotective.
- ___ 88. My opinions regarding the role of men are similar to my father's.
- ___ 89. I wouldn't make a major purchase without my father's approval.
- ___ 90. I wish my father wouldn't try to manipulate me.
- ___ 91. I wish my father wouldn't try to make fun of me.
- ___ 92. I sometimes call home just to hear my father's voice.
- ___ 93. My religious beliefs are similar to my father's.
- ___ 94. My father's wishes have influenced my choice of major at school.
- ___ 95. I feel that I have obligations to my father that I wish I didn't have.
- ___ 96. My father expects too much from me.
- ___ 97. I wish I could stop lying to my father.
- ___ 98. My beliefs regarding how to raise children are similar to my father's.
- ___ 99. My father helps me to make my budget.
- ___ 100. While I am at home on vacation I like to spend most of my time with my father.
- ___ 101. I often wish that my father would treat me more like an adult.
- ___ 102. After being with my father for a vacation I find it difficult to leave him.
- ___ 103. My values regarding honesty are similar to my father's.
- ___ 104. I often consult with my father when I make plans for an out of town weekend.
- ___ 105. I am often angry at my father.
- ___ 106. I like to hug and kiss my father.
- ___ 107. I hate it when my father makes suggestions about what I do.
- ___ 108. My attitudes about solitude are similar to my father's.
- ___ 109. I consult with my father when deciding about part-time employment.
- ___ 110. I decide what to do according to whether my father will approve of it.
- ___ 111. Even when my father has a good idea I refuse to listen because he made it.
- ___ 112. When I do poorly in school I feel that I'm letting my father down.
- ___ 113. My attitudes regarding environmental protection are similar to my father's.
- ___ 114. I ask my father what to do when I get into a tough situation.
- ___ 115. I wish my father wouldn't try to get me to take sides with him.
- ___ 116. My father is my best friend.
- ___ 117. I argue with my father over little things.

Not at all true of me	A little bit true of me	Moderately true of me	Quite a bit true of me	Very true of me
1	2	3	4	5

- _____ 118. My beliefs about how the world began are similar to my father's.
- _____ 119. I do what my father decides on most questions that come up.
- _____ 120. I seem to be closer to my father than most people my age.
- _____ 121. My father is sometimes a source of embarrassment to me.
- _____ 122. Sometimes I think I am too dependent on my father.
- _____ 123. My beliefs about what happens when people die are similar to my father's.
- _____ 124. I ask for my father's advice when I am planning my vacation time.
- _____ 125. I am sometimes ashamed of my father.
- _____ 126. I care too much about my father's reactions.
- _____ 127. I get angry when my father criticizes me.
- _____ 128. My attitudes regarding sex are similar to my father's.
- _____ 129. I like to have my father help me pick out clothing I buy for special occasions.
- _____ 130. I sometimes feel like an extension of my father.
- _____ 131. When I don't write my father often enough I feel guilty.
- _____ 132. I feel uncomfortable keeping things from my father.
- _____ 133. My attitudes regarding national defense are similar to my father's.
- _____ 134. I call my father whenever anything goes wrong.
- _____ 135. I often have to make decisions for my father.
- _____ 136. I'm not sure I could make it in life without my father.
- _____ 137. I sometimes resent it when my father tells me what to do.
- _____ 138. My attitudes regarding mentally ill people are similar to my father's.

APPENDIX C
DIFFERENTIATION OF SELF SCALE

The following list of items describes different aspects of students' self-identity. Imagine a scale ranging from 1 to 4 that tells how often each statement applies to you. In the space next to the statement, please enter a number from "1" (Never) to "4" (Always). Your answers are completely confidential.

Never
1

Sometimes
2

Often
3

Always
4

- ___ 1. If someone close to me finds fault with what I do, I find my self-evaluation lowered.
- ___ 2. I find myself becoming depressed or anxious if a close friend is also feeling that way.
- ___ 3. I find it hard to decide how I feel about something until I've discussed it with those close to me.
- ___ 4. I tend to be uncertain how good my ideas are until someone else approves of them.
- ___ 5. I find it difficult to feel good about myself when I don't get affirmation from other people.
- ___ 6. A chance criticism from a friend will deeply upset me.
- ___ 7. When my mother criticizes my decisions, I become uncertain of them.
- ___ 8. I find it hard to make a separate judgment in the face of a strong opinion expressed by a friend.
- ___ 9. I feel very vulnerable to the criticism of others.
- ___ 10. I feel uncomfortable if my best friend disagrees with an action I take.
- ___ 11. If my parents don't approve of a decision I've made, I question my competence in making the decision.

APPENDIX D
EATING DISORDER INVENTORY-2

ED-2 ITEM BOOKLET

David M. Garner, Ph.D.

DIRECTIONS

Enter your name, the date, your age, sex, marital status, and occupation. Complete the questions on the rest of this page. Then turn to the inside of the booklet and carefully follow the instructions.

Name _____ Date _____

*Age _____ Sex _____ Marital status _____ Occupation _____

- A. *Current weight: _____ pounds
- B. *Height: _____ feet _____ inches
- C. Highest past weight excluding pregnancy: _____ pounds
 How long ago did you first reach this weight? _____ months
 How long did you weigh this weight? _____ months
- D. *Lowest weight as an adult: _____ pounds
 How long ago did you first reach this weight? _____ months
 How long did you weigh this weight? _____ months
- E. What weight have you been at for the longest period of time? _____ pounds
 At what age did you first reach this weight? _____ years old
- F. If your weight has changed a lot over the years, is there a weight that you keep coming back to when you are not dieting? ____ Yes ____ No
 If yes, what is this weight? _____ pounds
 At what age did you first reach this weight? _____ years old
- G. What is the most weight you have ever lost? _____ pounds
 Did you lose this weight on purpose? ____ Yes ____ No
 What weight did you lose to? _____ pounds
 At what age did you reach this weight? _____ years old
- H. What do you think your weight would be if you did not consciously try to control your weight? _____ pounds
- I. How much would you like to weigh? _____ pounds
- J. Age at which weight problems began (if any): _____ years old
- K. Father's occupation: _____
- L. Mother's occupation: _____

PAR Psychological Assessment Resources, Inc.
 P.O. Box 998/Odessa, Florida 33556/Toll-Free 1-800-331-TEST

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This form is printed in blue ink on white paper. Any other version is unauthorized. Reorder #1761-TB.

Printed in the U.S.A.

INSTRUCTIONS

First, write your name and the date on your EDI-2 Answer Sheet. Your ratings on the items below will be made on the EDI-2 Answer Sheet. The items ask about your attitudes, feelings, and behavior. Some of the items relate to food or eating. Other items ask about your feelings about yourself.

For each item, decide if the item is true about you ALWAYS (A), USUALLY (U), OFTEN (O), SOMETIMES (S), RARELY (R), or NEVER (N). Circle the letter that corresponds to your rating on the EDI-2 Answer Sheet. For example, if your rating for an item is OFTEN, you would circle the O for that item on the Answer Sheet.

Respond to all of the items, making sure that you circle the letter for the rating that is true about you. **DO NOT ERASE!** If you need to change an answer, make an "X" through the incorrect letter and then circle the correct one.

1. I eat sweets and carbohydrates without feeling nervous.
2. I think that my stomach is too big.
3. I wish that I could return to the security of childhood.
4. I eat when I am upset.
5. I stuff myself with food.
6. I wish that I could be younger.
7. I think about dieting.
8. I get frightened when my feelings are too strong.
9. I think that 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 felt that 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 thinner.
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 (overeating).
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're 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 my buttocks are too large.
60. I have feelings I can't quite identify.
61. I eat or drink in secrecy.
62. I think that 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.
65. People I really like end up disappointing me.
66. I am ashamed of my human weaknesses.
67. Other people would say that I am emotionally unstable.
68. I would like to be in total control of my bodily urges.
69. I feel relaxed in most group situations.
70. I say things impulsively that I regret having said.
71. I go out of my way to experience pleasure.
72. I have to be careful of my tendency to abuse drugs.
73. I am outgoing with most people.
74. I feel trapped in relationships.
75. Self-denial makes me feel stronger spiritually.
76. People understand my real problems.
77. I can't get strange thoughts out of my head.
78. Eating for pleasure is a sign of moral weakness.
79. I am prone to outbursts of anger or rage.
80. I feel that people give me the credit I deserve.
81. I have to be careful of my tendency to abuse alcohol.
82. I believe that relaxing is simply a waste of time.
83. Others would say that I get irritated easily.
84. I feel like I am losing out everywhere.

- 85. I experience marked mood shifts.
- 86. I am embarrassed by my bodily urges.
- 87. I would rather spend time by myself than with others.
- 88. Suffering makes you a better person.
- 89. I know that people love me.
- 90. I feel like I must hurt myself or others.
- 91. I feel that I really know who I am.

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APPENDIX E
DEMOGRAPHIC QUESTIONNAIRE

Demographic Questionnaire

Please answer the following questions as honestly as possible. All responses will be kept confidential.

1. Age: _____
2. Year in school: (circle one) 1st 2nd 3rd 4th 5th
3. Ethnicity: (check one)
 - Black _____
 - Caucasian _____
 - Asian _____
 - Hispanic _____
 - American Indian _____
 - Biracial (specify) _____
 - Other (specify) _____
4. Your residential / living status while attending OSU: (check one)
 - Dormitory _____
 - Rent off-campus housing _____
 - Live with parents _____
5. Parents' marital status: (check one)
 - married _____
 - separated / divorced _____
 - widowed _____
 - never married _____

(Continued on the next page)

6. Have you ever been associated with a family member or someone like a family member who you believed had a problem with alcohol or other drugs?

(check one) ☐ Yes ☐ No

7. If you answered "Yes" to # 6:

a. What was the relationship of the person(s) to you (i.e. parent, sibling)

b. Is that person still closely involved in your life?

(check one) ☐ Yes ☐ No

8. Are there any other situations or chronic problems in your family that you consider to be stressful now or in the past? (check one) ☐ Yes ☐ No

9. (Optional) If you answered "Yes" to # 8, please briefly describe the situation.

10. (Optional) If you answered "Yes" to #8, how long did this situation persist?

APPENDIX F
INSTRUCTIONS GIVEN TO PARTICIPANTS

Experimenter's Oral Instructions to Participants

Your participation in this experiment will involve approximately 1 hour to fill out five questionnaires. These questionnaires are about personality, family background, and relationships. The second inventory includes a booklet and answer sheet. I ask that you not write on the booklet, and mark your responses only on the answer sheet. The remaining 3 inventories call for you to write your answers directly on them. Do not put your names on any of the sheets. Your answers will remain completely anonymous and confidential.

There are no "right" or "wrong" answers to these questions. Please do not think too long about any question.

Remember that you are free at any time to discontinue your participation without being penalized. However, please attempt to answer all questions as best you can, as the data depend on each of your responses. Please complete the inventories in the order they are given to you. When you are finished, turn them in to me and I will sign your experiment card.

APPENDIX G
DEBRIEFING STATEMENT

Subject Debriefing Statement

Thank you for taking the time to participate in this experiment. The inventories you have just completed will be scored and pooled with all the other participants of this study. Your individual responses to these inventories will continue to remain anonymous. As this is an ongoing study, I would ask that you not discuss your participation in this study with other Psychology 100 students.

The purpose of this study was to explore the characteristics of dieting behaviors, personality factors, and family relationships.

If you have questions about your own dieting behaviors, the following books may be helpful:

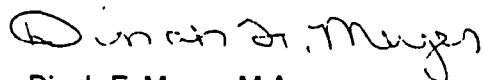
Kano, S. (1989). Making peace with food. New York: Harper & Row.

Haskew, P. & Adams, C. (1984). When food is a four-letter word. Englewood Cliffs, N.J.: Prentice-Hall.

The Counseling and Consultation Services at OSU (292-5766) also offers workshops and personal counseling pertaining to family relationships and dieting concerns.

If you have any questions or concerns about your participation in this research, feel free to contact me at 292-5303, or leave a message and I will return your call.

Thank you for your participation,



Dinah F. Meyer, M.A.
Principal Experimenter

APPENDIX H

**RESULTS OF ANOVAS AND MEANS OF SUBJECTS WITH AND WITHOUT
ASSOCIATION WITH AN ALCOHOLIC RELATIVE**

Table 11

Results of ANOVAs and Means of Subjects With and
Without Association with an Alcoholic Relative

<u>EDI Scales</u>	Alcohol Association <u>M</u>	No Alcohol Association <u>M</u>	F
Drive for Thinness	5.7	6.2	.11
Bulimia	2.7	1.9	.60
Body Dissatisfaction	12.8	12.3	.08
Ineffectiveness	4.1	3.3	.41
Perfectionism	6.7	6.5	.05
Interpersonal Distrust	2.5	3.2	.72
Interceptive Awareness	4.1	3.5	.31
Maturity Fears	3.7	3.0	.81
Asceticism	5.4	4.8	.48
Impulse Regulation	4.4	3.3	1.14
Social Insecurity	3.9	3.6	.09
<u>PSI Scales</u>			
Conflictual Independence			
Maternal	72.1	73.8	.15
Paternal	74.1	76.0	.17
Attitudinal Independence			
Maternal	26.9	26.9	.00
Paternal	32.9	31.5	.20
Emotional Independence			
Maternal	38.4	37.7	.05
Paternal	44.6	41.9	.51
Functional Independence			
Maternal	32.5	29.9	1.0
Paternal	40.5	36.1	2.7
<u>DS Scale</u>	24.8	24.7	.00

APPENDIX I

**RESULTS OF ANOVAS AND MEANS OF SUBJECTS WITH AND WITHOUT
EXPOSURE TO CHRONIC STRESS OR AN ALCOHOLIC RELATIVE**

Results of ANOVAs and Means of Subjects with and
Without Exposure to Chronic Stress or an Alcoholic Relative

	Alcohol or Stress Experience	No Alcohol or Stress Experience	F
<u>EDI Scales</u>	<u>M</u>	<u>M</u>	
Drive for Thinness	7.0	5.2	2.2
Bulimia	3.2	1.2	5.7*
Body Dissatisfaction	13.9	11.1	2.5
Ineffectiveness	5.3	1.9	10.92**
Perfectionism	7.3	6.0	2.3
Interpersonal Distrust	3.9	2.1	5.3*
Interoceptive Awareness	4.9	2.5	6.3*
Maturity Fears	3.4	3.1	.25
Asceticism	5.8	4.2	3.5
Impulse Regulation	4.9	2.5	6.2*
Social Insecurity	5.0	2.4	11.3***
<u>PSI Scales</u>			
Conflictual Independence			
Maternal	70.5	76.0	2.0
Paternal	71.0	79.6	4.6*
Attitudinal Independence			
Maternal	27.7	26.3	.34
Paternal	34.1	29.8	1.9
Emotional Independence			
Maternal	38.3	37.5	.07
Paternal	43.5	42.0	.20
Functional Independence			
Maternal	32.9	28.7	3.0
Paternal	39.9	35.1	3.7
<u>DS Scale</u>	26.1	23.3	4.6*

*p < .05
 **p < .01
 ***p < .001

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