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ANOREXIA NERVOSA AND BULIMIA NERVOSA:

THE PATIENTS' PERSPECTIVE

by

Benita J. Quakenbush

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Psychology

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1996

ABSTRACT

Anorexia Nervosa and Bulimia Nervosa:

The Patients' Perspective

by

Benita J. Quakenbush, Master of Science

Utah State University, 1996

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Department: Psychology

Eating-disorder clients show low motivation, poor follow-through, and inordinate premature dropout rates in treatment. To date, little research has been conducted that might provide clinicians with an understanding of the critical factors that may aid clients' recovery. Such factors may be used by clinicians to better motivate clients to collaborate in treatment. The purpose of this study was to identify some of the critical factors that women with eating disorders believed were crucial in prompting or facilitating their recovery. Identification of these factors was accomplished through a systematic content analysis of semistructured interviews with recovered or recovering bulimics and anorexics. This study may contribute significantly to future research into the development of motivational supplements to eating disorder therapy (e.g., psychoeducational materials or therapy orientation programs). Of interest were what personal, interpersonal, or environmental factors anorexic and bulimic clients reported increased their motivation to recover, and prompted them to begin the recovery process,

maintain recovery, and cope with the threat of relapse. Also, factors that subjects reported hindered their progress in recovery were examined.

The anorexic and bulimic subjects reported social support as a critical factor across three stages of recovery, including beginning recovery, maintaining recovery, and coping with relapse. Being "tired" of the disorder and therapy were indicated to be relevant to beginning recovery. Improved self-esteem was deemed significant in helping subjects both maintain recovery and cope with the threat of relapse. Establishing healthy eating habits and attitudes was a necessary factor required to maintain recovery. Subjects shared that developing healthy ways to deal with emotions enabled them to deal successfully with the threat of relapse.

Anorexic subjects reported that people and societal expectations, fear of becoming fat, incentive to numb emotions, and poor eating habits and attitudes impeded their recovery. Bulimic subjects indicated that people and societal expectations, incentive to numb emotions, lack of understanding, and poor eating habits and attitudes hindered their recovery.

(129 pages)

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Benita J. Quakenbush

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CHAPTER I

INTRODUCTION

Researchers report that most eating-disorder clients evidence considerable ambivalence about treatment. In general, they tend to show low motivation, poor follow-through, and inordinate premature dropout rates (Barth & Wurman, 1986; Hall, 1985; Lee & Rush, 1986; Merrill, Mines, & Starkey, 1987; Mitchell et al., 1985; Riebel, 1990; Roy-Byrne, Lee-Benner, & Yager, 1984; Shisslak, Crago, Schnaps, & Swain, 1986). To date, little research has been conducted that might provide clinicians with an understanding of the critical factors that may aid clients' recovery. Such factors may be used by clinicians to better motivate clients to collaborate in treatment. For example, the treatment outcome research published to date does not consider the insight of the client, the complexity of eating disorders, or the essence of the therapeutic process (Maine, 1992). The literature on prediction of positive and negative outcomes among eating-disorder clients has limited usefulness because it describes global correlates of change (e.g., less disturbed eating behaviors and self/body image, history of laxative or diuretic abuse, stable family), but not critical life events or factors that motivated clients to initiate treatment (incentives).

Interview and questionnaire data from recovered eating-disorder clients could provide clues regarding critical life events and other factors that motivated them to change (Beresin, Gordon, & Herzog, 1989; Hsu, Crisp, Arthur, & Callender, 1992; Maine, 1985; Purgold, 1987). If researchers could identify factors that possibly increase motivation, therapy effectiveness may improve.

The purpose of this study was to identify some of the critical factors that women

with eating disorders believed were crucial in prompting or facilitating their recovery. Identification of these factors was accomplished through a systematic content analysis of semistructured interviews with recovered or recovering bulimics and anorexics. This study may contribute significantly to future research in the development of motivational supplements to eating disorder therapy (e.g., psychoeducational materials or therapy orientation programs).

Primary Questions

The research questions below pertain to the temporal events and issues confronting eating-disorder clients who have recovered.

1. What personal, interpersonal, or environmental factors do anorexic and bulimic clients report increased their motivation to recover, and prompted them to begin the recovery process (e.g., enter treatment or overcome their denial)?
2. What personal, interpersonal, or environmental events or factors purportedly helped clients persist in their attempts to recover over time (maintain motivation)?
3. What factors do eating-disorder clients report maintained their eating disorder behavior, thus making recovery difficult?
4. What personal, social, or environmental factors do recovered clients believe helped/help them cope with the threat of relapse?

Accessory Questions

A variety of descriptive data and an explanation of interrelationships among key

variables were also of interest in the present study. A description and summarization of these variables would help to more clearly define accessory symptoms and problems of this client population, and illustrate how problem areas exacerbated initially, but then remitted with recovery. Further description of these relationships would serve to verify common clinical beliefs about recovery. For example, prior researchers (Casper, Eckert, Halmi, Goldberg, & Davis, 1980; Garfinkel, Moldofsky, & Garner, 1980; Hall, Slim, Hawker, & Salmond, 1984; Katzman & Wolchik, 1985; Toner, Garfinkel, & Garner, 1986) have noted that the emergence of eating disorders is associated with problems such as impulse control (e.g., alcohol abuse, excessive exercise, compulsive spending).

Documentation of the occurrence of these accessory problems would help to enhance the clinical legitimacy of this sample, and may serve to support common clinical assumptions about clients' problems. The specific accessory questions of interest were:

1. Is the present sample of recovered and recovering women similar to other known samples reported in the literature in terms of marital status, ethnic origin, age of onset of disorder, and personal income?
2. What relationships exist between interview variables and recovery constructs (e.g., such as entering recovery, maintaining recovery, hindrances to recovery, and coping with relapse)? For example, is there an inverse relationship between number of impulse control problems acknowledged by subjects and: (a) subjects' self-rated, overall degree of recovery (see Interview question #17); or (b) the length of time in recovery?
3. Is there a relationship between the self-rated overall degree of recovery and the length of time in recovery?

4. Does a relationship exist between length of time in recovery or self-rated degree of recovery, and clients' recovery attributions (i.e., internal versus external locus of control)?

CHAPTER II

LITERATURE REVIEW

This review contains three sections. First to be discussed is the inability of available eating-disorder treatment outcome studies to shed light on the therapeutic problems of motivation and premature dropout. Clearly, there is a need to develop more effective treatments due to inordinate dropout rates among eating-disorder clients. Second, a summary of the limited literature regarding former eating-disorder clients' perceptions of critical factors that facilitated their recovery will be presented. The lack of studies in this area suggests a need for further research into recovery factors. Third, research pertaining to attribution and motivation theory will be outlined. When individuals recall past experiences, their perceptions of the events are not necessarily fully valid or completely representative of objective reality. Rather, attributions are peoples' constructions of cause-and-effect relationships, which help them better understand critical life events. With regard to eating-disorder recovery issues, individuals who are just beginning recovery and who are still bingeing and purging may tend to ascribe these events to external factors. Conversely, individuals with longer periods of recovery may be more likely to attribute these factors to internal events.

Outcome Studies of Bulimia Nervosa and Anorexia Nervosa

This section reviews the articles published to date regarding eating disorder

outcomes. It is intuitively reasonable to expect that psychotherapy outcome research might assist clinicians in identifying critical personal factors that affect change in clients. It is well known, for example, that a popular approach to examining client factors and outcome is to correlate client characteristics with degree of improvement, or to compare good versus poor outcome groups on such client factors.

In the section that follows, 10 articles are discussed that are in the public domain. These included one review of outcomes in anorexia nervosa and bulimia nervosa, six outcome studies of bulimia nervosa, and three outcome studies of anorexia nervosa. Examples of the available eating disorder outcome research are also summarized in an effort to illustrate the limitations of current knowledge regarding critical motivational factors. This literature also illuminates the problem of inordinate dropout rates in eating disorder treatment.

Herzog, Keller, and Lavori (1988) reviewed 40 follow-up studies of bulimia and anorexia. They summarized data on the outcome domains and possible prognostic factors of mortality, weight, eating behavior, menstruation, psychological functioning, psychosexual functioning, recovery, and relapse. The reviewers contended that anorexia nervosa is a psychiatric disorder with a significant mortality rate, and is often comorbid with bulimia. Anorexia is typically chronic in nature, whereas bulimia is more episodic, with both remissions and relapses. At a minimum, one third of surveyed anorexic and bulimic subjects were still symptomatic at follow-up several years later. The authors stated that 29 of the studies reporting prognostic factors had results that were inconclusive and contradictory.

A 2-year follow-up of 43 bulimic patients suggested that abstinence from bingeing and purging appears essential to psychological, as well as behavioral, recovery, and is important in the determination of treatment outcome status (Maddocks, Kaplan, Woodside, Langdon, & Piran, 1992). Johnson-Sabine, Reiss, and Dayson (1992) found that positive outcome (i.e., significant reduction of symptomatology) was associated with fewer social problems, higher social class, and a significant improvement in eating attitudes at follow-up. However, no one factor or combination of factors significantly predicted the outcomes for bulimics at follow-up.

Herzog, Keller, Lavori, and Ott (1988) reported a 6-month follow-up study of 30 bulimic individuals. Fifty-seven percent of the sample had been diagnosed with an affective disorder, 33% of these were considered recovered, and 24% had recovered from their affective disorder. The affective disorder had little effect on recovery time from bulimia. In a study (Keller, Herzog, Lavori, Bradburn, & Mahoney, 1992) that expanded the beforementioned study's follow-up time to 35-42 months, researchers found that predictors of recovery included having less disturbed eating behaviors and self/body image at intake and having several good friends.

Fallon, Walsh, Sadik, Saoud, and Lukasik (1991) conducted a follow-up study of 46 inpatient bulimic women 2 to 9 years after hospitalization. Thirty-nine percent had fully recovered and 41% were currently actively bulimic. Positive outcomes were associated with shorter duration of bulimia before hospitalization, increased length of time since discharge, absence or minimal history of laxative abuse or diuretic abuse, and greater weight fluctuation in the follow-up interval. A diagnosis of anorexia nervosa at

admission, the type of therapy received, likelihood of having a lifetime history of substance abuse or dependence, level of deterioration of functioning in earlier life, or having a follow-up diagnosis of borderline personality disorder were not associated with poorer outcomes.

An overview of seven existing studies examining the course and outcome of bulimia nervosa (Herzog, Keller, Lavori, & Sacks, 1991) indicated that outcome studies are complicated by differences in research design and methods, confusion over the definition of "recovery" and "relapse," and the possibility of forms of bulimia with varying outcomes. It is generally understood that bulimia is a chronic disorder with high rates of relapse and subclinical symptomatology.

Vilsvik and Vaglum (1990) reported a 1- to 9-year follow-up study in which 17 teenage female anorexics with a stable family and positive premorbid psychosocial functioning may constitute a subgroup of anorectic clients with a hopeful prognosis. A larger number of hospitalizations for anorexia and an unsatisfactory educational and/or vocational adjustment at presentation were two variables found to be significant in terms of poor long-term prognosis (Santonastaso, Pantano, Panarotto, & Silvestri, 1991). Basso (1990) noted that among his clients presenting with anorexia, 86% have fair recovery (12% spontaneous recovery), 13% remain chronic, and 1% have died.

The studies just outlined indicate that recovery from bulimia and anorexia might be affected by certain client characteristics, such as less disturbed eating behaviors and self and body image at intake, having several good friends, history of laxative abuse or diuretic abuse, stable family, good premorbid psychosocial functioning, and duration of

eating disorder before hospitalization. In spite of the contradictory nature of the research results of predictor outcomes, research indicates that approximately two thirds of eating-disorder patients do recover.

It is evident from the present review that the outcome literature supplies little information about factors that have facilitated clients' recovery. Rather, authors typically describe client demographic and epidemiological characteristics and their relation to outcome. Also, these researchers failed to inform the reader what "recovery" or "recovered" meant in a particular study. In addition, the body of research did not involve assessment of clients' perceptions, experiences and insights into recovery. Given that clinicians are interested in learning possible clues to the incentives which may have been powerful enough to initiate and maintain recovery, it may be useful to obtain these attributions from interviewing recovered or recovering clients.

Recovering Eating-Disorder Clients' Perceptions of Recovery

This section will review what is currently known about eating-disorder clients' perceptions of the recovery process. Also, the limitations and problems with the current available research will be discussed. Although numerous studies have investigated the relationship among demographics, personality and behavioral characteristics, assessment, treatment of eating disorders, and treatment outcome, there has been only limited research surveying eating-disorder clients' experiences of recovery to date (Kirk, 1986). Only nine such studies of this type were located. Of these nine studies, four focused on

anorexia nervosa, and the remaining five focused on bulimia nervosa.

Beresin et al. (1989) reported on 13 female anorexic subjects' perspectives on recovery. They emphasized that movement toward health entails forming a therapeutic relationship in which the anorexic individual can express feelings and experience nonjudgmental understanding from another person, helping the person separate from the pathological family system, assuage primitive guilt, experience psychosexual development in a manner that would enhance entering into adulthood, and build a firm, cohesive sense of self.

Maine (1985, 1992) examined the views of 25 recovering anorexic females and found that few clients receiving formal treatment believed it was essential to their recovery. The central themes of self-acceptance, acknowledgment of familial dysfunction, self-responsibility, and self-motivation were identified as fundamental to recovery. Validation, support, and affirmation facilitated recovery, but these were reportedly found more often in relationships outside of therapy.

Six recovered anorexic individuals described personality strength, self-confidence, "being ready," and "being understood" as the factors most important for recovery (Hsu et al., 1992). Purgold (1987) followed up 78 anorexic clients, 24 of whom were identified as "good outcomes" and 17 considered "poor outcomes." A majority of the recovering anorexic clients perceived having a new relationship with the opposite sex, family support, and therapy as helpful to their recovery. Factors identified by recovering anorexic clients as impeding or delaying their recovery included lack of involvement of family, family's negative attitudes toward the therapist, and bulimia after discharge.

Recovering bulimic clients have reported somewhat different factors associated with recovery. Kirk (1986) surveyed 123 recovering bulimics who indicated that the most helpful aspects of recovery included engaging in individual counseling that offered a combination of insight and cognitive-behavioral methods. Spiritual and supportive activities were helpful to those respondents who tried them. Antidepressant medications were helpful to about half of the clients who tried them.

In another study, the experiences of seven recovering bulimics were described (O'Byrne, 1992). The experiences seen as most significant involved both psychological and social variables. The author labeled the basic psychosocial process that emerged from the descriptions of the experience of recovery as "opening the self." She defined this process as follows:

- a) The self begins to become increasingly open to the realization that problems existed, and that the self eventually contemplates change;
- b) the person no longer keeps the behavior secret, but she takes some kind of action;
- c) expanding the self; and
- d) being open in one's heart and mind to maintaining health and continuing to move towards life. (p. 154)

Peters' (1991) research with 17 recovering bulimic subjects suggested that recovery is not a single event, but a progression of complex changes in a multitude of relationships: to self, body, others, and the cultural standards for appearance. Data from another study involving 10 recovering bulimics (Platt, 1992) suggested that recovery occurs in three stages. In the first phase, bulimia came to be viewed as an unwanted coping mechanism, and a commitment to stop the behavior was made. In the second phase, the bulimic behavior was interrupted; however, relapses were common. In the

third phase, the bulimic individual learned to care for herself, and developed more adaptive coping mechanisms, which promoted feelings of self-esteem. Themes emerging from a study of 30 bulimic subjects (Rorty, Yager, & Rossotto, 1993) emphasized that their determination to recover stemmed from being "fed up" with the disorder and desiring a better life. Professional treatment and support groups, particularly Overeaters Anonymous, were reported to be helpful. Additionally, supportive and caring relationships with other recovering bulimics, therapists, or other important persons were considered as essential to recovery by most of these subjects.

The aforementioned studies explored the very general aspects and phenomenology of eating-disorder subjects' recovery experiences. Themes that emerged as significant client attributions about recovery included desiring a better life, self-acceptance, acknowledgment of familial dysfunction, self-responsibility, self-motivation, and nonjudgmental understanding from another person. The other variables that eating-disorder clients described as important to their recovery were a new relationship with the opposite sex, empathic and caring relationships with important others, family support, therapeutic help, support groups, spiritual activities, and antidepressant medications.

Although these studies have added information to a small research base, they have several limitations. First, a majority of the studies had very small sample sizes, which decreased the stability and generalizability of results (two studies had under 10 subjects, two had under 15, and only two studies had over 20). Also, in the majority of the studies, the researcher him/herself conducted the interview, which may have introduced experimenter (interviewer) bias into the design. Additionally, themes of recovery were

sometimes conceptualized and reported in a vague manner (e.g., being open in one's heart and mind to maintaining health and continuing to move towards life) (O'Byrne, 1992). Finally, rather than using multiple judges, the author of the majority of studies attempted to identify variables or themes he/she presumed were critical to recovery.

While some of the earlier studies incorporated the use of a questionnaire only, the present study utilized a demographic questionnaire, but primarily gathered data from semistructured clinical interviews. Further, the present study used trained interviewers (blind to the exact purposes of the study) to conduct the interviews in a standardized manner. There seem to be attributional differences between anorexic versus bulimic subjects in these studies. It is not known whether these differences are due to: (a) how the attributions were ascertained, (b) inherent differences between anorexic and bulimic individuals' attributions or recovery experience, or (c) perceived locus of control. Unlike these prior studies, the present descriptive study aimed to identify clients' attributions regarding critical events they believed led up to, precipitated, and maintained recovery, as well as to identify any attributional differences between anorexic and bulimic subjects.

Attribution and Motivation Theory

Attribution theory has proven to be a useful framework for studying motivation in educational and therapeutic contexts (Graham, 1991). Causal attributions may help individuals answer "why" questions such as "Why did I fail at abstinence again today?" or "Why did I do poorly on this test?" People tend to search for reasons "why" when faced with negative, unexpected, or atypical outcomes because attributions help impose

order on an uncertain environment (Pittman & Pittman, 1980; Weiner, 1985b; Wong & Weiner, 1981).

Graham (1991) stated that individuals' successes and failures are usually credited to ability factors (aptitude and skills), an exertion factor such as temporary or sustained effort, the difficulty or ease of a task, personality, mood, and help or hindrance from others. In this culture, individuals attach the most significance to their perceived competencies and how hard they try (Graham, 1991). Researchers have been most interested in the effect of attributions upon achievement strivings. Attribution theorists and researchers in the achievement motivation area have focused on affect as a consequence of causal attributions (Harvey & Weary, 1984). This section will examine the properties or causal dimensions of attributions and the research that investigates the impact of attribution and outcome on affect. Additionally, research on how attributions affect progress in treatment or maintenance programs for alcoholics, addicts, and others striving to improve health behaviors will be reviewed. Finally, three studies investigating locus of control orientation in obese subjects and eating-disorder clients will be examined.

Four properties or causal dimensions of attributions have been identified by Weiner (1985a, 1986) and have been supported by other researchers, including: (a) the locus dimension, (b) stability dimension, (c) globality dimension, and (d) controllability dimension. The locus dimension describes the location of a cause as internal or external to the person, and is linked to pride and other self-esteem affects (Graham, 1991). Ability and effort are seen as internal attributions because they reflect an individual's personal

characteristics. Task difficulty or luck are viewed as external attributions regarding the causes of outcomes. Weiner, Russell, and Lerman (1978, 1979) posit that internal attributions heighten affective reactions, such as pride in success. However, ability attributions following a failure often lead to feelings of incompetence, resulting in a reduction of self-esteem. A study conducted by Riemer (1975), in which subjects rated their affect following performance on a task, supported Weiner's findings. Also, McFarland and Ross (1982) investigated the impact of outcome and attribution on affect in achievement contexts. College students were led to attribute their test score outcomes either to ability or to task difficulty. Not surprisingly, the results indicated that success was correlated with higher or more positive affect, less negative affect, and greater feelings of self-esteem versus failure, but only when students perceived or believed that their performance was a result of their ability. Peplau, Russell, and Heim (1979) found that locus had relevance for individuals' responses to their loneliness. The students who attributed their loneliness to social ability rather than to effort reported more feelings of apathy, depression, and hopelessness.

The stability dimension defines causes as constant or varying (Weiner, 1979). For example, an individual's aptitude is considered to be stable, whereas mood and effort vary across time and situations (unstable). Stability is linked to affects that implicate future expectations. For example, stable causes for failure can give rise to feelings of hopelessness. Abramson, Metalsky, and Alloy (1989) have suggested that a state of learned helplessness results from the belief that there is no relationship between one's responses and the ensuing outcomes. Weiner, Nierenberg, and Goldstein (1976) found

that expectancies for continued success on a block design test were higher among individuals making attributions to stable causal factors rather than unstable factors. Arkin and Maruyama (1979) found that anxiety about school performance was significantly reduced when stable attributions were made by students who were satisfied with their performance in a course.

The dimension of globality differentiates between causal factors believed by persons to influence many (or all) of their situations from those factors perceived to affect only specific situations. For example, persons can believe that other people find them uninteresting in all situations. Other individuals may consider themselves interesting to others in work situations, but not interesting to others at social events. Abramson, Seligman, and Teasdale (1978) found that attributions of depressed people who perceived themselves as helpless were characterized as internal, stable, and global.

The fourth dimension, controllability, refers to personal responsibility (Graham, 1991). An individual is perceived to be responsible for how hard the person tries (effort). However, aptitude and luck are believed to be beyond personal control. This dimension is linked to the set of social emotions including guilt, shame, pity, and anger. Graham has explained that individuals feel guilty when failure is perceived to be due to controllable factors. Shame is more likely to be experienced when failure is due to uncontrollable consequences such as low ability. People often feel sympathy toward others when we perceive their failure as due to uncontrollable factors such as low ability. However, if their failure is perceived as caused by controllable factors, such as lack of effort, anger is the dominant emotional reaction experienced by others. See Table 1 for a

Table 1

Dimensions, Outcomes, and Resulting Effects

Dimension	Examples	Success >>>>>>> Affect	Failed>>>>>>>Affect
Locus of Control			
Internal	Ability/Effort	Pride/Self-Esteem	Inadequacy
External	Task Difficulty/Luck		Esteem Protected
Stability			
Constant	Aptitude	Hopefulness	Helplessness
Varying	Mood/Effort		
Globality			
General	All Situations	Hopefulness	Helplessness
Specific	Specific Situations		
Controllability			
Responsible	Effort		Guilt/Anger
Beyond Control	Aptitude/Luck		Shame/Sympathy

summary of dimensions, outcomes, and resulting affects.

Attributions have been found to affect the efficacy of treatment and maintenance programs designed to prevent relapse in alcohol and drug abuse and other health behaviors (smoking cessation, dieting, exercising). Ginter (1988) indicated that making internal attributions about the control of health behaviors is more likely to enhance personal responsibility for its continuation. Kopel and Arkowitz (1975) stated self-attributed control can be fostered by health professionals. Their research suggests four intervention aids: (a) use the least powerful reward or punishment to help keep the externally attributed control to a minimum, (b) encourage the client to play an active role in the choice of treatment goals and target behaviors, (c) minimize reliance on counselors and external aids, and (d) help the client to develop self-management skills that can help enhance the perception of self-regulation.

Sandoz (1991) reported recovering alcoholics in A.A. differ significantly from a control group in their greater belief in an external locus of control (i.e., "higher power"). However, a linear relationship was found between length of sobriety and an internal locus of control in the A.A. group, suggesting that locus of control may shift from external to internal over the course of recovery maintenance.

Morojele and Stephenson (1992) found that between intake and discharge in a Minnesota Model (MM) treatment program in the United Kingdom, there was a marked reduction in the clients' feelings of personal responsibility for their addiction. However, the clients' sense of personal control over their recovery was increased significantly. These findings suggest clients in MM-type treatment programs come to believe their

addiction problem is primarily due to an external factor (a disease); and they make internal attributions about responsibility for their recovery, such as involvement in 12-step fellowships and adoption of certain ways of thinking. Taylor, Lichtman, and Wood (1984) and Frey and Rogner (1987) found this approach to be conducive to positive behavior changes.

Obesity research has examined locus of control because of its presumed link with dependency and self-regulation skills (Striegel-Moore & Rodin, 1986). Several researchers have found that individuals with external locus of control are more dependent and use less self-reinforcement than persons with internal locus of control (Bellack & Tillman, 1974; Bellack, Schwartz, & Rozensky, 1974; Reid & Ware, 1973; Rotter, 1966). A study of obese college students revealed (Thomason, 1983) obese students obtained higher externality scores on the self-control subscale and the social system control scale than normal weight peers. These results indicated the obese subjects felt less control over their social environment and over their impulses and desires.

Rost, Neuhaus, and Florin (1982) found sex-related locus of control data showed that bulimarexic women had significantly higher external control, and lower internal control than the comparison subjects. The authors assert these findings indicated the bulimarexic woman tends to adapt to the demands of her partner and to follow a role concept of passivity, dependency, and unassertiveness.

A study conducted by Hood, Moore, and Garner (1982) showed that younger anorexic patients demonstrated higher internal control compared to norms. Older patients were not differentiated from the norms. The results of this study suggest the

internality/externality orientation is not a global characteristic of anorexia nervosa. External subjects were on the average one year older, had higher premorbid and presentation weights, and experienced early menarche about three times more than internal subjects. External subjects reported dieting was encouraged by parents or peers. Additionally, external subjects were more likely than internal subjects to eat snacks regularly, induce vomiting or use laxatives on a regular basis, use alcohol, and smoke cigarettes. A majority of external subjects were attending or had graduated from college, whereas two thirds of the internal subjects were still in high school. Internal subjects were portrayed as excellent or above average students more often than external subjects.

Attribution theory has been a helpful framework to study motivation in achievement contexts. Attribution theorists and researchers have focused on affect as a consequence of causal attributions. Four properties or dimensions of casual attributions have been identified, including locus of control, stability, globality, and controllability. The locus dimension is related to pride and self-esteem affects. The stability and globality dimensions are associated with affects that shape future expectations. The controllability dimension is connected with the social emotions of guilt, shame, pity, and anger. Attributions, their outcome, and resulting affects have been found to influence achievement and motivation outcomes in alcohol and drug, smoking cessation, dieting, and exercising programs.

Obese college students were found to have higher externality scores on the self-control subscale and on the social system control scale than peers of normal weight. Sex-related locus of control data indicated bulimarexic women had significantly higher

external control, and lower internal control than the comparison subjects. Other results revealed internality/externality orientation is not a global characteristic of anorexia nervosa. Externality increased with age, and high external scores were correlated with specific clinical symptomatology and personality measures.

Implications for Clients'

Reports of Recovery

Findings from the aforementioned articles suggest that there may be a link between (recovering) eating-disorder individuals' attributions, and their ability to persevere in the recovery process over time. Clinicians and researchers could possibly help improve treatment effectiveness if they were able to identify attributional styles that facilitated or hindered recovery for eating-disorder clients. For example, does the internalization of positive events affect motivation differently than the internalization of negative events? And, is there a relationship between length of time in recovery and internality versus externality? Additionally, it would be helpful to know if a relationship exists between relapse and a high locus of control.

CHAPTER III

METHODOLOGY

Population and Sample

The population of interest in the present study was women who considered themselves to be recovered or recovering from bulimia and/or anorexia nervosa.

Definition of Recovery

Subjects for the study had to demonstrate that they met the following defining conditions for recovery:

1. Previously met Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (APA, 1994) diagnostic criteria for anorexia nervosa or bulimia nervosa for at least a 3-month period.
2. Currently, maintenance of body weight was no less than 10% of optimal weight for longevity based on Metropolitan Life Insurance Tables (1983), for at least 3 months.
3. Currently, no more than monthly binge-eating episodes (consumption of 2000 calories or more with a sense of loss of control, for at least 3 months).
4. Presently, no more than monthly use of one or more of the following extreme methods for the purpose of losing weight: (a) self-induced vomiting, (b) use of laxatives or diuretics for purpose of losing weight, (c) loss of 10% body weight coupled with more than 1 hour per day of high aerobic exercise.

5. All subjects had been recovering for at least 3 months.

Recruitment of Subjects

Subjects were recruited from Cache Valley, Utah, and from communities along the Wasatch Front and the Salt Lake Valley from Spanish Fork, Utah, to Tremonton, Utah. Newspaper advertisements announcing the study were placed in the major and community newspapers (see Appendices A and B), as well as student newspapers at Utah State University. Public service announcements were aired with radio stations. In addition, subjects were recruited from former Psychology Community Clinic and Counseling Center clientele at Utah State University.

Screening Interview

Subjects interested in volunteering for this study were asked to participate in a preliminary semistructured phone interview. Screening questions assessed history of bulimia nervosa and/or anorexia nervosa, and the extent of recovery (residual DSM-IV symptoms). Of interest was whether subjects met the "Definition of Recovery" described above. A checklist of DSM-IV Criteria for anorexia and bulimia (Appendix C) was used to guide the screening interview, so as to verify the prior diagnosis of prospective subjects, as well as current status (as recovered). Subjects who passed the telephone screening were later asked to complete a consent form (see Appendix D), demographic forms (see Appendix E and F), and Attributional Style Questionnaire (see Appendix K).

Consent Form

A consent form (see Appendix D) advised subjects that: (a) participation in the study would take about 2 hours; (b) they would be asked to complete a short demographic fact sheet, a 75-item questionnaire, The Attributional Style Questionnaire, and an interview; (c) the interview would be videotaped; (d) completed questionnaires, videotapes, and interviewer's notes would contain no identifying information and be kept in a secure place; (e) results of the study would report only group data and would be used for research purposes only; (f) segments of the videotape could be used to develop a pretreatment therapy orientation film, which might be used in future research at Utah State University; (g) there were no known risks; (h) participation was voluntary and subjects were free to withdraw their consent at any time; and (I) subjects were invited to inquire about study procedures at any time, and told that results of the study would be available to them in about 6 months.

Demographic Form

The demographic forms (see Appendices E and F) elicited various kinds of information, much of which (theoretically) related to major recovery issues and strategies. For example, subjects' age, ethnicity, socioeconomic status, as well as information regarding other impulse control problems (e.g., drinking, use of drugs, shoplifting, promiscuous sex) have all shown correlations with anorexia or bulimia in prior research. Also, anorexia and bulimia seem to affect mostly female adolescents and

young adults. Herzog (1982), for instance, reported in a study that the age of bulimics ranged from 15 to 42, with a mean age of 25.3. Other researchers have found the mean age of bulimics to range from 23.7 to 26 (Abraham, Mira, & Llewellyn-Jones, 1983; Fairburn & Cooper, 1982; Pyle, Mitchell, & Eckert, 1981). Similarly, anorexia nervosa primarily occurs in adolescents and young adults (Maine, 1992).

Although anorexia and bulimia have been believed to occur less in lower socioeconomic classes and underdeveloped nations and minority groups, some studies have found increased incidence in these groups (Garfinkel & Garner, 1982; Jones, Fox, Babigan, & Hutton, 1980). These researchers suggest that excessive control of one's weight, body size, and shape is becoming more evenly distributed throughout minority and socioeconomic groups.

Additionally, research has shown that bulimia is frequently complicated by concomitant disorders, such as alcohol and drug abuse, as well as other impulse control disorders (Casper et al., 1980; Garfinkel et al., 1980; Hall et al., 1984; Katzman & Wolchik, 1985; Toner et al., 1986). Taken together, these demographic and personal characteristics might correlate with the recovery issues and attributions assessed in the present study.

Attributional Style Questionnaire (ASQ)

The Attributional Style Questionnaire (Peterson, Semel, et al., 1982; see Appendix K) is a self-report measure of patterns of "explanatory style." Peterson and Seligman (1984) have defined explanatory style as the tendency to select certain causal

explanations for positive and negative events. The ASQ yields scores for the attribution of causes for negative and positive events with internal versus external, stable versus unstable, and global versus specific. Subjects are asked to generate their own cause for six negative events and six positive events. They then rate themselves on three 7-point Likert scales that correspond to the internality, stability, and globality dimensions.

The three ratings of each (attributed) "cause" are scored in the direction of increasing internality, stability, and globality. Total scores are formed separately for negative and positive events. The appropriate items are summed and divided by six (see ASQ scoring key, Appendix L). These three scales have modest internal consistency coefficients (.44 - .69) due primarily to the small number of items in each scale (Tennen & Herzberger, 1985). Also, the scales are intercorrelated within positive events and negative events. For these reasons, the authors have combined the scales into overall composites for negative and positive events. As a result, reliability has been increased (.72 and .75, respectively). A large research base supports the criterion and construct validity of the ASQ (Alloy, Peterson, Abramson, & Seligman, 1984; Eaves & Rush, 1984; Peterson, Bettes, & Seligman, 1982; Peterson, Semmel, et al., 1982; Weinberger & Cash, 1982).

The ASQ is being used with the written permission of the author, Dr. Martin E. P. Seligman (see Appendix J).

Recovery Interview: Content and Format

The Recovery Interview followed a semistructured format (see Appendix G).

Content of the interview was based on the recommendations and speculations of researchers regarding issues thought to be important in recovery (Beresin et al., 1989; Hsu et al., 1992; Kirk, 1986; Maine, 1992; O'Byrne, 1992, Peters, 1991; Platt, 1992; Rorty et al., 1993). Also, some of the interview content was based on DSM-IV criteria for eating disorders. Specifically, DSM diagnostic criteria must be largely absent if a client was to be considered "recovered." Interview items were also borrowed from a number of unpublished interviews (Kirk, 1986; Maine, 1992; O'Byrne, 1992).

Taken together, the interview questions systematically tapped subjects' recall of psychological, social, and biological factors that they believed paved the way for, precipitated, and maintained recovery. In addition, factors that clients believed contributed to relapse, prevented relapse, and that helped them recovery from relapse were elicited. Finally, clients were asked to disclose any insights and personal meaning derived from the experience in their recovery.

As the interviewer inquired about perceived elements of recovery, maintenance, and relapse, it was emphasized to avoid asking questions that were rhetorical or leading. Many interview questions in earlier studies had been constructed in a manner that could have slanted clients' responses to favor the author's preconceived hypotheses (e.g., How has the fashion industry's emphasis on slimness impeded your recovery [Maine, 1992]; How has your view of your body changed since recovery? [Maine, 1992; Platt, 1992]). Because of the problems presented by such leading questions, the interview questions developed for the present study were worded in an ambiguous fashion to encourage unbiased client responses. For example, the two slanted questions mentioned above were

reworded to, "Have your thoughts or feelings about your body changed or stayed the same since you stopped (binge eating, purging, diuretic use, high rate of exercise, fasting, other extreme weight loss method)?" and "What do you think or feel when you come across articles, or see TV shows describing clothing fashions?" Also, interviewers were required to use clients' own verbal characterizations of symptoms (e.g., use the term "throwing up" if that is how the client refers to vomiting). In addition, clients were asked to provide specific reports of symptomatology, as well as how recovery issues or principles were reflected in examples of daily experience and events.

Coding

Development of coding categories for assessing content of the live interviews was partially guided by prior research (Beresin et al., 1989; Hsu et al., 1992; Kirk, 1986; Maine, 1992; O'Byrne, 1992, Peters, 1991; Platt, 1992; Rorty et al., 1993). Specifically, a list of content categories was comprised from recovering eating-disorder clients' responses to questions regarding recovery asked in these earlier studies. Some of the categories researchers had developed helped shape the content categories of the present study. Also, a major task of this study was to ascertain the client's perception. For this to occur, it was necessary to allow for the possibility that some new coding categories might be conceptualized by the coders as the study progressed, to at least some degree.

Raters' coding sheets (see Appendix H) for the interview were organized so that they were congruent with the first four research questions. The first part of the coding sheets listed coding categories predicted by prior research to be instrumental. The second

half of the coding sheet provided space for new categories to be added as needed.

Definition of Coding Contents

Subjects' responses to interview questions were collapsed into categories to expedite data analysis and to identify major themes or factors (see Appendix I). Subjects' individual responses to interview questions are listed in Appendix M. The interested reader should refer to this appendix. Twenty-six categories were formulated. Listed below are the definitions, or category contents of each category.

The category Supportive Family/Friends included: (a) support from friends, parents, family, Overeaters' Anonymous (OA) sponsors, and significant others (husband, wife, boyfriend, girlfriend); (b) the desire to save or develop relationships; (c) confrontation from friend or family member undermined subjects' denial; and (d) nonjudgmental support and understanding from others that allowed the subjects to persist in their struggle with recovery.

The category Fear of Getting Caught included responses that indicated fear of embarrassment or humiliation, or facing consequences (e.g., forced to go to treatment) if one's eating disorder behavior was discovered by others. The category Healthy Eating Habits and Attitudes included: (a) commitment to stick to a healthy food plan; (b) shift from eating foods to stay thin, to eating to stay healthy; (c) eating in front of others, and participating in social events which required eating; (d) stopped weighing and counting calories; (e) mental preparation for weight gain; (f) focus on physical fitness versus "thinness"; (g) eating several small meals throughout the day (so as not to feel to full); (h)

eating when hungry; and (i) seeing food as nutrition, not the enemy.

The category New Hobbies, Interests, and Relationships included responses indicating that subjects had replaced bingeing or restricting behavior with new activities, goals, new relationships, or improving existing relationships. The Habit or Routine category was applicable when subjects noted that their disorder was difficult to stop because the eating disorder behavior had become reflexive, relatively automatic, or represented a “natural” coping mechanism. This category was also used when subjects indicated it was difficult to change food types. The category Attention for Weight Loss was used for responses indicating that social attention for weight loss, or being thin was a reinforcement to continue eating disorder behaviors. The Numb Emotion category applied to subjects who reported they binge/purged or restricted to avoid dealing with underlying emotions. The category Healthy Ways to Deal with Emotions included any responses that indicated that subjects dealt with their emotions in other ways besides bingeing, purging, or restricting. Responses including talking to others, keeping a journal, taking walks, accepting their emotions, and expressing their feelings would be included here.

The Improved Body Image category included responses which indicated that women’s acceptance of their body had increased. Personal Health Concerns referred to subjects’ fear that their eating disorder was harming their bodies. The category Tired of It included responses that indicted subjects were tired of: (a) obsessing about their weight and body size; (b) their perception that their life was centered around eating, purging, or restricting; (c) their eating behavior or symptoms excessively wasted their time; (d)

spending too much money to buy food; (e) feeling weak, sick, and fatigued; and (f) a relative lack of activities or relationships in one's life.

The Feel Better, Want Recovery category contained responses in which subjects avowed that they were enjoying the physical and/or emotional aspects of recovery, and did not want to lose these improvements in their life. The Poor Eating Habits and Attitudes category was used when subjects indicated continuing to miss meals, eat binge prone foods, or eating to stay thin hindered their recovery. Recovering People referred to other women recovering from eating disorders.

The Professionals/Therapy category referred to professional individual, Transactional Analysis, group, and family therapy. The category People Not Understanding included responses indicating that people either did not recognize, understand, or accept their eating disorder. This category also included remarks that indicated the subject felt negatively judged or evaluated by others. The category Pregnancy/Children was used when subjects said they were motivated to get well to ensure a healthy birth, or to parent existing children. Media Awareness was used when subjects shared they were educated or motivated to get help by a TV show, magazine, or other media publication or broadcast.

The category Improved Self-Esteem referred to personal growth that improved self-worth such as: (a) developing boundaries with parents, significant others, and friends; (b) no longer feeling responsible for parents' problems; (c) changing negative thoughts to positive thoughts; (d) becoming aware of personal strengths and positive attributes; (e) realizing that many factors contributed to the etiology of eating disorder,

not just personal weaknesses; (f) giving up their perfectionism; (g) the affirmation that “good days” (abstinence) gave the subject confidence she could recover; (h) not caring as much what others thought; (i) recognizing that small steps toward success occur one day at a time, and accepting slips without giving up; and (j) comparing oneself less to others than before. This category also included shifts from self-evaluation based on body weight and size, to self-evaluation based on basic human worth and their other attributes, talents, and achievements.

The category Nothing was used when a subject indicated that nothing hindered her recovery. The Maturation category was used when subjects actually referred to the process of “growing up,” or the realization that being thin was not the only or most important goal in life. Spirituality included responses that reported organized religion, God, Higher Power, prayer, meditation, or nonreligious spiritual growth as helpful (or harmful). Hospitalization referred to inpatient treatment on an Eating Disorder unit or a Behavioral Health Unit.

The category People/Society’s Expectations referred to: (a) significant other, father, mother, or friends desire that the subject maintain a certain body weight or shape; (b) family, or specifically, father or mother had perfectionistic standards the subject was expected to live up to (e.g., 4.0 GPA); (c) societal pressure for women to be thin; or (d) subjects’ perception that her religious values required her to be “perfect.” The Support Group category referred to the 12-Step Program, OA, or an informal group of recovering eating-disorder women.

Pilot Study to Improve Interview Content

The interview was tested in a pilot study involving three subjects who avowed having had an eating disorder in the past. Pilot interview subjects were not potential subjects for the study. The pilot study enabled the researcher and interviewers to: (a) become familiar with the interview questions; (b) eliminate redundancy among questions; (c) reword confusing questions; (d) exclude irrelevant or unproductive questions; and (e) determine the approximate length of the interview. In addition, the pilot study enabled the interviewers to improve their interviewing technique and presentation consistency.

Second Pilot Study to Improve Coding System

A second pilot study ascertained the reliability of the interview coding system. Three interview videotapes were made, and the interview coders were trained in interview coding procedures. Two coders independently coded content categories on each of the three tapes. Interrater reliability for major coding categories was determined by use of the Contingency Coefficient (C); C was calculated as .95, $p < .05$.

Procedure

After the final semistructured interview was produced, the researcher trained additional interviewers to conduct the interviews. Interviewers needed to complete at least two mock interviews, in which they presented all relevant questions without error, and they had to demonstrate that they could effectively prompt subjects to provide

examples of their recovery experiences. A trainer observed the interviewers and determined they were able to effectively prompt subjects to elaborate as needed without asking leading questions.

Subject Recruitment

An advertisement was placed in the Utah State University newspaper, Utah Statesman, local newspapers, and with radio stations, announcing the purpose of the study and the need for volunteer subjects (see Appendix A and B). Additionally, public service announcements were placed in major and community newspapers, as well as with radio stations, in cities along the Wasatch Front and the Salt Lake Valley from Spanish Fork, Utah, to Tremonton, Utah.

After passing an initial telephone screening interview (guided by a checklist of DSM-IV criteria for eating disorders), subjects received a letter explaining the purpose of the study and the rationale for the interview. They were invited to ask the researcher questions prior to giving consent. Subjects were then asked to sign the consent form, and complete a demographic face sheet and the Attributional Style Questionnaire prior to the semistructured recovery interview. The recovery interview lasted approximately 1 hour and was videotaped (with complete knowledge and consent of the subjects).

As has been noted, the videotapes of the semistructured recovery interviews were coded according to a categorical system developed by the researchers, based on client responses elicited in pilot interviews, as well as categories used by other researchers (see Appendices H and I). Categories were altered or added when interviewees appeared to be

identifying recovery factors not discussed in the theoretical or research literature.

Subjects' individual responses to interview questions have been listed in Appendix M.

Data Analysis

To provide some insight into the question of whether females participating in the study were comparable to other samples of women recovering from eating disorders, and in the service of providing evidence for generalizability, summary demographic statistics were collected from a number of published studies of recovering women (Beresin et al., 1989; Kirk, 1986; Maine, 1985; 1992; O'Byrne, 1992; Peters, 1991; Platt, 1992; Rorty et al., 1993). These data were compiled, averaged, and put in a comparison table, which will be discussed later.

Interview data were coded into 26 categories. A frequency distribution was used to describe demographic data and the proportions of subjects providing responses reflecting each theme. A frequency distribution is a list of each score or value on a measure and the number of individuals who earned each score or value.

The Spearman's rank correlation coefficient was used for assessing the associations between selected variables. This correlation coefficient was used instead of Kendall's tau. Kendall's tau is preferred for rank order of fewer than ten pairs. Spearman's rank correlation coefficient also more closely estimates the product moment correlation coefficient used for continuous data.

Spearman's correlation coefficients were computed between the following variables: total reported impulse control problems (see Appendix F), self-rated degree of

recovery (see interview question # 17), length of time in recovery, and locus of control dimensions (internality versus externality). Spearman's rank correlation coefficient is one of several correlation coefficients based on the ranks of the two variables. Rank-difference correlation is used to correlate two variables when one or both of these variables are available only as an ordinal measure. This rank correlation coefficient provides a nonparametric procedure for measuring the strength of the relationship between two variables. When one variable was an interval or ratio measure and the other variable was a true ordinal ranking, the interval or ration variable was coded as ordinal. For example, a Spearman's correlation coefficient was computed for the variables "time in recovery" and "self-rated degree of recovery." Because the self-rated degree of recovery was considered an ordinal measure, the time in recovery, reported in number of months, was converted from a ratio measure to an ordinal ranking for the purpose of this analysis.

CHAPTER IV

RESULTS

Demographic Data

Twenty-two subjects participated in the study. Eleven individuals were diagnosed as anorexic, and 11 were diagnosed as bulimic (DSM-IV). The mean age of the subjects was 28.7 years ($SD = 9.03$). The modal age was 25 years. Interestingly, 66.7% of the subjects were 26 years of age or less. The youngest subject was 20, while the oldest subject was 60. Of the 22 subjects, 12 were single, 7 were married, and 2 were divorced. The mean number of children is .762 ($SD = 1.26$). The modal number of children was zero. Nineteen of the 22 subjects were Caucasian.

The modal 1994 personal income range was between \$5,000 to \$10,000. Forty-five percent of subjects made less than \$10,000. In terms of religious orientation, 11 of the women were affiliated with the LDS church. Three women were Catholic, two were Lutheran, three declared no religion, and two listed their religion as other.

Most subjects either lived with a roommate ($n = 7$) or spouse ($n = 7$); the remainder lived with their parents, their children or other family member, or they lived alone. The mean age of onset for the anorexic subjects' eating disorder was 15.5 ($SD = 2.6$). The modal age of onset was 15 (see Table 2). Also, the mean age of onset for the bulimic subjects was 16.1 ($SD = 3.1$). The modal age of onset was 12 (see Table 3). Although the modal age of onset for bulimia was 3 years younger, approximately 60% of subjects in both groups reported onset by age 16.

Table 2

Age at Onset of Anorexia Nervosa

Age	Frequency	Percent	Valid Percent	Cum Percent
11	1	9.1	10	10
12	1	9.1	10	20
14	1	9.1	10	30
15	2	18.2	20	50
16	1	9.1	10	60
17	1	9.1	10	70
18	2	18.2	20	90
19	1	9.1	10	100
	1	9.1	Missing	
Total	11	100	100	
Mean	15.5		Median	15.5
Mode	15.0		Std dev	2.64

Substance Use

Nine anorexic subjects did not use alcohol before, during, or after experiencing an eating disorder. "Before" was defined as subjects' belief that drinking occurred 3 months before eating disorder symptoms appeared. "During" was defined as the period in which the subjects symptoms were the most severe. "After" is defined as a stable period of no less than 3 months, in which the subject was bingeing or purging no more than once every 2-3 weeks; or, the subject's body weight had increased to within 5-8 pound of her normal

Table 3

Age at Onset of Bulimia Nervosa

Age	Frequency	Percent	Valid Percent	Cum Percent
12	2	18.2	18.2	18.2
14	1	9.1	9.1	27.3
15	2	18.2	18.2	45.5
16	2	18.2	18.2	63.6
17	1	9.1	9.1	72.7
18	1	9.1	9.1	81.8
19	1	9.1	9.1	90.9
23	1	9.1	9.1	100
Total	11	100	100	
Mean	16.1		Median	16.0
Mode	12.0		Std dev	3.18

weight; or, the subject avowed that the regularity of her period had returned to "normal" (for her). For more detailed definitions of "before," "during," and "after," see Appendix F.

The use of alcohol was reported by one anorexic subject during eating disorder, and by one subject after eating disorder. Data are missing for one subject. Nine bulimic subjects did not use alcohol before, during, or after eating disorder. The use of alcohol was reported by one bulimic subject before eating disorder, and by two subjects during eating disorder.

Eight anorexic subjects disavowed using drugs to alter their mood or thinking before, during, or after eating disorder. The use of drugs was reported by three anorexic subjects during eating disorder, and by one subject after eating disorder. Data are missing for one subject. Ten bulimic subjects did not use drugs before, during, or after eating disorder. The use of drugs was reported by one bulimic subject during eating disorder.

Compulsive Exercise

Seven anorexic subjects reported compulsive exercise before the onset of their eating disorder, 14 during their eating disorder, and 7 after their eating disorder. (See Appendix F for detailed definitions of before, during, and after eating disorder.) Data are missing for one subject. Three bulimic subjects reported compulsive exercise before eating disorder, eight during eating disorder, and three after eating disorder.

Compulsive Spending/Shopping

One anorexic subject reported "compulsive spending" during her eating disorder. (See Appendix F for detailed definitions of before, during, and after eating disorder.) Data are missing for one subject. Four bulimic subjects reported compulsively spending during eating disorder. One anorexic subject avowed that she compulsively shopped before her eating disorder, while four did so during their eating disorder, and three did after their eating disorder. Again, data are missing for one subject. One bulimic subject compulsively shopped before her eating disorder, four did so during their eating disorder, and three avowed that they compulsively shopped after their eating disorder.

Demographic Comparability

Table 4 compares the demographic data from the current study with parallel demographic information from seven similar studies investigating eating-disorder clients' perceptions of recovery. Subjects' mean current age, mean age of onset, mean time in recovery, marital status, and race are reported in the table. For example, the mean current age of subjects across the seven studies ranged from 25.65 to 32.6, with a mean age across the studies of 29.24 ($SD = 2.42$). Mean time in recovery in months across the seven studies ranged from 15-127 (with a mean of 51.62, $SD = 44.27$). Mean age of women in the current study was 28.7 ($SD = 9.0$), and mean time in recovery was 50.4 months ($SD = 49.69$).

As the data indicate, the present sample of recovered and recovering women is similar to other known samples reported in the literature in terms of current age, age of onset, and race (see Table 4).

ASQ Data

The Internal Negative dimension responses indicate a subject's perceived "cause" of a negative event (e.g., what contributed to a particular outcome of a situation). An example of a question loading on the Internal Negative dimension is, "Is the cause of your unsuccessful job search due to something about you or something about other people or circumstances?" Values range from 1 to 7, with 1 representing total external locus of control. Values increase in the direction of increasing internality, with 7

Table 4

Demographic Comparability

Studies	X Current Age	X Age of Onset	X Time in Recovery	Marital Status	Race
Rorty et al., 1993	5.65	16.15/B)	43.68	87.5% Single	85% White, 10% Asian, 5% Other
Platt, 1992	32.6	15.2/B	48	70% Single	90% White, 0% Asian, 10% Other
Peters, 1991	29.08	17.92/B	15	-----	93% White, 7% Asian
Kirk, 1986	29.6				98.4% White, .8% Asian
O'Byrne, 1992	26.86	21.0/B	24.43		
Beresin et al., 1989	29.4	16.8/A		54% Single	
Maine, 1992	31.52	16.8/A	127		
Current Study	28.7	15.5/A, 16.1/B	64.1/A, 36.7/B	54% Single	90% White, 5% Asian, 5% Other

representing total internal locus of control. The mean value for all subjects was 4.2 ($SD = 1.1$). The modal value was 4.00.

A useful frame of reference for interpreting these scores is data from the study by Peterson, Semmel, et al. (1982). Their undergraduate sample of 130 students produced a mean of 4.29 ($SD = .84$). An effect size was calculated:

$$\frac{\text{college student } x - \text{present study } x}{\text{college student } \underline{SD}}$$

This statistic revealed that subjects in the present study were highly comparable to college students, as the effect size was small ($ES = .1$). An effect size is a standardized way of looking at mean differences between groups. For example, an effect size of 1 in an experimental group has changed or is different from all subjects below the 84th percentile of the reference group. Since the calculated effect size for this study is .1, it can be concluded that these groups are similar.

Composite scores sum across the three dimensions of internality, stability, and globality. The composite scores range from 3 to 21. The lower the Composite Negative score the more likely a subject is to believe that negative outcomes of situations are due to external, transient, and situational factors. The mean value was 12.0 ($\underline{SD} = 2.7$). The modal value was 9.33. By contrast, the Peterson, Semmel, et. al (1982) undergraduate sample produced a mean of 12.36 ($\underline{SD} = 1.92$). The effect size was .18.

The Internal Positive dimension indicates the subject's perceived cause of a positive event. Values range from 1 to 7, with 1 representing total external locus of control. Values increase in the direction of increasing internality, with 7 representing total internal locus of control. The mean value for the total sample was 5.0 ($\underline{SD} = .97$). The modal value was 5.3. By comparison, the undergraduate sample (Peterson, Semmel, et. al, 1982) produced a mean of 5.26 ($\underline{SD} = .79$). The effect size was .33.

Composite Positive scores sum across the three dimensions of internality, stability, and globality. The composite scores range from 3 to 21. The higher the

Composite Positive score, the more likely an individual is to attribute positive outcomes to internal, stable, and global personal characteristics. The mean value was 14.825 ($SD = 2.6$). The modal value was 15.3. As a frame of reference, the undergraduate sample (Peterson, Semmel et al., 1982) produced a mean of 15.75 ($SD = .1.86$). The effect size was .49.

Interview Data

Appendix M is an exhaustive summary of quotations from subjects that were categorized by raters. The interested reader should refer to the appendix. The following tables provide a rank ordering of anorexic and bulimic subjects' first, second, and third most frequent response categories. The table provides both frequency and percentage of women's responses for each category. It should be pointed out that some categories were differentially relevant to particular precipitants (i.e., recovery, maintenance). For example, the category "people who don't understand" would not likely serve as a possible precipitant to recovery. On the other hand, this category could conceivably represent a precipitant to relapse. Therefore, only relevant response categories are listed in each table of "Precipitants."

The first column in Table 5 provides a percentage for each of the four causal categories: (1) precipitants to beginning recovery, (2) maintaining recovery, (3) hindrances to recovery, and (4) methods of coping with relapse. A tally was made of the number of responses that belonged to each response category (far left column of Tables 5, 6, 7, and 8).

Table 5

Precipitants of Recovery/Anorexics and Bulimics

Coding Categories	Category Ranks					
	First Most Frequent Response		Second Most Frequent Response		Third Most Frequent Response	
	AN (n/%)	BU (n/%)	AN (n/%)	BU (n/%)	AN (n/%)	BU (n/%)
Support Family/Friends	6/54.5	4/36.4	2/18.2	2/18.2	--	2/18.2
Tired of It: Time/\$/Obsess.	--	4/36.4	5/45.5	1/9.1	1/9.1	2/18.2
Personal Health Concerns	1/9.1	1/9.1	1/9.1	2/18.2	1/9.1	--
Improved Self-Esteem	--	1/9.1	--	3/27.3	3/27.3	1/9.1
Health Eating Habits/Attitude	--	--	--	--	1/9.1	1/9.1
New Hobbies/Interest/Rels.	1/9.1	--	--	--	1/9.1	1/9.1
Hospitalization	1/9.2	--	--	1/9.2	2/18.2	--
Fear of Getting Caught	--	--	--	1/9.2	--	1/9.1
Pregnancy/Children	--	1/9.1	--	--	--	--
Maturation	1/9.1	--	--	1/9.1	--	--
Support Group	1/9.1	--	--	1/9.1	--	--
Health Deal w/Emotions	--	--	1/9.1	--	--	--
Media Awareness	--	--	--	--	--	1/9.1
Spirituality	--	--	--	1/9.1	--	--
Feel Better; Want Recovery	--	--	1/9.1	--	--	--

Table 6

Causes: Maintenance of Recovery for Anorexics and Bulimics

Coding Categories	Category Ranks					
	First most frequent response		Second most frequent response		Third most frequent response	
	AN (n/%)	BU (n/%)	AN (n/%)	BU (n/%)	AN (n/%)	BU (n/%)
Support Family/Friends	4/36.4	4/36.4	1/9.1	1/9.1	1/9.1	2/18.2
Improved Self-Esteem	--	6/54.5	5/45.5	3/27.3	3/27.3	--
New Hobbies/Interest/Rels.	1/9.1	1/9.1	1/9.1	1/9.1	--	1/9.1
Support Group	2/18.2	--	--	--	--	1/9.1
Spirituality	--	--	--	1/9.1	2/18.2	1/9.1
Health Eating Habits/Att.	--	--	--	3/27.3	2/18.2	1/9.1
Professionals/Therapy	2/18.2	--	1/9.1	--	1/9.1	1/9.1
Improved Body Image	1/9.1	--	1/9.1	1/9.1	1/9.1	1/9.1
Personal Health Concerns	--	--	1/9.1	--	--	1/9.1
Tired of it: Time/\$/Obsess.	1/9.1	--	--	--	--	1/9.1
Recovering People	--	--	--	1/9.1	--	--
Pregnancy/Children	--	--	1/9.1	--	--	--
Feel Better; Want Recovery	--	--	--	--	1/9.1	--
Healthy Deal W/Emotions	--	--	--	--	--	1/9.1

Table 7

Hindrances to Recovery: Anorexics and Bulimics

Coding Categories	Category Ranks					
	First most frequent response		Second most frequent response		Third most frequent response	
	AN (n/%)	BU (n/%)	AN (n/%)	BU (n/%)	AN (n/%)	BU (n/%)
People/Society Expectations	9/81.8	7/63.6	--	--	--	--
Poor Eating Habits/Attitudes	1/9.1	1/9.1	--	1/9.1	2/18.2	2/18.2
Fear of Fat/Body Distortion	--	--	6/54.5	1/9.1	2/18.2	1/9.1
Numb Emotions	--	1/9.1	2/18.2	3/27.3	3/27.3	2/18.2
People Not Understand	1/9.1	--	1/9.1	3/27.3	--	2/18.2
Professionals/Therapy	--	--	--	--	1/9.1	2/18.2
Attention for Weight Loss	--	1/9.1	--	--	--	--
Hospitalization	--	--	--	1/9.1	2/18.2	--
Habit or Routine	--	--	--	1/9.1	--	--
Pregnancy/Children	--	--	1/9.1	--	--	--
Nothing	--	1/9.1	--	--	--	--

Table 8

Coping with Relapse: Anorexics and Bulimics

Coding Categories	Category Ranks					
	First most frequent response		Second most frequent response		Third most frequent response	
	AN (n/%)	BU (n/%)	AN (n/%)	BU (n/%)	AN (n/%)	BU (n/%)
Improved Self-Esteem	3/27.3	4/36.4	1/9.1	1/9.1	2/18.2	1/9.1
Support Family/Friends	2/18.2	4/36.4	2/18.2	1/9.1	2/18.2	--
Healthy Deal with Emotions	1/9.1	1/9.1	3/27.3	2/18.2	3/27.3	5/45.5
Feel Better; Want Recovery	1/9.1	1/9.1	1/9.1	1/9.1	2/18.2	--
Improved Body Image	--	1/9.1	--	2/18.2	--	1/9.1
Professionals/Therapy	1/9.1	--	1/9.1	1/9.1	--	--
Healthy Eating Habits/Attitude	--	--	1/9.1	1/9.1	--	--
New Hobbies/Interest/Rels.	1/9.1	--	--	1/9.1	1/9.1	2/18.2
Personal Health Concerns	--	--	1/9.1	--	--	1/9.1
Spirituality	--	--	1/9.1	--	--	1/9.1
Support Group	1/9.1	--	--	--	1/9.1	--
Tired of It: Time/\$/Obsess.	--	--	--	--	--	1/9.1
Pregnancy/Children	1/9.1	--	--	--	--	--
Recovering People	--	--	--	1/9.1	--	--

The category containing the highest number of interview responses represented each subject's First, or #1 response category. For example, a given subject might allude to one type of precipitant more frequently than all others (First or #1). Her second and third most frequently referred to response categories could also be similarly counted.

Thus, among 11 anorexic subjects, six individuals most frequently referred to Support of Family/Friends as a precipitant to beginning recovery. After a subject's most frequent precipitant was noted, a tally was made of her second most frequent attribution (cause). Five of the 11 subjects' second most frequently cited precipitant of beginning recovery was simply Tired of It.

Recovery Interview Results

During the live interview, all subjects were asked "On a scale from 0 to 100, how recovered overall, would you say you are?" The mean percentage of anorexic subjects' self-rated overall degree of recovery was 83.8% (SD = 17.4). The modal percentage of recovery reported by anorexic subjects was 95% (see Table 9). The mean for bulimic subjects' self-rated overall degree of recovery was 90.2% (SD = 9.3, mode = 95%) (see Table 10).

The mean number of months in recovery for anorexic subjects was 64.1 (SD = 65.1) (see Table 11), while for bulimics, the mean was 3.67 (SD = 23.1) (see Table 12).

Table 9

Anorexic Self-Reported Overall Percent of Recovery

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	50	2	18.2	18.2	18.2
	85	2	18.2	18.2	36.4
	87	1	9.1	9.1	45.5
	90	2	18.2	18.2	63.6
	95	3	27.3	27.3	90.9
	100	1	9.1	9.1	100.0
	Total	11	100.0	100.0	
Mean		83.818	Median		90.000
Mode		95.000	Std Dev		17.360

Accessory Correlational Data

A number of correlational analyses were conducted to examine the relationship between: (a) self-rated overall degree of recovery, and time in recovery; (b) self-rated overall degree of recovery, and the number of reported impulse control problems; (c) time in recovery, and the number of reported impulse control problems; (d) the self-rated degree of recovery, and the dimension of locus of control (internality vs. externality); (e) length of time in recovery, and the dimension of locus of control; and (f) the reported number of impulse control problems, and the dimension of locus of control.

Correlational data will be interpreted according to the conventions of

Table 10

Bulimic Self-reported Overall Percent of Recovery

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	75	2	18.2	18.2	18.2
	80	1	9.1	9.1	27.3
	90	2	18.2	18.2	45.5
	95	3	27.3	27.3	72.7
	98	1	9.1	9.1	81.8
	99	1	9.1	9.1	90.9
	100	1	9.1	9.1	100.0
	Total	11	100.0	100.0	
Mean		90.182	Median		95.000
Mode		95.000	Std Dev		9.325

Davis (1971), seen below:

<u>r</u>	
.01 - .09	Negligible
.70 - .99	Very high
.50 - .69	Substantial
.30 - .49	Moderate
.10 - .29	Low
.01 - .09	Negligible

Table 11

Anorexic: Number of Months in Recovery Program

Value Label	Value	Frequency	
	3-12	2	
	13-24	2	
	25-36	1	
	60-72	3	
	84-240	3	
	Total	11	
Mean	64.091	Median	60.000
Std Dev	65.113		

Table 12

Bulimic: Number of Months in Recovery Program

Value Label	Value	Frequency	
	3-12	3	
	13-24	1	
	25-36	2	
	37-48	3	
	49-72	2	
	Total	11	
Mean	36.727	Median	36.000
Mode	36.000	Std Dev	23.000

There was a low, nonsignificant correlation between the self-rated overall degree of recovery and time in recovery ($r = .112, p > .10$). Furthermore, low, nonsignificant correlations were found between the self-rated overall degree of recovery and the number of reported impulse control problems ($r = .045, p > .10$), and between time in recovery and the number of reported impulse control problems ($r = -.126, p > .10$).

Also of interest were the correlations between both length of recovery and self-rated degree of recovery, and the length of recovery and the dimension of locus of control (internality vs. externality). Two large, statistically significant correlations were found. There was a substantial, inverse correlation between self-rated degree of recovery and the internal negative dimension ($r = -.594, p < .01$). Also, there was a substantial, inverse correlation between self-rated degree of recovery and the composite negative score ($r = -.520, p < .05$). These findings suggest that subjects who rated their degree of recovery high tended to believe that negative situations were due to external, transient, and situational factors.

The correlation between self-rated degree of recovery and the Internal Positive dimension was noteworthy, but statistically nonsignificant ($r = .297, p > .01$), as was the correlation between self-rated degree of recovery and the Composite Positive score ($r = .274, p > .01$). These findings suggest that subjects who rated themselves as further along in recovery had a tendency to attribute the positive outcomes of life situations to internal, personal characteristics, which they perceived to be stable and global across situations.

Additionally, the correlation between number of months in recovery and the

composite negative score, while statistically nonsignificant, was of interest ($r = .286$, $p > .01$). This correlation indicates that subjects with longer times in recovery have a tendency to believe negative situations are due to external, transient, and situational factors. A modest, but nonsignificant inverse correlation was found between reported number of impulse control problems and the Composite Positive dimension ($r = -.217$, $p > .01$). This finding suggests that subjects with a lower number of reported impulse control problems had a tendency to attribute the positive outcomes of situations to internal personal characteristics, which were perceived as stable and global across situations.

There was no meaningful relationship between the number of months in recovery and the (a) internal negative dimension, (b) Internal Positive dimension, and (c) Composite Positive score. Similarly, there was no meaningful correlation between reported number of impulse control problems and (a) the internal negative dimension, (b) composite negative score, and (c) Internal Positive dimension. Additionally, no meaningful differences were identified when comparing the attribute variables of the anorexics with the attribute variables of the bulimics.

CHAPTER V

DISCUSSION

Conclusions

The results of the study can be best discussed in relation to Figure 1, which illustrates the relationship between three of the recovery phases and critical response categories. The three recovery phases outlined in Figure 1 are Beginning Recovery, Maintaining Recovery, and Coping with Relapse. Over 72% of the subjects indicated that social support was one of the most essential factors in beginning and maintaining recovery from their eating disorder, and helping to cope with the threat of relapse. Four of 22 subjects noted that lack of support (e.g., people not understanding) was a hindrance to recovery. Interestingly, a number of subjects (five anorexics, nine bulimics) reported that support and validation from males (including fathers, brothers, boyfriends, and husbands) were especially helpful in their struggle to accept a more normal body size and shape. For example, hearing such things as "you look good at a healthier weight" from significant males was perceived as more powerful and reinforcing than similar statements from others (e.g., mothers, girlfriends, therapists). Various responses from these subjects indicated such statements from mothers were perceived as worry, and from other women as jealousy or competition.

It is perhaps useful to address the question of whether the social support construct was as pervasive in its importance as subjects indicated or whether it appeared so to the researcher because of methodological artifacts. For example, the social support category

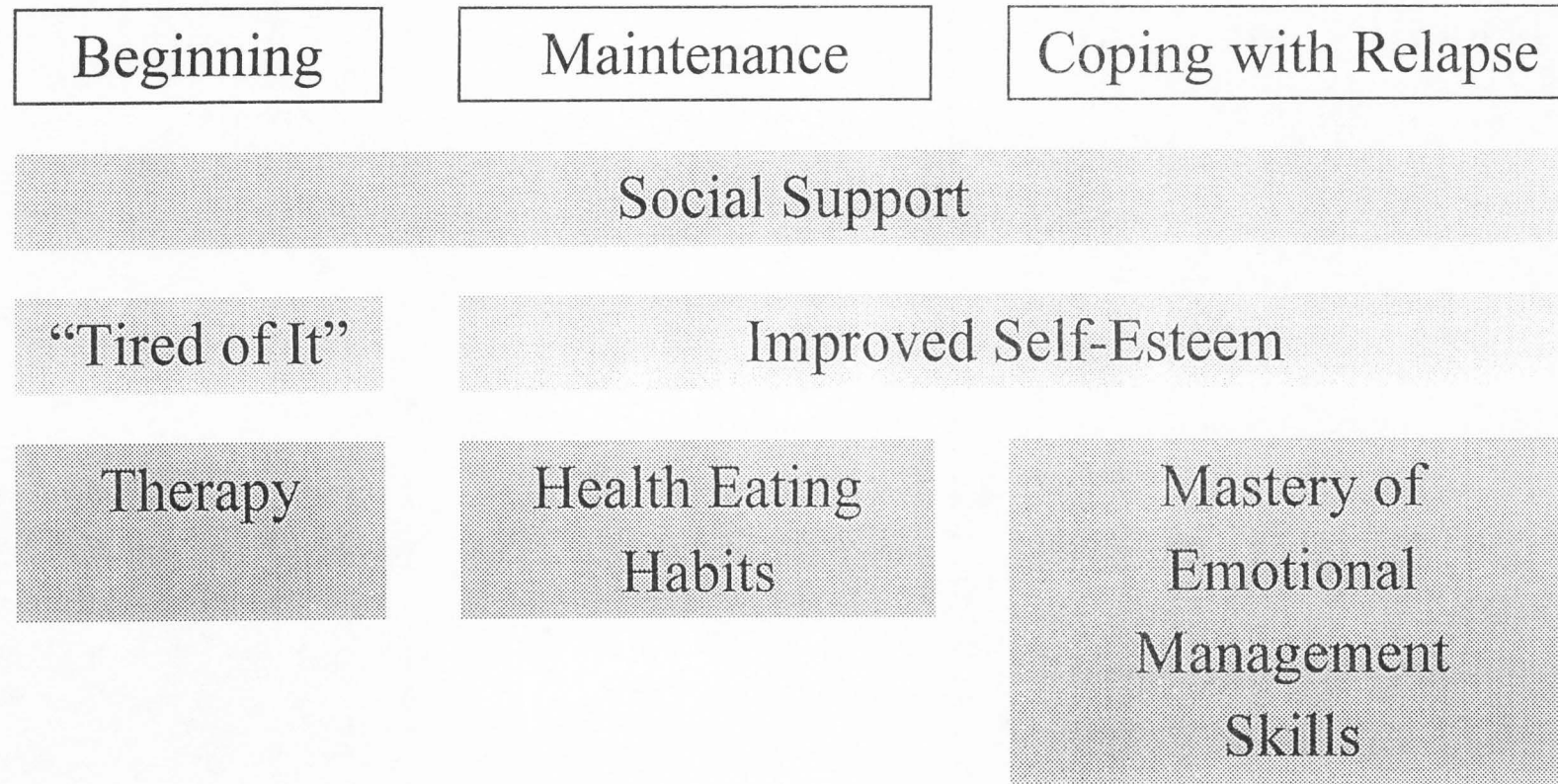


Figure 2. The recovery process.

may have been designed to embrace more subject responses than other content categories, thus making it likely that a higher frequency of responses would be reported. Indeed, this category included: (a) support from friends, parents, family, OA sponsors, and significant others (husband, wife, boyfriend, girlfriend); (b) the desire to save current relationships or develop new relationships; (c) a confrontation from friend to family member, which penetrated the subject's denial; and, (d) nonjudgmental support and understanding from others, which allowed the subject to struggle for recovery. Certainly, the category could have been subdivided into specific types of social support. However, these specific types of social support nonetheless reflect the same core theme--people providing nonjudgmental understanding, concern, support, and validation. Social support responses were equally distributed among friends, family, and significant others. Also, as mentioned previously, the significance of male support and validation was underscored by both anorexic and bulimic subjects.

Half of the anorexic and bulimic subjects also indicated that a necessary precipitant to begin recovery is that they needed to be "sick and tired" of maintaining their eating disorder behavior ("hitting a bottom"). Although the subjects indicated they still wanted to be thin, they also reported being tired of such things as: (a) obsessing about their weight and body size; (b) having their life revolve around eating, purging, or restricting; (c) wasting time; (d) wasting money to buy food; (e) feeling weak, sick, and fatigued; and/or (f) not having other activities or people in their life. It should be noted that some women indicated that confrontations from significant people contributed to being "sick and tired." This suggests that although subjects need to be tiring of their

disorder, interventions have the potential to reach eating-disorder individuals and assist them in acknowledging their need to change.

Professional therapy (individual, group, Transactional Analysis, and family) was also viewed as a critical factor in beginning recovery by both anorexics and bulimics (27.3% and 45.5%, respectively). Both groups indicated that professional therapy was also a factor, although not frequently cited, in maintaining recovery and coping with relapse. These subjects avowed that therapy that went beyond merely focusing on eating and weight symptoms (i.e., counseling that includes interpersonal and emotional issues) was most beneficial. Anorexics tended to report family therapy as extremely helpful.

Therapy appeared to provide a safe environment for these women to identify problems and develop solutions. For example, subjects often believed that intra- and interpersonal conflicts seem to drive their eating disorder behavior, and that it was essential to have an environment in which they could openly explore and resolve these issues to continue recovering. Additionally, therapy helped recovering individuals to address issues with parents. Commonly, women reported that they had been unable to honestly express thoughts and feelings to family members.

Both anorexic and bulimic subjects (72.8% and 81.8%, respectively) reported that improving one's self-esteem was fundamental to persisting in recovery. Subjects' interview responses suggested that feelings about one's self fluctuated. For instance, subjects reported they gained self-esteem after developing positive thoughts about themselves and practiced new, more constructive behaviors. Such behavior changes appeared to promote feelings of confidence and a determination to persist in recovery.

Subjects explained that as they felt better about themselves, the recovery experience became reinforcing. In other words, incentives for persisting in recovery included gains in self-efficacy, escape from health problems, and general feelings of success. Indeed, the category Improved Self-Esteem embraced a variety of areas commonly referred to as personal growth, or the development of autonomy. It included subject responses such as: (a) developing boundaries with parents, significant others, and friends; (b) no longer feeling responsible for parents' problems; (c) changing negative thoughts to positive thoughts; (d) becoming aware of personal strengths and positive attributes; (e) realizing many factors contributed to etiology of an eating disorder, rather than personal weaknesses; (f) giving up perfectionism; (g) successful days of abstinence begets confidence one can recover; (h) not caring so much what others think; (i) recognizing the small steps toward success (one day at a time), and accepting setbacks without giving up; and (j) not comparing oneself to others. These responses also included shifts from self-evaluation based on body weight and size, to self-evaluation based on basic human worth and their other attributes, talents, and achievements.

Anorexic and bulimic subjects also avowed that the development of healthy eating habits (four anorexics, three bulimics) was quite important in facilitating their recovery. The women shared that refraining from dieting, eating a wide variety of foods, eating in moderation, eating when hungry, and/or eating small meals several times a day helped them avoid binges or fasting episodes. The anorexics commented that it was necessary to commit to consistently eating a certain number of meals per day, no matter what. This commitment was incompatible with their former behavior of episodic food restriction.

Subjects also said that refraining from weighing and counting calories helped refocus their attention away from staying thin. Taken together, 27% of the anorexic individuals and 36.4% of the bulimic women indicated that poor eating habits and negative attitudes toward eating delayed progress in their recovery.

Figure 1 also shows that learning to deal with emotions in a constructive way was a primary factor in enabling 64% of anorexic subjects and 73% of bulimic subjects to cope with the threat of relapse. Subjects stated by dealing with their feelings or problems directly, they were less likely to "slip" or numb their emotions with inappropriate eating or restricting behavior. Subjects' answers indicated they dealt with their emotions in new ways by talking to others, journaling, taking walks, accepting their emotions, and expressing their feelings. Specifically, five anorexic subjects and six bulimic subjects indicated that the incentive to moderate aversive emotional states ("numb emotions") by bingeing, purging, or restricting was a significant barrier to recovery.

Improved body image was identified as a factor contributing to success in recovery only infrequently. In general, subjects reported that body image concerns were persistent, but the irrational importance they placed on body weight and size had moderated. However, poor body image or body distortion was ranked as one of the most significant hindrances to recovery by anorexics.

Undue societal pressures and lack of understanding, irrational fears, maladaptive coping strategies for handling emotions, and unhealthy eating represented major hindrances to recovery. Both anorexic and bulimic subjects (82% and 64%, respectively) said that perceived expectations from other people or society were the

primary factors impeding progress in their recovery from their eating disorder. Subjects' responses implied they perceived excessively high pressure in the following ways: (a) significant other, father, mother, or friends desired that the subject maintain a certain body weight or shape; (b) their family, especially father or mother, declared perfectionistic standards the subject was expected to live up to (e.g., 4.0 GPA); (c) societal norms dictated women to be unreasonably thin; or (d) subject had internalized values of perfection from various sources. Both anorexic and bulimic subjects stated that significant people in their life resisted their attempts to change or violate the "norms." Five bulimic subjects said that people's lack of acceptance or understanding about the recovery process made getting well more difficult.

In summary, subjects reported that social support was a critical factor across all three stages of recovery, (beginning recovery, maintaining recovery, and coping with relapse). Being "tired" of the symptoms and maladaptive behaviors associated with the disorder, and receiving therapy were frequently cited as relevant to beginning recovery. Improved self-esteem was deemed significant in helping subjects both maintain recovery and cope with the threat of relapse. Establishing healthy eating habits and attitudes was often deemed to be a necessary factor required in maintaining recovery. Subjects avowed that developing healthy ways to deal with emotions enabled them to deal successfully with the threat of relapse.

Anorexic subjects reported that (a) perceived excessive expectations from others and society, (b) fear of becoming fat, (c) avoidance of emotions, and (d) poor eating habits and attitudes impeded their recovery. Bulimic subjects indicated that (a) excessive

people and societal expectation, (b) avoidance of emotions, (c) lack of understanding from other people, and (d) poor eating habits and attitudes hindered their recovery (see Figures 1, 2 and 3).

How Comparable is the Present Study to Other Studies?

Seven of the earlier studies that looked at recovering eating-disorder clients' perceptions of recovery reported demographic characteristics of their study sample. The present sample of recovered or recovering women was similar to other known samples in terms of current age, age of onset, time in recovery, and race.

Although the current study sample was recruited from Cache Valley and the Wasatch Front in Utah, the similar demographic characteristics suggest that the current sample has characteristics that are similar to other eating-disorder women. It is speculated that the findings from this study could generalize to other women with eating disorders.

Impulse Control Problems

As discussed earlier, impulse control problems (e.g., drinking, use of drugs, shoplifting, compulsive shopping) have all shown correlations with anorexia or bulimia in prior research. However, alcohol and recreational drug use seemed low or incidental in this present sample. This likely is attributed to the high proportion of subjects asserting LDS affiliation, where substance use is typically lower. As expected, compulsive

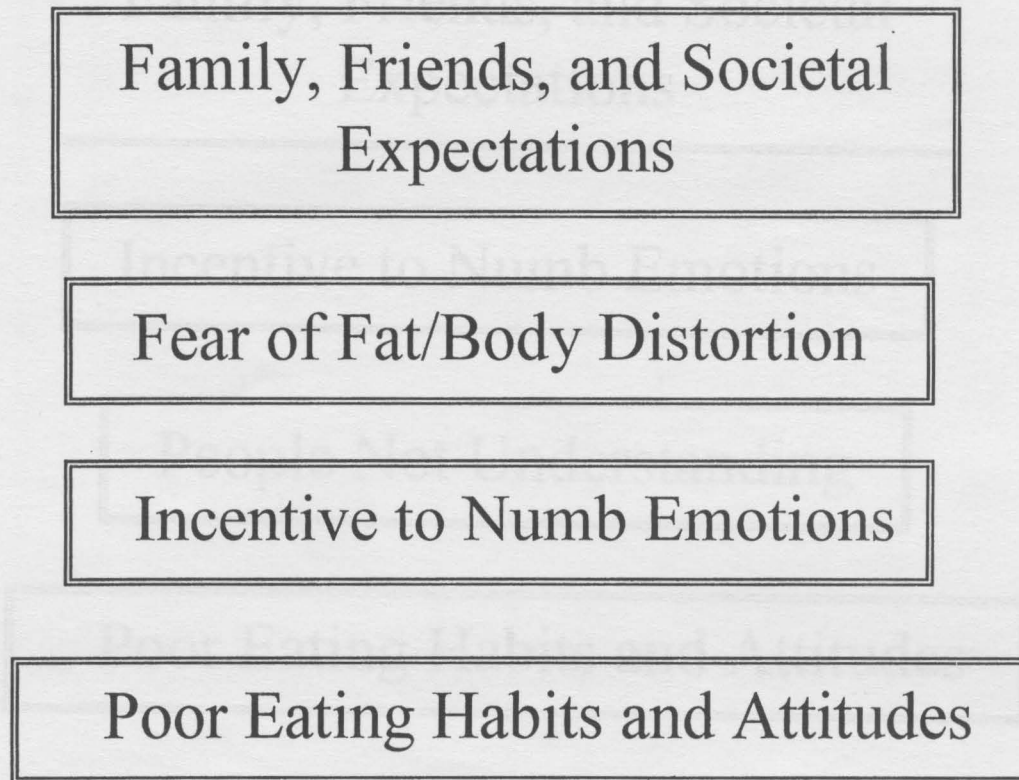


Figure 2. Hindrances to recovery: Anorexic subjects.

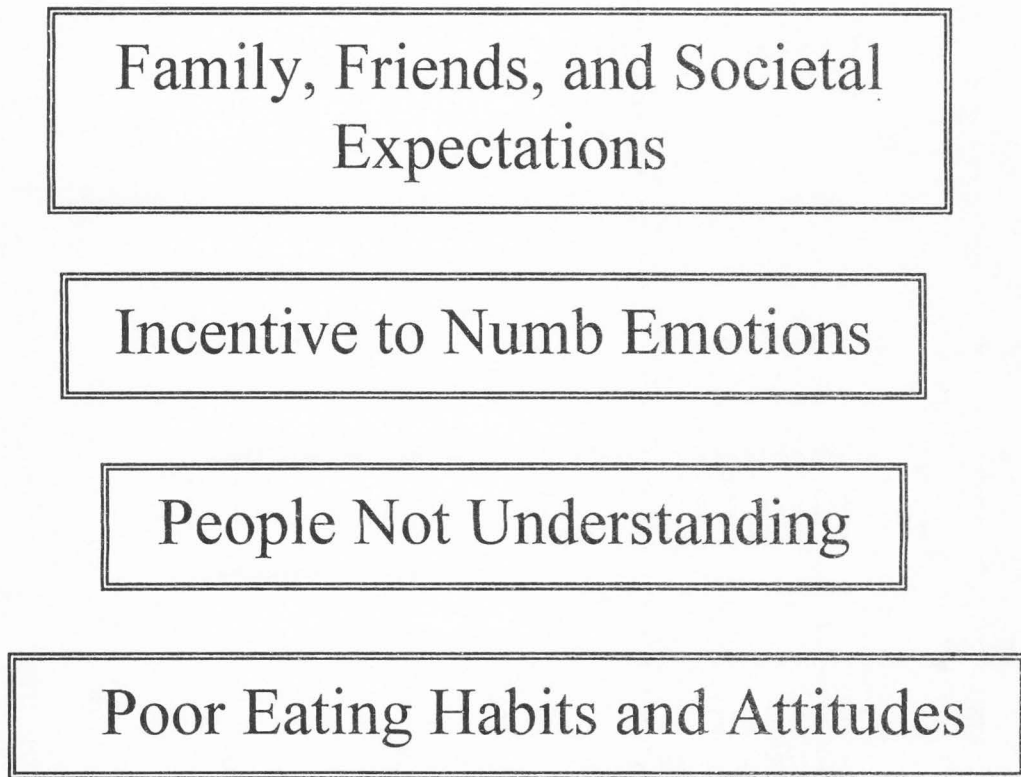


Figure 3. Hindrances to recovery: Bulimic subjects.

exercise escalated during the eating disorder for both bulimic and anorexic subjects. Interestingly, half of the anorexic subjects and 25% of the bulimic subjects reported compulsive exercise prior to the onset of their eating disorder; the same proportions reported some compulsive exercise behavior after other symptoms of their eating disorder had decreased. A few of these subjects (four anorexics, one bulimic) noted that exercise enabled them to focus on fitness versus thinness. Additionally, exercise helped them to "feel in control" and to cope with feelings of panic when they began to eat normal meals.

Compulsive spending and shopping were largely absent in the sample (anorexics and bulimics) prior to the onset of the eating disorder. These behaviors increased during the eating disorder. Interestingly, compulsive shopping was reported by both anorexics and bulimic subjects after their eating disorder symptoms ended. Generally, these subjects (three anorexics, three bulimics) indicated that these behaviors occurred during their first year of recovery. It could be that as subjects gave up their food behaviors, they found compulsive shopping to be a temporary "quick fix" when facing stressors or uncomfortable feelings.

Attributions Regarding Recovery

Theoretically, women who recover from an eating disorder are likely to evidence the same beliefs and explanations about the world that reflect a healthy sense of self-efficacy. It was hypothesized that causal attributional differences about recovery issues would exist between anorexic subjects and bulimic subjects. Overall, descriptive statistics showed that mean scores for attributional indices (internal negative, composite

negative, Internal Positive, and Composite Positive) were highly similar to a sample of nonclinical college undergraduates. That is, the present sample tended to score roughly in the middle of a 7-point Likert scale. In general, these scores indicated a relative balance between subjects making internal versus external attributions, as well as stable versus unstable attributions.

On the other hand, there was a substantial, inverse correlation between self-rated degree of recovery, and the internal negative dimension and the composite negative score. These findings suggest that the subjects who rated their degree of recovery higher tended to believe negative situations are due to external, transient, and situational factors.

There was a modest nonsignificant correlation between self-rated degree of recovery, and the internal, positive dimension and the Composite Positive score. These findings suggest that subjects who rated themselves as more recovered had a tendency to attribute the positive outcomes of situations to internal personal characteristics, which were perceived as stable and global across situations.

Additionally, there was a modest, nonsignificant correlation between number of months in recovery and the composite negative score, which suggests subjects with longer times in recovery have a tendency to believe negative situations are due to external, transient, and situational factors. One interesting finding was a modest, but insignificant inverse correlation found between reported number of impulse control problems and the Composite Positive, indicating that subjects with a lower number of reported impulse control problems had a tendency to attribute the positive outcomes of situations to internal personal characteristics which were perceived as stable and global.

Overall, these findings are consistent with previous attributional research results. No meaningful differences were identified when comparing the attribute variables of the anorexics with the attribute variables of the bulimics. This could be due to the small number of subjects.

The mean percentage of anorexic subjects' self-rated overall degree of recovery was 83.8, and the modal percentage of recovery reported by anorexic subjects was 95. The mean percentage of bulimic subjects' self-rated, overall degree of recovery was 90.2, and the modal percentage of recovery reported by bulimic subjects was 95. These findings suggest that this current sample of anorexic and bulimic subjects felt they were moderately to highly recovered.

There was a low correlation between the self-rated overall degree of recovery and time in recovery. A stronger correlation was expected, indicating that as time in recovery increased, subjects viewed themselves as more recovered. One reason this relationship may be weak is that as subjects gain time in recovery, they become more aware of remaining issues that need to be resolved. For example, subjects with longer times in recovery appear to be more aware of residual cognitions and behaviors associated with eating and their bodies.

Implications

Social support and other recovering people are critical in assisting women to overcome eating disorders. Therapists could capitalize on this power of social support. Clinicians could assist clients to expand their range of social contacts. Family and friends

could be involved in therapy and help provide support and reinforce new adaptive behaviors. Additionally, a treatment film could be developed and introduced as a modeling influence to expose eating-disorder clients to other recovering eating-disorder clients' reports of their disorder and recovery. Exposure to this film could provide support, motivation, and hope to the eating-disorder client. As many women believed that reaching a point of being sick and tired was critical in precipitating change, it may be useful for therapists to amplify the negative consequences of symptoms. Additionally, a video could help educate women about the recovery process. Educating clients can be therapeutic. Additionally, a treatment film could help families understand the disorder and the recovery process. It is important that families, and especially males and parents, understand their contribution to the etiology of the disorder, as well as the significant role they could play in the recovery of the eating-disorder client.

Limitations to the Present Study

The present study likely interviewed more gregarious, open, recovering women. Shy, more private women may not have volunteered. Also, women's responses regarding recovery may have been influenced by the prior conceptualizations regarding the etiology of the disorder and key recovery issues promoted by professional therapists and/or self-help groups. Additionally, the subjects' possible unawareness of all factors eliciting, reinforcing, and preventing behavior invariably restricts their ability to report causal factors. An inherent weakness of studies that ask subjects to recall past events is that people can be poor historians.

Improvements to the current study could include refining the demographic fact sheet to differentiate between personal and household income. Either a questionnaire or the interview guide could be used to quantify number of relapses so that relationships between relapse and other variables could be examined. This study only had 22 subjects. A larger sample of anorexic and bulimic subjects may better represent actual attributional differences between these two groups.

Future research could pull together these vignettes to produce a videotape that educates viewers about eating disorders and recovery. Such a video could also be used to improve motivation and adherence to treatment, and reduce dropout rates in eating-disorder clients.

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APPENDICES

Appendix A

Advertisement Requesting Participants

If you have recovered or are recovering from anorexia or bulimia nervosa, we urge you to share your recovery experience with a Utah State University research team. Please call (801) 752-3195 or send your name, phone number, and address to:

Benita Quakenbush and David M. Stein, Ph.D.
Psychology Department - UMC 2810
Utah State University
Logan, UT 84322-2810

Appendix B

Anorexia and Bulimia Nervosa Recovery Research

A Utah State University team is conducting a research study to determine what specific critical factors began and maintained recovery for individuals once suffering from anorexia or bulimia nervosa.

You can help others in their struggle to recover from an eating disorder. If you believe you have been recovered or recovering for the past 6 months and would like to participate in this study, please call (801) 752-3195 or send your name, phone number and address to:

Benita Quakenbush and David M. Stein, Ph.D.
Psychology Department - UMC 2810
Utah State University
Logan, UT 84322-2810

Appendix C

Clinician's DSM-IV Interview Rating Form

Patient Research ID _____

Rater's Initials _____

In rating the severity or frequency of each symptom below, rely on your subjective experience, using as your frame of reference, a typical patient in this treatment program who apparently has the same disorder (e.g., bulimia, or anorexia). The typical or usual patient should be assigned a rating of "3" on a symptom. Leave an item blank if it does not apply to the patient because of age or gender. When a symptom is not present, rate it a "1". The system of rating is as follows:

- 1= Severity or frequency of symptom is extremely low; or symptom is not present
 2= Severity or frequency of symptom is below the norm for treatment group
 3= Severity or frequency of symptom is typical of patients with this disorder, in this program
 4= Severity or frequency of symptom is somewhat above the norm for the treatment program
 5= Severity or frequency of symptom is extreme or unusually high for treatment program

Rating

DMS-IV Criterion

- _____ A. Intense fear of gaining weight or becoming fat, even though underweight
- _____ B. Disturbance in the way in which one's body weight or shape is experienced
 Or denial of seriousness of current low body weight
 Or undue influence of body weight or shape on self-esteem
- _____ C. Refusal to maintain body weight over a minimal normal weight for age and height
 _____ Weight loss leading to maintenance of body weight 15% below expected
 _____ Failure to make expected weight gain during period of growth, leading to body weight 15% below expected
- _____ D. In females, absence of at least three consecutive menstrual cycles when otherwise expected to occur (primary or sec. amenorrhea). List the number missed in past 6 months. ____ (Rating: 0 missed = 1; 1 missed = 2; 2-3 missed = 3; 4-5 missed = 4; 6 missed = 5)
- _____ E. Recurrent episodes of binge eating (rapid consumption of a large amount of food in a discrete period of time, usually less than two hours). List the average number of binges during the past month. (Rating: 0-2 episodes = 1; 3-5 episodes = 2; 6-8 episodes = 3; 9-12 episodes = 4; > 12 episodes = 5)
- _____ F. During the eating binges there is a feeling of lack of control over the eating behavior.
- _____ G. In order to counteract the effects of binge eating, the individual regularly engages in;
 _____ Self-induced vomiting; List the average number in last month ____
 (Rating: less than monthly or never = 1; 1-4/month = 2; 5-9/month = 3; 10-15/month = 4; > 15/month = 5)
 _____ Use of laxatives or diuretics, diet pills, enemas, or other medications. Rate highest frequency in last month of any one item (Rating: less than monthly or never = 1; 1-4/month = 2; 5-9/month = 3; 10-15/month = 4; > 15/month = 5)
 _____ Rigorous dieting or fasting. Rate frequency of 12 to 24 hour fasts in last month (Rating: less than monthly or never = 1; 1-4/month = 2; 5-9/month = 3; 10-15/month = 4; > 15/month = 5)
 _____ Rate frequency of vigorous exercise during past month _____. Rate frequency in last month (Rating: less than monthly or never = 1; 1-8/month = 2; 9-16/month = 3; 17-24/month = 4; > 24/month = 5)

Please fill in patient's current weight _____

Height _____

Body fat composition _____

Appendix D

Permission Statement

As a participant in the study being conducted by Benita Quakenbush and David M. Stein, Ph.D. of Utah State University, I understand that:

The purpose of the study is to help individuals with eating disorders and their therapists better understand how successful recovery may occur. Specifically, the study seeks to identify important recovery themes in the lives of women who have experienced eating disorders.

I understand that participation will take about 1 1/2 hours - 2 1/2 hours and will include completing a demographic fact sheet, a 75 item questionnaire, and a videotaped interview.

I understand the results from questionnaires will report only group data and will be used for research purposes only. Additionally, I understand that with my additional written permission in the future, segments of the videotape interview may be used to develop a pretreatment orientation therapy film. This film is expected to be used in future research at Utah State University (designed to better understand and facilitate client recovery. For example, future research efforts may result in the production of video or audio segments that use part of my interview as a motivational aide to clients. I understand that I would be contacted before the film is developed and give my written permission for any segment of my video to be used in anyway.

I understand that I will not now, nor in the future expect to receive any financial compensation for my participation in the study, or if segments of my videotape are eventually used in the development of a commercial treatment orientation video, or other research training or treatment materials.

Further, I understand there are no known risks associated with participating in the study, and that my involvement is voluntary. In fact, some subjects find that talking about their recovery is a helpful or therapeutic experience. I understand that codes will be used in place of identifying information (e.g., name) to label all forms, questionnaires, and video tapes to protect my confidentiality. Additionally, I understand that all research materials will be kept locked in a safe place to further ensure my confidentiality. Subjects are free to withdraw their consent any time during the study period without consequence.

I understand that subjects are invited to inquire about study procedures at any time, and that results of the study will be available in about 6 months from Dr. Stein, Utah State University.

Name

Signature

Date

Any questions or concerns, please contact
Benita Quakenbush at 752-3398 or 797-1012
David M. Stein, Ph.D. at 797-3274

Appendix E

Demographic Face Sheet

DO NOT PUT YOUR NAME ON THIS FORM

Date:

Age:

Marital Status:

Number of Children:

Ethnic Origin:

Personal Income:

Religious Affiliation:

Current Living Arrangements:

Your Estimate of Age at Onset of Bulimia or Anorexia Nervosa:

Appendix F

Demographic Face Sheet -- Impulse Control

Indicate whether you have experienced any of the behaviors or events (defined below). We would like to know if: a) the behaviors occurred BEFORE your eating disorder symptoms began; b) whether they occurred DURING the time period of your eating disorder; or c) whether they occurred three months or later after you were recovered from your main symptoms. Also, please mark (where appropriate) the AVERAGE number of times per week the behavior occurred, or the TOTAL number of times the event occurred.

Also, please keep in mind the following definitions of terms or phrases found in the questions below:

1. **“3 months before eating disorder symptoms appeared”** means the period of roughly three months before you began to have eating binges twice per week or more, **OR**, the period of roughly three months before you began missing your periods and had lost 10% or more body weight (through dieting, exercise, etc.)
2. **“During eating disorder”** means the period when your binge eating or purging was most severe, **OR**, when you had lost the most weight, and your periods were most irregular or absent altogether.
3. **“3 months after your eating disorder”** means the period when you were finally binging or purging no more than once every couple of weeks, and this became a stable pattern for three months, **OR**, when your body weight increased to within 5-8 pounds of your normal weight, or the regularity of your periods had returned to “normal” for you.

Alcohol episodes per week: 3 or more 8-ounce glasses (total of at least 24 ounces) of wine, beer, or mixed alcohol drinks taken in an evening or drinking period.

Drug episodes per week (prescribed, or nonprescribed): getting high or intoxicated, or taking a medication to reduce bad feelings.

High levels of exercise: periods of 40 minutes or more of such activities as aerobics class, swimming, jogging one or more miles, etc.

Spending money or writing checks that “bounced,” or, times you exceeded your credit card limit.

Self-defeating shopping: number of shopping trips involving uncontrollable or excessive spending, or periods when you regretted buying items you did not need or really want. Often people engaged in self-defeating shopping will start making purchases mostly to temporarily improve their mood state, or their feelings of self-esteem.

Appendix G

Recovery Interview

I. Telephone Screening using Structured Clinical Interview
for DSM-IV (SCID).

Identify and record prior evidence of major health-threatening weight loss behaviors, and/or evidence of binge eating (at least 1400 calories consumed in 2 hour period with the perception of loss of control over eating). The extreme weight loss behaviors can include severe food restriction periods of 24-hour fasting, extreme exercise, self-induced vomiting, use of laxatives and diuretics.

II. Video Research Interview at USU Community Clinic.

Based on SCID telephone symptoms, use the following list to select the top two (if more than one has occurred) extreme weight loss measures (EWLM) previously identified by the subject for further discussion:

1. self-induced vomiting 3 or more days per week
2. use of laxatives and diuretics 3 or more days per week
3. fasting for 24 hours, 3 or more days per week
4. extreme exercise 5 or more days per week (e.g., 40 minutes of aerobics, swimming/jogging 1 plus mile)

If the subject was binge eating, interviewer will use the questions below in reference to binge eating, and will also cover the most extreme EWLM identified in the list. If the subject was

not binge eating, interviewer will use the questions below in reference to the two EWLM selected from the list.

Begin the questions that follow, which are in line with the Goal Research Question: **Are there common situations and personal factors that clients report increased motivation and prompted them to begin the recovery process (e.g., enter treatment or overcome their denial).**

1. a) "What factors do you believe contributed to your wanting to stop the [binge eating; purging; diuretic use; high rate of exercise?"]
b) "How about (cover the 1-2 EWLM selected previously)?"

2. "What made you realize that [your eating had come to involve binges; or that the (EWLM)] was a problem?"

3. a) "Did you talk to anyone about [binging; EWLM]?"
b) "What was the motive behind sharing this?" {acc: "Can you recall hoping they would give you support or help?"}
c) If more than one person was listed, ask, "Did anyone react the way you had hoped?" {acc: Who responded most like the way you hoped?"}

IF NO go to question #4.

IF YES continue asking "Can you recall the situation, and what was said". {acc: What stood out most about the conversation as you think about it today?"}

4. "Was anything in particular happening in your life at the time you finally decided that something needed to be done about your eating problems? (I mean, anything significant going on with your relationship with friends, family, your boss at work, school--anything like that?)"

5. a) "Did you ever seek professional assistance?"
IF YES, "What kind of help did you seek?"
b) "What happened during the time you spent (in the program; working with the person in the counseling sessions) that was most helpful to you?"

6. a) "Many women with eating problems will have mornings when they wake up and absolutely promise themselves that they will not [binge; repeat 1-2 EWLM] that day."
Reinforce positive head nods at this points and say:
"You're nodding your head 'yes'"), or ask, "Did you ever have a morning like that?" "Tell me about it"
If NO acknowledgment of a morning like this, go to question #8.

7. "What was different the time that you decided you needed to change, and found you began to be successful?"
Prompt (if needed): "Tell me more about that"; or "Tell me whatever makes sense to you about that".

8. "Was there a particular moment you remember realizing you were going to stop, or was it a gradual process?"
9. "What needed to change before you could give up your old eating habits?"

Begin the questions that follow, which are in line with the Goal Research Question: **TO WHAT LIFE EVENTS OR CRITICAL FACTORS DO CLIENTS ATTRIBUTE THEIR ABILITY TO PERSIST IN NEW, HEALTHFUL BEHAVIORS OVER TIME (E.G., MAINTAIN MOTIVATION).**

10. "Which factors or events do you believe kept you going through the hard times in the process of recovery?"
11. "Did any changes occur in your beliefs or feelings as you recovered?" If yes, say "Tell me about them?"
12. a) "How did you feel about your body before deciding to change?"
b) "Has that changed for you?" or "How do you feel now?"
13. a) "Have your eating behaviors changed or stayed the same?"
b) "Did your view of food change or stay the same during the recovery process?"

14. "Did things change or stay the same in your social world?"
"That is, your relations with family, friends, or social contacts at school or work during your recovery?"
15. Is your overall self-concept the same, or different now compared to the period in your life when you were [binging, fasting, EWLM]?"
16. "Can you list the most important things that helped you persist in the recovery process?"
17. a) "On a scale from 0 to 100 percent, how recovered overall, would you say you are? I mean, would you say you are 20% recovered or 80% recovered or ...".
[If <100%] ask, " What work do you have yet to accomplish or what else needs to change?"

Begin the questions that follow, which are in line with the Goal Research Question: **WHAT INCENTIVES DO EATING DISORDER CLIENTS BELIEVE MAINTAINED THEIR EATING DISORDER BEHAVIOR, AND THUS MADE RECOVERY DIFFICULT?**

18. "Did any factors or life events interfere with recovery?"
19. "Were there people in your life who were not helpful in recovery?" If yes say, "What did they do or not do that got in the way?"

20. [If professional help was sought], "Was there an aspect of your (treatment, therapy) that hindered your progress?"
21. "What aspects of your eating disorder were hardest to change?"
22. "Is there anything that you hated to give up during recovery?"

Begin the questions that follow, which are in line with the Goal Research Question: **WHAT ISSUES OR FACTORS DO CLIENTS BELIEVE HELPED THEM COPE WITH VARIOUS THREATS TO RECOVERY?**

23. a) "Have you ever had a "slip-up" or a relapse? By this I mean, a period when you once again began [list EWLM]."
IF YES, "What do you think caused you to [list EWLM]?"
IF NO, "Why do you think you were able to avoid them?"
- b) "What did you do and think when you relapsed?" [acc. "What would you do and think if you relapsed?"]
24. "Lately, have you had any thoughts or worries about a relapse?"
IF ANY MENTIONED, "What might cause such an event?"
IF NONE ARE ACKNOWLEDGED, "Your answer says you feel pretty confident."

25. "Have urges to [binge eat, EWLM] disappeared, or do you still have the urge to [binge eat, purge, use diuretics, exercise extremely, fast, or health threat behavior]?"
IF SO, "Tell me how you cope with this urge and give me some examples."
26. "In general, do you deal with your emotions in the same way, or differently now, compared to when you had your eating problem?"
27. a) "What do you believe is needed for recovery to persist over time?"
28. "What do you think or feel when you come across articles or see TV shows describing clothing fashions?"
29. a) "Why do you think some women develop eating disorders while others do not?"
b) "What contributed to the development of your eating disorder?"
30. "Do you have any advice to young girls who are showing signs of eating disorders?"
31. "What advice would you give people who currently have the eating problems you experienced?"

32. "Where there any pleasant surprises or benefits to recovering that you didn't realize were possible when your eating disorder was at its worst?"
33. "How can family or professionals help people with an eating disorder to take a risk to try new behaviors, so that they can discover these benefits?"

Appendix H

Rater's Interview Coding Form

Question Number One:

What do you believe caused you to begin recovery?

Place the subject response in columns 27 and 28 according to the following codes:

- 01 Individual therapy
- 02 Group therapy
- 03 Other therapy
- 04 Self-help group
- 05 Medication
- 06 Significant other (partner)
- 07 Friend(s)
- 08 Family
- 09 Personal Health Concerns
- 10 Pregnancy
- 11 No outside help
- 12 Reached a bottom (out of denial)
- 13 Acted to save job
- 14 Acted to save marriage/relationship
- 15 Media awareness
- 16 Rehabilitation hospital or medical treatment
- 17 Additional (new) category: _____
- 18 Additional (new) category: _____
- 19 Additional (new) category: _____

Question Number Two:

Which factor helped you to maintain recovery?

Place the subject response in columns 29 and 30 according to the following codes:

- 01 Individual therapy
- 02 Group therapy
- 03 Other therapy
- 04 Self help group
- 05 Medication/medical treatment
- 06 Significant other (partner)
- 07 Friend(s)
- 08 Family
- 09 Personal health concerns
- 10 Pregnancy
- 11 No outside help
- 12 Acted to save job
- 13 Acted to save marriage/relationship
- 14 Media awareness
- 15 Self assessment or reflection
- 16 Improved self-esteem (e.g., Empowerment, set limits, dissolved emeshment)
- 17 Improved body image
- 18 Developed new hobbies, interests and/or relationships
- 19 Healthy eating habits
- 20 Additional (new) category: _____
- 21 Additional (new) category: _____
- 22 Additional (new) category: _____

Question Number Three:

What hindered or acted as a barrier in your recovery?

Place the subject response in columns 31 and 32 according to the following codes:

- 01 Society's norms (expectations)
- 02 Family expectations
- 03 Significant other's (partner's) expectations
- 04 Habit or routine
- 05 Perceived control of weight and body image (fear of being fat)
- 06 Used disorder to deal with emotions
- 07 Perceived body distortion
- 08 Poor eating habits
- 09 Additional (new) category: _____
- 10 Additional (new) category: _____
- 11 Additional (new) category: _____

Question Number Four:

Which factor has helped you cope with the threat of relapse?

Place the subject response in columns 33 and 34 according to the following codes:

- 01 Individual therapy
- 02 Group therapy
- 03 Other therapy
- 04 Self help group
- 05 Medication/medical treatment
- 06 Significant other (partner)
- 07 Friend(s)
- 08 Family
- 09 Personal health concerns
- 10 Pregnancy
- 11 No outside help
- 12 Acted to save job
- 13 Acted to save marriage/relationship
- 14 Media awareness
- 15 Self assessment or reflection
- 16 Improved self-esteem (e.g., empowerment, set limits, dissolved enmeshment)
- 17 Improved body image
- 18 Maintained new hobbies, interests and/or relationships
- 19 Fear of the loss of recovery (returning "back to the bottom")
- 20 Continued contact with people in recovery
- 21 Additional (new) category: _____
- 22 Additional (new) category: _____
- 23 Additional (new) category: _____

Appendix I

Coding Categories

- 01 supportive family/friends; nonjudgmental support
- 02 fear of getting caught/embarrassment
- 03 healthy eating habits and attitudes
- 04 new hobbies, interests, or relationships
- 05 attention for losing weight
- 06 habit or routine
- 07 numb emotions
- 08 healthy ways to deal with emotions
- 09 improved body image
- 10 personal health concerns
- 11 tired of it: obsessing, spending \$, wasting time, tired
- 12 feel better; don't want to lose recovery
- 13 poor eating habits and attitudes
- 14 Recovering people
- 15 professionals/therapy
- 16 people who didn't understand or ignorant
- 17 fear of being/becoming fat - body distortion
- 18 pregnancy/children
- 19 media awareness
- 20 improved self-esteem/personal growth
- 21 nothing
- 22 maturation
- 23 Spirituality
- 24 hospitalization
- 25 partner's/family's/society's norms & expectations
- 26 support group

Appendix J
Permission to use the Attributional
Style Questionnaire

UNIVERSITY of PENNSYLVANIA


Psychology Department
Professor Martin E. P. Seligman
3815 Walnut Street
Philadelphia, PA 19104-6196

PERMISSION TO USE THE ATTRIBUTIONAL STYLE QUESTIONNAIRE

The Attributional Style Questionnaire (ASQ) is copyrighted material and may only be used with the written permission of the author, Dr. Martin E. P. Seligman. This letter grants you permission to use the ASQ, so please keep it on file. The questionnaire may be used only for academic research or by a clinical psychologist for the diagnosis or treatment of patients. It may not be used for profit or for any corporate-related activities.

Thank you for your understanding and consideration in this matter.

Sincerely,



Martin E. P. Seligman, Ph.D.
Professor of Psychology
Director of Clinical Training

MEPS:tbs

Encl.

Appendix K

Attributional Style Questionnaire

DIRECTIONS

- 1) Read each situation and vividly imagine it happening to you.
- 2) Decide what you believe would be the one major cause of the situation if it happened to you.
- 3) Write this cause in the blank provided.
- 4) Answer three questions about the cause by circling one number per question. Do not circle the words.
- 5) Go on to the next situation.

SITUATIONS

YOU MEET A FRIEND WHO COMPLIMENTS YOU ON YOUR APPEARANCE.

1) Write down the one major cause: _____

2) Is the cause of your friend's compliment due to something about you or something about other people or circumstances?

Totally due to other people or circumstances 1 2 3 4 5 6 7 Totally due to me

3) In the future when you are with your friend, will this cause again be present?

Will never again be present 1 2 3 4 5 6 7 Will always be present

4) Is the cause something that just affects interacting with friends, or does it also influence other areas of your life?

Influences just this particular situation 1 2 3 4 5 6 7 Influences all situations in my life

YOU HAVE BEEN LOOKING FOR A JOB UNSUCCESSFULLY FOR SOME TIME.

5) Write down the one major cause: _____

6) Is the cause of your unsuccessful job search due to something about you or something about other people or circumstances?

Totally due to other people or circumstances 1 2 3 4 5 6 7 Totally due to me

7) In the future when you look for a job, will this cause again be present?

Will never again be present 1 2 3 4 5 6 7 Will always be present

8) Is the cause something that just influences looking for a job, or does it also influence other areas of your life?

Influences just this particular situation 1 2 3 4 5 6 7 Influences all situations in my life

YOU BECOME VERY RICH.

9) Write down the one major cause: _____

10) Is the cause of your becoming rich due to something about you or something about other people or circumstances?

Totally due to other people or circumstances 1 2 3 4 5 6 7 Totally due to me

11) In your financial future, will this cause again be present?

Will never again be present 1 2 3 4 5 6 7 Will always be present

12) Is the cause something that just affects obtaining money, or does it also influence other areas of your life?

Influences just this particular situation 1 2 3 4 5 6 7 Influences all situations in my life

A FRIEND COMES TO YOU WITH A PROBLEM AND YOU DON'T TRY TO HELP HIM/HER.

13) Write down the one major cause: _____

14) Is the cause of your not helping your friend due to something about you or something about other people or circumstances?

Totally due to other people or circumstances 1 2 3 4 5 6 7 Totally due to me

15) In the future when a friend comes to you with a problem, will this cause again be present?

Will never again be present 1 2 3 4 5 6 7 Will always be present

16) Is the cause something that just affects what happens when a friend comes to you with a problem, or does it also influence other areas of your life?

Influences just this particular situation 1 2 3 4 5 6 7 Influences all situations in my life

YOU GIVE AN IMPORTANT TALK IN FRONT OF A GROUP AND THE AUDIENCE REACTS NEGATIVELY.

17) Write down the one major cause: _____

18) Is the cause of the audience's negative reaction due to something about you or something about other people or circumstances?

Totally due to other 1 2 3 4 5 6 7 Totally due to me
people or circumstances

19) In the future when you give talks, will this cause again be present?

Will never again 1 2 3 4 5 6 7 Will always be present
be present

20) Is the cause something that just influences giving talks, or does it also influence other areas of your life?

Influences just this 1 2 3 4 5 6 7 Influences all
particular situation situations in my life

YOU DO A PROJECT WHICH IS HIGHLY PRAISED.

21) Write down the one major cause: _____

22) Is the cause of your being praised due to something about you or something about other people or circumstances?

Totally due to other 1 2 3 4 5 6 7 Totally due to me
people or circumstances

23) In the future when you do a project, will this cause again be present?

Will never again 1 2 3 4 5 6 7 Will always be present
be present

24) Is the cause something that just affects doing projects, or does it also influence other areas of your life?

Influences just this 1 2 3 4 5 6 7 Influences all
particular situation situations in my life

YOU MEET A FRIEND WHO ACTS HOSTILELY TOWARDS YOU.

25) Write down the one major cause: _____

26) Is the cause of your friend acting hostile due to something about you or something about other people or circumstances?

Totally due to other 1 2 3 4 5 6 7 Totally due to me
people or circumstances

27) In the future when interacting with friends, will this cause again be present?

Will never again 1 2 3 4 5 6 7 Will always be present
be present

28) Is the cause something that just influences interacting with friends, or does it also influence other areas of your life?

Influences just this 1 2 3 4 5 6 7 Influences all
particular situation situations in my life

YOU CAN'T GET ALL THE WORK DONE THAT OTHERS EXPECT OF YOU.

29) Write down the one major cause: _____

30) Is the cause of your not getting the work done due to something about you or something about other people or circumstances?

Totally due to other 1 2 3 4 5 6 7 Totally due to me
people or circumstances

31) In the future when doing work that others expect, will this cause again be present?

Will never again 1 2 3 4 5 6 7 Will always be present
be present

32) Is the cause something that just affects doing work that others expect of you, or does it also influence other areas of your life?

Influences just this 1 2 3 4 5 6 7 Influences all
particular situation situations in my life

YOUR SPOUSE (BOYFRIEND/GIRLFRIEND) HAS BEEN TREATING YOU MORE LOVINGLY.

33) Write down the one major cause: _____

34) Is the cause of your spouse (boyfriend/girlfriend) treating you more lovingly due to something about you or something about other people or circumstances?

Totally due to other 1 2 3 4 5 6 7 Totally due to me
 people or circumstances

35) In future interactions with your spouse (boyfriend/girlfriend), will this cause again be present?

Will never again 1 2 3 4 5 6 7 Will always be present
 be present

36) Is the cause something that just affects how your spouse (boyfriend/girlfriend) treats you, or does it also influence other areas of your life?

Influences just this 1 2 3 4 5 6 7 Influences all
 particular situation situations in my life

YOU APPLY FOR A POSITION THAT YOU WANT VERY BADLY (E.G., IMPORTANT JOB, GRADUATE SCHOOL ADMISSION, ETC.) AND YOU GET IT.

37) Write down the one major cause: _____

38) Is the cause of your getting the position due to something about you or something about other people or circumstances?

Totally due to other 1 2 3 4 5 6 7 Totally due to me
 people or circumstances

39) In the future when you apply for a position, will this cause again be present?

Will never again 1 2 3 4 5 6 7 Will always be present
 be present

40) Is the cause something that just influences applying for a position, or does it also influence other areas of your life?

Influences just this 1 2 3 4 5 6 7 Influences all
 particular situation situations in my life

YOU GO OUT ON A DATE AND IT GOES BADLY.

41) Write down the one major cause: _____

42) Is the cause of the date going badly due to something about you or something about other people or circumstances?

Totally due to other people or circumstances 1 2 3 4 5 6 7 Totally due to me

43) In the future when you are dating, will this cause again be present?

Will never again be present 1 2 3 4 5 6 7 Will always be present

44) Is the cause something that just influences dating, or does it also influence other areas of your life?

Influences just this particular situation 1 2 3 4 5 6 7 Influences all situations in my life

YOU GET A RAISE.

45) Write down the one major cause: _____

46) Is the cause of your getting a raise due to something about you or something about other people or circumstances?

Totally due to other people or circumstances 1 2 3 4 5 6 7 Totally due to me

47) In the future on your job, will this cause again be present?

Will never again be present 1 2 3 4 5 6 7 Will always be present

48) Is this cause something that just affects getting a raise, or does it also influence other areas of your life?

Influences just this particular situation 1 2 3 4 5 6 7 Influences all situations in my life

Appendix L

Attributional Style Questionnaire

Scoring Key

The Attributional Style Questionnaire (ASQ: c 1984) has 12 hypothetical events - 6 good events and 6 bad events. Each event has 4 questions that are always in the same order. The first question asks for the one major cause of the event. It is not used in the scoring but is necessary for the test-taker to answer the next 3 questions on whether the cause of the event is internal or external, stable or unstable, global or specific. Scores can be generated for each of the 3 dimensions - internality, stability and globality. Composite scores (CPCN, CoNeg and CoPos) that sum across these 3 dimensions have proven, however, to be the most valid and reliable in the prediction of depression. There is also a measure of hope that sums across stability and globality.

Scores are derived by simply averaging within dimension and across events for individual dimension scores or across dimensions and across events for composite scores. Each individual dimension ranges from 1 to 7. Composite scores, therefore, range from 3 to 21 for CoPos and CoNeg and from -18 to +18 for CPCN. The higher the CoPos or CPCN score the better and the lower the CoNeg score the better. Styles are calculated separately for good events and bad events. For example:

Internal Negative = the sum of #s 6, 14, 18, 26, 30 and 42 divided by 6.
(There are 6 bad events.)

Hopelessness = the sum of #s 7, 8, 15, 16, 19, 20, 27, 28, 31, 32, 43 and 44 divided by 6.

Composite Negative (CoNeg) = the sum of 6, 7, 8, 14, 15, 16, 18, 19, 20, 26, 27, 28, 30, 31, 32, 42, 43 and 44 divided by 6.

Following is a list of all the measures:

Composite Positive Attributional Style (CoPos): _____
Composite Negative Attributional Style (CoNeg): _____
Composite Positive Minus Composite Negative (CPCN): _____

Internal Negative:	_____	Internal Positive:	_____
Stable Negative:	_____	Stable Positive:	_____
Global Negative:	_____	Global Positive:	_____
Hopelessness:	_____	Hopefulness:	_____

Appendix M

Subjects' Responses to Interview Questions

**Research Question Number One:
What do you believe caused you to begin Recovery?**Bulimic - #1

Mostly me
friends (a little)
Improved relationship with parents (big help)
Personal health concerns - concerned about purging damage
fear of getting caught and forced to go to doctor
not enough time to exercise once began high school
focus began to shift from being thin to being healthy
started on structured diet
getting caught in the age of purging by neighbor
replacing bingeing/purging with activities (e.g., walks/talks)

Anorexic - #2

Being emaciated, no energy, sick, weak, couldn't study
didn't like constantly focusing life around food and eating
food for bingeing became too expensive
got a different, better job
figured out that she had to eat to survive

Anorexic - #3

significant other
friends
Her doctor
developed new "vices"

Bulimic - #4

personal health concerns
media awareness - Geraldo
embarrassed
financial concerns
stopped cold turkey

Anorexic - #12

friends
maturation
higher self-esteem
caught stealing ex-lax
tired of obsessing and controlling weight and food

Anorexic - #13

desired to be closer to friends
desired a closer relationship with siblings
family was angry & upset that she wouldn't eat
acted to save marriage
psychiatrist told her she was a spoiled brat

too busy to exercise after marriage and children
disliked that she couldn't eat in public

Bulimic - #14

individual therapy
significant other
family
reached a bottom - sick of it
rehabilitation hospital/TX

Bulimic - #15

significant other
friends
reached a bottom - sick of it
realized she had to stop "cold turkey"
realized guys she dated liked her regardless of weight

Bulimic - #16

individual therapy
reached a bottom - sick of it
had goals she wanted to accomplish
had a commitment to being well

Bulimic - #18

individual therapy
personal health concerns
reached a bottom - sick of it
know it was abnormal, wanted to be normal
talked to people and felt supported
God

Bulimic - #19

individual therapy
got married and wanted a family
understanding husband
aunt & uncle
pregnancy - afraid would lose baby
hospital treatment

Bulimic - #20

individual therapy
friend told her it was worth it
better relationship with parents
2nd hospitalization
tired of it
lacked energy
taking too much time

Bulimic - #21

understanding from fiancée
personal health concerns
embarrassment - people knew what she was doing
afraid it was going to get worse when she moved back to home

Anorexic - #22

Nutritionist

group therapy

individual therapy

friends

rehabilitation hospital - stopped abruptly, took control over eating, worked on other issues

felt out of control

depressed & suicidal - needed to be stabilized

Anorexic - #23

less family stress

had to eat to compete in cycling races

Anorexic - #25

brother got worried and angry and confronted her

personal health concerns

took too much energy

tired of obsessing with food

improved self-esteem, confidence in various talents/abilities

Anorexic - #26

boyfriend confronted her, he was supportive

wanted sexual relationship w/boyfriend -body too skinny/ugly

personal health concerns, didn't like the way she was feeling

Treatment program - 2nd TX program

support group

Anorexic - #27

AA sponsor also had food issues and talked w/ her

4th step inventory in AA alerted her to her food issues

went to OA

friend

Bulimic - #28

boyfriend

personal health concerns

aware she was out of control

stopped feeling responsible for others (especially mother)

Anorexic - #29

father made decision she needed help

concern for kids, and husband

went back to work

acted to save marriage/relationship

therapist

whole life revolving around food

tired of her negative thoughts

Bulimic - #30

individual therapy

group therapy

TA therapy

12-step support group, OA

almost had a nervous breakdown

Anorexic - #31

Husband left her
 sister's support
 dizzy black-out spells
 depressed, suicidal
 several trips to the hospital

**Research Question Number Two:
 Which factors helped you to maintain Recovery?**

Bulimic - #1

parents (especially mom)
 friends
 improved body image
 adopting healthy eating habits and attitudes
 realized others didn't judge her by her looks
 maturation process
 moving away from home
 moving away from boyfriend

Anorexic - #2

personal health concerns - realized she was way too thin
 self-reflection and assessment
 healthy eating habits
 getting more energy and muscle tone

Anorexic - #3

significant other
 friends

Bulimic - #4

self assessment - felt good about herself
 improved self-esteem - stronger constitution
 improved body image
 healthy eating habits
 strong desire to be healthy
 fearful of consequences
 tired of hiding things
 saved money

Anorexic - #12

friends
 became closer to parents
 improved self-esteem
 improved body image
 healthy eating habits
 God-spirituality
 maturation
 sharing feelings with others

Anorexic - #13

regained old friends

needed to feel accepted among friends/siblings
 faith
 realizing she had love of people regardless of her weight
 obtaining confidence and a purpose
 developed new interests, goals and relationships at college
 realizing many factors contributed to etiology-not just her
 wanted to reduce conflict and keep peace
 view of food and body changed (no longer her enemy)

Bulimic - #14

significant other
 self assessment or reflection
 healthy eating habits
 giving up perfectionism
 learning to deal with problems without the use of food
 good days of abstinence gave her hope during bad days
 talking to people

Bulimic - #15

significant other
 had committed to serve a mission
 had more energy
 God
 talking to others who were recovering from eating disorder

Bulimic - #16

individual therapy
 self assessment or reflection
 belief in a higher power
 doesn't care so much what others think
 not let food control her

Bulimic - #18

friends
 family
 self-assessment or reflection
 improved self-esteem
 faith in God
 Didn't want to be depressed anymore

Bulimic - #19

wanted healthy relationship with husband
 unconditional love from husband
 wanted to be alive to see her kids raised
 kept herself busy with baby
 did other things instead of binging
 changed her attitude about herself
 "I was really a person"
 self-assessment and reflection
 improved self-esteem - didn't have to be perfect
 healthy eating habits
 took it one step at a time

Bulimic - #20

recovering people (eating disorders, alcoholics, addicts)
 closer friendships
 not manipulated by brothers
 parents saw her as an adult
 self-concept changed - "who I am as a person"
 improved self-esteem gradually
 improved body image
 healthy eating habits
 unconditional support from anyone
 lifestyle had to change
 relationships had to change (not to keep them at a distance)
 not comparing myself to others so much
 having someone (2nd hospitalization) help break the cycle

Bulimic - #21

fiancée was supportive
 gained social confidence
 self-assessment or reflection
 count days recovering
 no more black and white thinking, satisfied w/steps forward
 mentally prepared for weight gain
 healthy eating habits
 mood swings lessened
 telling people, talking about it
 reading about others
 stopped weighing herself and counting calories

Anorexic - #22

nutritionist
 friends
 self assessment or reflection - saying positive statements
 improved self-esteem
 improved body image
 antidepressant helped depression
 support
 not dating "body-oriented" men

Anorexic - #23

fear she would lack energy to race
 self-esteem increased by cycling success
 increased her level of cycling and swimming

Anorexic - #25

made new friends in graduate school
 brother was supportive & had no ulterior motive, validated she was not fat and she believed him
 improved self-esteem through college
 improved body image
 eats now when hungry
 faith and prayer
 good physical fitness

Anorexic - #26

treatment program - 2nd TX program
 boyfriend

ambitious to succeed at recovery - full throttle approach
 improved self-esteem - gained confidence, didn't need parents' approval (be perfect for them)
 improved body image
 healthy eating habits-low fat foods, small meals/6 per day
 support group
 read scriptures

Anorexic - #27

friends
 improved self-esteem, self acceptance
 support of AA & OA
 Sponsor
 satisfied with progress, not perfection

Bulimic - #28

boyfriend
 stopped feeling responsible for others
 stopped trying to fix parent's problems
 improved self-esteem, became more assertive, less perfectionistic, boundaries with mother and others, self-worth less dependent on her achievements, became self-accepting
 improved body image
 healthy eating habits - eats when hungry
 she has a life now

Anorexic - #29

individual therapy
 group therapy
 family therapy
 concern for husband and children
 friends
 family
 didn't want another child to be born premature
 improved self-esteem, dissolved enmeshment w/mother, taking care of herself, OK to not be thin
 healthy eating habits - more nutritious
 replace negative thoughts with positive thoughts
 journal writing
 therapist
 facing fears

Bulimic - #30

friends
 recovering anorexics and bulimics
 acceptance of responsibility for self (not blame others)
 improved self-esteem - gained confidence
 improved body image - acceptance of herself
 healthy eating habits - quit dieting, eats wide variety of foods, eats in moderation, eats when hungry
 journaling about feelings
 support groups

Anorexic - #31

family support
 develop new interests & goals - school and new job
 improved self-esteem

- received support for she was instead of her looks
 healthy eating habits - eats 2-3 times per day
 therapists focus on her personality and issues Vs weight
 religion

**Research Question Number Three:
 What hindered or acted as a barrier in your recovery?**

Bulimic - #1

Wears Orange Jump Suit!
 former male friend's expectations
 habit/routine
 food to deal with emotions
 constant thoughts of food
 giving up particular foods
 being perfectionistic
 attention from others when she lost weight

Anorexic - #2

fear of eating food with fat

Anorexic - #3

family expectations
 fear of becoming fat
 her psychologist focused on sex (not helpful)

Bulimic - #4

no interference

Anorexic - #12

father's expectations
 poor eating habits
 missed the "after" feeling of throwing up
 frame of mind about control

Anorexic - #13

teachers didn't help, ignored her, seemed afraid of her
 family expectations
 father died at age 14, needed him for direction
 poor eating habits
 being in psych. hospital (didn't teach to deal w/real world)

Bulimic - #14

significant other's expectations
 habit of bingeing
 used food to deal with stress
 poor eating habits
 her own pressure to be "good"
 hospital tried to blame parents too much

Bulimic - #15

poor eating habits
 marriage plans fell through

people who didn't understand
individual therapy

Bulimic - #16

significant other's expectations
habit
used food to deal with feelings
ex-husband's psychologist
people who don't understand

Bulimic - #18

used food to deal with emotions
perceived body distortion
difficult to change her thoughts about food

Bulimic - #19

allowed parents to define her values
wanted to be like others in her family
family was not understanding, expected her to be perfect
poor eating habits, bingeing
learned new bulimic behaviors in during first hospital stay
difficult to give up diuretics, laxatives, and thyroid pills

Bulimic - #20

family expectations - father wanted to control her
parents and brothers not involved in recovery
habit or routine - purging
wanted to excessively exercise

Bulimic - #21

family stresses
mother and grandmother pushed food on her
boyfriend's expectations
fear of becoming fat

Anorexic - #22

family expectations
fear of being fat
nutritionist-told to count calories & write in food journal
thinking about food so much

Anorexic - #23

past boyfriends' expectations - leave if she gained 1 pound
pregnancy

Anorexic - #25

society's & media norms
her own cognitions - fear of getting fat

Anorexic - #26

family's denial of her disorder
fear of becoming fat
restrict to rebel against parent's control of her

1st TX program - all day doing nothing, not like real world
 punishment in this 1st TX program, made to stay in bed 3 days, weighed naked (humiliating)
 time it took to recover

Anorexic - #27

working on family of origin issues caused periods of sadness & depression
 family didn't acknowledge or accept her recovery

Bulimic - #28

pressure of being held responsible for parents problems
 fear of getting fat when she quit exercising
 ate food to deal with emotions
 in Spain, no one helpful due to lack of knowledge

Anorexic - #29

society norms
 family expectations - wanted control of her, she was dependent on parents
 father was analytical in therapy
 mom wanted to deny anything was wrong, reluctant to go to therapy
 fear of becoming fat
 used food (restriction) to numb emotions
 perceived body distortion
 poor eating habits
 mother became ill - difficult to do anger work in therapy when mom was sick

Bulimic - #30

family expectations about food and eating - French love food
 "will begin tomorrow, so go ahead and binge today"
 friend told her she was too fat
 Too many Tx's at once - psychoanalysis, TA, OA

Anorexic - #31

needed mens' attention - father died when 12; last of 12 kids
 ex-husband's emotional abuse - told her she was disgusting
 stress
 loss of confidence
 loneliness - divorce
 family "policies" her food

Research Question Number Four:

Which factors have helped you cope with the threat of relapse?

Bulimic - #1

current boyfriend
 self assessment and reflection
 new hobbies, interests and relationships
 having strategies to prevent relapse
 dealing with emotions by talking things out with others
 realizing media presentations of women are unrealistic

Anorexic - #2

self-assessment and reflection
 tells self she has to eat to survive

Anorexic - #3

becoming pregnant
feeling better physically

Bulimic - #4

improved self-esteem - more positive and confident
improved body image
too tired to do it again

Anorexic - #12

friends
self-assessment and reflection
deals with emotions differently
God-spirituality
talking about it

Anorexic - #13

at least one close friend
open communication with family
new interests and relationship w/close friend at college
support group
fear of running out of money
fear of intimacy
unconditional love
dealing with emotions differently (not specific)

Bulimic - #14

significant other
friends
self assessment or reflection
maintained new hobbies, interests, and relationships
talking to others who would really listen
learning to like herself

Bulimic - #15

significant other
having a lot more energy

Bulimic - #16

maintained new hobbies, interests, or relationships
fear of the loss of recovery
time and success

Bulimic - #18

individual therapy
friends
family
maintained new hobbies, interests, and relationships
determined to not do it again
belief in her self
faith in God, prayer

Bulimic - #19

husband supports and listens to her

moved away from family
 improved self-esteem - OK to not be perfect
 improved body image
 deal with feelings (journal writing; talking with a nonjudgmental person)
 desired to be different - wanted recovery

Bulimic - #20

self-assessment or reflection (was I doing it for them or me)
 improved self-esteem
 maintained new hobbies, interests and/or relationships
 identifies feelings and deals directly with emotions
 doesn't perceive everything as her fault
 positive attitude about recovering
 fear of the loss of recovery

Bulimic - #21

self-assessment or reflection
 not dieting
 looks at food as energy now
 talks about things more openly
 maturation

Anorexic - #22

self-assessment or reflection - believes in herself
 made goals to not relapse
 not depressed anymore
 talks to someone instead

Anorexic - #23

not getting satisfied with enough food to race
 exercise brought her out of it and will keep her out

Anorexic - #25

support from husband
 support from brother
 personal health concerns
 healthy eating habits
 realizing she doesn't need to fit media image
 self assessment & reflection - positive self statements
 improved self-esteem, confidence in various talents/abilities
 improved body image
 maintained new hobbies and interests
 deals with stressors directly - talks to others, takes walks
 faith/prayer
 support from other people

Anorexic - #26

friends
 family therapy
 personal health concerns - eat to survive & be healthy
 education about consequences of disorder
 self-assessment and reflection
 support group

the hell she went through
not the time or energy to recover again

Anorexic - #27
get back to OA program

Bulimic - #28
improved self-esteem, dissolved enmeshment with parents, self-acceptance
improved body image, thinness not a big deal anymore

Anorexic - #29
individual therapy
self-help group
remembering what she went through
husband, kids
maintained new hobbies, interests, and relationships (friends)
pregnancy
improved self-esteem
improved body image
talks about feelings and problems

Bulimic - #30
improved body image
continued contact with people in recovery
expression of feelings
satisfaction in small steps toward victory

Anorexic - #31
individual therapy
group therapy
friends
family
personal health concerns (remembers attempt at suicide)
self assessment & reflection - identifies & accepts feelings
new interests & goals - college and a new job
stress in response to good things - too much too fast
sense of freedom she is experiencing