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A Life of Paradox: The Experience of Eating Disorders in Five University Women Athletes

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To the Graduate Council:

I am submitting herewith a dissertation written by DeeAnne K. Pearson entitled "A Life of Paradox: The Experience of Eating Disorders in Five University Women Athletes." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Education.

Craig Wrisberg, Major Professor

We have read this dissertation and recommend its acceptance:

Patricia Beitel, Robert Kirk, Mark Hector

Accepted for the Council:
Dixie L. Thompson

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

To the Graduate Council:

I am submitting herewith a dissertation written by DeeAnne Kaye Pearson entitled "A Life of Paradox: The Experience of Eating Disorders in Five University Women Athletes." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Education.

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Associate Vice Chancellor and
Dean of The Graduate School

A LIFE OF PARADOX: THE EXPERIENCE OF EATING DISORDERS IN FIVE UNIVERSITY WOMEN ATHLETES

A Dissertation

Presented For The

Doctor Of Philosophy

Degree

The University of Tennessee, Knoxville

DeeAnne K. Pearson

August, 1998

DEDICATION

I dedicate this dissertation to the athletes of this study, Jennifer, Julie, Kaye, Sarah, and Tu who shared their stories of being eating-disordered female athletes with the hope that their experiences might make a positive difference for other women athletes. May their stories of courage as they battled their eating disorders, inspiration as they struggled to recover from their eating disorders, and victory as they were eventually able to maintain consistent recovery from their eating disorders be an encouragement to those who struggle with eating-disordered behavior, and to those who assist athletes recovering from eating disorders.

ACKNOWLEDGMENTS

This is to acknowledge that the following individuals have made valuable contributions to the completion of this research. I am grateful for the constant and critical analysis of this study from its inception to its completion by my doctoral committee. My deepest gratitude goes to Dr. Wrisberg, my major professor, friend, and mentor who challenged and encouraged me throughout this four year process, and most importantly, ran the "homestretch" with me.

I appreciate the involvement of a number of people who provided the opportunity for me to do this research. The athletes of this study, Jennifer, Julie, Kaye, Sarah, and Tu volunteered hours of time to be interviewed and then proof read the composite profile; Jenny Moshak, Head UT Women's Athletics Trainer, provided the opportunity for me to assist eating-disordered athletes; and Priscilla Bolin, National Director for Clinical Outreach and Professional Development in the Field of Eating Disorders, was a "god send" in my work with eating-disordered athletes, and in providing many of the resources I referred to in the writing of the literature review and discussion.

I am grateful for the involvement of many people who assisted me in completing this research. My parents, Tony and RoseAnne, made many financial sacrifices for me during the final year of this research; Chapel of the Valley provided an office in which to write during the final six month writing process; Jen Clark, friend and talented artist who sees the world in pictures created Figure 4.1; Twig gave me a haven in The Great Smoky Mountains during the re-write process; and friends Jim and Kris Wright provided me a Tennessee home. I was assisted in last minute printing and other final details in completing the dissertationby a number of friends and family members, including UT Women's Athletics secretaries Gladys and Judy, Jen Clark, Kris Wright, Ann LaCava (Dissertation Consultant), and Corky (brother-in-law). Finally, the encouragement, love and prayers of

friends and my family, both immediate and extended, have been a constant mainstay throughout this research experience. Finally, I am thankful for the promise, "He who calls you is faithful, who also will do it" (I Thessalonians 5:24), by my Heavenly Father who provided the people, the means, and an unending supply of grace to "keep on keeping on" until the task was completed.

ABSTRACT

A qualitative research investigation using the phenomenological interview was conducted to describe the experience of eating disorders in five university women athletes, aged 19-23 years, who had been clinically-diagnosed with Anorexia Nervosa and/or Bulimia Nervosa. At the time of the interview, one athlete was a current competitor while the other four had retired from their sport prior to their senior year. Three athletes retired due to complications from their respective eating disorders; one retired because of a sport-related injury. The thematic analysis suggested that the eating disorder experience of these women was one of paradox and was invariably bivalent, i.e., the world was experienced in a dualistic way. This duality is characterized by contradiction, i.e., words and actions that are opposite of each other; and irony, i.e., an event or a result that is the opposite of what might be expected (Webster, 1989). The athletes of this study described contradictory feelings, thoughts, and actions/behaviors that they struggled with personally, and collectively, during their eating disorder experiences. The myriad of descriptive elements, paired or clustered in opposition, appeared to be the salient components of the athletes' experiences. These descriptive elements were collapsed into the metatheme grouping of simultaneous control/out-of-control/uncontrollable. The simultaneous oppositional control elements, present in all of the transcripts, reflected a life of paradox. From the ground of "paradox" two major themes became figural: "The Monster" and "Recovery/The Real Me." The Monster--the name selected to represent the other labels the athletes used to identify the driving force of their respective eating disorders--dominated the experiences of these athletes until they began recovery from their respective eating disorders. During recovery the dominant personality appeared to be more reflective of what the athletes referred to as "The Real Me." The presence of the element of the paradoxical control metatheme appeared to change as the athletes began recovery processes from their respective eating disorders.

Subthemes specific to theme of "The Monster" included: powerless to stop at will, harmful consequences, unmanageable life, escalation of use, and beginnings of awareness. The subthemes specific to Recovery/The Real Me included: identifying contributing factors and the struggle to recover.

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CHAPTER 1

INTRODUCTION

Many well-known and highly publicized women athletes known to have undergone treatment for eating disorders include gymnasts Cathy Rigby McCoy and Nadia Comenici, and Olympic gold medal swimmer Tiffany Cohen (Burckes-Miller & Black, 1988; Moriarty, 1991; Thornton, 1990). Former U.S. world figure skating champion Rosalyn Summners failed to live up to expectations of winning an Olympic Gold Medal in 1984, and subsequently had to take a break from her professional skating career due to recurring bouts of bulimia. Mary Lou Retton, gold medal U.S. darling of the 1984 L.A. Olympics, underwent treatment in the fall of 1985 for eating disorders that had developed and prevailed throughout her gymnastic career. Runners Kathy Ormsby and Mary Wazeter are both paralyzed as a consequence of suicide attempts that were related to their eating disorders. Both were 17-years of age when their attempts at ending their lives by jumping off bridges failed. Kathy is paralyzed from the waist down and Mary, who set the national age group record for the half-marathon, is a quadriplegic. Barbara Warner, championship downhill skier of Quebec, Canada, winner of a gold in the 1988 Olympics was a victim of bulimia and attempted suicide (Moriarty, 1991, pp. 46-47). Charlene Wong placed second in the 1984 Canadian figure skating championships. At 5-foot 4-inches and 112 lbs, she was told to lose 8 pounds over the summer. She lost them and kept losing, thinking the more she lost the better. By fall she weighed 90 lbs, had turned into a fitness fanatic, and lived on a diet of cereal and muffins. Charlene Wong told the CBC radio program, "Morningside,"

> Suddenly, dieting became more important than skating. I wasn't even really aware of it. Being a perfectionist had something to do with it, too. I am a very disciplined person. I want everything to be perfect, even my weight (Quoted in Moriarty, 1991, p. 47).

That athletes such as these have eating disorders is a paradox. Athletes need adequate nutrition to fuel the body for exercise, but in an attempt to achieve performance and appearance ideals, they restrict themselves of calories needed for optimal health, and essentially, performance.

Whether they are diagnosed with Anorexia Nervosa or Bulimia Nervosa, female athletes participate in behaviors that prevent them from getting their nutritional needs met. Even though each of these eating disorder methods is unique, as defined by specific criteria in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, (American Psychiatric Association, 1994) they all result in self-destructive behavior, they sabotage a person's athletic aspirations and, if left untreated, result in death (Coleman, 1988; Dick, 1991; Gottdiener, Gross, Henry, Borer, & Ebert, 1978; Hand & Dick, 1989a; U.S. Olympic Committee Sports Medicine Council, the Swanson Center for Nutrition and the University of Nebraska Medical Center Eating Disorders Program, 1987).

Recent estimates suggest college athletes are 6 times more likely than the general public to display anorexic or bulimic eating behaviors (Burckes-Miller & Black, 1988). In fact, the risk of a female collegiate athlete developing an eating disorder seems to be similar to that of other known non athlete high risk groups--ballerinas, flight attendants, and fashion models. These high risk groups have a reported incidence of 15% to 35% (Holliman, 1991). Nancy Clark (1992), a Sports Nutritionist for Sports Medicine Brookline reported, "as many as one-third of women athletes struggle with disordered eating patterns and 3% of almost 700 athletes in midwestern colleges met the diagnostic criteria for anorexia; while 21.5% met the criteria for bulimia."

What makes it possible for athletes to be so driven to lose weight that they would compromise their health and their life by participating in an eating disorder? Do they begin weight loss or excessive exercise behavior because of a preoccupation with their weight? Are athletes with eating disorders pressured by their coaches or other people to lose

weight? What causes a woman athlete to use food for reasons other than hunger and/or to provide the energy needed to meet the demands of her sport? Or, if she is anorexic, what prevents her from ingesting the foods needed to function and perform optimally in her sport and, ultimately, in life? What makes it possible for them to sabotage their opportunities to become the best athletes they can be....and not realize it? Why can't they have foresight enough to realize that they are likely not going to reach their athletic potential and fulfill their dreams if they continue the eating disorder behavior? What prevents women athletes from being truthful with themselves; why can't they admit being eating-disordered?

These questions address the eating disorder paradox--the nature of the interplay of the various factors that lead to the onset, and then perpetuation of an eating disorder. This paradox must be addressed if eating-disordered women athletes are to receive effective assistance. While current findings in the athletic literature have identified the behavior of eating-disordered women, they have not addressed questions regarding the nature of eating disorders. Knowing that a woman athlete with bulimia binges and purges at least three times per week does not address the question of why she would relentlessly practice a behavior that would eventually render her incapable of meeting the demands of a sport that she trained to achieve excellence in for years. Knowing that a woman athlete with anorexia fasts or greatly restricts her nutritional intake does not address the question of why a woman athlete deprives herself of the energy nutrition needed to train and compete effectively in her sport.

Literature on the topic does not provide a consistent explanation for eating-disordered behavior. Two bodies of literature that provide some insight into the eating disorder dilemma come from the athletic community and the mental health community. Each of these respective communities provides valuable information. However, the information is incomplete, and in some cases, the findings are questionable.

Research investigating the causes and perpetuation of eating disorders (ED) in women athletes suggests that there are a number of factors that contribute to eating disorders. These include cultural and societal influences; demands of certain sports that require the athlete to present an aesthetically appealing body, e.g., gymnastics and dancing (Bickford, 1991a; Gruber & Humphries, 1988), or to maintain low body weight and body fat percentage to enhance performance, e.g., distance runners (Ryan, 1989; Walberg, 1990); an individual's desire to obtain the competitive edge by lowering her body fat percentage so that oxygen is utilized by the muscles more efficiently, thus enhancing performance (Hand & Dick, 1989b; Overdorf, 1990; U.S. Olympic Committee Sports Medicine Council et al., 1987); and the demands of the coach or significant others that exert pressure on athletes to reduce their body fat percentage to enhance performance. It has also been suggested that individuals with excessive concerns about body weight and shape selectively gravitate to sports demanding intense physical activity (Garner & Rosen, 1991; Hand & Dick, 1989a; Overdorf, 1990).

Current research in women's athletics reports contradictory findings. Discrepancies exist in explaining why women athletes become eating-disordered, if athletes in certain sports are at a higher risk than those in other sports, and if the demands of athletics contributes to an athlete's eating-disordered condition (Black & Held, 1991; Holliman, 1991; Johnson, 1992; Weight & Noakes, 1987). The discrepancies are due, in part, to two things: (a) researchers have used psychometrically unsound measures in acquiring their data (Petri & Stoever, 1993; Ryan, 1992b); and (b) researchers have accepted self-report information from non-clinical populations and then published that information as if it were indicative of eating-disordered women athletes (Daly, Abood, & Cleveland, 1991; Petri & Stoever, 1993). Evidence of pathogenic eating behavior in an individual does not always indicate a clinically diagnosable eating disorder as defined by the American Psychiatric Association.

While there are obvious concerns with the athletic literature, it does address some of the unique demands placed on women athletes. It does not adequately address the complex nature of eating disorders, however. The mental health community does address this issue.

Professionals in psychiatry and counseling are well aware that eating disorders are multifaceted conditions that include nutritional, social, familial, psychological, and spiritual dimensions (Black, 1990; Hemfelt, Minirth, & Meier, 1989; Kasl, 1989; Minirth, Meier, Hemfelt, Sneed, & Hawkins, 1990; Whitfield, 1987). Through years of professional practice, mental health professionals, physicians, and particularly eating disorder specialists (Black, 1990; LeSourd, 1987) have learned to treat the multifaceted nature of compulsive behaviors as an addiction rather than focus solely on the specific addictive behavior or substance. In Double Duty (1990) Claudia Black states, "it is important to recognize that in every eating disorder, the relationship with food becomes addictive. And, as with any addiction, the relationship to the addiction becomes the major focus in the person's life" (p. 47). Addictions such as alcoholism and other drug dependency, compulsive spending or financial mismanagement, workaholism, and eating disorders are problematic in that they are harmful to the individual, and in some cases life-threatening, but they are symptoms of the addictive nature. Too many patients recover from one addiction or pathogenic behavior only to sprint full-speed into another. Not until the multifaceted nature of the condition is dealt with can a person be free of such behavior (Hemfelt et al., 1989, pp. 33-103; LeSourd, 1987; Whitfield, 1987, pp. 67-75). While receiving therapy for the genesis of acting-out behavior, each compulsive behavior must be dealt with as a problem in itself; otherwise continued and unchecked behavior negates forward progress in resolving the deeper issues in a person's life (P. Bolin, personal communication, July 31, 1997; Minirth et al., 1990; D. Stengel, personal communication, 1992). For some individuals with

compulsive or addictive behaviors, a physically-addictive component demands specific intervention.

Many of the factors such as family dynamics and culture that contribute to an eating disorder for female college athletes are introduced much earlier in their lives--during childhood and adolescence, (Hemfelt et al., 1989; Johnson & Tobin, 1991; LeSourd, 1987; Minirth et al., 1990; Rowland, 1984; Whitfield, 1987) well before a young woman is cognizant of the pressures of college sports. Literature on eating disorders (Hemfelt et al., 1989; LeSourd, 1987; Minirth et al., 1990; Rowland, 1984), suggests that components or factors within the individual and the environment have the potential of contributing to a person's eating-disordered experience. Factors contributing to the etiology and perpetuation of eating disorders not commonly addressed in the athletic literature include socialization, family history, clinical depression and psychological influences; and the incidence of victimization and resulting psychopathology. These may be the strongest contributors to the development of eating disorders in athletic women (Hemfelt et al., 1989; Johnson & Tobin, 1991; LeSourd, 1987; Minirth et al., 1990; Rowland, 1984; Whitfield, 1987; Zerbe, 1993). Such factors are given relatively little attention in the sport literature which has opted for explanations that deal more with the pressures of culture and demands of the sport, such as the athlete's appearance and the importance of a light body mass in gaining the competitive edge.

Research efforts in the mental health community and the athletic community are well-intended. The sport literature basically overemphasizes the unique demands of sport and gives superficial attention to the factors that are stressed in the mental health literature. The mental health literature addresses the complex nature of eating disorders but does not recognize the unique demands of sport on athletes. In combining the literature from the mental health community with that of the athletic community, the suggestion is that there are a multitude of inter-related factors that contribute to the eating disorder experience of

women athletes. These include the influence of family, socio-cultural factors, biology, psychology, environment, physiology and athletic demands. Dick Moriarty (1991) suggested

> Socio-cultural factors alone do not cause eating disorders or everyone on a diet would have an eating disorder. Families alone do not cause eating disorders. Athletics or sport alone do not cause eating disorders, or everyone who participates would have one. Coaches, parents, and teachers, do not cause, cannot control, and cannot cure eating disorders. They can contribute, either positively or negatively, to the prevention of the problem or prognosis in this illness (p. 48).

The fact is that there is a high incidence of eating disorders among women athletes. It is a fact that eating disorders are health and life-threatening illnesses (American Psychiatric Association, 1994; Moriarty, 1991). However, little is actually known about the experience of those disorders, and the factors that contribute to and/or define the experience.

In order to understand the paradox of the life experience of the woman athlete who is involved in eating-disordered behavior, investigation of the dynamics contributing to and perpetuating the behavior must be undertaken. An axiom from the mental health literature is that each factor affects the "unit" as a whole. The whole (eating disorder experience) is assumed to be more than a sum of its components (or factors) and is characterized by the patterns and forms of the relations among them. The emphasis is not on single events or variables. The emphasis is not solely on behaviors, such as binge and purge, fasting or over-exercising. The emphasis is not solely on feelings, such as low self-esteem or helplessness, or on particular thoughts, such as distorted body image. Instead, the emphasis is on the way all of the factors relate to each other.

The research approach that allows an in-depth exploration of multiple factors that interact to form the experience of the eating-disordered female athlete is the systemic, or qualitative, research approach discussed by Salomon (1991). A qualitative research approach embraces the complexities of the experience of the eating-disordered woman

athlete because "the world in which we immediately live, that in which we strive, succeed, and are defeated is preeminently a qualitative world" (Dewey, 1930, p. 242).

Summary

Eating disorders are a current downfall for many women athletes, forcing early retirement from sport participation and resulting in irreparable physical damage (Hand & Dick, 1989a), not to mention the heartbreak and disappointment that result from unfulfilled dreams and lost opportunity. Eating disorders are not selective. They may be found in women from different sports and levels of competitive excellence (Wilkins, Boland, & Albinson, 1991). Possibly the most selective characteristics of eating-disordered women athletes are that they strive for excellence, demand great things of themselves, are team leaders, and are the "go to" players in the heat of competition--essentially, they are the best. Current literature does not effectively represent the dilemma of eating disorders in women athletes, nor the paradoxical life experience of the eating-disordered female athlete. This investigation was undertaken to provide insight into the life experience of the eating-disordered female athlete.

Statement Of Purpose

The purpose of this study was to describe the experience of eating disorders in intercollegiate female athletes. In order to achieve this purpose, a qualitative phenomenological interview approach was taken.

Definition Of Terms

The following terms are defined to provide a better understanding of the literature which presents the theoretical framework for this research:

Acting-out behavior: The performance of acts or behaviors that are compulsive and/or obsessive in nature and contrary to one's wishes or standards, such as using food inappropriately, i.e., bingeing and purging or self-imposed starvation; being sexually promiscuous; being inordinately perfectionistic; compulsive dieting, exercising, shopping;

and/or abuse of alcohol and other drugs. Some people call this, "being in their addiction" (Kasl, 1989, p. xiii).

Addiction: Giving one's self up to the control of a substance, i.e., food or alcohol, or behavior, i.e., gambling, excessive exercise, or sexual involvement, such that the behavior is life-controlling (Hemfelt et al., 1989; Kasl, 1989; Whitfield, 1987). Five basic criteria are used to determine addiction: powerless to stop at will, harmful consequences, unmanageability in other areas of life, escalation of use, and withdrawal upon quitting (Kasl, 1989, pp. 19-20). Claudia Black expands on these criteria. Some of the criterion Black lists are included in the definition provided by Kasl. The criteria listed in Double Duty (1990) include: loss of control, denial, increased dependence, change in tolerance, impaired thinking, preoccupation with and the control of the addictive substance, manipulation of one's environment to obtain the desired effects, lying, obsession, guilt and remorse, and physical deterioration (pp. 47-48).

Amenorrhea: Amenorrhea is the absence of menstrual bleeding. In a woman who has established menstrual cycles, amenorrhea is the absence of menstrual bleeding for six consecutive months or for a length of time equivalent to a total of at least three of her previous cycle lengths (Haas & Haas, 1993; Marshall, 1992). Women who have not had any menstrual bleeding by age 16, or by age 14 in the absence of sexual development, are also considered amenorrheic. Recently, the International Olympic Committee has agreed on one period or less per year as their definition of amenorrhea. "Primary amenorrhea" refers to women who have never had menstrual bleeding and "secondary amenorrhea" refers to those who have had at least one episode of menstrual bleeding before amenorrhea begins (Marshall, 1992).

Anorexia nervosa (AN): An eating disorder in which the individual starves herself such that she has a body weight of less than 85% of expected normal weight, or that required for health. In spite of her emaciated appearance, she perceives a distorted body

image of herself, i.e., obese. Obsessive thoughts about food and dieting occupy her mind. She is involved in obsessive-compulsive rituals, and has extreme feelings of inferiority (American Psychiatric Association, 1994; Furnham & Kramers, 1989; Gottdiener, et al., 1978; Hand & Dick, 1989a; U.S. Olympic Sports Medicine Council et al., 1987).

Binge: The consumption of food as a coping mechanism in response to psychological (or other) stress. Most commonly identified by the ingestion of excessive quantities of food (3000-10,000 calories) in a discrete time period (one-two hours) by an individual, the definition has become more encompassing to include eating any amount of food (may be minimal) in response to stress and things other than physical hunger (American Psychiatric Association, 1994; Bickford, 1991a; Dick, 1991; Furnham & Kramers, 1989; Hand & Dick, 1989a; Rowland, 1984; Ryan, 1989).

Bulimia nervosa (BN): An eating disorder in which an individual has a compulsive preoccupation with food. The individual uncontrollably binges on food, and then follows the binge with a purge episode in which she rids her body of food in any number of ways: self-induced vomiting, the use of laxatives and/or diuretics, fasting, or excessive exercise. The bulimic individual is difficult to diagnose because body weight may appear to be normal, or be either slightly under or over that considered normal for the woman (American Psychiatric Association, 1994; Bickford, 1991; Dick, 1991; Furnham & Kramers, 1989; Hand & Dick, 1989a; Rowland, 1984; Ryan, 1989).

Clinical diagnosis: An individual assessment of a person's well-being by a medical and/or mental health professional whose diagnostic criteria is based on that found in the Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition, (1994) authored by the American Psychiatric Association.

Codependency: The dependency on some other person, activity, behavior, or thing to obtain feelings of self-worth. It is using any "thing" (person, behavior, object, etc.) to meet a human need that the "thing" is not meant to fulfill. It is the fallacy of trying to

control internal feelings by controlling people, things, and events externally (Hemfelt et al., 1989; Norwood, 1986; Whitfield, 1987). "A strong emotional reliance on something on the outside to make one feel good on the inside" (Minirth et al., 1990, p. 13). Someone whose core identity is unknown or undeveloped, and who maintains a false identity built from dependent attachment to external sources--a partner or spouse, work, sport, appearance, rules, etc. (Kasl, 1989). "A pattern of painful dependency on compulsive behaviors and on approval from others in an attempt to find safety, self-worth, and identity. It manifests itself in relationships when an individual gives another person power over her self-esteem" (Black, 1990, pp. 5-6). People who are codependent tend to be sensitive to criticism, have an inability to question authority figures, and are easily manipulated. They have feelings of being ineffective or inadequate on their own (Norwood, 1986; Whitfield, 1987).

Codependent: The codependent person is called the False Self (Whitfield, 1987) and codependent self. Codependents are people whose behavior is characterized by the numbing of feelings, denial, low self-worth, and compulsive behavior (Black, 1990).

Compulsive behavior: The performance of acts that are contrary to one's ordinary wishes or standards. Compulsive behaviors are acting-out behaviors (American Psychiatric Association, 1994; Hemfelt et al., 1989; Whitfield, 1987).

Denial: The ability of the psyche to cancel out information that is too troublesome, emotionally. It provides protection for one's ego from overwhelming conflicts, burdens, and fears (Hemfelt et al., 1989; Norwood, 1986; Whitfield, 1987).

Dichotomous thought processing/thinking: A thinking pattern that classifies everything as good or bad, black or white, win or lose--a balance is never achieved between good and bad; nothing is just "okay" (Whitfield, 1987).

Disease: An impairment of normal functioning (Kasl, 1989).

Dysfunctional family: A family in which either the father or mother or child has a problem that causes an imbalance in family relationships. Addiction to alcohol, nervous breakdown, or serious illness are examples of catalysts for dysfunctional family dynamics. Whatever the specific issue, the family begins to function around the problem, ceasing to behave in a healthy, mutually supportive way such that basic emotional needs of family members are not met (Hemfelt et al., 1989; LeSourd, 1987; Norwood, 1986; Rowland, 1984; Whitfield, 1987). Members of dysfunctional families subscribe to a set of rules including (Black, 1990):

1) Don't talk;
2) Don't feel;
3) Don't trust;
4) Don't think;
5) Don't ask questions (p. 13).

Eating-disordered female athlete: A competitive athlete involved in intercollegiate athletics who is clinically-diagnosed as eating-disordered, according to the criteria in the DSM-IV. In this study, four of the athletes were involved at the NCAA Division I level, and one at the Division III level of athletic competition.

Eating disorders: Clinically-diagnosed psychiatric conditions manifested by pathogenic/inappropriate eating practices (in this study, Anorexia Nervosa and Bulimia Nervosa) (Klumph, 1985; Rowland, 1984; Ryan, 1989). Whatever the form of the disorder, eating takes on a compulsive quality. People feel driven to eat or starve as though they had no choice (Black, 1990). An eating disorder may exist concurrently with a number of other compulsive behaviors, dysfunctional interpersonal relational habits, and problematic psychological and behavioral characteristics within a person (Klumph, 1985; Rowland, 1984; Ryan, 1989).

Goal, process: Goals that take an athlete progressively to her desired outcome goal. These are goals that assist the athlete in being mindful of that which is within her immediate control (Gould, 1993).

Goal, product or outcome: "Attaining a specific standard of proficiency on a task, usually within a specified time limit" (Locke, Saari, Shaw & Latham Quoted in Gould, 1993).

Lack of sense of identity: A person externalizes rather than internalizes their identity by basing individual self-worth on accomplishments and appearance rather than on an intrinsic sense of unconditional regard and worth.

Low self-image/self-esteem: Personal self-evaluation that is characterized by thoughts of low self-worth and value. Having low self-regard, individuals with low self-esteem express disordered attitudes and concepts that negatively affect their lives; frequently they put themselves down, or do not think their work or performance is ever good enough (Hemfelt et al., 1989; Norwood, 1986; Whitfield, 1987).

Monster: The name given to the labels the women athletes in this study used to describe the driving uncontrollable force of their respective eating disorders.

Obsessive/compulsive (O/C): Personal behavior characterized by a driven quality to personal behavior and an inclination to perform certain rituals repetitiously in order to relieve anxiety, and obsessive thinking about things in general. The behaviors or mental acts are aimed at preventing or reducing distress or preventing some dreaded event or situation; however, these behaviors or mental acts are not connected in a realistic way with what they are designed to neutralize or prevent or are clearly excessive (American Psychiatric Association, 1994). An eating-disordered woman may exhibit O/C behavior in her obsession with food and her body weight, and feels that if her body is "right" then everything else in her life will be right also.

Outpatient treatment: Professional intervention and treatment is provided to an eating-disordered woman by practitioners who may or may not practice at the same location. As opposed to an inpatient treatment program, a woman with an eating disorder would live at her own residence while seeking outpatient treatment.

Pathogenic behaviors/actions: Behaviors and actions that are symptomatic of emotional/psychological un-health (Norwood, 1986; Rowland, 1984; Whitfield, 1987).

Pathogenic cognitive functioning/feelings: Thoughts and feelings that are emotionally/psychologically unhealthy (Norwood, 1986; Whitfield, 1987).

Perfectionism/dissatisfaction: Perfectionists often have overstated and unrealistic goals which may set them up for continuous failure. In combination with dissatisfaction, perfectionists do not let themselves enjoy the feelings of a job well done, or take satisfaction from the process of trying (Rowland, 1984; Whitfield, 1987).

Phenomenology: A qualitative research method used to investigate the subjective meaning of human experience (Dale, 1993).

Recovery process: A process an eating-disordered woman experiences as she recovers from an eating disorder. A recovery process involves breaking denial of having an eating disorder and acknowledging and taking ownership of her feelings and her life (Black, 1990). It is the transformation within an individual from dysfunctional (or "diseased," as referred to by the athletes of this study) thought processes, feelings and behaviors to functional and healthy ones. The provision is made for the satisfaction of an individual's basic emotional, physical, social and spiritual needs in a healthy manner (Hemfelt et al., 1989; Norwood, 1986; Rowland, 1984; Whitfield, 1987).

Residential or inpatient treatment facility: The location where an eating-disordered woman lives while receiving treatment, and at which she receives professional intervention and treatment for her clinical eating-disordered condition.

Assumptions of the Study

The basic assumptions of this study were as follows:

1. All participants were cognizant of their clinical eating-disordered condition.
2. Participants' responses were truthful and accurate.
3. The audio-taped interviews were accurately transcribed.

Limitations of the Study

The major limitations of this study were as follows:

1. The results are not generalizable to the female athlete eating-disordered population at large.

2. The derivation of themes representing the athletes' experiences with their eating disorders are a result of the interpretation of a finite group of individuals (the primary investigator and the interpretive qualitative research group).

Delimitations of the Study

This study was delimited to five women athletes who were clinically-diagnosed as eating-disordered with Bulimia Nervosa and/or Anorexia Nervosa (or had episodes of both) according to the criteria in the Diagnostic And Statistical Manual of Mental Disorders. Fourth Edition (American Psychiatric Association, 1994). At the time of the investigation, the athletes had received or were currently receiving professional intervention for their clinical eating-disordered condition by medical and/or mental health professionals.

Significance of the Study

It is hoped that the results of this study will assist support staff personnel in their efforts to be proactive in promoting optimal health, personally and athletically, for female athletes. In addition, the results may offer athletes insights into ways they can prevent the onset and perpetuation of eating disorders and other problematic nutritional practices.

CHAPTER 2

A REVIEW OF THE RELATED LITERATURE

This literature review is subdivided into seven content sections: (a) history and definitions of eating disorders, specifically Anorexia Nervosa and Bulimia Nervosa; (b) the Female Athlete Triad; (c) eating disorders in women's athletics; (d) short-comings of current literature on eating disorders in women's athletics; (e) the concept of love hunger; (f) recovery from eating disorders; and (g) the qualitative research approach.

History and Definitions of Eating Disorders

This content section provides a historical review of eating disorders and definitions of eating disorders, specifically Anorexia Nervosa and Bulimia Nervosa.

History Of Eating Disorders

Eating disorders are not a new phenomenon in society. Literary accounts of self-inflicted starvation and weight loss date back to the Middle Ages. Accounts of emphasis on slimness in Ancient Egypt, Greece, and Rome can also be found (Grandjean, 1991). In the 9th century, followers of St. Jerome starved themselves in the name of religion; these women became thin and stopped having menstrual periods (Sobel, 1996). The first reported case of Anorexia Nervosa as an eating disorder was furnished by an English physician, Richard Morton, in 1689 (Giannini, Newman, & Gold, 1990).

The practice of bulimia was instituted by the Greeks and Romans during the first century A.D. so that people could endure the eight to ten hour banquets that were frequently held during that time. A small room known as the "vomitorium" was made available by the banquet host to provide the guests a place to empty their stomachs so they could return to the banquet and consume more food. The Greek translation of bulimia means "ox hunger," or "bull's appetite" (Grandjean, 1991; Sobel, 1996). The first mention of bulimia in

medical terms appeared in 1903 by Pierre Janet, a French psychiatrist. The first American description came in 1959, relating bulimia as an eating disorder that contributed to obesity. Finally, in 1980, a diagnostic criteria for defining bulimia was established by the American Psychiatric Association (Rowland, 1984). Specifically, eating disorders in athletics, were not addressed until 1976. Until this time, the topic of eating-disordered athletes was enmeshed within the broader field of eating disorders in the general public (Black, 1991).

Definition of Eating Disorders

In the video tape Nutrition and Eating Disorders: What Can You Do? published by the NCAA, Jan Samuelson, Boston University Track Coach stated, "having an eating disorder may be a life or death situation. It is like being an alcoholic or drug addict." Eating disorders are self-destructive eating behaviors that identify a person's inability to deal rationally with food (Klumph, 1985; Ryan, 1989).

An eating disorder is a symptom of underlying emotional distress. An eating habit becomes an eating disorder when the primary need it satisfies is psychological, and not physical. An eating-disordered person may eat to temporarily block out painful feelings, calm anxiety, or subdue tensions. Just like drug and substance abuse, an eating disorder is first a coping mechanism and then becomes an additional problem (Black, 1990; Ryan, 1989). Starving (if a person has Anorexia Nervosa) or binge eating and purging (if a person has Bulimia Nervosa) behavior is not the most important issue (Clark, 1992), even though the consequences of such behavior are life-threatening (Coleman, 1988; Ryan, 1989 &1992a; U.S. Olympic Committee Sports Medicine Council et al., 1987). If left untreated, serious medical and psychological consequences may occur (Coleman, 1988; Ryan, 1989 &1992a; U.S. Olympic Committee Sports Medicine Council et al., 1987). Classified by some professionals as a disease that culminates in an addiction (Black, 1990; Kasl, 1989; C. Webner, [Director of The Willough in Naples, FL--an inpatient facility for women with eating disorders and chemical dependency], personal communication, August

1996), eating disorders are similar to many diseases in that they follow a pathogenic progressive course culminating in death (Coleman, 1988). Intervention is needed to terminate that process. Eating disorders are the only psychiatric condition that results in death (Coleman, 1988).

Even though an eating disorder is life-threatening, it is a symptom of more fundamental problems with life (Black, 1990; Clark, 1992; Kasl, 1989). Engagement in an acting-out behavior is a survival technique employed by an individual to escape from issues that are deep-seated in the psyche. "An addiction is the psyche's way of seeking escape from buried feelings and easing the inner strife" (Kasl, 1989, p. 189). Hemfelt, Minirth, and Meier, (1989) and Minirth et al., (1990) founders of Minirth-Meier Clinics throughout the U.S. that provide assistance to women with eating disorders, chemical dependency and other compulsive/obsessive and addictive behaviors, state that the primary driving force in addictions and compulsive behaviors is not the addictive agent, such as food, but the underlying emotional issues of "love hunger." Of the interaction between "love hunger" and bulimia or anorexia Minirth et al., (1990) suggested,

> bulimia is compulsive overeating to fill love hunger, then purging the food out in an attempt to purge out pain. Anorexia is an eater's attempt to control something in his or her environment--a rigid, authoritarian father, for example--by controlling food. Often anorexics are so hungry for love that they stop trying to fill their love hunger. Their fasting anesthetizes the pain of love hunger (p. 13).

This hunger for love becomes an obsession when it reaches such a proportion that the person feels she needs it just to feel that life is worth living, just to maintain an every day emotional balance (LeSourd, 1987). People who participate in compulsive behaviors are willing to endure anything in order to re-experience that physical and psychological state of being--that compelling satisfaction they feel whenever they take in that substance or participate in their "coping activity" (frequently identified as an "escape" mechanism) whatever it is-- alcohol and other drugs, another person's love, inappropriate use/deprivation of food, or excessive exercise (LeSourd, 1987; Norwood, 1986).

To limit the scope of an eating disorder to just that of the psychological domain in a person's life is not an accurate representation of the condition. Similar to other compulsive behaviors and addictions, eating disorders are psychological, physiological, medical, and nutritional problems (Holliman, 1991, p. 2; Johnson & Tobin, 1991). Eating disorders arise from a multitude of factors. Suggested factors that contribute to the domains that are problematic in an eating-disordered person's life include socio-cultural, environmental, familial, psychological, and, for the athlete, sports-related influences (Klumph, 1985; Ryan, 1989). The interaction of these factors predispose certain individuals to develop eating-disordered behavior (Black, 1990; Hemfelt et al., 1989; Holliman, 1991; Johnson & Tobin, 1991; Minirth et al., 1990). As in recovery from any addiction and/or compulsive behavior, all factors must be considered. The psychological issues that are driving the individual to engage in compulsive behavior must be addressed; as must the medical, nutritional, social, behavioral, and, for the athlete, sport-related considerations (Ryan, 1989). So, it is not the eating disorder problem, per se, that must be the sole focus in treatment, but a whole set of underlying issues that are manifested in self-destructive behavior (Black, 1990; Kasl, 1989; Minirth et al., 1990; Ryan, 1989).

Though problematic nutritional habits fall under the category of "disordered eating," there are clear and clinical definitions of eating disorders. Two prevalent eating disorders in women's athletics, that were also the eating disorders of choice of the women athletes in the present study, are Anorexia Nervosa and Bulimia Nervosa. Anorexia Nervosa is characterized by a refusal to maintain a minimally normal body weight. Bulimia Nervosa is characterized by repeated episodes of binge eating followed by compensatory behaviors such as self-induced vomiting, misuse of laxatives, diuretics, or other medications, fasting, or excessive exercise. A disturbance in perception of body shape and weight is an essential feature of both Anorexia Nervosa and Bulimia Nervosa (American Psychiatric Association, 1994, p. 539).

Anorexia Nervosa

Anorexia Nervosa (AN), often just called anorexia, has behavioral, cognitive, and affective components, and is associated with phobias concerning bodily appearance, obsessional thinking about food and dieting, obsessive-compulsive rituals, disillusioned thinking, paranoid fears, depression, and anxiety (Furnham & Kramers, 1989). Most frequently affecting females (90-95% of all cases are found in the female population), anorexia is a syndrome characterized by severe weight loss, an intense and obsessive fear of weight gain, a distorted body image, and amenorrhea (Woscyna, 1991, p. 141). It is an obsessive effort to lose weight and become very thin. The anorexic individual may be so thin, she looks malnourished (U.S. Olympic Committee Sports Medicine Council et al., 1987). Anorexia nervosa can be physically debilitating and is a potentially life-threatening illness. It has the highest mortality rate of any psychiatric disease (Gottdiener et al., 1978), thought by some to be as high as 15% (Sobel, 1996). It includes self-imposed starvation that results in severe reduction of body mass (Bickford, 1991b, p. 13; Hand & Dick, 1989a; Holliman, 1991, p. 3; Ryan, 1989), comparable to that of famine victims (Gottdiener et al., 1978). Anorexia Nervosa is subdivided into the Restricting Type, in which food intake is limited, and the Binge-Eating/Purging Type. In the latter category, individuals with anorexia also engage in regular binge-eating followed by purging behaviors, including self-induced vomiting, the abuse of laxatives, diuretics or enemas, and/or excessive exercise (American Psychiatric Association, 1994, p. 545; Sobel, 1996) See Table 2.1.

Anorexic patients lose at least 10% to 20% of body weight (Coleman, 1988). The term Anorexia Nervosa literally means "a nervous loss of appetite." It is clearly a misnomer (Sobel, 1996, p. 2). An anorexic's intense fear of becoming obese causes her to

Table 2.1. Diagnostic Criteria for Anorexia Nervosa

Diagnostic Criteria for Anorexia Nervosa

A. Refusal to maintain body weight at or above a minimally normal weight for age and height (e.g., weight loss leading to maintenancy of body weight less than 85% of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85% of that expected).

B. Intense fear of gaining weight or becoming fat, even though underweight.

C. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight.

D. In postmenarchal females, amenorrhea, i.e., the absence of at least three consecutive menstrual cycles. (A woman is considered to have amenorrhea if her periods occur only following hormone administration, e.g., estrogen.)

Specific type:

Restricting Type: during the current episode of Anorexia Nervosa, the person has not regularly engaged in binge-eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas).

Binge-Eating/Purging Type: during the current episode of Anorexia Nervosa, the person has regularly engaged in binge-eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas).

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think almost constantly about food, dieting, and weight control (Dick 1991; U.S. Olympic Committee Sports Medicine Council et al., 1987). She consciously denies hunger, usually controlling body weight by severely limiting the amount of food she consumes and/or exercising excessively (Coleman, 1988; Ryan, 1989). Only when she begins to lose weight does an anorexic feel in control of her body--thereby presenting her with an obsessive challenge to continue the weight loss. As the patient loses weight, her sense of control increases. "Food seemed like such a weakness. I was sure I didn't need it and it felt good to pass up food when others couldn't. That's the only time I felt in control"

(Quoted in Nutrition And Eating Disorders In College Athletics. U.S. Olympic Committee Sports Medicine Council et al., 1987, p. 1). The anorexic often does not have an accurate picture of her own physical body; instead she perceives her body image to be of delusional proportions. Despite life-threatening emaciation, the patient tenaciously clings to the belief that she is terribly overweight. Most have prolonged amenorrhea (American Psychiatric Association, 1994, p. 545; Ryan, 1989, 1992a &b). An anorexic's life is so completely organized around avoiding fat and pursuing thinness that social withdrawal and impaired school and work performance are common (Johnson & Tobin, 1991).

The repertoire of foods an anorexic may eat narrows and she becomes preoccupied with thoughts of food. Some collect recipes or hoard food (American Psychiatric Association, 1994, p. 541). The anorexic athlete may over-exercise and physically train well beyond the training program prescribed by her coach, even to the point of injury, chronic illness, and a decrease in performance or an inability to compete (Hand & Dick, 1989a; Ryan, 1989; U.S. Olympic Committee Sports Medicine Council et al., 1987). Quotes of recovering anorexics in Nutrition & Eating Disorders In College Athletics, of the U.S. Olympic Committee Sports Medicine Council et al., (1987) are as follows:

> I thought I'd blimp out on anything over 500 calories a day. I couldn't see how my performance and toning decreased. When they told me I was starving my body I thought they were crazy (p. 1).

Another athlete said,

> when I sprained my knee, the trainer told me to lay off of training for 1-2 weeks. I couldn't do that. I was sure I'd gain weight and then I'd never be any good. He made me miss one race, but I still kept running on my own (p. 2).

An anorexic becomes compulsive, not only about eating and exercise, but about other areas of her life. When individuals with Anorexia Nervosa exhibit obsessions and compulsions that are not related to food, body shape, or weight, an additional diagnosis of Obsessive-Compulsive Disorder may be warranted (DSM-IV, 1994, p. 541). A study of 102 anorexic females by Crisp, Hsu, Harding and Hartshorn (1980) that spanned 5.9 years

found at follow-up that obsessional symptoms were characteristic in 22% of the women, depressive symptoms in 38%, and social phobic symptoms in 25%. Even though 80% of the women had normal or near normal body weight and 70% had relatively normal menstruation, two-thirds of the women still showed a highly variable dietary pattern and over 40% worried intensely about their weight and shape. Follow-up occurred nearly six years after intervention (p. 1). Zerbe (1993) concurs with the finding regarding the longevity of pathogenic symptoms associated with anorexia. "Only a few years after their initial treatment, 30% of anorexia nervosa patients are either dead from their illness or are still chronically afflicted by it" (front cover).

For an anorexic, everything related to food or weight becomes highly emotional (U.S. Olympic Committee Sports Medicine Council et al., 1987). She may engage in bulimic binge/purge behavior, which may lead to becoming bulimiarexic (Ryan, 1992a & b). Typically, she does not want help (Johnson, 1992). To escape from others' chastising, she will hide her emaciated frame by wearing baggy clothing or will layer clothing regardless of weather (Overdorf, 1990; Ryan, 1992b).

The physical effects caused by Anorexia Nervosa are related to the malnutrition and semistarvation that occur (Sobel, 1996). Most major organ systems are affected (American Psychiatric Association, 1994, p. 541). Some specific effects include fat and muscle loss, dry hair and skin, cold extremities, decreased body temperature, lanugo hair (a fine downy body hair on the person's trunk), dry skin, decreased ability to concentrate, lightheadedness, loss of the fat pad around the heart, nutritional deficiencies, and thyroid and pituitary malfunction. Laboratory values associated with starvation include low white blood cell count; anemia; low follicle stimulating hormone and lutenizing hormone levels which contribute to amenorrhea (Marshall, 1992; Snow-Harter, 1992); low thyroid function; biochemical deficits, and ketonuria, pyuria, and hematuria. Electrocardiogram changes noted in the starvation include bradycardia and a prolonged QT interval, i.e., time

required for the heart ventricle to contract and repolarize (Furnham & Kramers, 1989; Johnson, 1992; Ryan, 1989, 1992b). Abnormal electrocardiographic (ECG) patterns are present in a majority of anorexic patients. Of greater significance for the athlete is the occurrence of arrhythmias during exercise and other abnormal heart responses associated with sudden death (Gottdiener et al., 1978; Stephenson, 1991, p. 131-133).

Amenorrhea, or absence of menstruation, is a characteristic of women with Anorexia Nervosa. Amenorrhea is associated with low bone mass which results in an increased risk of fracture, and early onset of osteoporosis (Snow-Harter, 1992; Sobel, 1996). Peak bone mass in a woman is achieved at about 18 years of age. There is a window of approximately 12 years during which bone mass may be gained. The ability of the woman's body to develop skeletal mass is dependent on cyclical reproductive endocrine function. A female must menstruate regularly, monthly, if her reproductive hormones are to maintain normal function. A woman discontinues bone deposition upon occurrence of menopause and the cessation of menstruation. So the occurrence of a regular menses in a young woman is extremely important, considering the fact that the bone mass she has by age 45-52, when menopause occurs, is all that she will have for the rest of her life. During the adolescent years, 48% of bone mass is laid down and 15% of height is achieved. After peak bone mass is achieved at about age 18, there is a window of approximately 12 years during which bone mass may be gained (Snow-Harter, 1992). Amenorrhea prevents cyclical endocrine function. Being amenorrheic disrupts the body's production of estrogen, a hormone that functions to protect the strength and density of bone (Snow-Harter, 1992). Adolescent and young adult women with anorexia are inhibited, and possibly prevented, from developing peak bone mass.

It is estimated that up to 10-20% of vigorously exercising women and 40-51% of elite runners and professional ballet dancers have an irregular or non-existent menses, compared to 2-5% of nonathletes. The lower bone mineral density experienced by these

women compared with cyclic athletes (those who menstruate regularly) may seriously alter their ability to develop skeletal mass during adolescence and decrease their ability to develop peak bone mass (Snow-Harter, 1992) A lack of estrogen and the resulting reduced skeletal mass development and low peak bone mass, combined with the rigors of athletic training and competition, can make a young woman vulnerable to injuries, such as stress fractures, shin splints, osteoporotic fractures, or injuries to the knee (U.S. Olympic Committee Sports Medicine Council et al., 1987; Snow-Harter, 1992). Just the loss of a period for six months shows irreversible damage to one's bone density.

In a symposium on athletic amenorrhea and bone health, Christine Snow-Harter (1992) reported numerous studies in which vertebral bone mineral density, femur mid-shaft bone mineral density, femoral neck and whole body mineral density were found to be significantly lower in amenorrheic women athletes than in cyclical women, athletes and non athletes. Amenorrhea seriously alters a woman's ability to develop skeletal mass, attain peak bone mass, and maintain bone mass (pp. 52-56). In the video tape, Afraid to Eat: Eating Disorders and the Student-Athlete the following anecdote was reported, "one anorexic athlete's x-rays taken at 23 years of age compared to those taken when she was 19 revealed her bone density to be that of an 80 year-old woman." This athlete had stress fractures in her vertebrae, due to the osteoporotic condition of her bones. These stress fractures were found to be irreversible (Hand & Dick, 1989a).

Amenorrhea is a symptom of anorexia, and therefore each anorexic victim will be at risk for skeletal deficiencies and subsequent difficulties. Physical symptoms of anorexia are numerous and may be extreme, particularly if the illness has been allowed to go unchecked (Snow-Harter, 1992; Marshall, 1992). Osteoporosis, amenorrhea and anorexia, or other disordered eating behavior, is often referred to as the Female Athlete Triad (Otis, Drinkwater, Johnson, Loucks, and Wilmore, 1997, p. i).

There are also many mental and behavioral symptoms of anorexia. Psychologically, the anorexic turns away from food to cope, is introverted and passive, isolates from others, negates a feminine role, maintains rigid control, experiences feelings of inferiority and ineffectiveness, and is in strong denial of being anorexic and exhibiting telltale symptoms (American Psychiatric Association, 1994, p. 541; Furnham & Kramers, 1989; Ryan, 1992b). The individual is obedient and overly compliant, due to a lack of self-esteem. Outwardly, she may give the appearance of being under control, but may actually be very dependent upon others, such as parents, coaches, or teachers. As weight loss continues, she oftentimes becomes depressed, withdrawn, irritable, shows a lack of interest in social activities, and may be unable to display a normal range of emotion (Bickford, 1991a, 1991b; U.S. Olympic Committee Sports Medicine Council et al., 1987). The pursuit of thinness becomes all-encompassing, and her way of dealing (or not dealing) with her feelings is through weight loss. As a result of her starvation tactics, the anorexic individual is usually unaware of her feelings and loses her ability to recognize other normal bodily sensations, such as hunger, thirst, or pain (American Psychiatric Association, 1994, p. 541; Bickford, 1991a, 1991b). Other features associated with AN include inflexible thinking and overly restrained initiative and emotional expression. Compared with individuals with AN, Restricing Type, those with the Binge-Eating/Purging Type are more likely to have other impulse-control problems, to abuse alcohol or other drugs, to exhibit more mood lability, and to be sexually active (American Psychiatric Association, 1994, p. 541).

Bulimia Nervosa

Bulimia Nervosa (BN), more commonly termed bulimia, is different from AN in that a person with bulimia is of normal weight or slightly overweight (Stephenson, 1991, p. 133). Bulimia Nervosa is characterized by intermittent episodes of binge eating with large caloric intake, which is usually followed by a purge (inappropriate compensatory

method to prevent weight gain). To qualify for a diagnosis, the binge eating and inappropriate compensatory behavior must occur at least twice a week for three months (American Psychiatric Association, 1994, p. 545; Furnham & Kramers, 1989). Bulimia is different from the over-eating or heavy snacking normal people do occasionally and over weight people do habitually. Bulimia means "bull's appetite" or "ox hunger" reflective of the intensity with which women who have bulimia consume food (Sobel, 1996). They appear to have an insatiable, voracious appetite. Formally recognized as a psychiatric diagnosis in 1980, Bulimia Nervosa involves a compulsive preoccupation with food and results in repeated episodes of excessive secretive binge eating, followed by some form of purge or undoing behavior such as self-induced vomiting, the use of laxatives and/or diuretics, fasting, or excessive exercise. The undoing behavior functions to relieve the bulimic's guilt and fear of weight gain from binge eating. There are two subtypes of bulimia: Purging Type and Nonpurging Type. The Purging Type individual regularly engages in inappropriate compensatory purging methods, such as self-induced vomiting, or the misuse of laxatives, diuretics or enemas during the current episode. The Nonpurging Type individual uses non purging compensatory behaviors, such as fasting or excessive exercise during the current episode (American Psychiatric Association, 1994, p. 547). See Table 2.2.

Binge eating is typically triggered by dysphoric mood states, interpersonal stressors, intense hunger following dietary restraint, or feelings related to body weight, body shape, and food. An episode of binge eating is accompanied by a sense of lack of control. An individual may be in a frenzied state while binge eating, especially early in the course of the disorder. Some individuals describe a dissociative quality during, or following, the binge episodes. After Bulimia Nervosa has persisted for some time, the binge-eating episodes are characterized by impaired control, such as difficulty resisting

Table 2.2. Diagnostic Criteria for Bulimia Nervosa

Diagnostic Criteria for Bulimia Nervosa

A. Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:

(1) eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances.
(2) a sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).

B. Recurrent inappropriate compensatory behavior in order to prevent weight gain, such as self-induced vomiting; misuse of laxatives, diuretics, enemas, or other medications; fasting; or excessive exercise.

C. The binge eating and inappropriate compensatory behaviors both occur, on average, at least twice a week for 3 months.

D. Self-evaluation is unduly influenced by body shape and weight.

E. The disturbance does not occur exclusively during episodes of Anorexia Nervosa.

Specific type:

Purging Type: during the current episode of Bulimia Nervosa, the person has regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas.

Nonpurging Type: during the current episode of Bulimia Nervosa, the person has used other inappropriate compensatory behaviors, such as fasting or excessive exercise, but has not regularly engaged in self-induced vomiting or the misuse of laxatives, diuretics, or enemas.

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binge eating or difficulty stopping a binge once it has begun (American Psychiatric Association, 1994, p. 546). The most common moods that precipitate a binge include boredom, loneliness, anger, and anxiety (Johnson, 1992). Binge eating may transiently reduce dysphoria, but disparaging self-criticism and depressed mood often follow (American Psychiatric Association, 1994, p. 546).

During a binge, a person may ingest large quantities of food in a short period of time. They can't seem to get food quickly enough before and during a binge, typically eating high-caloric, carbohydrate-rich foods that need little preparation, foods they normally deprive themselves of (Bickford, 1991b; Dick, 1991). The bulimic is aware that the eating behavior is abnormal, and they have an incredible fear that once they begin eating they will not be able to stop voluntarily (Rowland, 1984). Patients describe the binge-eating experience as being driven in a way that makes them feel desperately out of control. They often report that it is as if someone else is doing the eating. The binges usually occur in the evenings when they are alone (Johnson, 1992; Ryan, 1989).

Bingers eat far beyond the body's normal signals to stop eating. Binge eating often continues until the individual is uncomfortably, or even painfully, full (American Psychiatric Association, 1994, p. 546). The binge/purge episodes are not due to anorexia or any other known physical disorder. Physiological hunger may precede a binge, the binge is followed by guilt, which results in the purging behavior (Johnson, 1992). A binge may last from a few minutes to several hours, averaging one to two hours, in which 2,000-10,000 calories may be consumed (American Psychiatric Association, 1994; Bickford, 1991b; Dick, 1991; Hand & Dick, 1989a; Holliman, 1991; Ryan, 1989). Cynthia Rowland, an award winning television journalist, consumed up to 20,000 calories per day during her twelve year battle with "the monster within" (Rowland, 1984).

Specifying a caloric amount to define a binge is becoming less widely accepted, because the definition of a binge for some eating-disordered women is an insignificant number of calories (100-300 calories, for example); the fact they ate at a time they didn't think was appropriate constitutes a binge for them (P. Bolin, personal communicaton, July 31, 1997; D. Stengel, personal communication, April 1993). A bulimic's eating pattern may alternate between binge-eating and fasting (Ryan, 1989).

Termination of binges usually occurs as a result of abdominal pain, sleep, social interruption, or self-induced vomiting. Binges occur from twice per week to several times daily (American Psychiatric Association, 1994; Dick, 1991; Hand & Dick, 1989a; Holliman, 1991; Rowland, 1984; Ryan. 1989).

Following a binge episode, the person usually feels guilty and fat, which provokes some form of undoing behavior. Depressive reaction follows binges (American Psychiatric Association, 1994; Dick, 1991; Holliman, 1991; Johnson, 1992; Minirth et al., 1990; Rowland, 1984). As the cycle continues, feelings of depression and low self-esteem increase (U.S. Olympic Committee Sports Medicine Council et al., 1987). Many patients maintain their weight within normal limits through purging, but many bulimics experience weight fluctuations of ten pounds or more during alternating binges and fasts, or other undoing behavior (American Psychiatric Association, 1994; Dick, 1991; Holliman, 1991; Johnson & Tobin, 1991; Rowland, 1984; Ryan, 1989).

As mentioned previously, purging methods include vomiting, use of laxatives and diuretics, fasting, and excessive exercise. Exercise may be considered excessive when it significantly interferes with important activities, when it occurs at inappropriate times or in inappropriate settings, or when the individual continues to exercise despite injury or other medical complications (American Psychiatric Association, 1994, p. 546). Vomiting does not remove all calories, does not relieve hunger, and results in fluid and electrolyte loss. The chronic dehydration associated with vomiting occasionally results in kidney stone

formation (Stephenson, 1991, p. 133). Both laxatives and diuretics do not affect calories absorbed, and they result in fluid and electrolyte loss (Johnson, 1992). A combination of vomiting, and diuretic and laxative abuse can dangerously affect potassium regulation and fluid balance. Electrolyte imbalance may be severe which results in heart arrhythmia and cardiac arrest. Bulimia can be life-threatening (Ryan, 1992b; U.S. Olympic Committee Sports Medicine Council et al., 1987).

Bulimics fear failure, rejection, being imperfect, and being out of control. Beyond all of these, they fear discovery, the perceived embarrassment and the primal fear that they will never be able to change this cycle. Paradoxically, while Bulimia Nervosa begins when individuals attempt to control their lives, it soon goes out of control. The whole cycle quickly becomes automatic. The result--they become even more isolated, despondent, insecure, depressed, and fearful; the cycle continues to worsen (Kubistant, 1982).

Physical effects of purging include swollen parotid glands, chest pain, sore throat, abdominal pain, esophageal tears, erosion of tooth enamel due to exposure of the teeth to gastric acids that result from vomiting, face and extremity edema, diarrhea and/or constipation, menstrual irregularities, cardiac effects, electrolyte imbalance, and malabsorption of fat, protein, and calcium. Laboratory values observed with purging behaviors include metabolic alkalosis/acidosis; low sodium, iron (anemia), chloride, potassium, magnesium, calcium, phosphate; and elevated amylase. Cardiac arrhythmias and EKG abnormalities are a reality (Bickford, 1991a &b; Johnson, 1992; Ryan, 1992b; U.S. Olympic Committee Sports Medicine Council et al., 1987). Because diet pills, diuretics, and laxatives contain sympathomimetic substances, the sympathetic nervous system is overly activated, resulting in elevated heart rates, high blood pressure, and disturbed sleep patterns. In addition, use of purgatives along with poor food intake results in the athlete suffering from hypokalemia; a condition known to precipitate life-threatening

cardiac arrhythmias (American Psychiatric Association, 1994, p. 548; Gruber & Humphries, 1988).

Psychologically, the bulimic turns to food as a coping mechanism in times of stress; is extroverted initially, but as the disease progresses, becomes introverted; has low impulse control which can be exhibited in stealing, and alcohol/drug abuse; and recognizes self as a bulimic but feels guilty about having the illness (Ryan, 1992b). Admission of being bulimic may not occur until intervention for the condition of bulimia occurs. Typically, she has poor self-esteem and experiences issues of achievement conflict. She has difficulty expressing anger and frustration, and believes she is unable to face her problems or cope with the world directly. A bulimic often feels that her life is dominated by conflicts about eating: the binge is a direct end-product of this feeling of a lack of control; the purge is relief. She may have tremendous mood swings (Bickford, 1991a). "The binge and purge cycle of bulimia closely parallels the highs and crashes that drug addicts know so well. First comes the euphoric high of the binge, then comes the drastic expulsion of food" (Black, 1990, p. 44).

Psychological similarities that individuals with bulimia share with anorexics include an excessive emphasis on body shape and weight in their self-evaluation--these factors are typically the most important ones in determining self-esteem (American Psychiatric Association, 1994, p. 546); magical thinking, i.e., "if my weight is right everything else will be right;" obsession with food and weight; dichotomous thinking (good/bad, success/failure); perfectionistic ideals and unrealistic expectations; not feeling successful; and a pervasive sense of ineffectiveness. They have a history of low self-esteem and difficulty with problem solving and stress management (Ryan, 1989; U.S. Olympic Committee Sports Medicine Council et al., 1987).

Complications of Anorexia Nervosa and Bulimia Nervosa for the athlete stem from the harmful effects of dehydration and starvation on the human body. In addition to the

effects mentioned above specifically to anorexia or bulimia, respectively, the disorders result in loss of muscular strength, loss of endurance, decreased oxygen utilization, decreased aerobic power, decreased speed, loss of coordination, impaired judgment, reduced blood volume, less blood flow to the kidneys, loss of all muscle glycogen, reduced heart function, increased heart rate, electrolyte loss, and inability to regulate body temperature. Finally, death from anorexia or bulimia may result. It is estimated that between 5% and 20% of anorexics die (Zerbe, 1993, p. 8)--most from suicide or sudden death from cardiac arrest. These are the most frequent causes of death among those with bulimia (Bickford, 1991a, 1991b; U.S. Olympic Committee Sports Medicine Council et al., 1987). Everything known about the effects of eating disorders lead to one conclusion, they hurt performance. "It is just not worth it" (Quote by Natale in Hand & Dick, 1989a).

Anorexia Nervosa is characterized by a refusal to maintain a minimally normal body weight. Bulimia Nervosa is characterized by repeated episodes of binge eating followed by inappropriate compensatory behaviors such as self-induced vomiting; misuse of laxatives, diuretics, or other medications; fasting; or excessive exercise. "Whatever the form of the disorder, eating takes on a compulsive quality. People feel driven to eat or starve as thought they had no choice. This compulsion effectively blocks awareness of their feelings and serves to distract them from anxiety and from unpleasant feelings and memories. When people are frightened of their feelings, or experience painful feelings, excessive food intake or extreme food deprivation helps them deny and repress the pain" (Black, 1990, pp. 44-45).

A disturbance in perception of body shape and weight is an essential feature of both Anorexia Nervosa and Bulimia Nervosa (American Psychiatric Association, 1994, p. 539). When the individual places so much primacy on her body image, she has less energy for and investment in developing unique competence as a worker, or friend. This investment in the body may also mask a deeper dread of looking at the self starkly and honestly. After

all, building one's life around the quest for a perfect body avoids the vital existential (if not personal) issues of life that are probably never completely answered. These anxieties are diverted into the pursuit of a perfect body in a way that tends to encapsulate the self in a protective veneer that avoids self-scrutiny and personal and spiritual development (Zerbe, 1993, p. 151). Kathryn Zerbe, M.D., Director of the Adult Outpatient Department, Medical Director of the Women's Program, and former Section Chief of the Eating Disorders Unit--both positions at The Menninger Clinic-- suggests, "the struggle with body image faced by patients with eating disorders derives from their difficulty with expressing feelings and in developing a full emotional life" (p. 168)

Both Anorexia Nervosa and Bulimia Nervosa result in death due to physical complications or suicide, if not treated. If treated, the prospect of recovery is grim. "One in four bulimic patients do not respond to treatment; and only a few years after their initial treatment, 30% of Anorexia Nervosa patients are either dead from their illness or are still chronically afflicted by it" (Zerbe, 1993, front cover). Both of these clinical conditions contribute to the Female Athlete Triad.

The Female Athlete Triad

The position statement by the American College of Sports Medicine (1997, p. i) on The Female Athlete Triad is as follows:

> The Female Athlete Triad is a syndrome occurring in physically active girls and women. Its interrelated components are disordered eating, amenorrhea, and osteoporosis. Pressure placed on young women to achieve or maintain unrealistically low body weight underlies development of the Triad. Adolescents and women training in sports in which low weight is emphasized for athletic activity or appearance are at greatest risk. Girls and women with one component of the Triad should be screened for the others. Alone or in combination, Female Athlete Triad disorders can decrease physical performance and cause morbidity and mortality.

In 1992 the Female Athlete Triad was the focus of a consensus conference called by The Task Force on Women's Issues of the American College of Sports Medicine. The three components of the Triad are:

1. Disordered eating. Disordered eating refers to a wide spectrum of harmful and often ineffective eating behaviors used in attempts to lose weight or achieve a lean appearance. The spectrum of behaviors ranges in severity from restricting food intake, to bingeing and purging, to the DSM-IV defined disorders of Anorexia Nervosa and Bulimia Nervosa. Disordered eating behaviors can result in short and long term morbidity, decreased performance, amenorrhea, and mortality.

2. Amenorrhea. Primary amenorrhea (delayed menarche) is the absence of menstruation by age 16 in a girl with secondary sex characteristics. Secondary amenorrhea is the absence of three or more consecutive menstrual cycles after menarche. Amenorrhea associated with exercise or Anorexia Nervosa is hypothalamic in origin. Hypothalamic amenorrhea results in decreased ovarian hormone production and hypoestrogenemia similar to menopause. Both hypothalamic amenorrhea and menopause are associated with decreased bone mineral density.

3. Osteoporosis. Osteoporosis is a disease characterized by low bone mass and microarchitectural deterioration of bone tissue leading to enhanced skeletal fragility and increased risk of fracture. The principal cause of premenopausal osteoporosis in active women is decreased ovarian hormone production and hypoestrogenemia as a result of hypothalamic amenorrhea.

Potentially all physically active girls and women could be at risk for developing one or more components of the Triad. The biological changes, peer pressure, societal drive for thinness, and body image preoccupation that occur during puberty make adolescence the most vulnerable time. Participation in sports that emphasize low body weight can also be a risk factor. Those sports include:

1. Sports in which performance is subjectively scored, e.g., dance, figure skating, diving, gymnastics, and aerobics.

2. Endurance sports emphasizing a low body weight, e.g., distance running, cycling, and cross-country skiing.

3. Sports requiring body contour-revealing clothing for competition, e.g., volleyball, swimming, diving, cross-country running, cross-country skiing, track, and cheerleading.

4. Sports using weight categories for participation, e.g., horse racing, some martial arts, wrestling, and rowing.

5. Sports emphasizing a prepubertal body habitus for performance success, e.g., figure skating, gymnastics, and diving (Otis et al., 1997, p. v).

Nearly all sport types are inherent risk factors for osteoporosis, amenorrhea, and disordered eating: the three components of The Female Athlete Triad.

Eating Disorders In Women's Athletics

This section addresses the incidence of eating disorders in female non athletes and athletes as well as various factors that may contribute to the etiology, or the development and perpetuation, of eating disorders in women athletes. These factors include: (a) sport-related factors inherent in the athletic environment, (b) sport type, and (c) the demands of certain sports.

Incidence of Eating Disorders in Women

Incidence speaks to the current and projected status of eating disorders occurring in women. Determining the incidence of eating disorders is difficult because they are associated with secrecy and denial (Hall & Cohn, 1992; Ryan, 1989). It is estimated that the number of women in the United States that have an eating disorder is in the millions. Specifically concerning the condition of Bulimia Nervosa, professionals are divided as to whether or not it is reaching epidemic proportions. Some believe it is epidemic (Rowland, 1984), and that the incidence has doubled between the 1960's and 1980's. It is predicted that eating disorders will occur at one time or another in 90% of the female population

(Gruber & Humphries, 1988). Prevalence figures for the general high school and college student population include 1% to 5% of students developing Anorexia Nervosa (AN), and 5% to 10% developing Bulimia Nervosa (BN) (Hall & Cohn, 1992; Ryan, 1989; U.S. Olympic Committee Sports Medicine Council et al., 1987; Worthington-Roberts, 1991, p. 64). Additionally, it is believed that about 5% of women with an eating disorder suffer from a sub clinical case of either syndrome. Nearly half of AN patients also suffer from BN (Woodside, Garfinkel, Glanville, Leichner, & Tonkin, 1989). Of all people with eating disorders, 90-95% are females (U.S. Olympic Committee Sports Medicine Council et al., 1987). High school and college students tend to have the greatest prevalence of eating disorders (Ryan, 1989). In fact, AN is customarily considered a disorder of early adolescent females, and BN ordinarily begins during later adolescence (Stephenson, 1991, p. 130).

Incidence of Eating Disorders in the Female Athletic Population

Recent estimates suggest college athletes are 6 times more likely than the general public to display anorexic or bulimic eating behaviors (Burckes-Miller & Black, 1988). In fact, the risk of a female collegiate athlete developing an eating disorder seems to be similar to that of known non athlete high risk groups--ballerinas, flight attendants, and fashion models. These high risk groups have a reported incidence of 15% to 35% (Holliman, 1991). Nancy Clark (1992), a Sports Nutritionist for Sports Medicine Brookline reported, "as many as one-third of women athletes struggle with disordered eating patterns and 3% of almost 700 athletes in midwestern colleges met the diagnostic criteria for anorexia; while 21.5% met the criteria for bulimia" (p. 27).

Some studies have reported that the incidence of eating disorders in women athletes is much higher than the general population. For example, one study (Rosen, McKeag, & Hough, 1986) revealed that 32% of 182 female college athletes representing all sports practiced at least one form of disordered eating (vomiting, laxative use, diuretic use,

excessive weight loss, and diet pill use). Other investigations have reported that 62% of 42 college female gymnasts practiced at least one form of disordered eating (Rosen & Hough, 1988), while 15.4% of 487 nine to18 year-old female swimmers engaged in disordered eating (Dummer, Rosen, Heusner, Roberts, & Counsilman, 1987). Almost one-half of the NCAA athletic programs sponsoring women's gymnastics and more than 20% of the schools sponsoring women's cross-country and women's track programs reported at least one athlete with an eating disorder in 1990. A replication study in 1992 revealed similar results (Dick, 1991, 1992). According to a study by the National Collegiate Athletic Association (NCAA) sport-sciences staff (Dick, 1991),

> Sixty-four percent of NCAA member institutions responding to the voluntary survey reported that at least one student-athlete had experienced an eating disorder as defined by the DSM-III-R diagnostic criteria during the past two years. (Note: Since 1990, the DSM-III-R has been updated to the DSM-IV). The vast majority of the reports (93%) were in women's sports.
>
> Responses were received from 491 (61%) of the 803 active member institutions; 313 reported an eating disorder in at least one sport (pp. 137-138).

"All athletes are susceptible to disordered eating; no sport should be considered exempt" (Dick, 1991, p. 140).

While some recent findings indicated that the incidence of eating disorders in women athletes is much higher than that of the general population; other professionals report that the incidence is the same as that of the general population (Petri & Stoever, 1993). Other findings suggest that athletes do not appear to exhibit greater signs or a higher incidence of eating-disordered behavior than that of the general population (Gustafson, 1989; Wilkins et al., 1991). Obviously, an accurate picture of the prevalence of eating disorders among women athletes has not been established.

The possibility that athletes, in comparison to non athletes, are more susceptible to eating disorders has been suggested for several reasons. Black (1991) suggested that the problem of eating disorders among athletes may be more complex than for nonathletes. Over and above the stresses nonathletes face, such as vocational and educational goals, the

desire to please and find acceptance, and relational concerns, the athlete finds herself in a multifaceted world of competitive athletics which contains expectations about performance and achievement of societal ideals; these demands exceed the normal stresses of life common to the general female population. It has been suggested that certain factors inherent in athletes and the athletic environment may contribute to the development of eating disorders in the female athletic population.

Factors That Influence the Development of Eating Disorders

Identified as influential in the development of eating disorders are factors of psychology, physiology, the athletic environment, and coaching and/or parental influence.

Psychological Factors

Psychological factors that are associated with the process of competing and/or the concept of winning at any cost may make an athlete more vulnerable to developing an eating disorder. Other psychological factors may include stress from pressure to compete and/or fear of failure, social and emotional isolation resulting from improper management of athletic success, and an athlete limiting her identity to the role she has in athletics (Rotella & Heyman, 1993). Additionally, athletes convey a sense of self-sufficiency, are physically strong and gifted people who present an illusion of being indestructible, and are reluctant to admit problems or seek help (Overdorf, 1990; Ryan, 1989).

Physiological Factors

Physiological factors associated with specific sports (e.g., track, dancing, and gymnastics) may contribute to the development of an eating disorder. Excess body fatness may have a negative effect on performance. Therefore, to facilitate the best performance, athletes and coaches are highly motivated to maintain the athlete's body weight at a level that provides optimum physical movement and performance. Problems can arise in ascertaining what an athlete's optimal weight is and, as with any factor that affects performance, the importance of body weight can be over emphasized. Overemphasis on

body weight may possibly exacerbate the condition of an athlete who is prone to developing an eating disorder. In fact, it may be the catalyst that triggers the eating disorder. While predisposing factors may have been present prior to the catalytic scenario, the single event could trigger the phenomenon of an eating disorder.

Appropriate means of weight reduction aid those athletes whose body fatness is excessive. Therefore, it is desirable to optimize lean muscle mass and minimize fat mass for at least two reasons. First, fat provides no functional purpose in moving the athlete's body through space, except indirectly. Metabolism of fat does provide energy to the muscle tissue, but requires energy to be metabolized. Fat mass is essentially "dead weight." Physical movement is made possible by the work of muscles. The function of muscles determines the athlete's ability to physically perform.

Second, an athlete desires to optimize lean muscle mass and minimize fat mass for the purpose of providing adequate oxygen to the muscles. When oxygen flow is optimum muscular performance is enhanced, i.e., muscles perform longer and with greater force and power. Oxygen entering the body is first used by the fat stores that contribute nothing to performance (until metabolized, which requires energy. Energy needed to metabolize fat is energy the athlete does not have for muscular function and performance). Fat as an energy source is valuable if the energy required to metabolize it is more important than using energy for physical movement. Secondly, muscle mass is oxygenated. Oxygen is first used to serve the nutrient demands of fat stores, then to oxygenate muscle tissue (Repovich, 1992). Muscle mass is related to muscle strength which may translate into jumping higher and hitting harder--enhancing performance. In an exercising woman, the sooner muscle mass is oxygenated the better. (Ryan, 1989; Walberg, 1990). However, an athlete on a weight loss program who loses more mass than what is physically healthy experiences a loss in muscle tissue that required rigorous training to build. The muscle

tissue that is needed to enhance performance is used for fuel instead, because caloric consumption is not adequate.

It is difficult for an athlete's body to drop below its "optimum weight." The body fights hard to maintain that balance and excessive attempts to disrupt this balance are detrimental to training and performance (Ryan, 1989). An athlete needs adequate nutrition to fuel the body for exercise, but in an attempt to achieve performance and appearance ideals may restrict herself of calories needed for optimal health, and, essentially, performance. When caloric output far exceeds caloric intake, performance decrements result (Overdorf, 1990). Nancy Hogshead, Olympic Gold Medalist says, "coaches want their athletes to be the best athletes they can be. I think coaches think there is some magical weight number to strive for to achieve peak performance" (Hand & Dick, 1989a). Many athletes and coaches adhere to height and weight charts to determine target body weight. Mike Johnson, University of Washington Cross-Country Coach has this response, "height and weight charts are used as a collection of normative data that have no basis for athletic competition and performance. What coaches, trainers, and athletes should do is determine the proper healthy weight for each athlete and then try to maintain that year 'round. Weight should be determined by body composition," i.e., the comparison of lean body mass to fat body mass (Hand & Dick, 1989a).

The metabolic consequences of eating disorder behaviors such as extreme dieting, vomiting and laxative/diuretic abuse have very negative physical effects, including death. Improper nutrition, severely limiting caloric intake, excessive/compulsive behavior, and excessive physical exercise, (i.e., that in addition to required training) can become last resorts for athletes who think, or have been told, that their weight is too high. These activities can increase in number and become addictive habits in a relatively short period of time for an eating disorder-prone individual. In the end, these behaviors become more performance limiting than excess weight could ever be (Ryan, 1989).

A second physiological effect of weight loss is a lower resting metabolic rate (RMR). If a decrease in body mass is attempted through a large decrease in caloric intake without a compensatory increase in aerobic exercise, the body may respond as if starvation has set in and lower its basal metabolic rate (BMR) 10-18%, i.e., becoming more efficient with less fuel (Molé, Stern, Schultz, Bernauer, & Holcomb, 1989; Ryan, 1989; Schelkun, 1991). Therefore, as the body adapts, the individual consuming fewer calories does not reduce mass expediently. Furthermore, the mass that is lost is likely to be lean muscle tissue rather than fat mass. When the body responds to perceived starvation, it becomes more efficient in conserving fat tissue. The frustrated athlete, unaware of her body's response to starvation, attempts to reduce caloric intake even further.

It is suggested that athletes that would be most susceptible to a lower resting metabolic rate are those who primarily engage in anaerobic activities such as gymnasts, divers, volleyball players, and dancers. Swimmers are also at risk because accomplished performers are extremely efficient, i.e., the aerobic demands during activity are not adequate to decrease weight and relative body fatness (Ryan, 1989). To counteract this adaptive quality of the body, the healthy weight loss method is to maintain adequate aerobic exercise while decreasing dietary fat intake and total caloric intake. Women can achieve strength gains and muscle hypertrophy even while they are consuming a low calorie diet (suggested not to decrease below 1200 calories per day) as long as they are participating in adequate aerobic exercise (Walberg, 1990). Without adequate aerobic exercise, the woman athlete is more likely to lose lean muscle tissue rather than fat. Achieving less body fat is not easy for the non aerobic athlete. A 140-pound woman playing one hour of rigorous volleyball will use approximately 250-500 calories while the same woman jogging at a moderate pace for the same time duration will expend approximately 700 calories (Walberg, 1990). It has been found that participation in aerobic exercise for a duration of 30 minutes at an intensity of 60% of maximum oxygen uptake increases one's resting metabolic rate

(Molé et al., 1989). So, for the anaerobic athlete who wishes to reduce fat mass, participation in an aerobic exercise program while attempting to reduce calorie intake is beneficial. Restriction of calories without involvement in aerobic exercise causes the body to adapt to a starvation situation, resulting in greater efficiency of the body's fuel supply, thereby hindering metabolism of fat.

Environmental Factors

Environmental factors associated with specific sports may contribute to the incidence of eating disorders. Swimmers, divers, and gymnasts who are scantily clad while on public display for an inordinate amount of time may become overly concerned and sensitive about their bodies (Ryan, 1989).

Coaching and/or Parental Influence

Inappropriate coaching or parental behavior may push a susceptible athlete "over the edge" into a full-blown eating disorder. A coach or parent, unaware of the power of their influence, may make demands that are unrealistic for their children. Because eating disorder-prone athletes may not separate their value or worthiness as a person from their physical image, excessive demands to change their body is heard by these athletes as, "I am not a good person" (Ryan, 1989, p. 9). Not separating their value or worthiness as a person from comments of others, and/or their physical image, is particularly characteristic of children from dysfunctional families (Black, 1990; Kasl, 1989). Because of their need to gain self-worth through the approval of others, they work extraordinarily hard to win the approval of a coach. Often they go above and beyond the coach's requirements to achieve performance excellence. If the coach has identified losing weight to be a means of performance enhancement, the athlete accommodates. They lose, and lose, and lose weight (Overdorf, 1990). To say that a coach causes an athlete to become eating-disordered is inappropriate, because of the underlying multifaceted nature of eating disorders. But, eating disorders can be "triggered" by a single event or by comments from a person who is

very important to the athlete. An off-handed remark which characterizes an athlete as "thunder thighs" or "pudgy" is a cruel set-up for the highly motivated, uninformed athlete who wants to please the coach more than just about anything (U.S. Olympic Committee Sports Medicine Council et al., 1987). An additional way coaches and trainers may influence some athletes to begin disordered eating habits is by conveying to athletes their own destructive attitudes related to weight control and thinness that they have developed in response to personal eating difficulties (Garner & Rosen, 1991).

Inappropriate coaching and/or parental behaviors and comments, being scantily clad for performance, and factors of physiology and psychology have all been identified as influential in the development of eating disorders in female athletes.

The Influences of Sport Type and Sport Demands, and Other Sport Factors

Does Sport Type Increase the Risk for Developing an Eating Disorder?

Are athletes of certain sport types more at risk for developing eating disorders? Athletes of certain sports, particularly those sports that emphasize leanness to enhance performance or appearance, i.e., distance running, gymnastics, and ballet have been identified as being more susceptible to eating disorders (Burckes-Miller & Black, 1988; Dick, 1991; Harris & Greco, 1990; Rosen & Hough, 1988).

Originally, the results of Garner and Garfinkel (1980) supported the hypothesis that athletes involved in sports emphasizing leanness felt heightened pressures to diet or to be thin and are prone to develop an increased vulnerability to eating disorders. They reported that 6.5% of professional ballet students from several different schools met rigorous diagnostic criteria for Anorexia Nervosa, and those from the most competitive schools had the highest incidence of the disorder. Later, specific sport studies on athletes who competed in sports that emphasized leanness and who maintained a low body weight, such as gymnasts, distance runners, ballet dancers, divers, figure skaters, and synchronized swimmers, also reported a high incidence of pathogenic weight control techniques and/or

eating disorders (Brownell, Steen, & Wilmore 1987; Johnson, 1992; Rosen et al., 1986; Smith, 1980). It had been speculated that these athletes are considered particularly vulnerable to anorexia nervosa (Dick, 1991; Garner & Rosen, 1991; Holliman, 1991).

Recent findings, however, suggest that the risk of athletes developing eating disorders in sports emphasizing leanness and appearance is not as high as originally suggested. Among elite female distance runners, some research does not report a higher incidence of eating-disordered behavior than that of non athletes (Garner & Rosen, 1991); the same has been found to be true of gymnasts (Petri & Stoever, 1993). Others suggest athletes do not appear to exhibit greater signs or a higher incidence of eating-disordered behavior than that of the general population (Gustafson, 1989; Wilkins et al., 1991). Going one step further, Wilkins et al. (1991) suggest that the prevalence of indices of eating disorders among athletes is lower than that of the non athletic university sample.

> Compared to nonathletes, athletes rely less on dieting, possess higher self-esteem and body esteem and report greater confidence in terms of the way in which their bodies move and perform. Neither the athletes' competition level (intercollegiate, provincial, national, or international), or objective pressure to maintain a lean body weight imposed by the sport was linked to eating disorder.

Contradictory findings suggest that it is difficult to determine whether athletes in certain sports are more susceptible to eating disorders; or are more likely to not develop eating disorders.

Are Eating Disorders Caused by the Demands of Certain Sports?

It has been assumed that eating disorders have been caused by the demands of certain sports (Bickford, 1991; Gruber & Humphries, 1988). A collective review of studies on athletes in general and athletes participating in specific sports did not reveal that athletics contributed to, helped avoid, or delayed the onset of eating disorders (Dick, 1992; Hand & Dick, 1989a; Holliman, 1991, pp. 3-8). Two competing questions, focusing on a "cause and effect" relationship, have dominated the literature: (a) does athletic involvement cause individuals to become eating-disordered? and, (b) are individuals with eating

disorders drawn to athletics? Research in athletics has explored sports-related factors that may contribute to the development of eating disorders. However, research findings do not reveal any consensus.

The Influence of Sport-Related Factors

Factors that may increase the risk of athletes becoming eating-disordered include inappropriate methods of weight loss in response to perceived pressure, and the personal desire of the athlete to optimize performance and meet weight goals. Inappropriate weight loss methods may be sought in response to body image concerns, and personality traits that many competitive athletes possess--personality traits often considered positive such as perfectionism, compulsiveness, and high achievement expectations (Dick, 1992; Hand & Dick, 1989a; Johnson, 1992; Overdorf, 1990; Ryan, 1989). It has also been suggested that an athlete is particularly susceptible to disordered eating behaviors at specific times: (a) during her freshman or transfer year when she is dealing with the stress of new friends and routines; (b) following weight gain due to an injury that has kept her out of training or competition for an extended period of time; (c) when she is attempting to gain the competitive edge after being on a performance plateau; and (d) if a member of the team has an eating disorder, for it is thought eating disorders have an epidemic effect (Bickford, 1991b).

It has been suggested that individuals who are predisposed to developing eating disorders are drawn to athletics (Daly et al., 1991; Black & Held, 1991). Two contradictory reasons are given. It has been suggested that some individuals with full-blown eating disorders are drawn to athletics because the environment is congruous with personal achievement expectations, and it initially may offer greater tolerance for excessive dieting and weight control (Benson, 1991, p. 58). The opportunity to engage in relentless, excessive, vigorous exercise is attractive to the eating-disordered athlete. It is not uncommon for such an athlete to attend 2-1/2 to 3 hours of vigorous practice, and then run

for an additional hour or more (Overdorf, 1990). Diametrically opposed to the above position, is the possibility that physiological elements implicit in athletics provide protection against the development of Anorexia Nervosa (Holliman, 1991). Those struggling with issues of personal identity and control may turn to exercise and sport competition for solutions. Weight and Noakes (1987) speculated that distance running may prevent the onset of full-blown Anorexia Nervosa in females with a psychological predisposition towards the disorder and that success in competition may also serve as a "buffer" against developing an eating disorder.

It cannot be concluded that abnormal eating behaviors are a function of a particular sport (Daly et al., 1991, p. 7). Many researchers in athletics suggest the etiology of pathogenic weight-control behaviors and eating disorders among athletes may be related to factors such as: (a) making weight, e.g., weight-lifting, rowing, and horse racing; (b) presenting an aesthetic appearance, e.g., gymnastics, dance, diving, figure skating, and synchronized swimming; (c) and involvement in sports emphasizing body leanness for optimal performance, which would include all sports, and particularly distance running (Holliman, 1991; Johnson, 1992). There are factors relative to the nature of a particular sport, and to the nature of the athletic experience that may place certain pressures on an athlete that may induce pathogenic weight-control behaviors and may lead to an eating disorder (Holliman, 1991, p. 5). In a comprehensive literature review in Eating Disorders and Athletes: A Handbook for Coaches, (1991) Susan Holliman states,

> in looking at both sides of the discussion of eating disorders in athletes....no where is the implication that athletics is harmful to the individual. Quite the contrary: athletics helps build good sportsmanship, healthy body image, self-esteem, and overall well-being. Nevertheless many persons fail to enjoy athletic involvement. These are individuals who have problems with negative self-concepts, and therefore, resort to unhealthy behaviors such as pathogenic weight control techniques to prove their "worthiness" (p. 1).

Determining accurate figures in reporting the incidence and prevalence of eating disorders in the female population is difficult. In combination with the problem of eating-

disordered women honestly self-reporting their condition, a variety of instruments used to gather data, many of which have been administered with questionable methodology to non-clinically diagnosed eating-disordered females (but were reported as clinical eating-disordered cases), has resulted in conflicting and contradictory findings in studies on women athletes with eating disorders. Whether or not the female athletic population experiences a higher incidence of eating disorders than the nonathletic population remains in question.

Short-comings of Current Literature on Eating Disorders in Athletics

Literature on eating-disordered women athletes is characterized by two short comings: (a) controversey, and (b) an apparent insensitivity to the complex nature of the eating disorder experience.

Controversey

There is much controversy as to the incidence of eating disorders in athletes. This appears to be due to a number of reasons. These include: (a) research specifically dealing with athletes and eating disorders is in a state of infancy, (b) a consistent means of identifying eating-disordered athletes has not been established, (c) results of studies contradict each other, and (d) many researchers assume pathogenic weight control behaviors result in clinically-diagnosed eating disorders.

Infancy of Research on Women Athletes

Until 1976, most of the literature regarding eating disorders focused on the general population and not on the athletic population. When concern arose for eating-disordered athletes, the available literature dealing with the topic was not athlete-specific. Therefore, reported findings were probably not indicative of eating disorders in the female athletic population.

Inconsistency in Determining Who Is and Who Is Not Eating-Disordered

A second reason for controversy in the literature is that researchers have not used a consistent means of identifying eating-disordered athletes. Much of the eating disorder research reporting the incidence of eating disorders in athletes has employed self-report questionnaires. Often, these self-report questionnaires have been developed by the author of the study, and have had inadequate or non established psychometric properties, instead of the clinically established criteria set forth by the DSM-III-R (Note: The DSM-III-R has been revised, and is now DSM-IV) (Petri & Stoever, 1993; Ryan, 1992b). To state that all the self-report questionnaires are useless would be incorrect, but to obtain consistent results in studies it would behoove researchers to use the same diagnostic instrument--or at least those that are clinically established according to the DSM-III-R criteria. Higher rates of eating disorders have been reported in athletes when criteria less stringent than that of the DSM-III-R were employed (Petri & Stoever, 1993).

A variety of questionnaires has been commonly seen in the literature investigating the existence of eating disorders. The Eating Attitudes Test (EAT), a forced-choice Likert rating scale, is a frequently used questionnaire. The Eating Disorder Inventory (EDI) and the Eating Syndrome Inventory (ESI) have also been used. While the questionnaires have been administered both to eating disorder groups and healthy control groups, they include self-rating items which only approximate the DSM-III-R criteria (Daly et al., 1991). While, these surveys may be used as screening tools, they frequently overestimate the actual prevalence of eating disorders.

Contradictory Findings

Results obtained using various self-report instruments have frequently contradicted each other. Some studies report that college athletes have a higher incidence of eating disorders than the general student population (Holliman, 1991), while others report no

difference between the two groups (Wilkins et al., 1991; Petri & Stoever, 1993). Additionally, some of the published studies do not provide specific information regarding the methods used to determine prevalence (Holliman, 1991). Non-verified methods casts suspicion on the validity of such results.

Pathogenic Weight Control Behaviors vs Clinically-Diagnosed Eating Disorders

Researchers have erroneously assumed that pathogenic eating behaviors are synonymous with eating disorders, or that serious eating disturbances culminate in full-scale eating disorders. While this certainly is a possible scenario, one must be careful not to assume that it is the only final consequence of unhealthy eating behavior (Holliman, 1991; Petri & Stoever, 1993). To assume that individuals with unhealthy eating behaviors are suffering from the same concerns that are characteristic of patients with a clinical diagnosis of AN or BN is not appropriate (Garner & Rosen, 1991).

The erroneous assumption that unhealthy eating behavior results in clinical eating disorders, contradictory findings in the reported research, the use of inconsistent means of identifying eating-disordered female athletes, and the relatively infant stage of research on eating-disordered women athletes has resulted in controversy regarding the incidence of eating disorders in the female athletic population.

Insensitivity to the Complex Nature of Eating Disorders

A second concern that arises when one examines the literature on eating-disordered women athletes is the apparent inattention to the complex nature of eating disorders.

While collegiate athletes generally range in age from 17 to 22 years, the onset of an eating disorder often occurs during the early teenage years. At the same time it is well-known that a significant number of eating-disordered women experience their first episode well into adulthood (Woodside et al., 1989). The age of onset is from 11 to 62 years of age, with the most common age being between 13 and 22 years (Levenkron, 1982). An

eating disorder may begin at any time in a young woman's life, but it seems that a common age of onset is prior to college athletic involvement.

The primary eating-disordered population (97%) includes women who are single, Caucasian, college-educated, and from middle to upper-class intact families of more than one child. These women are typically highly motivated and exceptionally self-demanding. They set very high standards for themselves and strive for perfection. Emotionally, they feel that to be accepted they must win the approval of others (Hand & Dick, 1989a; Johnson & Tobin, 1991; Overdorf, 1990). "Personality characteristics of women athletes are the same as those of lawyers and doctors. These personality qualities are also found in people with addictions, including eating disorders. These characteristics include a high tolerance for pain and people-pleasing tendencies" (C. Black, personal communication, September 15, 1996; P. Bolin, personal communication, July 31, 1997). This profile is a paradox: Women that seem to have a strong will and appear to be in control of their lives, instead are controlled by a behavior that is life-threatening.

Eating disorders are multifaceted conditions that have more than one contributing component, including factors of psychology, culture, environment, socialization, and physiology. Also, the influence of the family and the effects of victimization contribute to the condition of an eating disorder. The eventual manifestation of an eating disorder is usually the result of a combination of interacting factors (Ryan, 1989).

Psychological Factors

Specific psychological factors are exhibited by eating-disordered individuals. These include perfectionism/dissatisfaction, dichotomous thinking, obsessive/compulsive characteristics, codependency, lack of self-identity, low image/self-esteem, and role conflict (Black, 1990; Hemfelt et al., 1989; Johnson, 1992; Kasl, 1989; Minirth et al., 1990; Ryan, 1989; Silverstein, Carpman, Perlick, & Perdue, 1990).

Cultural, Environmental, and Social Factors

Eating disorders are highly affected by socio-cultural factors and they are culture bound syndromes. It is important to note that the prevalence of Anorexia Nervosa and Bulimia Nervosa is common only in westernized countries. For example, both are as common in Tokyo as in the U.S., but they are virtually non-existent in rural Japan, where there is little westernization (Johnson & Tobin, 1991).

Socio-cultural factors may have a detrimental effect on the development of individual self-esteem. For the adolescent, two central developmental tasks are separation/individuation from the nuclear family and consolidation of self-esteem or identity. Many youth enter this developmental period feeling profoundly undifferentiated and ineffective. Young women in the United States have been living in a culture that prizes thinness. "We live in a society obsessed with size, weight, and image. This is readily apparent by merely observing the explosion of diet clinics, liquid fasting programs, advertisements for weight reduction vacations and spas, and the weight control pharmacopoeia at any local drugstore" (Zerbe, 1993, p. 7) Because women are defined culturally, and a woman's body image is a preoccupation of United States culture, women have learned to define themselves by their body size and physical attractiveness. For many women feeling fat is often equated with the belief that one is horrible and worthless (Black, 1990, p. 103). American culture that suggests that individual self-worth and acceptance are determined by external standards such as body image and appearance (Johnson, 1992; Johnson & Tobin, 1991; Overdorf, 1990; Ryan, 1989). These women are confronted with the message that acceptance from others and personal sense of self-worth are attainable through possessing/realizing an ideal body image. Attainment of such (body image or others' acceptance) make one desirable and guarantees one of happiness (Ryan, 1989). This message is erroneous, regarding one's self-worth as synonymous with "ideal" body

image. If self-worth is determined by "something" external, i.e., "as I achieve this quality (ideal body image) I am a good person," the individual is engaging in a codependent relational behavior (Hemfelt et al., 1989, p. 23). "Codependency is emerging as the problem in part because today's lifestyle, attitudes, and goals magnify codependent tendencies" (Hemfelt et al., 1989, p. 21).

Codependency is not an emotionally healthy way to relate to life experiences. Codependency is a fundamental issue in compulsive behaviors (Hemfelt et al., 1989, p. 20). Codependent individuals do not understand genuine acceptance to be a nonperformance-based quality, i.e., that one's value and acceptance is realized through something other than the appraisal/eyes of other people, and that personal worth far exceeds external standards--such as body image. It has been suggested that a condition needed for individuals to accept and believe that personal worth is determined by something more valuable than ideal body image, or being included in an elite peer group, is if genuine acceptance is modeled to them by individuals who are capable of exhibiting genuine acceptance and love. "Love is not a lecture class; it is a lab course...." (McDowell & Day, 1987, p. 34) you have to experience it to know it.

Because many people with codependent patterns of relating to people and life experiences do not possess a concept of acceptance and self-worth other than one that is performance-based, they believe the message that if they achieve thinness they will have accomplished self-control, discipline, beauty, and success. This message forms a strong concept that is often invalid (Ryan, 1989). The strength of the codependent way of relating in America has resulted in "a preoccupation with our bodies and beauty...that has supplanted other psychiatric conditions. Some mental health professionals even go as far as to wonder if the eating disorders are one of the late 20th century's primary mental health issues, much as hysteria was in Freud's time" (Zerbe, 1993, p. 8). Consequently, during this time many young women become preoccupied with body image and weight control and

begin highly restrictive diets in an effort to compensate for self-esteem deficits. Achieving thinness is tantamount to "being their own person" and feeling in control of their lives (Johnson & Tobin, 1991; Overdorf, 1990). A young woman's mission of striving for unrealistic body proportions is compounded by feeling a lack of control in obtaining a clear self-identity and sense of self-worth. Often they discover that the one aspect of their lives they can control is their behavior related to food (Overdorf, 1990). What they don't realize is that semi-starvation and weight regulation work against the strategy for achieving self-esteem through thinness. "The eating disorder is a failed solution--but nonetheless an attempt--to correct these very early deficits in self-esteem and strivings for independent functioning" (Zerbe, 1993, p. 171).

Physiological Factors in Response to Restricting and Binge-Purge Behaviors

Deprivation of needed calories over a prolonged period of time initiates psychological and biological reactions. As people become increasingly preoccupied with food, their moods become very unstable, and they become vulnerable to counter-regulatory binge-eating. Biologically, as the body drops below a biogenetically mediated level (set point) range of body weight and percent body fatness, the body compensates by conserving energy and trying to increase body weight to the set point (Molé et al., 1989). If a person's body fat drops below this range, a specific biological imperative ensues, which includes a persistent, intense drive toward caloric intake (Johnson & Tobin, 1991). To feel in control, the person needs to restrict their eating or diet, lose weight, and pursue thinness. The more they starve, the more their body compensates by increasing their drive to eat. Eventually, some stressful event occurs and they may begin binge eating because they are semi-starved. If they begin purging, they learn that they can temporarily quiet the drive to eat by taking in the calories, but then protect themselves from weight gain by purging before they fully digest the food. The purging behaviors allows them to pursue thinness and have the experience of eating whatever they want. Eventually, though,

purging may lose its function. Some eating-disordered women who purge regularly have difficulty not gaining weight--even if they are restricting calorie intake. The body, determined to survive, adjusts. The binge-purge cycle of bulimia ultimately becomes a coping strategy to manage a wide range of stressful events and moods and to manage painful emotions (Johnson & Tobin, 1991; Kubistant, 1982).

The Influence of Dysfunctional Family Dynamics

Dysfunctional families who are dealing with drug addiction, alcoholism, sexual abuse, and/or depression create environments that are particularly difficult for young people. It may be hard for these individuals to develop strong self-concepts and feelings of self-worth (McDowell & Day, 1987; Ryan, 1989; Whitfield, 1987). Persons from dysfunctional families may not have been equipped or provided with coping skills that are satisfactory in dealing with life stresses (Black, 1990; Kasl, 1989; Minirth et al., 1990). And, many of them derive their sense of self-worth in reflection of others' responses to them, particularly regarding physical appearance.

Effects of Victimization

Victimization is not uncommon in eating-disordered women. Twenty to 35% of persons with eating disorders report sexual abuse, and 67% of bulimics report sexual and/or physical abuse (Hall & Cohn, 1992; Johnson, 1992). "However, that figure does not include individuals who have repressed the memories of their abuse, so the actual figures are undoubtedly higher" (Hall & Cohn, 1992, p. 31). Sexual abuse results in long-term effects of embodiment and the formation of personal identity and psychological integrity. It has been suggested that females who were victims of rape and incest may be likely to develop disordered eating (Silverstein et al., 1990) and other self-destructive behavior. Eating disorders are common among survivors of sexual abuse (Black, 1990, p. 82). One supervisor of a treatment program in eating disorders said that 80 percent of the women at their intake interviews revealed that they were survivors of sexual abuse (Kasl,

1989, p. 185). Most women who have been sexually abused were victimized by a "trusted" person (Hall & Cohn, 1992; Kasl, 1989). Hall and Cohn (1992) write,

> being sexually assaulted, especially by a trusted adult, parent, or sibling is a terrifying, confusing, and horrific experience. Her emotional and physical survival depend on her not remembering the events or her feelings connected with what happened. An eating disorder is a highly effective way to protect repress...divert, numb, or confuse these feelings and memories" (p. 31).

Characteristics of eating-disordered individuals, such as revictimization, acting-out behaviors, suicide and suicide ideation, depression, and poor self-esteem are reported as long term results of sexual abuse (Beitchman, Zucker, Hood, Da Costa, Akman, & Cassavia, 1992; Cavaioloa & Schiff, 1988; Stovall & Craig, 1990; Young, 1992).

Being personally ill-equipped to healthfully manage life stresses, thinking that personal acceptance is realized through attainment of a desired body image, and the interaction of various other personal, familial, socio-cultural, environmental, and biological factors contributes to a female athlete's complex eating-disordered experience. Eating disorders are not a single illness caused by a single pathogen, but a complex syndrome composed of a distillation of a group of interacting factors unique to the individual. The factors that interact to contribute to a woman athlete becoming eating-disordered are not merely the demands of athleticism (Bickford, 1991b, p. 21). Furthermore, many of these factors are in effect early in an individual's life, and not late adolescence or early adulthood as some of the literature would lead one to believe. The predisposition to becoming eating-disordered likely often begins well before an individual is an athlete, and particularly before becoming an elite level athlete.

Summary

Determining accurate figures in reporting the incidence and prevalence of eating disorders in the female population is difficult. In combination with the problem of eating disordered women honestly self-reporting their condition, a variety of instruments used to gather data, and many of them administered with questionable methodology to non-

clinically diagnosed eating-disordered females (but reported as clinical eating-disordered cases), has resulted in conflicting and contradictory findings in studies on eating-disordered women. Whether or not the female athletic population experiences a higher incidence of eating disorders than the nonathletic population remains to be decided. It is well known that there are many factors, and not merely the demands of athleticism, that interact to contribute to a woman becoming eating-disordered.

The Concept of Love Hunger

"Love hunger" is considered by some professionals to be foundational in the development of codependency and addictions, whether that is eating disorders, alcoholism, and/or the use of some other problematic substance and/or involvement in some type of behavior in a life-controlling manner (Black, 1990; Hemfelt et al., 1989; Kasl, 1989; Minirth et al., 1990). Minirth et al., authors of Love Hunger: Recovery From Food Addiction, (1990) said that 90 percent of their patients with eating disorders and other compulsive behavior disorders have their problem rooted in multigenerational dysfunction. Only a small percentage of eating disorders are caused by physical, chemical, or metabolic problems; these causes could be determined only by a qualified medical physician (pp. 38-39).

In her book Women, Sex and Addiction (1989) Charlotte Kasl provides a model for addiction and codependency that illuminates the concept of "love hunger" (pp. 44-47), specifically focusing on origin and development. This model is the basis for the following discussion on the role the dysfunctional family has in the development of love hunger and the subsequent response of the victim in developing codependent tendencies and addictive behaviors. The model is not all-inclusive for each person, but it does provide a description that may be helpful in gaining understanding of the nature of addiction. A second model provided in Love Hunger: Recovery From Food Addiction (1990) focuses on the spiral

effect of addiction that functions to maintain the addictive cycle. Both models provide insight for the process of addiction as well as for the process of recovery.

Kasl's model was written with regard to sexual addiction, but the model provides insight for other addictions. It is well-known that persons with life-controlling behaviors are usually involved in numerous addictions (Black, 1990; Kasl, 1989; Minirth et al., 1990). Kasl (1989) provided an example:

> Switching from food addiction to romance addiction is a classic. It is not uncommon for a woman who is doing well in an eating disorders program to fall in love, lose her appetite, and suddenly drop out of the picture, going from total immersion in food to total immersion in a relationship. She is convinced that her eating problems have disappeared, but in fact she has merely switched addictions (p. 185).

While it is important to treat each specific substance and/or behavior an addicted person is involved in/with, it is more important to treat the "root" or core issues of addictive behavior. The specific addictive behaviors and substances are each problematic for they are personally damaging, and life-threatening in many instances. At the same time they are symptoms of the cause. The cause is the underlying core issues (Black, 1990; P. Bolin, personal communication, July 31, 1997; Hemfelt et al., 1989; Kasl, 1989; LeSourd, 1987; Minirth et al., 1990; D. Stengel, personal communication, 1992). Without a recovery program that addresses the nature of the addiction as well as the specific addictions, people often replace one addiction with another (Black, 1990). Furthermore, not only might one addiction replace another, one addiction often masks another. This is why it is important to treat each addictive behavior as well as the underlying emotional issues (Black, 1990, p. 93).

Addiction and codependency have their roots in survival skills women adopt to cope with childhood wounds--neglect, abuse, loss, shame, and negative programming. The model for addiction and codependency that Kasl provides in Women, Sex, and Addiction (1989) suggests that addiction and codependency proceed through the following stages:

1. Victimization.
2. Development of core beliefs.
3. Cultural, family and genetic filter.
4. Beliefs to reduce anxiety.
5. Operational beliefs.
6. Addiction and codependency as modus operandi (p. 46).

Victimization

Victimization involves any form of neglect, abuse, or betrayal that leaves a child's basic needs unmet or that violates the child's body, mind, or spirit. It can be willful or active abuse such as beatings, sexual violation, verbal or emotional violence, or rigid over control (Kasl, 1989, p. 44; Minirth et al., 1990, p. 40). "Active abuse is usually relatively easy to identify. It is the direct transmission of pain from one person to another. For instance, a husband who fails in his job comes home and kicks the cat, yells at his son, and hits his wife" (Minirth et al., 1990, p. 113). Victimization may also result from ignorance, death, accidents, war, catastrophe, early hospitalization, or isolation. These examples of circumstances that may result in passive abuse are harder to identify because covert abuse consists of acts of omission rather than acts of commission. In these instances the problem is what was missing. "To develop into healthy adults, children must receive time, attention, and affection from their parents. If any of these qualities was missing or compromised in their families of origin, then there was passive abuse" (Minirth et al., 1990, p. 40). While all parents make mistakes, victimization involves a parent's continued inability to understand and respond to the emotional and physical needs of a child, as well as overt abuse of the child (Kasl, 1989, p. 45). While most codependency, and subsequent addictive behavior is caused by the pain of abuse early in life, codependency can occur later in life as a result of painful experiences. Minirth et al., (1990) write,

> So if either of two things have happened to you: If you come from a dysfunctional family (where, for example, on parent was alcoholic or rigidly authoritarian), you may have entered adulthood with an empty heart. Or if you come from a normal family, but in adulthood encountered enormous setbacks, such as a disappointing marriage, a job failure, a death in the family, or a serious illness, you may now have an emotional deficit.

> This deficit can even be caused by the exhaustion and constant giving required by good things in your life: nurturing an active, growing family; career success that demands more and more of you; volunteer work that swells to take so much of your energy that you have no time left to recharge your own batteries (p. 38).

In Love Hunger: Recovery From Food Addiction (1990), Dr. Frank Minirth writes of the influence family dynamics has on the emotional development of a child.

> We're all born self-centered. We feel as if we're the whole world until about eighteen months of age when we figure out we're separated from our mothers. The older we get, the more we are drawn out of our self-centeredness by loving parents who discipline us and set an example. But if children aren't disciplined and aren't given good role models, they'll continue to want instant gratification.
>
> People reared in families that provide good nurturing and good role models out grow this natural selfishness. But growing up in a dysfunctional family with a lack of adequate gratification in childhood will leave a person ungratified in adulthood. These people try for self-managed gratification and turn to food because it provides instant gratification. Anyone who grew up in a dysfunctional family will have double difficulty here because he or she will have great emotional hunger and also will lack good self-gratification skills. The person who doesn't know how to provide self-gratification by building relationships or developing creative hobbies will repeatedly turn to the cookie jar for gratification.
>
> We have found this cause of overeating to be particularly difficult to detect because people often cover selfishness with a veneer of unselfishness. Many overt people-pleasers who work all day helping people in hospitals, in schools, or at home will then binge in private for self-gratification (p. 23).

A second effect dysfunctional family dynamics may have in the emotional development of the child involves the manner in which the child thinks about and deals with problems. Hemfelt et al., (1989) addressed this in Love is a Choice: Recovery for Codependent Relationships.

> If the child fails to change what should be changed, it must somehow be the child's fault. Magical thinking occurs. Examples include, "If I do such-and-so, this-and-that will happen." "If I am perfect, Mommy will love me." "If I do everything exactly right, Daddy will notice me."
>
> A child doesn't guess that perhaps Mommy or Daddy have problems all their own that stem from sources beyond the child's knowledge. Her only emotional bond is with them; logically, theirs is bound into her. In the child's eyes, anything Mommy and Daddy feel is necessarily generated by the child. "If Mommy is unhappy it must be because of me." "If I weren't a pain in the neck, Daddy wouldn't drink so much." "If I do X then Y will happen." Magical thinking. Codependent thinking (p. 68).

In addition to the inability to develop in an emotionally healthy manner, which contributes to love hunger, over time, victimization and neglect leave a basic emptiness, an unmet longing or hunger that becomes the driving force underlying addictions (Kasl, 1989, p. 45). The use of food in an eating-disordered person is to satisfy emotional hungers, hungers of which they may not be aware (Minirth et al., 1990, p. 13). "The essential source of all addiction is spiritual emptiness, a hunger for purpose and connectedness in life" (Kasl, 1989, p. 170).

Development of Core Beliefs

The child who is abused, neglected, or abandoned feels terrified, angry, or sad. She fears she will die. When no one responds to her feelings, she assumes that they must be bad. Unable to separate her feelings from her identity, she translates "My feelings are bad" to "I am bad." Eventually she becomes a "shame-based" person, meaning she feels defective at her core. Her core beliefs about herself are negative, and her script in life are written based on these beliefs. Because her emotional and physical needs are not met in childhood, even if her parents were physically present, she believes she will always be abandoned (Kasl, 1989, p. 45).

Cultural, Family, and Genetic Filter.

A child whose vulnerability has been betrayed is desperate for a way to relieve the tremendous pain of victimization (in response to active or passive abuse) and devise a means of control. That the child will adopt some kind of survival skills is a given. The exact nature of these skills is influenced by family experiences, innate temperament, chance events, education, and cultural messages that are influenced by class, ethnic background, religion, education, and the media. When she stumbles onto a behavior or stance that relieves pain or gives power, chances are she will adopt it. She may try to be cute, competent, tough, smart, or athletic; or she may adopt the role of troublemaker, or loser, hoping to stop her parents from hurting her to get their attention (Kasl, 1989, p. 46). The

more she hangs tough or creates trouble, the more her own needs go unmet. A basic human need is to have feelings validated. If they are unacknowledged, they go invalidated. Because a woman who finds a way to relieve the pain in this context is not taking care of her emotional self, her love tank is getting no refill at all (Hemfelt et al., 1989, p. 82). The roles a child will adopt in hopes of getting the attention of her parents are in addition to the roles she may adopt within her family system. In accommodating themselves to their environment, children within a family system adopt certain roles, or a mixture of these roles in an attempt to bring consistency, structure, and safety into a household that is unpredictable, chaotic, and frightening. These roles include the overly responsible (hero) child, the family placater, the adjuster, and the acting-out (scapegoat) child (Black, 1990, pp. 15-20). Because children of dysfunctional families spend all their energy dancing to the tune of the parents in the hope of being loved or to avoid shame and abuse they don't learn to know themselves (Kasl, 1989, p. 33). All they know of themselves is the roles they've adopted.

Beliefs to Reduce Anxiety

A child who does not receive the time, attention, and affection needed to prevent love hunger that leads to codependency (Minirth et al., 1990, p. 114) develops beliefs to reduce anxiety. These beliefs create internal devastation and hopelessness along with tremendous fear, anxiety, and depression (Kasl, 1989, p. 46). They give a child no sense of how to be loved or how to survive. They have no payoff. To escape them, the child puts her survival instincts to work to find a way to reduce anxiety and the pain. The goal is to stop being vulnerable to the parents or caregivers. The beliefs she adopts to reduce anxiety will be fundamental in her roles of codependency and addiction. The anxiety-reducing beliefs most likely to lead to an addictive modus operandi include: I don't need anyone; I don't care about these people; I'm tough; I can do it myself. It is far less painful to believe that you don't need someone than to have your longing for love and care

constantly denied (Kasl, 1989, p. 46). Of course, the child does not deliberately choose these beliefs; they are formed at all levels of consciousness. The beliefs feel like the truth, and they keep the devastating pain of victimization at bay (Kasl, 1989, p. 46).

The anxiety-reducing belief "I don't need anyone" submerges the child's need for nurture. However, this denial creates tension, for somewhere deep inside the wounded child continues to cry for attention and care. The need, like an underground stream, is ready to spring up whenever there is an opening. The codependent's anxiety-reducing statement "I will find someone to take care of me" (Kasl, 1989, p. 47) or "I will find something to help me feel important" also creates an internal tension, for it takes her search outside herself, causing her to lose control over her life (Kasl, 1989, p. 47).

Operational Beliefs

Operational beliefs are created by transforming core beliefs into a course of action. Developed over a long period of trial and error, operational beliefs lead to actions that will provide illusory escapes from the dreaded feelings associated with core beliefs. The goal is to feel wanted, powerful or, for the codependent, secure.

In order to achieve these goals, the child transforms the core belief by adding a conditional clause that provides a course of action. For the codependent who seeks security, the core belief "I am powerless over my life" becomes "I'll find security by being in control," for example. These operational beliefs become important survival tools. They create a pathway out of despair. Once she clicks into action, the woman feels more like a survivor and less like a victim; she now has a behavioral recipe for survival. "Underlying addictive and codependent behavior, there is always a primary drive for survival" (Kasl, 1989, p. 43). Paradoxically, "this recipe may eventually lead to devastation, for it is almost always a faulty foundation for living" (Kasl, 1989, p. 47). However, in the early stages of an eating disorder involvement--in bulimic behavior, for example--self-esteem , may be raised. The eating disorder may provide someone a way to be successful, such as

achieving the cultural ideal of thinness; but the increase in self-esteem will likely be short-lived. Hall and Cohn (1992) explain.

> Once the bingeing and purging cycle begins...the resulting metabolic consequences and habitual escape become an ever-deepening pit, eventually eroding any initial sense of self-worth and control. It is important to note that the rewards for thinness are only implied, and although diets and a smaller body promise a happier life, they rarely deliver" (p. 21)

As a woman puts her operational beliefs into action, they become her reality and her painful core beliefs are increasingly forgotten and repressed. Painful childhood memories are relegated to the unconsciousness or kept at bay. She might even say, "Oh, I had a wonderful childhood," or "Underneath it all I know my parents loved me. They did the best they could." The pain associated with the core beliefs is triggered only when life brings disappointment, rejection, or loneliness. That's where codependency and addiction enter. When the pain associated with the core beliefs is triggered, the woman uses her operational tactics to fend off the feared feelings. Thus, the panic response to rejection, hurt, and disappointment can be stopped with the addictive or codependent behavior (Kasl, 1989, p.49). Feel overwhelmed? Binge and purge. Feel dissatisfied with the tonight's tennis performance? Go run five miles.

In a dysfunctional family the child grows up learning to be scared. In defense, they take control of their lives to protect themselves from pain. As the child grows older, there are only a few battlegrounds where they can practice their control. Food may become one of them. In reality, people who are eating-disordered aren't in control because the food is in control and is killing them. However, they feel as if they're the boss (Minirth et al., 1990, p. 29).

The model in Love Hunger: Recovery From Food Addiction (Minirth et al., 1990, p. 60), used in Minirth-Meier Clinics addresses the spiral effect of addiction. Love hunger is the first domino that acts as a trigger mechanism in setting off the addiction cycle (Minirth et al., p. 56). The other dominoes include low self-esteem, the addictive agent,

consequences, guilt/shame, and self-hatred (Minirth et al., pp. 56-61). A brief discussion follows.

Low Self-Esteem (Emotional pain)

Low self-esteem is a symptom of having experienced a love-hungry childhood. Low self-esteem is felt as pain and an individual searches for an anesthetic to dull the agony. In searching for a way to make the pain bearable they seek an agent to anesthetize the pain. For some the agent is alcohol, sex, rage, or food, or a combination of substances.

The Addictive Agent

Food can act as a tranquilizer, either by raising blood sugar levels or by increasing the output of neurochemicals known as endorphins. Food can function in another manner. An obsession with food or dieting starts to crowd out other life issues, including other people, which may, in fact, be the eater's subconscious goal (Minirth et al., 1990, pp. 22 & 56-58). "An obsession with food drains energy and distracts a woman from the deeper issues of her life (Kasl, 1989, p. 187).

> People with heart hunger will stuff their stomachs, either constantly or periodically, in an attempt to fill their hearts, but no matter what they put into or force out of their stomachs, (in the case of the anorexic or bulimic), none of it touches the heart. In fact, the more effort and energy they direct toward their stomachs, the less emotional and psychic energy they can invest in those things that could legitimately fill their hearts (Minirth et al., 1990, p. 38).

Food as the addictive agent takes on a self-perpetuating life of its own. Whether or not it is physically addictive, it has become psychologically addictive for the person in pain (Hemfelt et al., 1989, p. 81).

Food is not only an anesthetic, but it is also the fuel that perpetuates the cycle with the pain of its consequences. The eating-disordered woman turns to food as an anesthetic to kill the pain and at the same time uses food as a means of self-punishment to generate pain. This dual function of food can cause an addiction to continue like a feedback belt;

the more a woman eats to kill the pain, the more they inflict punishment on themselves (Minirth et al., 1990). "The food does make you forget for awhile; but when you wake up you've got the painful memories (of life experiences resulting in love hunger), plus the guilt from what you've done to yourself" (Minirth et al., 1990, p. 58).

Consequences

The consequences of food addiction make sport and physical activity uncomfortable, difficult, and finally impossible. However, more damaging are the internal consequences. It is these that accelerate the addict into guilt and shame.

Guilt/Shame

People caught in the addiction cycle are under the burden of false, self-imposed guilt and shame. Shame can result from either false guilt, things over which the person has no control--such as poverty--or carried guilt such as when the child of an alcoholic carries the guilt for the alcoholic parent. Food addicts have a double burden to carry because they have the shame of the eating disorder behavior plus the old shame from their family of origin. The two flood together, and the shame is overpowering. Most doctors believe that at some level all addictions are shame-based (Minirth et al., 1990, pp. 59-60).

Self-Hatred

The obsessed woman feels the false guilt and the shame becomes unbearable. The food addict must confess it or carry it inside. Here, the self-hater will turn against herself and make self-destructive decisions. From the "I don't deserve to be happy" of the shame stage, the addict now passes to "I don't deserve to live." "The more shame addicts bear, the more they tell themselves 'I have no right to direct my anger at others,' so they turn it back on themselves" (Minirth et al., 1990, p. 60).

In summary, the woman feels pain of some sort, low self-esteem, guilt, dissatisfaction, pressure, or simply the sheer boredom life can bring. She finds anesthesia in food, but using food creates consequences--remorse, greater guilt, even more pain. The

woman finds relief once in her anesthetic, so she returns to it. The consequences increase to include depression, loss of health, and other harmful results. More guilt and shame, more remorse, more anesthetic. The cure has turned into the cause. The cycle is now rolling on its own, becoming more life-controlling without further input from the original pain of love hunger (Hemfelt et al., 1989, pp. 78-80). The addiction cycle both perpetuates and amplifies codependency. The addiction now maintains its own internal addictive momentum. "No longer can you ease codependency simply by identifying and dealing with the cause. You must do that, but you must also take definite steps to recover from the codependency itself, and you must break the addiction component that feeds it" (Hemfelt et al., p. 78). "The vicious cycle of addiction continues until we throw a monkey wrench into the system and change the patterns.... we break through the addictive miasma by connecting with our truths and releasing our buried feelings and healing our tired bodies" (Kasl, 1989, pp. 188-189).

Recovery: Treating an Eating Disorder as a Primary Illness

Most women with eating disorders experienced childhood victimization, either in an active or passive manner (Black, 1990; Kasl, 1989; Minirth et al., 1990). Some women with eating disorders came from a normal family, but encountered enormous setbacks during adulthood that resulted in an emotional defecit (Minirth et al., 1990). The eventual condition of an eating disorder is an expression of how the human heart deals with suffering and tries to overcome it (Zerbe, 1993, p. 5). Women with eating disorders had the courage and strength to endure. However they responded to the pain in their lives, it was their way of surviving. They found their lifelines and they used them well. In recovery, these defenses need to be released. Giving them up can be very difficult because they have been a major form of protection (Black, 1990, pp. 152-153). "The need to control one's body through the eating disorder must be reframed so that the individual learns there are other ways to self-regulate, soothe, and affect the body. This first

step...involves giving up the old modes of coping...." (Zerbe, 1993, p. 171). According to Priscilla Bolin, National Director for Clinical Outreach and Professional Development in the Field of Eating Disorders, "successful treatment of eating disorders requires that eating disorders be treated as a primary illness and an addiction" (P. Bolin, personal communication, July 31, 1997). This assertion is supported by Minirth-Meier Clinics (Hemfelt et al., 1989; Minirth et al., 1990), and other addiction specialists (Black, 1990; Kasl, 1989). How has this perspective of treatment for eating disorders developed?

For years, alcoholics that were treated by the mental health community were treated by a psychiatric model. Alcoholics were pathologized about "mom and dad," i.e., "if we can figure out what went wrong in your life then the drinking will stop" (P. Bolin, personal communication, July 31, 1997). Initially, this was the model of treatment for other addictions, including eating disorders (C. Black, personal communication, September 15, 1996). Analyzing the past did not stop the present behavior. People with alcohol addictions were continuing to kill themselves with alcohol while the analysis process was on-going. The alcoholics didn't stop drinking. What was found to work most successfully for alcohol recovery was the treatment of alcoholism as a primary illness. Alcoholism is both a primary illness, or disease and an addiction. The treatment of substance or behavioral addiction--substances such as food, alcohol and drugs other than alcohol; and behaviors, such as promiscuous sexual activity, gambling, compulsive shopping, or workaholism--as a disease requires that the physical, emotional, and spiritual needs of an addicted person get addressed (P. Bolin, personal communication, July 31, 1997).

The first step in treating an eating disorder as a primary illness is to stop the behavior in a loving way. Being eating-disordered is not about food. Being alcoholic is not about alcohol. But, to deal with what it is that is maintaining the eating or restricting behavior and drinking behavior, the behavior needs to stop (C. Black, personal

communication, September 15, 1996; P. Bolin, personal communication, July 31, 1997). If the person is an alcoholic, stop drinking; if eating-disordered, stop the binge-purge or restricting and/or excessive exercising behavior. Stop whatever acting-out behaviors the person is engaging in. The purpose in stopping the behaviors is to restore the woman's body so that the wounded emotions of the woman can be dealt with. Use of, or involvement in addictive substances or behaviors medicates and/or anesthetizes pain, insecurities, and self-loathing, for example (Black, 1990; P. Bolin, personal communication, July 31, 1997; Kasl, 1989; Minirth et al., 1990). Whatever acting-out behavior(s) the eating-disordered woman is involved in traps and "saves" the pain. This "saved" emotional pain perpetuates the addictive cycle. In addition to saving the pain the eating disorder behavior blocks the pathway to the emotions of the person and the pathway to God, or the spiritual life. These pathways must be restored for recovery and healing to take place (Black, 1990; P. Bolin, personal communication, July 31, 1997). Until the behavior is stopped, the emotions cannot be accessed, nor can healthy change take place. Change cannot occur when a person is constantly escaping through her eating disorder behavior (Kasl, 1989, p. 180; P. Bolin, personal communication, July 31, 1997). Ongoing addictive behavior would wash out any therapeutic process. If the eating-disordered behavior continues while experiencing emotional therapy, she'll not be able to integrate what is happening in therapy. Emotional issues and food issues are so closely interwoven that working on one strand alone would be impossible (Minirth, et al., 1990, p. 71).

When the behavior is stopped, the hurt emotions can be addressed. Claudia Black, known for her pioneering work with dysfunctional family systems and the author of several books including, Double Duty: Food Addicted (1990) addressed the importance of stopping the addictive behavior of an eating-disordered woman by using the metaphor of a cart to carry luggage for a trip.

The luggage, or bags, are the containers for unresolved feelings such as shame, loneliness, and abandonment, for example. The bags protect, hide, and contain the woman's feelings. The exterior of the bags, how they look, is the facade the eating-disordered woman presents to other people. The cart carrying the bags is the addictive behavior. The woman needs to be involved in her eating disorder, and/or other addictions(s), to carry the bags. The trip is the woman's journey through life. To unpack the bags, or let go of the feelings--which if kept in the bags perpetuates the eating-disordered behavior--the addicted woman must let go of the cart, i.e., her eating disorder and/or other addiction(s) (C. Black, personal communication, September 15, 1996).

Stopping the behavior may include the use of anti-depressant medication, especially for an individual with bulimia. Medication may be used, initially or long-term to correct brain chemistry, and therefore, minimize and possibly eliminate, the desire to engage in binge eating behavior. Biogenetic changes do occur in the brain in individuals with eating disorders and other addictive behaviors. The body becomes accustomed to the disordered eating behavior, and it is evident that it serves a purpose in the chemical interaction in the brain. While much research has been done on the effects of emotional trauma on brain chemistry, or the possibility of predisposition to developing an addiction due to an individual being born into a family practicing addictive behavior, it is not known for certain what is required for brain chemistry to change. What is known is that it does change. There is definitely a chemical response of the body that takes place when a woman is involved in an eating disorder (Ralph Carson, Ph.D., R.D., personal communication, 7/31/97). Purging and restrictive behavior both affect the brain chemistry. Participating in those behaviors results in mood alteration (P. Bolin, personal communication, July 31, 1997).

The second step in treating an eating disorder as a primary illness is to address the eating-disordered woman's wounded emotions (P. Bolin, personal communication, July

31, 1997). Experiencing emotional recovery is needful if a woman is to recover from food addiction. Overeating, starving, and purging are defenses erected to protect one from further hurt and pain. Unfortunately, these defenses don't work. Using food to manage feelings may temporarily distort one's perception of the truth, but it cannot alter the truth. Feelings may be disguised, denied, and rationalized, but a painful feeling will not go away until it has run its natural course (Black, 1990, pp. 128-129). The emotional pain perpetuating an eating disorder usually stems from relationships the person, who is now involved in an addiction, had with significant people. Until the hurt emotions are dealt with, people with a substance abuse problem or other addictive behavior will be attracted to people who assist in recreating the feeling that the person is addicted to. This means that the person with an addiction will likely remain involved in relationships that are degrading, humiliating, abusive, etc.--essentially, unhealthy. This pattern for relating to others was likely set in place through a relationship an individual, who is now addicted, had/has with a significant other. The relationship with the significant other may not have involved physical or other abuse. The hurt emotions may have been caused by acts of omission, i.e., not speaking words of love, acceptance, honor, and praise to a person during childhood. Or, the hurt could possibly have been due to the parent/guardian not spending time with the child in a way that the child's needs were met. The eventual addictive behavior during adolescence or adulthood may be the result of neglect, resulting from inadequate attention from parents/guardians. A well-intended father or mother, wanting to provide the "world," financially to their children, may have spent most of their time working at the office or traveling in their business endeavors, providing monetarily for the family, but not providing what the heart of the child most needed: love--through the giving of the parents' time and attention. (P. Bolin, personal communication, July 31, 1997). "The three ingredients every child must receive from her parents in order to prevent love hunger that leads to codependency are time, attention, and affection" (Minirth et al., 1990,

p. 114). Misuse of food and other behaviors occur together or interchangeably as an individual desperately tries to quell an inner emptiness created by some form of childhood abuse or neglect (Kasl, 1989, p. xi). Addressing the emotions of the person in a therapeutic manner usually involves dealing with feelings of one's past (Black, 1990, pp. 128-129). In Double Duty Claudia Black addresses what recovery is, and what it is not.

> Recovery is not a blaming process. Rather, it is a process of examining and speaking your truths. It is the process of breaking your denial, of acknowledging and taking ownership of your feelings and your life. In doing so, you many need to acknowledge pain from childhood and to be specific about where that pain came from. However, the goal is not to blame, but to be able to break the rules that have kept you in denial and disengaged from your self (pp. 24-25).

Children of dysfunctional families are fiercely loyal and are often frightened of betraying their families. But if there is any betrayal here, it is of the chemical addiction and codependency in the family. What is not being betrayed are those parts of an eating-disordered woman's mother and father that loved her. Parents wanted their children to be healthy and happy, but often their afflictions got in the way. The only betrayal that happens in recovery is when an eating-disordered woman betrays herself by not speaking her own truth (Black, 1990, p. 25).

Acknowledging the hurtful feelings of her past does not take away all the hurt, but it does cleanse one's emotional wounds and initiates healing (Black, 1990, pp. 128-129). An eating-disordered woman must walk through the pain in order to put it behind her (Black, 1990, p. 145). As this takes place, feelings of the present will begin to be experienced, and will not be as clouded by issues from the past. As connections begin to be made between feelings and food, recovery from bingeing, starving, and purging can begin (Black, 1990, pp. 128-129).

Emotional healing involves addressing codependent behaviors the person has been engaging in. "Codependency is looking for people, places, or things to make me feel better, or fix me" (P. Bolin, personal communication, July 31, 1997). For the athlete, this

might include using food to deal with her feelings, expecting success in athletics to "fix" her problems, or to provide her with a meaningful identity. "In recovery, you have to be able to identify the role that food--or lack of food--has played in your life" (Black, 1990, p. 85).

The third component in addressing eating disorders as a primary illness is that of spirituality. The spiritual component is necessary because the addictive behavior of an eating disorder thrives and flourishes in isolation. People with eating disorders isolate and withdraw themselves. They practice their binge-purge or restricting behavior in secret (P. Bolin, personal communication, July 31, 1997). The authors of Love Hunger: Recovery From Food Addiction reveal, "often a food addict will come to us and say, 'Just break my addiction. Let me make peace with food.' We can't do that. We've got to identify the food problems and then go down through all the layers to get to the core issues" (Minirth et al., 1990, p. 43). Food addiction is not just a matter of simple mathematics: if you take in more calories than you burn, you'll store it as fat. Food addiction is more than that; primarily, that no matter how much food a woman with an eating disorder stuffs into her stomach that food will never reach her heart and satisfy its hunger (Minirth et al., pp. 36-37). "The building block is: I've got to have a good relationship with myself before I can have a good relationship with people. I've got to have a good relationship with people before I can have a good relationship with food" (Minirth et al., p. 43). Spirituality is about being in relationship with others, and with God (P. Bolin, personal communication, July 31, 1997). "Spirituality is the only cure for addiction" (Kasl, 1989, p. xi). Treatment programs with a spirituality component allow the person recovering from an addiction to determine who God is, or their higher or deeper power (P. Bolin, personal communication, July 31, 1997). "Unfortunately, many people...who have been raised by perfectionistic, rageaholic fathers and therefore saw God as an angry, punishing father, have a distorted image of God. They need to decide: God is my Heavenly Father, waiting to embrace me.

God loves me. God accepts me. God understands all my problems and is waiting to help me with them" (Minirth et al., 1990, p. 141).

Step five of the Overeaters Anonymous Twelve Step recovery program is admitting "to God, to ourselves, and to another human being the exact nature of our wrongs" (Minirth et al., 1990, p. 75; Overeater's Anonymous, 1980, p. 4) Confessing to God is an important step in breaking out of denial, for in that a new perspective is gained. The realization occurs that the problem with food is one that must be dealt with. Second, the food addict confesses to another person. James 5:16 urges us to confess our faults to one another and pray for one another, "that you may be healed." The ultimate result of this process is freedom and wisdom; God has promised that knowing the truth will make you free, and Psalm 51:6 says that God desires "truth in the inward parts,...and in the hidden part [He] will make [us] to know wisdom" (Minirth et al, 1990, p. 75).

Relationship with people and with God becomes the person's way of relating, and connecting in the world rather than using food or another substance. The 12-step program proposed by AA, OA and other self-help groups provides an opportunity in a safe environment for people with addictions to learn and practice healthy relational practices. The relational process involves communicating honestly about the concerns and hurts in their lives, caring for one another, providing encouragement and re-parenting themselves (Black, 1990, pp. 26-28; P. Bolin, personal communication, July 31, 1997; Minirth et al., 1990, pp. 118-192). Because of the common elements people with addictions share, including emotional pain, a common ground is found. Trust is established, and the hope is that people will begin to relate authentically. This provides an opportunity to experience unconditional love. "Unconditional love loves even when the beloved needs to be disciplined, needs to be challenged, needs to be told, "No" (Minirth et al., p. 174). "Unconditional love works. Legalism does not. Doctors with years of experience in the recovery field will often say something like, 'When you boil down all that happens in

recovery, the fundamental principle is that people can be loved back into emotional health.' To have that happen, the patient must be surrounded by loving people" (Minirth et al., p. 173). Each person with an addiction deals with issues of discipline, love, and boundary setting. Because people with addictions were not parented in these areas effectively while they were under the care of their guardians, the task becomes theirs in their adult life. Food addicts must work for cure by saying good-bye to codependent relationships. Minirth et al., (1990) addresses this aspect of recovery, specifically regarding the relationships a food addict has with other people.

> The person who wants to say good-bye to a codependent relationship must ask ...herself: Am I willing to say good-bye to extremes in my relationship? Do I want to move toward balance? Am I willing to surrender rigid roles? The key to breaking free from codependency is achieving balance. The opposite of codependence is not independence, but healthy interdependence. Think of a teeter-totter. Dependence is on one end, independence on the other. If you are on either end, the teeter-totter is out of balance, and you are in a state of codependency. The central, balanced position is interdependence. Balanced, interdependent persons can be both dependent enough to allow trusting vulnerability and genuine intimacy in a relationship and yet at the same time be independent enough that they have their own emotional identity. They do not go up or down emotionally just because others go up and down (p. 114).

"Recovery leads to establishing a balance in life. It will offer you an emotional freedom from the past, so that the past no longer dictates your self-worth and esteem. It will give you options; it empowers; it brings you into the 'here and now'" (Black, 1990, pp. 139-140).

"Love hunger tries to replace people with food. Support groups remind one to put people in place of food. All along our journey of recovery we have been working to develop new habits to reverse that old order. If one is lonely, bored, or depressed--situations which in an earlier day would certainly have led to compulsive overeating--the member of a fellowship group can easily find someone to talk to or to do something with rather than reaching for food" (Minirth et al., p. 177).

Because addictive behaviors are multifaceted, treating eating disorders as a primary illness has many components: group therapy, 12-step group, one-on-one counseling, nutritional counseling, and other modalities, including nonverbal therapies such as art therapy and experiential activity, including massage and movement therapy (P. Bolin, personal communication, July 31, 1997; Zerbe, 1993, p. 172). For some addictive people, woundedness began at a preverbal time in their lives. Preverbal damage may be stored in the unconscious. To access that, nonverbal therapies have been found effective; moreso than verbal therapies (P. Bolin, personal communication, July 31, 1997).

In summary, treating eating disorders from a disease model, i.e., as primary illnesses, rather than from a psychiatric model that addresses "why" a person became involved in an addiction requires stopping the disordered eating behavior in a loving way (which may require the assistance of medication), addressing the emotional issues that are causing and perpetuating the codependent behavior, surrendering to God for help and establishing healthy relationships with people, and continuing a recovery process of physical and emotional healing, and spiritual growth (Black, 1990; P. Bolin, personal communication, July 31, 1997; Minirth et al., 1990).

The Qualitative Research Approach

This section on the qualitative research approach provides the following: (a) a discussion concerning the inadequacy of current research methods in addressing the complex nature of eating disorders in women athletes, (b) a brief overview of research method theory, (c) a brief discussion of the nature of qualitative research, (d) a synthesis of John Dewey's writings on the qualitative concept, and (e) and an overview of existential-phenomenology research theory and methods.

Inadequate Methods in Addressing the Complexities of Eating Disorders

Short-comings of current research methods on eating disorders in women athletes is two-fold: a) the complex nature of eating disorders has not been adequately addressed, and

b) findings have been contradictory. While current findings have identified the behavior of eating-disordered women, they have not addressed questions regarding the nature of eating disorders. Knowing that a woman athlete with bulimia binges and purges at least two times per week does not address the question of why she would relentlessly practice a behavior that would eventually render her incapable of meeting the demands of a sport that she trained to achieve excellence in for years. Knowing that a woman athlete with anorexia fasts or greatly restricts her nutritional intake does not address the question of why a woman athlete deprives herself of the energy (food) needed to meet the demands of her sport. The great British physicist of the 1800's, Lord William Thomson Kelvin (1824-1907) addressed the inadequacy of these research methods when he wrote,

> When you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind. It may be the beginning of knowledge, but you have scarcely, in your thoughts, advanced to the stage of science, whatever the matter may be (Kaplan, 1964, p. 72).

Knowledge of overt symptoms is inadequate in addressing the questions dealing with the complexities of a woman athlete's eating disorder experience.

What is the nature of the interplay of the various factors that lead to the onset of, and then perpetuation of, an eating disorder? How can a woman athlete sabotage the opportunity to become the best athlete she can be....and not realize it? What is going on within an eating-disordered woman that allows self-destructive behavior to be a consistent reality? Why can't she recognize the harm the eating disorder is doing to herself? Why can't she have foresight enough to realize she is likely not going to reach her athletic potential and fulfill her dreams if she continues the eating disorder behavior? What prevents her from being truthful with herself--that she cannot admit that she has an eating disorder? Do all eating-disordered women deal with the same issues, factors, and concerns in the same way? If they do, or don't, what are those ways? Is each woman's eating-

disordered experience unique or do women share similarities? Compiled into a suitable question: What is the experience of an eating-disordered woman athlete?

Research Method Theory

Research questions should drive data collection techniques and analysis rather than vice versa. Data collection techniques employed ought to fit and be suitable for answering the research question (Howe & Eisenhart, 1990). According to Strauss (1987) methodology concerns

> guidelines that should help most researchers in their enterprises. Researchers need to be alive not only to the constraints and challenges of research settings and research aims, but to the nature of their data. They must also be alert to the temporal aspects or phasing of their researches, the open-ended character of the "best research" in any discipline, ... and the local contexts in which the researches are conducted... Methods, afterall, are developed and changed in response to changing work contexts (pp. 6-7).

Methodology must respond to the purposes and context of research (Howe & Eisenhart, 1990). Salomon (1991) suggested four considerations to contemplate when embarking upon a research investigation: the paradigmatic assumptions the researcher adopts, the perceived nature of the phenomenon to be studied, the questions to be asked about it, and the methodology used. These four considerations are mutually independent. The kind of question asked determines the paradigm adopted. The literature on eating disorders suggests that there are complex inter-related factors in the eating disorder experience, both within the eating-disordered athlete, and among the factors contributing to the onset and perpetuation of an eating disorder. Within the woman athlete this interrelationship is between thoughts, feelings, and behaviors. Among the elements contributing to the eating disorder experience are factors of family, socio-cultural, biological, psychological, environmental, and athletic. The research approach that accepts interdependency of elements is one of a systemic nature (Salomon, 1991).

Nature of Qualitative Research

The systemic approach assumes that elements are interdependent, inseparable, and even define each other in a transactional manner so that a change in one may change everything else and thus require the study of patterns, not of single variables (Salomon, 1991). An underlying model appears to be one of billiard balls: each is independent of the other, has its own qualities, but interacts with the others to produce an effect (Salomon, 1991). No event operates alone, nor is it an independent event that "affects" others. Such events and actions mutually define each other. According to Altman and Rogoff (1987)

> ...the whole is composed of inseparable aspects that simultaneously and conjointly define the whole...the aspects of a system, that is, person and context, coexist jointly and define one another and contribute to the meaning and nature of...the event (p. 24).

No single event or action could be separated from the others or be given meaning independently of the others. Nor could one separate "causes" from "outcomes," independent from dependent variables. The literature on eating disorders (Black, 1990; Hemfelt et al., 1989; Kasl, 1989; LeSourd, 1987; Minirth et al., 1990; Rowland, 1984), suggests that components or factors within the individual and the environment have the potential of contributing to a person's eating-disordered experience. Each factor affects the "unit" as a whole. The whole (eating disorder experience) is assumed to be more than a sum of its components (or factors) and is characterized by the patterns and forms of the relations among them. The emphasis is not on single events or variables. The emphasis is not solely on behaviors, such as binge and purge, fasting or over-exercising. The emphasis is not solely on feelings, such as low self-esteem or helplessness, or on particular thoughts, such as distorted body image. Instead, the emphasis is on the way all of the factors relate to each other. This emphasis on the interaction of factors parallels the systemic, or qualitative research approach discussed by Salomon (1991). A qualitative research approach embraces the complexities of the experience of the eating-disordered

woman athlete because "the world in which we immediately live, that in which we strive, succeed, and are defeated is preeminently a qualitative world" (Dewey, 1930, p. 242).

John Dewey: Thoughts on the Qualitative Life Experience

The idea that a qualitative world regulates all thinking (Dewey, 1930; Garrison, 1996) maintains that one's primary relation to reality is through the experience of it, and not through knowledge. Experience of life precedes knowledge of life. Concerning living in the qualitative world, Garrison (1996) wrote

> The qualitative whole has a unifying theme that is captivating, compelling, and pervasive but inarticulate. For each individually [sic], the qualitative whole seizes us. It is well to say we fall in love; likewise, that hatred consumes us, or we feel anger grip us. In their intensity such passions possess us. Qualitative experience is thus first had, and only later, if ever, known...Being and having things in ways other than knowing them....are preconditions of reflection and knowledge. Their existence is...qualitative...all cognitive experience must start from and must terminate in being and having....(p. 399)

The qualitative whole is immediately had, had but not known. What has been experienced may become knowable, but only by the mediating process of inquiry (Garrison, 1996). Garrison (1996) continues

> The antecedent qualitative experience is passively had: it possesses us. Quality is experienced; initially it is felt rather than known. The reflective consequence...is knowledge... Knowledge, while quite real, is a secondary...product of reflective inquiry...Quality is the immediate "given." Knowledge, on the other hand, is created; it is the mediate product of inquiry (p. 400).

According to Dewey, one of the gravest errors of epistemology is the assumption that our primary relation to reality is one of knowledge. What is the meaning of a qualitative experience? Is it good or bad; well or ill? Clarification of the experience is part of the task of scientific, aesthetic, and moral inquiry (Garrison, 1996).

A second concern of Dewey's was that of experiential context. The quality of any experience is determined in part by the organism's needs, desires, and interests interacting with its environment. Living creatures are always already involved in the world of events. Dewey (1925/1981) maintained "the most perverse fallacy of philosophic thinking goes

back to neglect of context" (p. 5). Thinking becomes perverse when it ignores or forgets that all inquiry originates either in an affective intuition of a situational unity or in subsequent selections that discriminate objects from within the qualitative whole (Garrison, 1996). To ignore context is to ignore the selective discriminations that have led to the construction of the "hard facts" (knowledge) to begin with. The hard facts are not the antecedent starting point. Rather, the long process of discrimination, involving needs, desires, and purposeful interests is the starting point (Garrison, 1996). The qualitative perspective of Dewey, i.e., that the realm of meaningful experience is the fundamental locus of knowledge (Polkinghorne, 1989), finds expression in the research method, existential-phenomenology.

Existential-Phenomenology Research Theory and Methods

In this section the following topics are addressed: (a) existential-phenomenology theory, (b) the bracketing interview, (c) the existential-phenomenological interview, (d) methodological procedures, (e) the function of an interpretive group, (f) data analysis, and (g) methodological issues.

Existential-Phenomenology Theory

Phenomenology, a method used to investigate the subjective meaning of human experience was developed by the German philosopher, Edmund Husserl (1859-1938). Phenomenology was joined with the philosophy of existentialism proposed by Heidegger (Dale, 1993, p. 3). Together, existentialism and phenomenology seek to understand the meaning of an experience or a phenomenon from the perspective of the participant (Bogdan & Biklen, 1982; Polkinghorne, 1989). A phenomenological investigation is suited to illuminate the meaning of an experience, and, in essence, attempt to reveal the phenomenon of human experience as it exists (Howard, 1994; Pollio, Henley, & Thompson, 1997, p. 31). "A first person understanding is explicitly sought" (Pollio et al., 1997, p. 43). The world of lived experience does not always correspond with the world of objective

description because objectivity often implies trying to explain an event as separate from its contextual setting (Pollio, 1982). Phenomenological research does not separate the world from the person (Ginn, 1992). Existential-phenomenology seeks to describe experience as it emerges in some context(s) or, as it is "lived" (Thompson, Locander, & Pollio, 1989). The writing of Gabriel Marcel, Jean-Paul Sartre, Van den Berg, and Maurice Merleau-Ponty deal with the existential phenomenological approach to the human body. In these writings, a common theme is that of a person being in the world as the experience of an existing self (Dale, 1993). The concept of "Lebenswelt," or life-world, is one manifestation of the existential-phenomenology focus on lived experience (Valle & King, 1978; 1989). Husserl admonishes all who pursue science to make use of the wealth of data available to them through attending to the "Lebenswelt." This type of attending is the primary thesis and starting point of existential-phenomenology (Hale II, 1992, p. 18).

It is from this point that an understanding can be sought for the experience of a phenomenon through the world of the person who experiences it. A fuller understanding of any experience can be gained through objective observation of the phenomenon as it emerges in the accounts of those who have lived it (Hale II, 1992, p. 18). Colaizzi holds that objectivity in the study of human experience requires faithfulness to the experiential phenomenon being studied (Hale II, 1992). Phenomenologists seek to understand the phenomenon from the first person perspective, rather than from an objective, or third person perspective. The participants in a study are viewed as the "experts" in describing their own experiences (Thompson et al., 1989; Polkinghorne, 1989, p. 49).

How does a researcher obtain an accurate description of a person's specific experience? Brenner, Brown, and Canter (1985) suggested that the best way to find out something about people's activities was to ask them...interview them. Harré & Secord (1972) state, "it remains true that a person is the best authority as to his own states of mind, feelings, and the like" (p. 122). Interviewing allows the investigator to enter another

person's world to understand their perspective, i.e., personal thoughts, feelings, and attitudes (Dale, 1994). The interview is perhaps the most powerful tool for attaining an in-depth understanding of another person's experience (Kvale, 1983).

Quite a lengthy process has led to the development of the interview that describes human experience (Benny & Hughes, 1956; Dexter, 1956; Harré & Secord, 1972; Hyman, 1954; Jahoda, Deutsch & Cook, 1951; Kelly, 1955, pp. 774-829; Maccoby & Maccoby, 1954; Meltzer & Petras, 1970). An important contribution to human experience interview protocol was the "non directive interview" developed by the psychologist Carl Rogers for use with his client-centered therapy (Rogers, 1945; Bogdan & Biklen, 1982, p. 18). In in-depth interview technique, whether it is termed "unstructured" (Maccoby & Maccoby, 1954), "open-ended" (Jahoda et al., 1951) or "non-directive" (Meltzer & Petras, 1970), the purpose of the researcher is to understand, in considerable detail, how people come to hold the perspectives they hold (Bogdan & Biklen, 1982, p. 2). The phenomenological interview technique eventually became the research tool to collect data that describes experience from the frame of reference of the participants (Bogdan & Biklen, 1982, p2). To discover aspects of an experience, researchers focus on "what" of a person's experiences. To most effectively obtain a first person account of an other's experience, the researcher is assisted through a procedure called a "bracketing interview."

The Bracketing Interview

During an audio-taped bracketing interview, the primary investigator is interviewed about the topic of investigation. The audio tapes are transcribed and a thematic description of the interviewer's present understanding of the phenomenon is determined. The bracketing interview process assists investigators by attuning them to their presuppositions about the nature and meaning of the present phenomenon and thereby sensitizing them to any potential demands they may impose on their participants during the interview or in its subsequent interpretation. This process assists the researcher in externalizing the lived

experiences of the participants by identifying conceptual biases and suspending theoretical beliefs, preconceptions and presuppositions that may distort a researcher's interpretive vision (Pollio et al., 1997). Following the bracketing interview process, the researcher is better equipped to engage in the phenomenological interview process so that the primacy on "Vertehen"--the empathetic identification in which an other's experience is relived by the interpreter--is maintained (Pollio et al., 1997).

The Existential-Phenomenological Interview

Existential-phenomenological interviews focus on the identification of recurrent experiential patterns. The goal of a phenomenological interview is to obtain a first-person description of a specified experience of the respondent. The respondent, considered the expert on their own experience, largely sets the course of the dialogue. With the exception of the opening question, the interviewer has no a priori questions concerning the topic (Thompson et al., 1989). Interviews are open-ended and unstructured, requiring enough time to explore the topic in depth--usually lasting from half an hour to an hour, although sometimes as long as several hours (Polkinghorne, 1989). The role of the interviewer is to provide a conversational context, rather than a question and answer session, in which respondents freely describe their experiences in detail. The interviewee describes as precisely as possible what they experience and feel, and how they act (Kvale, 1983, p. 174). Detailed experiences are solicited through circular dialogue used by the interviewer.

In circular dialogue, descriptive questions employed by the interviewer flow from the course of the dialogue and not from a predetermined path (Polkinghorne, 1989; Thompson et al., 1989). The interview seeks descriptions of the experience itself without the participant's interpretation or theoretical explanations. The interview focuses on specific situations and action sequences that are instances of the theme under investigation so that the essence or structure of the theme emerges and shows itself. The production of phenomenological protocols requires that participant's awareness be redirected toward their

own experiencing (Polkinghorne, 1989). Questions and probes, using the words of the respondent, are aimed at bringing about descriptions of experiences. A question such as, "How did it feel to be out of control?", or a probe such as, "tell me more about...." keeps the dialogue focused on specific experience (Polkinghorne, 1989; Thompson et al., 1989). The ideal interview format occurs when the interviewer's short descriptive questions and/or clarifying statements provide an opening for a respondent's lengthier and detailed descriptions (Polkinghorne, 1989). By adopting a non-directive interview format, a major tenet of existential phenomenology is maintained: that understanding is at the level of lived experience (Thompson et al., 1989).

Methodological Procedures

Interpretation of the interview begins after the interviews have been transcribed from audio tapes. The transcribed interviews are the text from which interpretation ensues (Kvale, 1983). The exclusive reliance on verbatim interview transcripts reflects three methodological criteria: the emic approach, autonomy of the text, and bracketing (Thompson et al., 1989).

The Emic Approach

In an emic approach, the interpretation relies on the respondent's own terms and category systems of lived experience rather than on the conceptually abstract terms of the researcher (Kvale, 1983). For example, in one interview, a respondent might make repeated references to "escape" when she was binge-eating. Whereas, a conceptual definition of the term "escape" might be a response to stress, the respondent might mean being overwhelmed by helplessness, and feeling "panicky." Using the respondent's terms is one methodological procedure for staying at the level of the lived experience (Thompson et al., 1989).

Autonomy of the Text

The text of the interview is treated as an autonomous body of data comprised of respondent reflections on lived experiences. There are two methodological aspects of autonomous texts. First, the goal is to determine the personal contextual meaning of the event. This is accomplished as the respondent reconstructs the experience during the interview. No attempt is made to corroborate a respondent's descriptions with external verification.

A second methodological aspect of the autonomy criterion is that interpretation should not incorporate hypotheses, inferences, and conjectures that exceed the evidence provided by the transcript (Thompson et al., 1989). For example, if a respondent describes escaping through compulsive exercise, a conjecture that the escape "really" speaks to an underlying hatred of the athlete for her sport is inappropriate unless a discussion of the athlete's dislike for her sport occurs in the text. Theoretical explanations are abstractions rather than descriptions of lived experience.

Bracketing

In order to treat the transcript as an autonomous body of data, preconceived theoretical notions about the phenomena must be bracketed (held in abeyance). Bracketing does not imply a neutral view, for researchers must see and describe the world from some perspective. By bracketing, the researcher attempts to grasp, rather than impose, meanings emerging from the transcripts (Thompson et al., 1989). The methodological procedure chosen for bracketing in the present study was to conduct interpretation in a group setting.

The Interpretive Group

An interpretive group is composed of the researcher(s) and other individuals familiar with existential-phenomenological research. When interpreting a series of interviews, the group members seek to understand experiences as described in interview dialogues (Thompson et al., 1989). Through the interpretive process, the essential

descriptions of the experience under investigation are teased-out (Polkinghorne, 1989). The interpretive group facilitates bracketing by conscientiously questioning the assumptions each group member employs. If one member fails to bracket a preconception, other members of the group are in a position to recognize such an oversight. Group members determine interpretations from the interview transcripts. Each interpretation is evaluated by referring back to the transcript. Evaluation is conducted by asking follow-up questions. Asking, "Is the proposed interpretation at the level of the respondent's lived experience?" should assist the group in determining themes from respondent descriptions rather than from abstract or theoretical conjectures. Another important interpretive question is, "Does the proposed interpretation take into account previous passages of the transcript?" This question assists in maintaining contextual accuracy. Because interpretation is a continuous back and forth process of relating parts to the whole, no part of an interview is taken out of its overall context. Any given passage of the transcript is always understood in terms of its relation to the whole transcript (Pollio et al., 1997, p. 50).

Data Analysis

In existential-phenomenology, data analysis is the part-to-whole interpretation of the transcripts. The part-to-whole process occurs in two phases. First, the interpretive group seeks an individual understanding of each interview. Understanding each interview involves viewing each transcript as a whole and relating separate passages of the transcript to its overall content. The interpretive group usually assists in interpreting the transcript of one interview, the majority of the remaining transcripts are interpreted by the primary researcher (Thompson et al., 1989).

The second part-to-whole phase involves identifying common patterns across interviews (Thompson et al., 1989). These patterns of commonalties are referred to as global themes (Kvale, 1983). Each of the global themes must be supported by individual transcripts. Identifying themes is a means to describe common patterns in experiences

(Thompson et al., 1989). The identified themes are necessary for an experience to present itself as it is (Polkinghorne, 1989). Themes describe experiential patterns exhibited in diverse situations, and by looking across interviews, the researcher is able to consider a more diverse set of experiences and to recognize ways in which one situation bears an experiential similarity to another (Pollio et al., 1997).

Periodically the researcher returns to the group with tentative particular (idiographic) descriptions and tentative general (nomothetic) thematic descriptions. Descriptive interpretation notes prominent meanings, relations, and patterns in each interview. In addition, the meaning of figural domains (objects, people, and events) may be discussed (Pollio et al., 1997). At this juncture the group evaluates whether these descriptions are supported by the data and whether or not they provide a relatively clear description of participant experiences. The function of the group evaluates the interpretive procedures of a study as well as the fit between the interpretation and the data to assess the trustworthiness of the study (Pollio et al., 1997).

Thematic interpretation is a continuous process of going back and forth among various parts of the text in which earlier and later parts are continuously being rethematized in the light of new relations provided by an unfolding descriptive understanding of the text. A specific thematic structure describing experiential patterns and interrelationships among themes is the final product of an existential-phenomenological interpretation (Pollio et al., 1997).

Methodological Issues

Conclusions of existential-phenomenological research should be empirically based: research should strive to be free of personal biases, prejudices, and dogma. Other individuals should be able to agree that conclusions are justified by the data. Criteria should be provided for evaluating competing knowledge claims. Validity is established if

the reader would be able to see textual evidence supporting the interpretations, and if a first person understanding was obtained (Pollio et al., 1997).

The empirical evidence of existential-phenomenological research is respondent descriptions of lived experience. Any proposed interpretation must be supported by evidence. Requiring evidence maintains fidelity to interview transcripts. To prevent personal biases and prejudices, each interpretation must be "seen" by others.

Verification procedures, internal to the interpretive process, capitalize on insight and intuition (instead of replacing them with external criteria). Insight and intuition are empirically based: the "seeing" is of things-in-the-world (i.e., empirical phenomena) and not of things-in-the-head of the observer (Thompson, et al., 1989). What is "seen" are thematic patterns. This is determined by the reader seeing the relation between the interpretation and the data. Thematic patterns may vary among group members. Variation is not problematic, because group members discuss each proposed claim in terms of the transcript data and the following evaluative criteria:

1. Interpretations must be based on the respondents' own terms.
2. Passages must be taken in their proper context.
3. Theoretical explanations and abstractions must be avoided.
4. Support for proposed themes must be available in all transcripts (Thompson et al., 1989).

Summary

The purpose of phenomenological research is to exhibit clear and accurate descriptions of subjective human experience (Claytor, 1995) from a first-person view (Thompson et al., 1989). The research strategy is holistic, and seeks to relate descriptions of specific experiences to each other and to the overall context of the life-world. The research goal is to give thematic description of experiences (Thompson et al., 1989). Polkinghorne (1989) describes a general three-step procedure for conducting a phenomenological investigation:

1. Gather a number of descriptions from people who are having or have had the experience under investigation.

2. Engage in a process of analyzing these descriptions so that the researcher comes to a grasp of the constituents or common elements that make the experience what it is.

3. Produce a research report that gives an accurate, clear, and articulate description of an experience. The reader of a report should come away with the feeling that "I understand better what it is like for someone to experience that" (p. 46).

Ideally, the current phenomenological research study captures the essence of the experience of eating-disordered women athletes through their own words. The goal of this endeavor was to assist readers in developing a more complete understanding of the particular phenomenon of being an eating-disordered female athlete.

CHAPTER 3

METHODS AND PROCEDURES

Following is a detailed explanation of the process followed to complete this study. Included in this section is discussion of: (a) a pilot study to assess research procedures, (b) the bracketing interview, (c) the participants, (d) the measures used to protect the identity of the participants, and (e) the methods and procedures used to gather data and analyze the transcripts.

Pilot Study

A pilot study was conducted during Spring, 1995, to determine if the methods and procedures were adequate for the purposes of this investigation. A phenomenological interview technique was used to procure a description of the eating disorder experience of a 19 year-old NCAA Division I track and field distance runner. This athlete, "Sarah," participated in four audio-taped interview sessions, lasting one to one and a half hours each. I transcribed the tapes verbatim. During the reading of the transcripts, Sarah was consulted to clarify the meaning of certain accounts of her personal experience. Data analysis for one of the transcripts was conducted with the assistance of an interpretive/qualitative research group. The other three transcripts were thematized by me. The detailed summary of the thematic analysis of the pilot study are presented in Tables 4.1-4.2 (Appendix B).

Upon completion of the pilot study, slight revisions were made to the protocol for data collection and analysis. It was determined that it was not necessary to designate a particular number of interviews to solicit a representative account of the experience of the eating-disordered female athlete. Instead, if a participant was engaging in Bulimia

Nervosa, she would be asked to talk about at least two episodes of her eating disorder behavior. If the participant was anorexic, she would be asked to share her experience as an anorexic, because the number of episodes does not usually represent an anorexic's life experience; it involves a life of consistent restricting and over exercising behaviors--it seems to be a "routine" way of life.

Bracketing Interview Process

To account for researcher bias and attempt to safe-guard against subjective influence during the interviews with athletes, I participated in two audio-taped bracketing interviews, one in 1995 and the other in 1997. While both interviews addressed my own eight year long eating-disordered experience, the second interview (1997) process used the interview question selected for the study under investigation. The interviews were conducted by two different Ph.D. graduate students who were experienced in the phenomenological interview technique. I transcribed the audio tapes. The data analysis process was undertaken to identify the themes of my eating disorder experience. The thematic analysis process was assisted by members of a qualitative interpretive research group. The purpose of the bracketing interview was to provide a thematic description of my eating disorder experience. Determining a thematic description attuned me to my presuppositions about the nature and meaning of being an eating-disordered intercollegiate female athlete (Pollio et al., 1997, p. 48). Identifying personal biases enhanced my awareness, and assisted me in recognizing subjective inferences I might bring to interviews with the participants, and later, in the interpretive process in this investigation. This awareness assisted me in maintaining focus on the "lived" experience of the participant rather than my own "lived" eating disorder experience. The following bias statement was then developed:

> Until I began a recovery process in 1988, my senior year and final season of intercollegiate basketball, an eating disorder controlled my life. That control manifested in self-destructive behavior and social isolation. Recovery from my eight-year battle with Bulimia Nervosa was a struggle. This time of struggle was

addressed by the apostle Paul in his writing of Romans 7:19 "For the good I will to do, I do not do; but the evil I will not to do, that I practice. I see another law in my members, warring against the law of my mind...." I was involved in active recovery for four years before the binge eating and purging by excessive exercise ceased. The struggle to recover was more intense than any athletic challenge I had ever encountered. Letting go of trying to be in control--which was fulfilled only when I was out of control with my eating disorder--occurred as I surrendered control to God in the person of Jesus Christ and began a process of restoration spiritually, emotionally, and physically.

My personal experience as an eating-disordered intercollegiate athlete was perhaps my greatest asset in establishing rapport and enhancing circular dialogue while interviewing eating-disordered women athletes. Paradoxically, my own experience provided a challenge to me to stay with the "lived experience" of the athletes I was interviewing. When I am involved in conversation about being eating-disordered, I am reminded afresh of the life-controlling influence of my eating disorder. Memories that are vivid and emotions that are intense are evoked. I recognize my familiarity and sensitivity to the eating disorder experience. In an attempt to stay focused on the experiences of the athletes I interviewed, I was consciously careful to probe athletes for a more descriptive account of their experiences rather then respond with an affirmative "uh huh" when they asked, "do you know what I mean?" I made a conscious effort to question the familiar. My familiarity with the eating disorder phenomenon did not ensure that I automatically understood the personal experiences of the female athletes of this investigation. I questioned the familiar in an effort to describe their perceptions and experiences rather than to frame their responses within the context of my own perception as a former eating-disordered female athlete (DeeAnne Pearson).

Description of the Participants

Five intercollegiate female athletes, including the pilot participant (Sarah), volunteered to participate in this study. Due to the similarity between Sarah's experience and those described by the other athletes, I decided to include Sarah's interview data with that of the other participants when conducting the thematic analysis. Ranging in age from 19 to 23 years of age, these athletes had been clinically-diagnosed with Bulimia Nervosa (BN) or Anorexia Nervosa (AN) or both. The athletes were in any of several stages of their recovery process, i.e., they were still involved in the bulimic or anorexic eating disorder behavior, or they had recovered to the degree that utilizing food for reasons other than physiological hunger or inappropriate restriction of food consumption had ceased to be a consistent behavior. All five athletes received professional intervention for their eating-disordered (ED) experience, and had been in the recovery process for less than 2 1/2 years. One athlete had been in recovery just seven months at the time of her interview. During the

initial stages of their respective recovery processes, four had spent time (duration ranged from 10 to 30 days) in an eating disorder inpatient facility, and one had received outpatient assistance. Following this initial intervention three athletes relapsed into a worse state with their eating disorder, and two athletes continued their recovery with the assistance of at least two external resources in which they participated weekly. These external resources included involvement in Overeaters Anonymous, outpatient treatment at an eating disorder facility, cooperation with a food sponsor, involvement in an eating disorder group at a university counseling center, and involvement at a university in a group of NCAA Division I athletes who met weekly for the purpose of assisting each other as they dealt with issues of nutrition, chemical dependency and other personal concerns. All athletes were college students with freshman to senior status, at the time of their interviews. One athlete, early in her recovery process, was competing actively at the time of her interview. However, this athlete, a distance runner who was slated to compete in two remaining seasons during that school year, was granted red-shirt status for indoor track season--which was at the same time the interviews took place--was of red-shirt status during the outdoor track season, and transferred to a different university and did not compete the following year. The other athletes, at the time of their interviews, were either retired from their sport or were not competing. All of the athletes retired early from their respective sports and did not complete all four years of college athletic eligibility. Four participants retired due to eating disorder complications. Retirement of the other athlete was due to a sport-related injury. This athlete's eating disorder experience began after she suffered the career-ending injury. Research participants were identified through personal contact as a result of my experience as a graduate assistant in sport psychology with the University of Tennessee, Knoxville, Intercollegiate Athletics Department for Women.

Profiles of the Participants

Sarah

"Sarah," the oldest of two children was born in 1976. A high achiever in various facets of high school life, Sarah excelled socially, academically, and athletically. Socially, she was popular, and was a member of the "in" crowd. As a ninth grader she was invited to all the parties. Everyone liked her. Throughout high school, she was involved in various activities and projects, such as yearbook and drama. She was involved in everything and anything. "I wasn't just a member of a club; I was usually a leader or the president." Experiences in leadership positions for different student organizations in high school included President of the Student Council, Vice President of the National Honor Society, a member of the enrichment advisory board, and year book staff editor. Academically, she held a 3.9 gpa while taking advanced classes. In athletics, she competed at the state championships three years.

When she failed to qualify for the state track meet her senior year in high school "and didn't care that I didn't qualify, I knew something was wrong." Sarah admitted herself to an inpatient eating disorder facility at a hospital during the Summer, 1994, one month following her high school graduation. Diagnosed with Bulimia Nervosa, she spent 27 days at an inpatient facility. She traced her binge-purge behavior back to the Fall of 1992 when she was a 16 year-old junior in high school.

Recruited to compete as an intercollegiate track and cross-country athlete, she competed during the Fall of 1994, but was of red-shirt status Winter and Spring, 1995, due to a relapse with her eating disorder, Bulimia Nervosa. Sarah's interview occurred mid-way through her freshman year of college, during the time of her relapse with Bulimia Nervosa and when she was of a red-shirt status, athletically, February-March, 1995.

Jennifer

A multi-sport athlete, Jennifer's life was one where athletic involvement was the "norm."

> I never considered my three-hour practices as a work-out time, that was just the normal course of my life. I had been a gymnast for 13 years--began that at the age of two for therapy for my feet--and was told I could never run or have any coordination. I competed at level 9, which is just below elite. [Following elite is the Olympics.] I placed 4th in the vault at the regional meet, and in my home state I won a lot of the age group meets.

Jennifer played soccer her freshman year of high school, and softball her freshman and sophomore years of high school. Her performance as a softball athlete merited being selected to the league all-star team, winning the Golden Glove Award and having the highest batting average on her high school team. She was a cheerleader all four years of high school, and tried track briefly, "but I didn't have time to do that." Jennifer began diving (1m and 3m) her sophomore year of high school. As a diver she competed for her high school and in the U.S. Diving age group competitions. Within a year she was placing in the top 10-15 in meets with girls "that I had been reading about in magazines. These girls had been diving since they were eight or nine years old." As a high school senior, she placed second at state and was her team's Most Valuable Diver. As a college diver she finished first in both of her meets, and second at an international meet. She had attained the first of two go-arounds of scores that would qualify her for the NCAA Division III National Diving Competition in the Spring of 1996. At mid-season, January of 1996, three days following her second place finish in Puerto Rico, her athletic career was suddenly terminated with an injury to her back.

In May of that same year she was diagnosed with Anorexia Nervosa. She lost 40 lbs from late February until she went to inpatient treatment in mid-July. Her lowest weight was 96 lbs. Being diagnosed as anorexic was baffling to Jennifer. "In high school, whether I was with guy friends or girl friends, I always said, 'I love food too much to ever be anorexic.' And, you know, for this to happen."

Other characteristics of Jennifer include academic excellence and extra-curricular involvement. She graduated from an academically intense private high school with a 4.0 gpa and was a pre-med student during her freshman year in college. During her freshman college year she was named to the Dean's list for academic achievement. She was involved in numerous extracurricular high school activities including various clubs, year book, was the senior editor for a literary magazine, and was a member of Teen Board of her city. Involvement in Teen Board required 150 volunteer hours during her high school senior year. Employed since the age of 12, she held a job during her freshman year in college while she was diving and studying pre-med. At the time of her interview during June of 1997, Jennifer had been in active recovery from Anorexia Nervosa for 11 months.

Julie

Diagnosed with Bulimia Nervosa three weeks into the cross-country season her junior year, Julie received inpatient treatment at a residential treatment facility. She was an All Conference track performer during her freshman indoor season in the distance medley relay, and during her sophomore outdoor season in the 1500m. At the time Julie was admitted to treatment for her eating disorder her coach said, "she was just ready to advance to the next level in competition. She was running terrific times, and looked like she was ready to have her best season ever." Athletic success had been a familiar experience for Julie. In high school track she was state champion in the mile her junior year, and in the 800m her senior year. From her sophomore-senior years, Julie had competed in two events at the state track and field meet. A multi-sport high school athlete, she competed in basketball, volleyball, and cross-country in addition to track. In addition to her state championship in track her senior season, she was named to the All-region volleyball team.

Extra-curricular activity included more than athletics. "I was involved in every kind of club you could think of--everything that was possible to do I tried. I was very social, and always tried to be everyone's friend."

Academically, Julie was named to the All Conference Academic team her sophomore season while studying pre-med in college. This was a continuation of her stellar high school achievements. She was named the scholar/athlete of her school, a private Catholic school, her senior year and was a member of the National Honor Society.

From a middle-class family, she was the second and youngest child and only daughter. Her brother, two years older than she is married. Neither of her parents nor her brother had attended college. At the time of her interview during Spring 1996 Julie had been in the recovery process from Bulimia Nervosa for eight months.

Kaye

As a sixth-grader Kaye had aspirations of cheering college football, and being an Olympic gymnast. Kaye determined that the means to achieve those goals was to be small. "To stay small meant to not eat." She began restrictive eating behavior in the sixth grade.

> I was just a very very picky eater; finicky eater. I don't like to eat in front of people.... never never liked to eat at church potluck dinners or go out to eat. I would eat more when I was alone, which at that age wasn't very much. For some reason I just felt like I wasn't supposed to eat in front of people.
>
> When I was 11 years of age, sixth grade, I thought it was so neat to not eat lunch; just sit there with the rest of my friends. I was just a little girl, but I would never eat lunch. I thought it was cool to save the money my mother gave me for lunch every day so I could buy my mother a birthday present, or my parents Christmas presents rather than eat lunch.

In high school the eating behavior developed into a restricting-bingeing pattern. "I can see a pattern where I would eat lightly all week, and then eat real heavy on the weekends; like Saturday afternoon, eat pizza and french fries. But, I never did anything with the food [purge]." Excessive exercise began in high school, following the break-up of a two-year dating relationship "that was bad." An advanced student throughout high school, she graduated as the valedictorian of her class.

In college, her life revolved around making the football cheerleading squad. She took just enough classes to be a full-time student, and even though she didn't declare a major until her cheerleading career was terminated at the end of her junior year, she

enrolled in science classes such as physics and chemistry, and, aerobics and weight training, achieving a 3.9 gpa as a pre-med student. Her over-exercise habits increased in intensity, and she worked-out at least eight hours a day. Her class and exercise schedule was created with the goal of avoiding food and being too busy at meal times to eat. To compensate for low levels of energy she began taking pep pills, Vivarin, Acutrim, Dexatrim, "diet pep," and "ripped fuel" during her freshman year of college. Throughout her first three years of college, she oscillated between anorexic and bulimic behavior with weight gains and losses of 20 lbs within a couple of weeks' to a couple of months' time.

Following outpatient treatment the summer preceding her junior year, she was able to maintain a healthy eating pattern for eight months. Following a binge-purge episode, she relapsed into bulimic behavior. During this time her body quit responding. The pep pills no longer worked and she couldn't keep the weight off, in spite of purging everything she ate--causing much scar tissue and internal damage. Her body began to fall apart, "everything all the time hurt on me." A good Christian girl who never drank alcohol, she began drinking and getting drunk. Her actions in a drunken state, led to the break-up of a dating relationship and the loss of friends. Because of a conflict with their coach, Kaye joined the other cheerleaders in their decision not to try-out for cheerleading her senior year. "It was an easy way out for me. I wouldn't have made it had I tried out. My body couldn't do it." She lived-out the goal she had set as a sixth-grader for one year, but "I was really really sick. Then, cheerleading was over." At the time she was at an all-time low she met the man who eventually became her husband. Through his encouragement, she began recovery, and has been working the recovery program ever since.

Kaye is the oldest of three girls, and is the daughter of a very successful high school football coach. Her mother worked in banking throughout Kaye's time at home. From a small community, she became an instant celebrity when she made the college football cheerleading squad.

At the time of her interview, Kaye was a fifth year college senior, on schedule to graduate Spring of 1996. Involved in active recovery from her eating disorder since July 26, 1994, she has been actively "working the program--going to OA (Overeater's Anonymous) and following the guidelines of my nutritionist" for 2 1/2 years.

Tu

Ranked in the top 50 in the U.S. in age group tennis during her junior high school season, Tu was enjoying great success. She played #1 for her high school tennis team, and was the Most Valuable Player all three years that she played high school tennis. She won district and made it to the state championship tournament her first three years of high school. During her senior year in high school, Tu underwent surgery for patellar realignment. Recruited to compete at the NCAA Division I level, she struggled through a challenging freshman year. Her knee required extensive rehabilitation and she found it difficult to "fit in" with her teammates.

> I am an only child, and was kind of a "homebody," and all the girls on the team were kind of wild and I didn't like that. I was just so sad and depressed my freshman year because I was away from my family, and away from my friends. Plus, I wasn't playing well.

Her involvement in unhealthy behaviors began with her eating habits during late Spring of her sophomore year. By Summer, she was over exercising and using Dexatrim. During her junior year she began to vomit her meals.

In spite "of all that craziness" Tu seemed to have finally returned to playing with the confidence that she had known as a high school athlete during the Fall season her junior year of college. Following her best performance in college--placing second at a large tournament against some very good players--she was found unconscious on her dorm room floor by her teammate. She had overdosed on Dexatrim. Rushed to the hospital, she was in a coma, and then revived six hours later. This began her recovery process from Bulimia Nervosa. She was admitted to an inpatient eating disorders facility immediately following her hospitalization for her near fatal overdose.

An only child of Asian descent, Tu came to the U.S. at the age of three from a Vietnamese refugee camp in Thailand. Her father is a civil engineer and her mother is a homemaker. Tu was interviewed during May of 1997, one and one-half years following in-patient treatment for her eating disorder. See Tables 3.1-3.4 for a descriptive summary of the athletes of this study.

Measures Used to Protect the Identity of the Participants

Due to the highly personal nature of this investigation, measures were taken to: (a) inform the participants of the purpose of the study, (b) inform the participants of the risks and benefits of participating in the study, and (c) protect the identity of the participants throughout the research process.

Informed Consent

During the first interview session with each participant, the athlete was verbally informed regarding the nature of the study, the benefits and risks of participating in the study, the measures employed to ensure confidentiality, and the voluntary nature of the investigation. The participants each read and signed an informed consent statement (Appendix A) prior to participation in the study. The informed consent statement detailed the nature and scope of their participation, the methods employed to ensure confidentiality of the data, the process that would be followed to collect and analyze data, and how the data would be used for the writing and publication of the research study, including the doctoral dissertation. Each participant proof read the results of the study and verified their accuracy.

Risks And Benefits

There were no physical risks anticipated, and the psychological risks of participating in this investigation were expected to be minimal. However, because of the deeply personal nature of the investigation, cautionary measures were taken. The

Table 3.1. Summary of Sport Participation of Five University Women Athletes

Name	Sport	Years of NCAA Competition	Season @ Intervention for ED	Competitive Status @ Intervention for ED
Julie	Cross-country/Track	2 years	Fall '95, junior season, CC	Top performer on team
Jennifer	Diving	1/2 years	Post freshman season, Summer, '96	Retired, due to injury
Kaye	Cheerleading	3 years	Summers '93 & '94: pre & post junior season	'93: Competitive best '94: Retired
Sarah	Cross-country/Track	1/2 years	Summer '94, post high school	Team member
Tu	Tennis	2 1/2 years	Nontraditional Fall season '95	Best ever @ college level

Table Key:
ED: Eating Disorder
CC: Cross-country

Note: All seasons, i.e., Fall, Spring, Summer; and class year, i.e., freshman, sophomore, junior and senior refer to college/university seasons and classes, unless otherwise indicated.

Table 3.2. Summary of Eating Disorder Behavior of Five University Women Athletes

Name	Type of ED	ED Behaviors	Beginning of ED	Awareness of ED
Julie	BN	R, EE, B-P: 5x/day	Fall of freshman year	Fall of '95, junior year
Jennifer	AN	R, EE	Winter '96, freshman year	Summer of '96, freshman year
Kaye	AN, BN, Bulimiarexia	R, B-P, EE, L, D, P	Restricting pattern began in 6th grade	'94, junior year
Sarah	BN	B-P	junior year in high school	Spring, senior high school year '94
Tu	BN	EE, R, B-P, P (Dexatrim)	Spring of sophomore year , '95	Spring of '95 told Teammate

Key for Eating Disorder Behaviors:
R: Restricting caloric intake
B-P: Binge-purge by vomiting
EE: Excessive Exercise
L: Laxatives
D: Diuretics
P: Pills, i.e., Dexatrim, Acutrim, pep pills, ripped fuel

Key for Type of Eating Disorder:
ED: Eating Disorder
BN: Bulimia Nervosa
AN: Anorexia Nervosa

Table 3.3. Eating Disorder History of Five University Women Athletes

Name	Recovery Began	Time @ Treatment Facility	Recovery Time @ Interview	Competitive Status @ Interview
Julie	Fall '95, junior cross-country season, End of Sept '95	2 weeks	8 months	Retired
Jennifer	Post season, freshman year, July '96	30 days	11 months	Retired
Kaye	(Summer '93 &) July 26, 1994: post junior season	two weeks outpatient (twice) '93 & '94	2 1/2 years	Retired
Sarah	mid-July '94, post high school	27 days	7 months; relapsing currently	Red-shirt
Tu	Nontraditional Fall season '95	10 days	1 1/2 years	Retired

Table 3.4. Summary of Eating Disorder Intervention for Five University Women Athletes

Name	How Did The Athletes Begin a Recovery Process?
Julie	Confronted by boyfriend
Jennifer	Confronted by parents
Kaye	Confronted by parents, and then her boyfriend
Sarah	Admitted self to a treatment facility
Tu	Following a near fatal overdose of Dexatrim, was confronted by an athletic trainer & a team physician

thought-provoking issues disclosed in the interviews provided for possible scrutiny of societal standards and parameters, as well as personal perspectives of the participants. This experience could be personally discomforting for each participant. However, the discomfort any of the athletes might experience as a result of their participation in this study was assumed to be not overly problematic for two reasons:

1. Each of the athletes had been eating-disordered a minimum of one year at the time of their respective interviews, and all were currently participating in a recovery process. It was doubtful that the discomfort each athlete may have experienced during the interview session(s) was greater than her previous or current experience in dealing with her eating-disordered condition.

2. All of the athletes had been assisted professionally at inpatient or outpatient eating disorder treatment facilities for a minimum of ten days during the initial stage of their recovery processes. During this intensive treatment experience they dealt with difficult personal concerns. It was deemed unlikely that the interview process would evoke personal concerns that were more troublesome than those the participants had already experienced.

The possible benefits to each athlete for participating in this study included:

1. The therapeutic effect that may result in response to the telling of "one's story;"

2. Possible self-discovery of issues and factors contributing to the eating-disordered condition; and

3. An opportunity to reflect on the positive changes that had occurred in her life since the conception of her recovery process.

Protection Measures During the Research Process

The identity of the athletes was kept in confidence throughout the research process, and following the completion of the study. Protection measures taken to ensure the confidentiality of the participants included: (a) assignment of a pseudonym to each athlete

that desired one, (b) secure storage of data during the research process, and (c) restricting viewership of the transcripts.

Pseudonyms were selected by the athletes for the purpose of maintaining personal anonymity. The pseudonyms were used to identify the participants during the interviews and in the writing of the doctoral dissertation and research articles.

Secure storage of data during the research process was accomplished in the following manner:

1. The informed consent forms (Appendix A)--to be kept on file for three years following the completion of the study--were stored in a locked file in my office in the HPER Building on The University of Tennessee campus. They were stored separately from the transcripts and other written information pertaining to this investigation.

2. A copy of the signed informed consent statement was given to each participant.

3. The audio tapes of the interviews, identified only by the pseudonym and date of the specific interview session, were stored out of eye-sight in a locked file cabinet until the tapes were erased. At the time the dissertation was completed the audio tapes were erased.

4. The transcripts and demographic data were stored in a folder in a locked file cabinet in my office.

5. I transcribed all of the audio tapes.

6. Knowledge of the content of the transcripts was restricted to me, the members of a qualitative/interpretive research group, and members of my dissertation committee.

Methods and Procedures Used to Collect Data and Analyze the Transcripts

Data Collection

During the first interview, demographic and anecdotal information was obtained. This included family background, athletic and academic history, and involvement in other activities throughout the life of the athlete. The eating disorder experience was discussed, specifically dealing with the initiation of one's eating disorder, the clinical treatment

process, and the athlete's current status. Following this, the phenomenological interview process took place.

Phenomenological interview technique was used when asking the participants to communicate about their experiences of being eating-disordered. The duration of each interview varied from one to three hours. Four athletes required subsequent interviews to share two to three experiences in which they were involved in their eating disorder. During each interview the participant was asked to respond to the following statement:

> Think back to one experience in which you were involved in your eating disorder. Think of one specific time; incident. What was your experience? Talk to me about it.

During the interview process, subsequent questions were generated which led to further description of the experience of the eating-disordered athlete. Such statements or questions included:

> "Tell me more about that experience."
> "What was going on when you were eating all of these kinds of food?"
> "What did that feel like?"
> "What was going on inside?"
> "You said out of control. What was it like to be out of control?"
> "What was that drivenness like? What does 'driven' mean to you?"
> "You said to survive or cope. With what?"
> "Think of another experience. Describe what that experience was like."
> "What were you feeling when you were lying on your bed?"
> "Tell me more about the screaming and yelling."

The interviews were audio-taped for accuracy purposes. The interviews were too lengthy for reliance on memory and written notes. In view of the nature of the study and the importance of the participants' perspectives, accuracy was deemed most probable through audio-taping. The audio tapes were then transcribed. The transcripts were checked for accuracy either in a second session with the participant, or by mail correspondence. Just one participant indicated areas of the transcript that needed revision. The revisions were subsequently made. The accuracy of the other transcripts was verified by a phone call to each athlete following her receipt of a copy of her transcripts.

Data Analysis

Three of the transcripts were analyzed with the assistance of a qualitative/ interpretive research group. The qualitative research group, composed of the researcher, faculty members, and graduate students familiar with existential-phenomenological research, cooperated in an interpretive process to understand the essential descriptions of the experiences of the participants.

Interpretive Group Data Analysis Process

The protocol for analyzing the transcripts in the qualitative research group is outlined in the following steps.

1. A group member took the role of the researcher in the reading of the transcript, and I took the role of the athlete being interviewed. We read the transcript aloud as each group member followed along in the reading with their own copy of the transcript. The dialogue between the group member and myself continued until one of two facilitators, faculty members, stopped the reading and asked the group members to identify the descriptions of the eating disorder experience that were evident to them. The interpretive group members facilitated bracketing by conscientiously questioning the assumptions each group member employed. If one group member failed to bracket a preconception, other members of the group were in a position to recognize such an oversight. Group members determined interpretations from the interview transcripts, and each interpretation was evaluated by referring back to the transcript (Polkinghorne, 1989; Thompson et al., 1989). Evaluation was conducted by asking a follow-up question such as, "Is the proposed interpretation at the level of the respondent's lived experience?" A second interpretive question was, "Does the proposed interpretation take into account previous passages of the transcript?" I was not allowed to share my thoughts in the interpretation process, except for the purpose of clarification. The following narrative of the interview with Julie is an example of this questioning process, as well as my role in the interpretive process.

In reading the transcript of the interview with Julie she was quoted as saying, "when I feel food in my stomach it has to be gone." Julie had to make herself vomit when she felt food in her stomach. One of the group members suggested that Julie's vomit response may have been for the purpose of getting something out of herself that was repulsive; or that possibly Julie had been pregnant at one time and had experienced an abortion. To those suggestions I responded that both of those suppositions were not supported in the reading of the transcripts. What was identified as a parallel to Julie's response to food in her stomach was Julie's comments on training. She said, "I can't feel food in my stomach when I work-out. I have to be light for work-outs." To train without discomfort, Julie couldn't feel food in her stomach.

In providing clarification in the process of interpreting the transcripts with the research group, I assisted in two roles. I identified inconsistencies in the interpretation process, i.e., recognized interpretations of the data by group members that were not supported by other data of the transcript being interpreted; and I recognized consistencies in the narrative of the transcripts, i.e., identified other data supporting the data of the transcript being interpreted by the research group.

2. These discussions were audio-taped. I listened to the audio tapes following the group discussions and made further notes.

3. A master transcript was then made of each transcript that had been analyzed by the collective efforts of the interpretive group members. This included a compilation of the comments the group members had made on their individual transcripts, and the audio-taped comments of the interpretive group discussions during the thematic analysis process. (The transcripts that were not thematized in the group members were then thematized by me.)

4. The thematic analysis of the transcripts was arranged in table form. (Appendix B). This arrangement presented the themes of the athletes' experiences as well as those components that seemed to be most descriptive of the experiences. The results of the

thematic analysis of the university women athletes in the dissertation study paralleled those of myself in the bracketing interview.

5. From the text of the individual transcripts, an initial thematic structure for the five participants was determined. A qualitative/interpretive research group assisted in the initial process of deriving the thematic structure.

The Moment of Decision

After long bouts of dialogue with the research group, it became apparent that the paradox of the eating disorder experiences of these women created considerable overlap of the themes. Therefore, I decided to continue the data analysis process in the following manner:

1. An individual profile for each participant was written describing her unique experience as an eating-disordered university athlete. Accompanying themes were inserted in outline form as they emerged from the narrative of each individual athlete.

2. A composite profile of the five individual profiles was then created that described the athletes' eating-disordered experiences, including the time they were controlled by the eating disorder, their experience of intervention, and their process of recovery.

3. The accuracy of the descriptions of the athletes' experiences as eating-disordered university athletes was verified by the following process:

   a. Photo copies of the pages describing each athlete's eating-disordered experience were mailed to the appropriate athlete.

   b. Each athlete proof read the pages of the document that described her experience of being eating-disordered.

   c. A phone call was made to each athlete, and she reported that the document accurately described her experience as an eating-disordered intercollegiate woman athlete. All five athletes requested that their stories be presented as

they had been summarized, with the exception of one athlete. She requested that I disclose more information about the events she experienced in high school that led to the feelings of shame that appeared to be an influence driving her eating-disordered behavior.

4. The composite profile is presented in Tables 4.1-4.2 (See Appendix B). This profile appeared to best represent the themes of the athletes' experiences as well as those components that seemed to be most descriptive of the experiences.

5. Two major themes with seven subthemes were identified as the figural components of the experience of eating disorders in five university women athletes. Five subthemes described the eating-disordered experience and two subthemes described the experience of recovery from an eating disorder.

Summary

The research design for this investigation, "A Life of Paradox: The Experience of Eating Disorders in Five University Women Athletes," was developed during a three-year process that included a pilot study and two bracketing interviews. Participants who were at various stages in their respective recovery process were interviewed in order to determine their personal experience of being eating-disordered. Extensive measures were taken to limit psychological risk to the participants and to ensure confidentiality in both the data collection and analysis procedures. The audiotaped interviews were transcribed, checked for accuracy, and then three of them were analyzed with the assistance of a qualitative/interpretive research group. The qualitative research group also assisted in the initial process of deriving the thematic structure of the experience of eating disorders in intercollegiate women athletes. When the paradox of the eating-disordered experience and over lap of themes made it difficult to recognize themes, individual profiles were written for each athlete. The individual profiles were collapsed into a composite profile. Tables 4.1-4.2 contain the main components of the athletes' experiences. Two major themes with five

and two subthemes, respectively, were identified as figural components that seemed to be most descriptive of the experience of the athletes.

CHAPTER 4

RESULTS AND DISCUSSION

A qualitative research investigation using the phenomenological interview was conducted to describe the experience of eating disorders in five university women athletes who had been clinically-diagnosed with Anorexia Nervosa and/or Bulimia Nervosa. At the time of the interview just one athlete was a current competitor; the other four had retired from their sport prior to their senior year. Three athletes retired due to complications from their respective eating disorders; one retired because of a sport-related injury. The three athletes with Bulimia Nervosa relayed their eating disorder experience by describing binge-purge episodes. The athlete with Anorexia Nervosa talked about her eating disorder experience as a routine way of life. The athlete with bulimiarexia (oscillated between anorexic behavior and that reflective of bulimia) shared from both the binge-purge experience and the routine life perspectives.

The thematic analysis suggested that the eating disorder experience of these athletes is one of **paradox**. It is invariably bivalent, i.e., the world is experienced in a dualistic way. This duality is characterized by contradiction, i.e., words and actions that are opposite of each other; and irony, i.e., an event or a result that is the opposite of what might be expected (Webster, 1989). The athletes of this study described contradictory feelings, thoughts, and actions/behaviors that they struggled with personally, and collectively, during their eating disorder experiences. The myriad of descriptive elements, paired or clustered in opposition appeared to be the salient components of the athletes' experiences. These descriptive elements were combined to comprise the metatheme grouping of **simultaneous control/out-of-control/uncontrollable** which characterized the aforementioned **Life of Paradox**.

From the ground of "Life of Paradox" two major themes became figural: **"The Monster"** and **"Recovery/The Real Me."** The theme of The Monster--the name selected to represent the other labels the athletes used to identify the driving force of their respective eating disorders--characterized the experience of the women from the early stages of their eating disorders until they experienced a recovery process. Beginning a recovery process signaled the emergence of the second theme Recovery/The Real Me. While the ground of paradox related to both themes, its nature seemed to change during the transition from disorder to recovery.

The descriptive elements that characterized the components of the experience of eating disorders of the women athletes are presented in Tables 4.1-4.2. From these elements, eight figural components were derived as subthemes that described the eating-disordered experiences of the individuals. Five of these eight subthemes were specific to the major theme of **"The Monster"** and three of the subthemes were specific to the other major theme of **"Recovery/The Real Me."** The subthemes specific to **The Monster** included **powerless to stop at will, harmful consequences, unmanageable life, escalation of use,** and **beginnings of awareness.** The subthemes specific to **"Recovery/The Real Me"** included **identifying contributing factors** and **the struggle to recover** (See Figure 4.1).

Life of Paradox

The experience of **paradox** was described by the athletes as a response of their efforts to deal with deception in their lives, i.e., being deceived and deceiving others; feelings of current day stress and uncertainty; feelings of loss, confusion and chaos resulting from deeply felt emotional pain; and feelings of self-loathing/hatred, shame, and unworthiness/being unacceptable. It appeared that the athletes attempted to deal with their uncomfortable circumstances by attempting to take control of their respective existence, including their feelings, relationships, and how others related to them. The result of

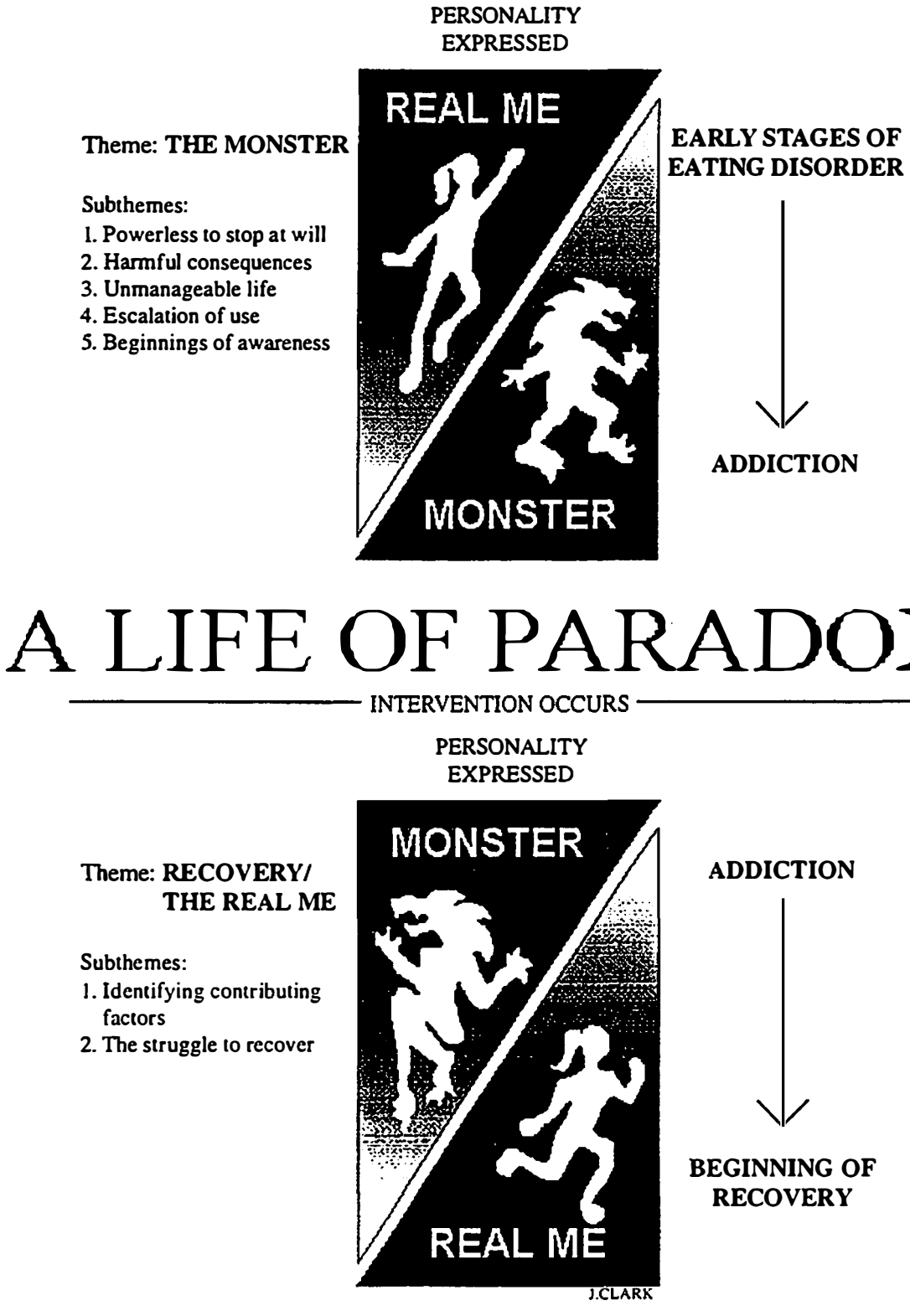

Figure 4.1 Thematic Analysis of a Life of Paradox:
The Experience of Eating Disorders in Five University Women Athletes

controlling in this manner was the athletes' participation in eating-disordered behavior, which was reflected in unhealthy thoughts, feelings, and actions/behaviors. The eating-disordered behaviors (restricting and/or binge-purge eating and excessive exercise) the athletes engaged in made it possible for them to control their existence by avoiding the pain of their experiences--pain resulting from loss of sport involvement, their personal experiences and perceptions, or that inflicted by significant others (which included acts of omission). In the athletes' attempts to control their existence the eating disorder became out of control. This existence was characterized by opposing thoughts, feelings, and actions; hence the **"Life of Paradox."** This Life of Paradox was the ground from which the themes **The Monster** and **Recovery/The Real Me** became figural. The following accounts illustrate the paradox the athletes experienced while they were involved in their eating disorders.

> Everything was hollow, like a hollow Easter bunny. It looks fine on the outside, but you tear a piece off, and there is nothing inside. It's part of the deception. I couldn't see it because I was praised and adored and loved, and everything was great and I thought I was great, and my body was good (Sarah).

> And when you think you have control of your life, and then "bam," it hits you that there's this huge thing that's controlling you, and you haven't had any control over anything you thought you did. That's the easiest and simplest way to explain it...knowing I should do something, and I wanted to do something, and I couldn't do it (Jennifer).

> I had to make it appear like my low weight was natural. It had to be natural because...I always felt like I had to be perfect, and that if I looked like I had to work very hard I wouldn't be perfect (Kaye).

> ...just like feeling lonely and then pushing people away, and then, like, I'm in a mood and expect people to be around me and to ask me, "what's going on?" And then when they do, I'm like, "why are you asking?" And then I'm...paranoid, "do you think something is up or something?" Crazy (Tu).

> It's like opposites all the time. I want to eat, but I've got to get rid of it. And then I'd think, "why don't you stop?" And I'm, "no, I haven't reached my goal." It's so strange...really strange (Tu).

The Monster

The Monster phase of the athletes' eating-disordered experiences was described as an incredible, nearly life and death struggle to control their respective lives. This control appeared to be realized only, paradoxically, when the women athletes were out of control with their eating disorders. The controlling force that appeared to drive the eating-disordered behavior, but which was described as being out of control or uncontrollable by the athletes, was labeled by the participants as "The Monster," "the disease," "that uncontrollable force/thing," "this driving force," being "psychotic" or "possessed," and "that powerful thing." The title, "**Monster**" seemed to encapsulate all the names given to the force that drove their eating disorder. Subthemes associated with "**The Monster**" included **powerless to stop at will, harmful consequences, unmanageable life, escalation of use,** and **beginnings of awareness**. Each of these subthemes are discussed in the following sections.

Powerless to Stop at Will

One description the athletes provided was their experience of being **powerless** to resist the control the eating disorders seemed to have on their thoughts, feelings and behaviors. **Powerless to stop at will** was a subtheme of the experiences of the athletes while they were involved in their eating disorders.

Jennifer suggested that her experience was one in which she was **powerless** to resist the control **The Monster** had over her thoughts, feelings, and actions; in spite of the fact that she was an athlete who thought she could make herself do anything she wanted until she was diagnosed with Anorexia Nervosa four months following a career-ending injury.

> I've always had control. I've always wanted to have control, and always thought I had control--especially with my behavior--whether that be to eat healthy or restricting as much as I did. I thought I was controlling it; and, at

> that point when I realized that I wasn't, it was scary, very scary. I felt so helpless--that I could do nothing.

Jennifer hated being controlled by this thing that was stronger than herself.

> A lot of the times I would slip in and out...the way I think of it, it's like having a split personality--and slipping into the disease. My mom and I called it "The Monster." Anyone around me could tell when I was thinking like this Monster or when I was thinking like me, because I would act differently. There was this whole other side of me that had control over me and my thoughts and my actions and my feelings.

Tu experienced a feeling of **powerlessness** during a particular binge and purge episode that followed a conversation with her coach. This binge-purge episode occurred the night before she overdosed on Dexatrim. In Tu's description of how she was different this night from her former experiences of being "driven to binge-purge," she acknowledged a force possessing her and a desire to be self-destructive.

> It was like I was possessed, seriously. I was like, "screw them [coach and teammates] for thinking this...I'll prove to them." I just wanted to get back at them somehow. I didn't do it with my words, you know. I did it to myself. In a way I just thought, "well, if I hurt myself then maybe they'll appreciate me more."

During the throes of her eating disorder Tu experienced paradoxes that "affected my relationships with everybody." Tu described this experience of opposites as

> ...just like feeling lonely and then pushing people away, and then, like, I'm in a mood and expect people to be around me and to ask me, "what's going on?" And then when they do, I'm like, "why are you asking?" And then I'm...paranoid, "do you think something is up or something?" Crazy.

This irony prevented connection with others; and simultaneously there were times she realized she wanted connection, but **The Monster** wouldn't let Tu connect with other people because of the connotation it put on being "found out," and being found out was exactly what she later learned that she needed to experience to get out of her isolated self-destructive existence.

When her eating disorder rendered her **powerless**, Kaye experienced sabotage. Following a semester of engaging in anorexic behavior that led to a 12 pound weight loss Kaye decided she'd try to lose "maybe five or 10 lbs more," during Christmas break.

> Even though my wisdom teeth weren't bothering me at all, I asked mom to set up an appointment...to have them taken out,....then I could come back to school in January and start off weighing less.

Kaye had her wisdom teeth taken out the first day of Christmas break, but gained 20 lbs during the 2 1/2 week break. At home alone because both parents were working and her sister was still in high school, Kaye experienced a chaotic internal "tug-of-war" when she could not control her eating behavior.

> I binged on milkshakes [8-10 per day], and I binged on soup. It hurt bad to chew, but I remember bingeing on a whole box of crackers.... I was so compulsive, I had to have food.... in my mouth. It was like I could not quit eating. I was eating tons of food. They were binges--like all day binges. I couldn't make myself throw up because I had all that going on with my teeth. So, I took laxatives to get rid of it (Kaye).
>
> I just felt so out-of-control. I felt like a failure. I always had been able to control. When I said I was going to do something I did it. Sports-wise, everything I had set a goal for I had gotten there, and found a way to get there and do it. And, suddenly I couldn't do it. Something else felt stronger than me; that's what it felt like. This was something that was getting in my way.

Jennifer's, Tu's and Kaye's accounts vividly describe their experiences of being **powerless** to resist the control of The Monster. **Powerless to stop at will** was further described by all five athletes in descriptions of their eating disorder episodes.

Being **powerless to stop at will** when they were involved in a binge eating and purging episode was characteristic of the athletes with bulimia.

> The drive to get a certain food that I wanted to binge on...it was like total vision; powerful; like something inside of me, and nothing can keep me from doing that. Something else felt stronger than me.... when I'm driven to destruct, it's kind of numb. It's like I don't even think about it [binge-purge process] (Kaye).

> When I binge, it's like a drive.... like I was driven to eat and eat and eat. During the binges I just felt totally out of control. I couldn't resist it [eating more food]. I was so obsessed with food. I felt like I entered this mode where all I could do was eat. I'm not thinking. It's not up to me; it's something I cannot control. It's like I'm on automatic (Sarah).

> I recognized that I was in the [eating disorder] behavior, but then I was like, "I've got to do what I've got to do." I couldn't stop it. It was hard not being able to stop it, because you're used to having control of your life,

> your destiny, or whatever.... and to not have that control.... It was hard. Like I said, I was a different person, when I was really sick (Tu).

The athletes experienced an inability to control the binge eating and purging behavior. The **powerlessness** the athletes experienced was addressed by Claudia Black in Double Duty: Food Addicted (1990).

> These are people who struggle constantly with issues of powerlessness and control. Often they experience themselves as totally helpless in a very frightening world. The overeating may symbolize their feelings of being out of control. It certainly reinforces the powerlessness" (p. 46).

Kaye's experience of opposites during binge eating and purging seemed to be associated with an overlapping of paradoxes. Her descriptions included "something else felt stronger than me; It's like the reverse of the drive to be perfect, it's like the drive to destruct.... I just really want to die;" and bingeing resulted in a numbing effect on her conscious awareness, "It's like I'm in a mode.... I've eaten and I don't even remember that I ate it; and, I don't remember that I threw up."

Julie, Kaye, Tu, and Sarah all said that bingeing and purging was automatic. They said they "did it without thinking." Tu said, "it got to be such a regular thing, you just do it." Sarah said that bingeing became automatic, "especially when I feel the drivenness." Automatic involvement in their eating disorder behavior was a component of the experience of the athletes. A paradox to the automatic nature of the episode was that the athletes, at times, experienced a premonition that they were going to engage in their eating disorder even though they were **powerless** to do anything about it.

> I was thinking, "I know I'm going to lose." The whole time I was eating I knew that that was not all I was going to eat. I knew, right from the beginning, that I was going to throw it up. I went to the cabinet and nibbled on something from there, and before I knew it I was sitting there just eating food (Julie).

Kasl (1989) noted that **powerlessness** does not mean a lack of awareness on the part of the eating-disordered individual. She writes that

> compulsive behavior is rooted in a need to reduce tension, often caused by inner feelings a person wants to avoid or control. Pleasure is not derived

> from the actual behavior itself, but from the tension release it provides. The individual generally recognizes the senselessness of the behavior and does not derive pleasure from carrying out the activity, although it provides a release of tension. "Can't, must" and "I've got to" are words associated with compulsions. A person may go into a trance like state when doing it. In any case there is often a frantic feeling associated with the task until it is completed (p. 26).

All of the athletes described feelings of guilt associated with the experience of **powerlessness** to do anything about their eating disorders. When Kaye began her diet of raisins and water "I quit the other laxatives,...because raisins are a natural laxative; then, I didn't feel so guilty."

> Julie experienced guilt following a binge and purge episode.
>
> After I purged I sat down and had this feeling of exhaustion. I was really depressed. I felt really guilty, really disappointed with myself. I went running at about 4 o'clock.
>
> For Julie, running seemed to provide a function for coping with feelings of guilt.
>
> Once I started running I was fine. I came back and took a shower and everything felt great. It was like I had forgotten everything that happened earlier that day. I felt great. "I'm not going to do that for the rest of the night." It was like, "oh, okay." I'm okay now, I'm fine." I'd look at food and go, "oh, I don't want to eat." There was a weird sense of calm.

The **powerlessness** Julie experienced during her binge eating, and then feeling "okay" following her run, was addressed by Claudia Black. In Double Duty: Food Addicted, Black penned,

> compulsive eaters experience powerlessness and a sense of being out of control, but purging restores some sense of control. Unfortunately, this only helps keep the eating disorder hidden and never dealt with (p. 115).

Tu described a paradox: relief and lack of relief in response to her purging behavior. Purging was relieving

> in the physical sense; but then, I don't know. It's like...(sighs) in a way it was like all the food that I ate was...the amount of anger and hurt that I felt. So, I had it all inside of me, but then when I threw it up..., in a way, it was kind of like, "oh, well I got rid of it" for that brief moment. But it was still there because I didn't really deal with it (Tu).

It seemed that Tu used the food to symbolically represent her feelings of anger and hurt, and then by purging it out, she was believing "that I solved that problem, next....you know' but, it didn't work." The feelings "were still there, because I didn't really deal with it." Tu binged to feel comfort--which was short-lived--then the final result, paradoxically, was great physical discomfort, and was emotionally horrific, because she asked herself "what did I just do?!"

Of the binge eating and purging experience in eating-disordered women, Kasl (1989) wrote in Women, Sex, and Addiction: A Search for Love and Power,

> The underlying intention of addictive behavior is to...feel good. Such behavior actually comes from a desire to fill a profound inner emptiness, anesthetize pain, and stay away from feelings. It is a flight from self knowledge....(p. 10) Addiction is often an escape from the powerless feelings of codependency (p. 31).

Following a binge-purge experience the athletes in this study often experienced a sense of altered reality. Altering their reality, a result of participating in their eating disorders, was a characteristic theme all five athletes experienced. Descriptors included "escape," "numbed-out," "another zone," "my own world," "mode," "and then, when it's all over, 'oh, okay.'"

Sarah said,

> It's like time is warped. Then, when it's all over, "oh, okay." It's like a chunk of time was taken out; it's not there.

It seems that by binge eating and purging, the athletes could control and alter their existence. Julie summed up the altered reality well when she said,

> I feel like I'm in a coma. I could just sit and stare at the wall--not clear-headed. I felt like I wasn't on the same page as everyone else. I felt like I was in my own little world; my own reality--just numbed-out. "Ugh," a depressing kind of feeling.

Kaye's experience was

> like I had a box around me. I was just in my own world. I didn't know what reality was like because I was living in my fantasy world--following my schedule and loving life because my weight was down. I was acting happy but inside I was constantly going. I could never relax. I had to keep

> working, had to keep telling myself, "keep pushing, keep pushing...." I think I was happy.... I was acting happy, but I wasn't relaxed. There was no serenity, there was no peace whatsoever, ever.

The **powerless to stop their eating at will** experienced by the athletes in this study was accompanied by failure to acknowledge the seriousness of their eating disorder. Kaye's response to the problem of compulsive bingeing and subsequent dramatic weight gain during Christmas break was not that she had an eating disorder but to perceive that she was inadequate. "You're not trying hard enough. You're not working hard enough. If you'd work harder... You're just not committed." Many high performance athletes are conditioned to believe that they can do anything if they are committed and determined enough. Kaye believed that she could make the weight drops happen--if she really "wanted it" bad enough. After all, "all my life I had always been able to do what I said I was gonna' do. When I said I was going to lose 10 lbs, I just set out and did it." Black and Bolin (1998), point out that collegiate athletes,

> are young women who feel they should be able to handle whatever comes their way. Should they become addicted, their fall is even harder. They have pride. They believe they are supposed to be perfect and therefore the need to hide their addictions is even greater. For the athlete who has spent most of her life in control of her body, performing and winning, to now begin to experience a body where addiction begins to take control, she is startled and confused (p. 12).

When the athletes were involved in their eating disorders they all described themselves as being different from the person they had known themselves to be; it seemed that The Real Me was absent.

> I really wasn't myself. I was not normal. I was a little psychotic (Tu).

> Anyone around me could tell when I was thinking like this Monster or when I was thinking like me, because I would act differently (Jennifer).

All five women athletes experienced **powerlessness** to alter or stop the eating disorder behavior. The strength of will, internal fortitude, ability to overcome obstacles, determination, and drive to excel these athletes knew so well in their respective sport experiences were no match for their eating disorders. In fact, quite the contrary occurred:

once powerful, they were now **powerless**. Furthermore, the eating disorder behavior **escalated** and **harmful consequences** resulted.

Harmful Consequences

All of the athletes experienced **harmful consequences** as a result of their participation in their eating disorders. In Women, Sex, and Addiction: A Search for Love and Power, (1989) Charlotte Kasl addressed the **harmful consequences** associated with eating-disordered behaviors when she wrote,

> While people derive temporary feelings of pleasure through their addictive behavior, harmful consequences are sure to follow. Once the addiction takes hold of the personality, the individual's ability to order her life slowly disintegrates and she falls more and more under the control of an unknown force within. Health, relationships, work, play, creativity and peace of mind slip away as the person slowly builds a wall around herself and becomes increasingly difficult to reach with either love or reason (p. 28).

At a seemingly innocent potluck Halloween party with other cheerleaders Kaye experienced a return to her eating disorder, following a six month sabbatical. Very self-conscious about being the tallest girl in the room, and costumed very differently from all the other cheerleaders, Kaye said,

> I just remember feeling so weird in the room, so self-conscious. As I looked around the room.... I just started to think about how I wasn't attractive. I always felt like I wasn't attractive and I wasn't sexy, and the guys didn't think I was.... They thought I was "cute." They didn't think I was "hot" like the rest of the girls. I just remember thinking that night that I didn't "fit in." Always, any time I didn't feel attractive it was because I was fat.
>
> I just remember going back to the kitchen.... and eating cookies, cake, and brownies.... I just binged at that party the whole night.... This was the first binge I'd had, in like six or eight months. I went home that night, and purged.

Having begun the football cheerleading season weighing 115 lbs. by the end of basketball season Kaye was at an all-time high of 125 lbs when

> my body gave out. I was too sick. I had shin splints...everything all the time was hurting on me, and it was because of my eating disorder.

To make matters even worse, Kaye, a former non drinker began drinking alcohol. Once she began drinking, Kaye began to lose things, i.e., while in a drunken state, she

cheated on her boyfriend-- "a really wonderful person, and a great football player who is playing pro now and is making lots and lots of money"--in front of him which led to the break-up of that relationship, and the *loss* of many friends. Her friends couldn't believe she "had done such a terrible thing to such a great guy."

> So many people who had been my friends no longer wanted to talk to me. I got lots of phone calls, cussings, and was called a "sorry bitch" in front of a group of people. I felt really bad about myself for doing this to this football player and for letting myself drink, and then get drunk. I had been trying to get back on my feet with my meal plan, but after all this I just "hit bottom." I started running around with all the people that drank, because I was just going to drink and be a hellion and show everybody that "I didn't give a shit about anything."

When Kaye's involvement in her eating disorder was out of control, the **harmful consequences** added up quickly: she began bingeing and purging consistently; began drinking alcohol, got drunk and betrayed her boyfriend and lost friends; her body was no longer resistant to injury, and she quit cheering at the collegiate level following her junior season.

Tu "had a hard time functioning in practice," because of the effects of exhaustion she was experiencing as a result of exercising excessively. Eventually, she unintentionally nearly took her own life. Of her near death experience Tu remarked,

> to this day people are like, "do you know you tried to kill yourself?" And I'm like, "no, I didn't. I honestly did not try to commit suicide."

Jennifer progressed from restricting her nutritional intake

> even though when I first began losing weight I was losing body fat that I needed to menstruate and stuff like that.... eventually, I was losing muscle.... I didn't have anything else to lose; muscles and tissues were going

and her exercise behavior, even though her doctor told her,

> "Your body just can't take this...." then she wrote on a piece of paper three things I needed to do; one of the things she wrote down was, "no exercise;" the reason, "cause of death"

to a thin line between life and death. Of her physical condition--having lost down to 96 lbs from a lean 140 lbs in four months' time--when she was admitted to treatment for accelerated Anorexia Nervosa Jennifer said,

> I wasn't allowed to do the water aerobics because I was too cold and I didn't have enough weight...my body would have to work overtime and I would lose more weight, just to keep me warm. It was counter-productive for me" [to participate in water aerobics].

In spite of her extreme physical condition, combined with "crying myself to sleep at night because of my back pain (due to her athletic injury)," paradoxically, Jennifer considered her day a great one when she ate according to her definition of health.

Julie's **harmful consequences** progressed from sabotaging her lean body composition reading of 48 mm to a reading of 71 mm three months later following a summer of bingeing on "fat free" desserts, to a binge-purge episode when she considered attempting suicide.

> My body just felt destroyed. My face was really swollen...and just horrible. I didn't have any energy. I was physically and emotionally exhausted. I sat down, and I just laid there for a few minutes. I remember thinking, "this is so pathetic. Why do I even bother going through my day if this is what I am going to do? There was no point to this day whatsoever." I remember thinking, "God, I just want to die right now." I had always considered people who were suicidal to be destitute. I had never considered myself to be at that point; and, I was.

For Sarah, Tu, Julie and Kaye, termination of their sport careers was a **harmful consequence** that coincided with their experiences of "hitting bottom."

Unmanageable Life

From descriptions of the most common actions such as getting out of bed, going to class, writing thoughts on paper, and deciding whether or not to go to the bathroom, to experiences of being irritable and mean, and feeling the struggle between **The Monster** and **The Real Me,** the athletes disclosed that involvement in their eating disorders seemed to make life chaotic and unmanageable (Kasl, 1989, p. 20). An **unmanageable life** was the third subtheme of the eating disordered experience of these women. Characteristic of

the progressive nature of the other subthemes, the athletes' lives became more **unmanageable** the longer they were eating-disordered.

For Sarah, bingeing and purging seemed to promote procrastination in completing other tasks. "If I knew I needed to do homework or train or clean my room, I would eat." However, reacting with an eating disorder resulted in helplessness, indecision, and academic struggle.

> I can't do the things I'm supposed to be able to do--like, go to class, keep a clean room...I can't even be honest, sometimes. In high school I had to get up at 6 a.m., get dressed, eat breakfast, pack my lunch, and go to class. I just did it. Now I ask myself, "Do I get up now? Do I put on clothes? Do I eat? Do I binge!? Do I purge!? Do I follow my meal plan? Do I go to class? Do I go to practice? Do I run?" I can't do anything. I feel like I'm rotting away.

Decision-making, performance in academics, and other details of managing her life seemed next to impossible when the eating disorder was unchecked.

Julie, like Sarah, struggled with her academic studies. The stress she felt about school triggered binges.

> This was a common thing when I would binge and purge: I would sit down with my homework and I just could not concentrate at all. That was so frustrating for me, because before [the eating disorder] I used to be so intense.... really, really confident with school. I knew that if I just devoted enough time to it and worked hard, that I could do well. Then I just... sunk into this...pit where...I really doubted myself all the time about school. I thought, "I'm not going to be able to do it." It's a lot like fear of failure. That [feeling] was always there. And so I'd just put the books away, and I'd start watching t.v. and get really distracted.

Julie's description was that she lacked ability to concentrate, experienced self-doubt, and was indecisive, it seemed eventually, about everything. Julie said,

> I...got to the point where I could not make the littlest decisions, like should I go to the bathroom now or should I go later? I could not make decisions for anything...like, I didn't trust any decision that I made. It made it so hard and so stressful to sit down and write a paper.... organize...deciding, "okay, this was going to go first and then this and this" ....a task...that would normally...take me about a day to sit down and do.

The indecision Julie experienced seemed to result in a paralyzing effect on her ability to function academically, as well as function in her mundane daily life routine. Her response

to the stress she experienced from being unable to manage her life was to binge and purge. She said the experience of not being able to manage her life--particularly concerning her academic struggle--"was really frustrating."

> I felt like I couldn't handle anything. School was one of my strengths. Now, I just felt like I had lost all my strength. I felt weak. Now, I didn't feel smart because I couldn't handle it.

The **unmanageable** quality of Julie's life escalated. As the eating disorder progressed in Julie's life, the rules and categorization system that she had created and held to for the purpose of "having everything under control" no longer resulted in the desired effects. The rules, i.e., to do everything in a row on her "to do" list each day, failed to provide her the comfort they once did and her categorization system for judging herself and other people failed to make her "a lot more at ease." Julie's experience of the **unmanageable** quality in her life progressing coincided with her continued involvement in her eating disorder. Of her management efforts failing her Julie said,

> the "to do" lists failed to keep me on task. I began to flit from one thing to other. There were times when I would have homework to do, and I had to clean my room, and clean the apartment, and do something else. I would literally be going from one thing to the other. I would sit down to do my homework and say, "I don't have time for this right now; I need to clean." I would go and start to do something else and say, "oh my gosh. I don't have time for this right now," and go start something else. I wouldn't focus on one thing at a time. It was like I wanted so bad to get everything done that I would get nothing done because I was going from one thing to the other. It was like I was hyperactive. Having a list was like, "okay, now I know what I have to do. Everything is in order; but, when I tried to follow it, and found myself going from one thing to the next, and not accomplishing any of it it was like, "screw the whole list." Then it was a vicious cycle.

The unmanageable lives Julie and Sarah described seemed to result in a lack of persistence in anything. Additionally, Julie said,

> Now I felt like I had transformed into the type of person that just procrastinated and never got things done. I hated it. I wanted to be the kind of person again that could just get things done.

For Jennifer, **unmanageability** sometimes surfaced in the way she communicated with family and friends.

> I was very irritable. My poor sweet little grandmother--(I love her to death)--I'd bite her head off for the stupidest things. She'd be trying to help out, and if she didn't cut the fruit salad the right way, I would throw a fit. Just very short-tempered with people. It came off mean and I hated that. That's just not me at all. Wasn't personable. Wasn't out-going. Very withdrawn, especially if I didn't get my exercise in for the day.

For Tu, **unmanageablity** was characterized by an interplay of opposites.

> It's like opposites all the time. I want to eat, but I've got to get rid of it. And then I'd think, "why don't you stop?" And I'm, "no, I haven't reached my goal." It's so strange...really strange. It's crazy. My goal was to be as fit as possible. It was to prove to people and prove to myself that I could do it: run faster, do more sit-ups and all that stuff. And, you know, I don't even know what proving those things would have done for me. Tennis wasn't in the picture all that much.
>
> I couldn't relax. I couldn't just sit down and relax. I was always on edge, so edgy. Just the littlest things would get me worked-up.

Paradoxically, as Tu's experience became more **unmanageable**, her sport participation became less important; and she said that it was because of her desire to improve athletically that she became involved in unhealthy eating and exercise behaviors.

In Women, Sex, and Addiction: A Search for Love and Power (1989), Charlotte Kasl addressed the internal paradoxical conflict of the **unmanageable** life experience when she wrote,

> When a person becomes addicted, the personality splits into two distinct parts, each denying the existence of the other. Addiction involves the words "powerlessness" and "unmanageability," both of which the person denies. It is as though the person has two sets of dreams, two kinds of values. Addiction is like having two sides--the addict side and the healthy side--engaging in a life and death struggle to control the inner world (p. 27).

Consistent with this notion, it appeared to be the controlling power of **The Monster** in the eating disorder experience of these athletes that made their lives **unmanageable**. Tu described **The Monster** that resulted in an experience of **powerlessness** and **unmanageability**. The voice was

> telling me, "you can't eat that," and then chastising me for eating it even if it was healthy. My normal voice would be, "you have to eat. You can't get around not eating something. This is fine that you're eating healthy." But then the other one would be, "you are trying to reach a goal, and this is...going to set you back."

Even though the athletes did achieve the desires they were seeking through involvement in their eating disorders--Kaye, a low weight; Sarah and Jennifer, escape from their feelings; Tu, better fitness scores; and Julie, attainment of her ideal of the model runner of her team--paradoxically, they experienced an **unmanageable life** as a consequence of their behavior, i.e., Julie not being able to "sit down and write a paper;" Sarah not being able to train for her sport, not to mention struggling to get out of bed in the morning; Tu finding it difficult to function in practice; Jennifer being irritable and mean; and Kaye "always pushing" and "never feeling peace whatsoever, ever." The response of all five athletes to the consequences of an **unmanageable** life was the same: to be more involved in their eating disorder.

Escalation of Use

The fourth subtheme that described the eating disorders of these women was experiencing an **escalation of use.** All of the athletes experienced an **escalating**, or progressive, involvement in unhealthy and self-destructive thoughts and behaviors the longer they were eating-disordered.

The **escalation** of Kaye's unhealthy behaviors coincided with attempts on her part to regain control. By the end of her sophomore year

> every time I ate I gained weight. I couldn't control my weight. It was so out of control. That's when I started using the laxatives and diuretics and throwing up. Then two weeks before cheerleading camp, I crash-dieted with raisins, water, and pills and dropped from 119 to 108 lbs.

By the end of her sophomore year the **escalated** frequency and intensity of Kaye's involvement in unhealthy behaviors was almost unbelievable.

> That whole [sophomore] year was awful; it was like the year from hell. I couldn't control it. There'd be two or three weeks of anorexic behavior and then two or three weeks of out and out binges and purges, and still doing the Vivarin. And, I did that that whole year.
>
> Nothing worked anymore. When I was anorexic and taking the Vivarin, it didn't work. It had run out, or my body wouldn't do it anymore, or something. I never had any energy. So, I had to keep taking more. It just didn't work. Then when I would start eating, I couldn't stop.

> I couldn't have normal [food] portions. I just couldn't stop [eating]. It was unbelievable.

Jennifer, like Kaye, experienced progression in both exercise and eating behaviors. She first experienced an **escalation** in her exercise behavior, even though she was quite limited in the types of exercises she could do because of her back injury.

> I would start out for half an hour on the machines and then lift half an hour and do 300 sit-ups a day, maybe. Then a week goes by, and I'm, "let's see if I can do 40 minutes on the machine and lift a little longer and do 100 more sit-ups."

Even though her athletic career had just terminated, the competitive drive she had known as an athlete seemed to exacerbate **escalation of use** for Jennifer.

> When I weighed about 110 lbs...I started competing with my weight, too. I'd be like, "let's just see if I can lose a couple more pounds." I was getting on the scales every three or four days. I remember thinking to myself, "okay, let's see if I can get down to 105. Let's just see if I can get down to 103;" and so, it was just all competition. That was my mission: competing with myself. And I was winning.

The progression of involvement in unhealthy behaviors for Julie was similar to Jennifer's, except Julie began with calorie counting, in combination with excessive exercise. Julie said that her behavior "became obsessive."

> I started out calorie counting. I was taking a nutrition class and I knew that if I weighed 120 lbs then I would need 1200 calories, or somewhere around that calculation, to function. If I ran 5 miles in a day, I knew I burned 500 calories, and so I knew I could eat 500 calories extra [above 1200] and be okay. Then I realized if I wanted to lose weight I had to work off more and eat less. So, in my calorie counting I made a list of everything I ate during the day, and how many calories it was. It was...like a goal of mine to stay at 1500 calories. Then, it became 1000.

Julie progressed from calorie counting to restricting certain types of food.

> It [food portions and selections] got smaller and smaller until it eventually got to the point where I would try to have a bowl of cereal for breakfast, no lunch, and then cereal again for dinner. Things [food types] were getting knocked off every day.

Even though Julie determined to stop her eating disorder behavior, it **escalated** to vomiting everything she ate. Her feelings of hopelessness reflected the experience of her eating disorder being out of control; she could not stop.

> gosh, everything I ate I would purge. I was vomiting up to five times a day. By this time I was really depressed. I felt hopeless about it. I said to myself every day, "okay, this is the last day, the last time [to binge and purge]," but it never was.

Tu experienced **escalation of use**.

> stopping it [the unhealthy behaviors] was not on the agenda. I was like, "this is working so I'm gonna' keep at it. If it doesn't work, then I'll have to try something else." For example, purging [by vomiting]: first it was the finger, then I'm like, "can't use the finger anymore; use the toothbrush. The toothbrush works fine, so, okay, keep with that." [Then, in dealing with the three year eating disorder experience], I progressively did more [behaviors].

When restricting herself from fatty foods didn't seem to work in achieving Tu's self-imposed fitness goals quickly enough she began doing "tons of exercise." The extra exercise "worked, but not well enough, and so I started using Dexatrim. If it didn't stop with the pills, I would have progressed to something else. I don't know what, but I would have...." Tu did do "something else" and the next progressive step nearly cost her life.

Following an emotional discussion with her coach, Tu returned to her dorm room, and, "it was like all hell broke loose, 'cause I was so angry and hurt at the same time. I was so emotional." Her response to being "upset, depressed,....and hysterical" was to binge and purge. Upon waking the next morning she remembered the binge-purge episode of the night before.

> My mind was all twisted, and I thought some of the food didn't leave me and so I had to do some other stuff. That's when I got into the pills [Dexatrim], and I'm like, "this is the time I need pills the most." And I didn't mean [to overdose].... I was so hurt, and I was drained from all the activity [bingeing and purging the night before].... I didn't realize how many pills I had taken. I had classes all that morning. By the time classes ended at 2 p.m., I think I must have taken all but two or three pills of the whole sheet. During classes when I started feeling a little weak, I was like, "no, I'm fine. I'm gonna' make it through class." Finally, class was over. As I was walking back to my room I was feeling like crap. When I got to my room I was just like dead. I thought I was going to take a nap, but I didn't even make it to the bed...that was it for me.

Minutes later, found unconscious by her roommate, Tu was rushed to the hospital in critical condition; she was in a coma for six hours.

For some of these athletes, **escalation of use** dovetailed with their competitive natures.

> I competed with myself so much, trying to push, that I was, "okay, let's do an hour on the machine, we have to do so many machines lifting, and we have to do at least 600 sit-ups a day, or it's been a waste" (Jennifer).

> When I weighed about 110 lbs...I started competing with my weight, too. I'd be like, "let's just see if I can lose a couple more pounds." I remember thinking to myself, "okay, let's see if I can get down to 105. Let's just see if I can get down to 103;" and so, it was just all competition. That was my mission: competing with myself. And I was winning (Jennifer).

> When I was in a Monster state of mind I was winning when I would not eat something, or exercise above and beyond...but if I was in the Jennifer frame of mind, I was losing [if I exercised appropriately or if I ate a healthy meal that included the nutrients I needed and was enough--quantity-wise] (Jennifer).

Even though attempts were made by the athletes to stop their unhealthy behaviors, involvement in unhealthy exercise and eating behaviors progressed the longer all of the athletes were involved in their eating disorders. For **escalation** to occur the athletes had to engage in their dysfunctional activities in isolation.

For example, when Tu's roommate went to bed, Tu would exercise. When her teammates went to the cafeteria to eat together, Tu found an excuse to not join them, usually saying that she had homework to do; but, "usually, I'd just exercise during that time." Tu "bailed on practice" and stopped working out with a teammate during the first part of the summer when she feared that this teammate might become suspicious "if I did tons more extra" exercise beyond the practice sessions. The secrecy she maintained about her behaviors assisted Tu in isolating herself. The result was intense feelings of loneliness. Secrecy and loneliness were characteristics of Tu's experience of isolation while her eating disorder behavior was **escalating**.

Kaye described the secrecy and deception she maintained about her eating disorder. No one ever knew about Kaye's oscillations between anorexic and bulimic behavior, with subsequent weight fluctuations, because she would

> always go on a crash diet with the pills and raisins and water just before I returned to be with the cheerleading squad. My weight was fluctuating from 98 to 120, from 120 to 102, from 119 to 108 in a couple weeks' to a couple months' time. I'd come back to school and perform well and so no one knew anything was wrong.
>
> The Monster caused me to become very anti-social. I would be sitting in my room, hear the phone ring, and let the answering machine pick up. 'Listen to my friends calling me, and they thought I wasn't there, and then never call them back.... A lot of people didn't realize what was going on because I never talked to them or hung out with them anymore.... I broke off from all my friends. I had a dorm room at the end of the hall and so it was very easy for me to isolate. I would go into my room and shut my door and do my homework, or go to the gym with my headphones on and I wouldn't talk to anyone; just do my own thing (Jennifer).

Isolation was achieved by the athletes. In Double Duty: Food Addicted, (1990), Claudia Black speaks of isolation being an integral element of an eating disorder.

> In the addiction field,...eating disorders are often referred to as diseases of...isolation. Those with eating disorders tend to have spent a tremendous amount of time in isolation filled with loneliness. Because much of the behavior that fed their disease was secretive, it created even greater feelings of loneliness and shame (pp. 46-47).

For the athletes in this study, isolation was a necessary prerequisite for **escalation of use.**

In concert with the athletes' experiences of isolation and an **escalation of involvement** in unhealthy behaviors, there was progression of another type, but in the reverse direction: a narrowing of focus. Reducing their world to a single focus was characteristic of all the athletes. This progression reduced the primary focus of the athletes to their bodies and the relationship of their bodies to such things as food or exercise.

In response to her fear of weight gain and her desire to be good enough, Kaye narrowed her focus to two things: practicing and losing weight.

> All I'd ever wanted since 6th grade was to make college cheerleader. I was always practicing....just constantly practicing. I was a workaholic. I practiced on my own when we didn't have regular practices, 'cause I was always trying to be good enough. I always felt...even though I made it [football cheerleading squad, junior year in college].... that I wasn't good enough. I would practice until 11 o'clock at night.

Concerning her narrow focus on weight loss, Kaye said,

> I couldn't think of anything else but getting the weight off after I binged. I couldn't do anything: couldn't study, couldn't even have a conversation.... all I thought about was, "oh my gosh, have I gained weight today?! What have I eaten today?" Or, "oh my gosh, I just ate that?! I have to go exercise!"

Formerly Julie was highly aware of her competence as a scholar and athlete. She was one who was interested in the well-being of other people. Now, she characterized herself as someone who focused only on food and being thin.

> I was so worried about how I looked that I had to throw up, and try to not eat [in order] to be thin....and then, end up bingeing and throwing it up. Here I am so worried about how I looked that I would freak out if I couldn't run. I felt really shallow--just self-absorbed....

Of Tu's experience of a narrow focus she said,

> I was constantly thinking about it--so occupied with food. I was preoccupied with food and getting rid of it.... Conscious of every little movement, "if I do this is this going to help me lose the weight?" I was so anxious, paranoid about being caught when I was vomiting, paranoid I wouldn't be able to get rid of the food after I'd eaten, or paranoid that I wouldn't be able to eat what I wanted to eat.

Jennifer's experience of a narrow focus was characterized by obsessive thoughts of food and exercise.

> That's all I thought about: food and exercise...which sounds kind of strange for someone who is anorexic and didn't eat a lot. Basically, my goal was to take in less calories than I was burning. For example, if I had burned off 650-700 calories exercising on the machines (excluding the calorie burn from her 1-2 hours of abdominal exercises and weight lifting), and, say, I'd eaten 300 calories for breakfast and lunch combined then I'd say, "okay, I can have 300 calories for dinner." That was the kind of mind set I was in. That's how I lived.

Jennifer said, "I had to exercise;" Kaye's response to a perceived failure or inadequacy was responded to with, "I've got to lose weight;" Sarah's response to any feeling or stress, actual or imagined, was to binge and purge; bingeing and purging became "the only solution" for Julie because "it was the quickest one;" and even though Tu recognized the craziness of her behavior and felt the physical effects of exhaustion, her response was, "I've got to do what I've got to do." The obsessions these athletes

experienced with food, body image, and/or exercise was addressed in Women, Sex, And Addiction: A Search for Love and Power (1989). Charlotte Kasl wrote, "obsession...drains energy and distracts a woman from the deeper issues of her life" (p. 187). Minirth et al., (1990) also addressed being preoccupied with food.

> People with heart hunger will stuff their stomachs, either constantly or periodically, in an attempt to fill their hearts, but no matter what they put into or force out of their stomachs, none of it reaches the heart. In fact, the more effort and energy they direct toward their stomachs, the less emotional and psychic energy they can invest in those things that could legitimately fill their hearts (p. 38).

Except for Jennifer--who did not begin her anorexic behavior until she suffered a career-ending injury--paradoxically, when the athletes were at, or near, their competitive best, the eating disorder was at its worst. Following her best ever collegiate tennis tournament, in which she advanced to the championship round, Tu nearly took her life by accidentally overdosing on Dexatrim. It was within one month of peaking in their performances for both Sarah and Kaye, and at the same time Julie was running her fastest times ever as the top performer on the cross-country team that these athletes experienced intervention. That the eating disorder continued to **escalate**--for some to a very narrow line between life and death--while everything except performance results and self-reinforcement told the athletes to stop is an incredible paradox. Yet, it was at this time that the athletes sought professional help for their self-destructive eating disorder behavior. It was as if they knew they were on the precipice and needed help. "The last thing to go in an eating-disordered woman athlete is her performance" (Webner, C., personal communication, April 21, 1996). Priscilla Bolin, National Director for Clinical Outreach and Professional Development in the Field of Eating Disorders has addressed the phenomenon of athletic performance being the last thing to go.

> There is a window of time, and only the body knows that window, when the woman will benefit from her eating disorder. She will be leaner, faster, etc.--all that merits approval in her sport. But when that line is crossed, that is when the eating disorder controls the athlete. Until that time, the athlete

> thought she was in control, because it was working for her, regarding training and performance results.
>
> Take, for example, a runner. She thinks, "if I get down to 120 lbs I'll be faster and I will race better." She gets down to 120 and she achieves her performance goals. Then she thinks, "120 was good, but now if I get down to 115 lbs, I'll be even better." She does and she runs faster. Because she is getting the results she wants she becomes more preoccupied with her behavior. The eating disorder is perpetuated. Then her goal becomes 110 lbs. Somewhere in this process distorted thinking about her body image, and the value of her person being defined by her body image becomes very present for her. When that line of the eating disorder controlling her is crossed, that is when the eating disorder becomes a destructive force. The story of Christy Heinrich is a great example. The last thing that will be destroyed is the body (P. Bolin, personal communication, July 31, 1997).

The involvement of the athletes in unhealthy behaviors **escalated**, combining any number of the following behaviors, depending on the athlete: from excessive exercise and bingeing and purging to restricting nutritional intake and/or pill use, laxatives, and diuretics. Isolation was a necessary prerequisite for **escalation of use** to occur. A simultaneous escalation, but in reverse direction was the reduction of the world of the athletes to a single focus: their body and the relationship of it to food and exercise. The reinforcement the athletes received was a stronger motivator than the pain and discomfort experienced as a result of bingeing and purging in making decisions about their continued involvement in their eating disorders.

Beginnings of Awareness

Stopping the eating-disordered behavior seemed impossible for each of the athletes. The fifth subtheme of The Monster, **beginnings of awareness** involved coming to terms with the control the eating disorder had of their lives. Gaining this awareness involved the chronological and progressive experience of the athletes from the time they were confronted by someone about the seriousness of their respective disorders until they experienced "hitting bottom."

Except for Sarah who admitted herself to inpatient treatment, all of the athletes were confronted about their eating disorders. Following the confrontation by her parents Kaye

was assisted by out-patient care for her eating disorder, worked with a nutritionist and a doctor during the summer preceding her junior year, relapsed, and then was confronted by her boyfriend.

When Kaye lost down from 125 to 104 lbs in a couple weeks' time by involvement in anorexic behavior, for fear that Mark wouldn't think her attractive in a bathing suit or shorts during the spring, he confronted her.

> I know you're anorexic. He didn't know anything about it [anorexia], but...he told me that if I wanted us to work-- if we were going to go anywhere in our relationship--I had to do something about it. He said, "you don't have any room to love me because you've got so much stuff going on." He was right. I really feel like the Lord sent Mark because even though I wasn't ready for a dating relationship at the time, it moved me to start OA [Overeater's Anonymous]. He said, "I don't know what you've got to do, but I'll support you whatever you've got to do. If we're going to make a relationship work you have to get this eating thing under control, because you're gonna' die; and, I don't want to date someone that's gonna' die." He brought to my attention that I was on my path to destruction again. So I started going to therapy again.

It wasn't until the second confrontation that she was able to maintain consistent recovery.

When confronted by the head athletic trainer, Julie and Tu both lied about their behavior, initially. Months later, during September of 1995, Julie's boyfriend confronted her, and at that time "I was ready to do something about it. I was really scared, but there was a huge sense of relief. 'Okay, I give up.'"

Following an intervention with the team physician and head athletic trainer, Tu was assisted by a clinical nutritionist, a certified counselor/psychologist, and a sport psychology consultant prior to "hitting bottom." It took a near death experience as a consequence of over-dosing on Dexatrim for Tu to recognize a need for professional assistance. At that time she was admitted to an eating disorders in-patient treatment facility.

Jennifer experienced four confrontations before she began consistent recovery from her eating disorder. In chronological order, she was confronted by her parents and her doctor before she went to an inpatient eating disorders treatment facility, and then during her treatment experience she was confronted by a therapist and a fellow adolescent client.

When Jennifer was confronted by her parents she experienced an intense reaction.

> When my parents confronted me about my anorexic condition and wanted to send me away to treatment, I freaked-out. "You can't send me away! I just started summer school, and got a new job, and.... I'll do anything!" That's when I made the deal with my mom.... so I wouldn't have to go away to treatment. I would eat.... whatever she fixed. I would stop exercising.

Even though she promised to eat whatever her mom fixed, Jennifer could not eat the rice, frozen peas, and chicken that her mother had prepared for her.

> It was very very healthy; and, I couldn't eat it. I just mentally couldn't make myself eat it. When I took a bite of the peas all I could taste was the butter. Really, all I could taste was butter [her mother had put butter on the peas]. I couldn't taste peas or anything. And, I threw a fit.

The intensity of Jennifer's single focus: the demand to exercise, led to a confrontation with her doctor. Finally, Jennifer experienced **beginnings of awareness**.

> Recognizing the Monster occurred when I was in the doctor's office in early July. I had been fully involved in my disease [the anorexic and compulsive exercise behavior] since February. I had been in [to the doctor's office] one or two times every week getting blood drawn and having tests run, EKGs and what not....and they had just run an EKG on me and my heart rate was really low, and my heart beat was irregular...they thought I was ready to pass out
>
> I was still going out in 90 degree weather during the heat of the day and riding my bike for 45 minutes. They couldn't understand why I hadn't passed out. "Your body just can't take this," my doctor said. Then she wrote on a piece of paper three things I needed to do. One of the things she wrote down was, "no exercise;" the reason, "cause of death."

It wasn't until Julie experienced two paradoxes in her eating-disordered behavior--an unplanned binge-purge incident instead of her characteristic planned binge-purge episodes, and "unsettled feeling" instead of "a weird sense of calm" following the purge--that Julie experience a paradox in her thinking process. She began to be aware that something was not right. Instead of thinking that she was "in a league different from other bulimics," she experienced a new realization, "oh my gosh, I am the typical case study of the bulimic."

> When I had the realization that I was the case study bulimic, I sunk to a new level--deep depression. It was like, "gosh, who was I fooling?" I was fooling myself; I was fooling a lot of people. When I came back from

> treatment, even though I was still bingeing, I down-played it all the time....I just made it seem like everything was peachy--that I was all better.

Following this particular binge-purge episode Julie experienced self-confrontation.

> I remember feeling awful, I mean really awful--when I was purging. I had purged so much food earlier in the day, and now I was purging again. My body just felt destroyed. My face was really swollen...and just horrible. When I came out of the bathroom....there was this little carpeted area. I didn't have any energy. I was physically and emotionally exhausted. I sat down, and I just laid there for a few minutes. I remember thinking, "this is so pathetic. Why do I even bother going through my day if this is what I am going to do? There was no point to this day whatsoever."

Of this experience Julie said, " I just felt really hopeless, and really ashamed of myself because I wasn't using the resources that I had [Overeaters Anonymous and the Performance Team opportunities], and I wasn't trying hard enough." Julie thought she should be able to do something about her behavior. After all, as a high school athlete, her experience had been that positive results occurred in response to her efforts. "In high school, I knew that if I worked harder, I would run faster." At the same time that she believed she could do something about her condition if she REALLY wanted to, paradoxically, her condition progressed to considering suicide.

> I remember thinking, "God, I just want to die right now." It was the easiest way. The only thing that kept me going [from attempting suicide] was thinking, "what if it doesn't work? I don't want to have to live through it afterwards." I had never in my life, thought of suicide--and just now as I'm talking, I want to push that thought out of my head. But, when that thought entered my head then, it made me sick to my stomach. I thought, "my God, why am I thinking this?" I was mad at myself...kind of beat myself up about it. It was like, "I can't believe I'm thinking this...this is just pathetic." I had always considered people who were suicidal to be destitute. I had never considered myself to be at that point; and, I was.

Julie recognized, "I am destitute," helpless" when her eating disorder behavior **escalated** to considering a suicide attempt. This is not the self that she knew. She could not believe this was herself.

> I felt like I was in a movie. I think of the typical movie they'll show of someone with some kind of problem, like bulimia. And, in the movie you'll see them sitting on the floor--just desperate and looking pitiful--and you sense the drama and hear the music.... and it was real. I was sitting on the floor.

The elements the athletes described of their experiences of "hitting bottom" seems to suggest that they admitted helplessness in fighting their eating disorders only after all of their attempts to control had failed, or the consequences were so severe--as in Tu's case--that the thin line between life and death was suddenly brought into sharp focus. Being confronted by someone, at which time the athletes recognized their self-destructive behaviors, did not seem to be motivation enough for the athletes to begin a consistent recovery process from their eating disorders. After they were confronted, the athletes were not alone in their battles with their eating disorders.

> I had a nutritionist, a therapist, doctor, friends, family--I had the best family environment; the best support you could ask for--loved my therapist, loved my doctor, loved my nutritionist.... And, as hard as we all worked, including myself...sometimes, maybe, it got a little better, but I was still losing weight. The behavior really wasn't changing at all; and, especially the thinking wasn't changing (Jennifer).

It appeared that the reinforcement the athletes received, which worked in concert with their all or none (or dichotomous) thinking pattern that categorized information discretely, i.e., that to not participate in their unhealthy behaviors was to be "a loser," were stronger motivators in making decisions about their continued involvement in their eating disorders than being confronted by someone and their experience of **harmful consequences** from their participation in their eating disorders.

Just as "hitting bottom" was the final progressive step in the disease process, it was the first step toward health for the athletes. It was through being the "worst of the worst," and "hitting bottom" that they began movement toward health. A characteristic of most successful addiction recovery programs is that addicts have to "hit bottom" in order to begin moving toward health (Priscilla Bolin, personal communication, July 31, 1997). All five athletes in this study eventually came to the place where they began to be aware of their eating disorders and realize what it REALLY meant to win: admit they needed help. As Jennifer commented:

> If someone has a serious eating disorder and they're not just playing around with diets, and it gets to the point where it is clinically-diagnosed, there is nothing you can do about it, behaviorally, without help, I think. I tried...for two months during the summer with the best support you could ask for.... I loved the professionals assisting me. I didn't want to go to treatment. I thought I could do it on my own. People were asking me, "why can't you just start eating again?" It's definitely not something that you have any control over.

Jennifer's statement is consistent with the conclusion of Kasl (1989).

> An addiction cannot be stopped without either extremely painful consequences or an intervention that involves other people. It takes great effort and a social support system to recover from entrenched addiction (p. 28).

As paradoxical as were the athletes' experiences of becoming eating disordered, so was that of their recovery process.

Recovery/The Real Me

The **Recovery/The Real Me** phase of the athletes' experience was described as a process of recovering The Real Me. Recovery appeared to be a battle between The Monster and The Real Me. Initially, in active recovery, The Monster personality seemed to be strongest in the lives of these women. The strength of the dominant personality, The Monster or The Real Me, within the person was a process that was an individual experience. However, all five women eventually seemed to experience The Real Me personality more prominently following intervention for their respective eating disorders, and participation in a consistent recovery program.

During recovery, the element of the metatheme **Life of Paradox** was characterized by an intense struggle with control and feeling out of control. The Real Me became more present--the dominant personality--as the athletes continued their recovery process. Recovery appeared to involve a restructuring or rebuilding process that included changes in how the athletes thought of themselves and others, how they reacted to life circumstances, and found meaning in life. As the athletes continued involvement in a

recovery program, the personality that became more and more present, over time, was characterized as the Real Me.

The personality of The Real Me was portrayed as one that was healthy and promoted living fully in the present with one's self and others. The healthy attributes of the Real Me tended to gain more strength the longer the female athlete was in a recovery program. Expression of the Real Me was characterized by struggling with uncertainties in living; and feeling pain, loss, grief, and happiness. This dovetailed with the restoration that took place in the lives of the women as they participated in their recovery processes. Restoration began physically when they ceased their unhealthy behaviors.

The theme **Recovery/The Real Me** consisted of two subthemes: **identifying contributing factors** and **the struggle to recover**. Each of these themes along with supporting quotes are presented in the following sections.

Identifying Contributing Factors

During their recovery processes, each athlete began to **identify the factors** that were driving their unhealthy exercise, eating, and/or restricting behaviors. Identifying these factors appeared to occur as a process, kind of like peeling layers off of an onion. By starting with the outermost layer, and peeling that off and then the next and the next, progressively deeper influences were revealed.

The outermost layer of the onion appeared to be the readily visible factors related to sport participation. Each of these factors were identified by the athletes during the early stages of recovery.

The transition from being a high school athlete to becoming a college athlete was one challenge for the athletes in this study. They indicated that they struggled with changes and new experiences in their personal lives and in their athletic endeavors from high school to college during the transition.

Jennifer's transition to a NCAA Division III level team and coach was frustrating when she left a "very good" club coach who was also a NCAA Division I coach.

> I peaked at the end of the summer before I went to school [college] my freshman year. The environment was so different [at the Division III school] it was really frustrating.

Tu's transition to NCAA Division I tennis competition was personally and athletically challenging.

> All the girls on the team were kind of wild, and I didn't like that at all. They all wanted to go out, and...at that time I was kind of a "homebody." I was just so sad and depressed my freshman year because I was away from my family and away from my friends. The three other freshmen seemed to be adjusting well to all this, and here I am, you know, "what's going on?"

Following rehabilitation for a knee injury, Tu also experienced increased athletic pressure.

> I didn't win hardly any matches. That was hard. I like the feeling of playing well. I was used to it, in junior tennis. And, you go to tournaments and people know the top players, and all the parents are like, "yes! that's my daughter!" I was used to that. Then when I got here I didn't play well and I didn't get the recognition. I felt like a loser.

Tu's assessment of herself, i.e., "I felt like a loser." suggested that her personal identity had been challenged (i.e., sub-par athletic performance and a lack of recognition from other people) as a consequence of having suffered a severe injury (Hohmann, 1985). Research by Brewer, Van Raalte, and Linder (1990, 1991) have focused on an athlete's personal sense of self. For many athletes, but particularly those who are intensely involved with their sport and those who achieve notable success, the whole focus of their identity, their sense of self, is defined in the role of being an athlete. Subsequently, because of the importance placed on athletic performance, physical injury often affect's the athlete's self-image. If an athletes's primary sense of self is based on her identity as an athlete and this identity is threatened, (e.g., due to injury), the entire person feels threatened (Rotella & Heyman, 1993, p. 343). Emotional and irrational thinking often becomes dominant. Athletes who respond in this manner may increasingly become lost in the "work of worry" and eventually become overwhelmed by anxiety (Rotella & Heyman, 1993, p. 342).

Rotella and Heyman (1993) have pointed out that "if a person's coping mechanisms have been previously taxed or eroded by a stressful situation then another stress or crisis may increasingly impair functioning. Life stress taxes athletes' coping abilities...." (p. 342). Tu said she "felt like a loser," not only because of sub-par performance outcomes, but because of a loss of recognition from other people.

When Julie became a NCAA Division I distance runner she also expressed feelings of inadequacy. Some of these feelings were due to comparisons she made between herself and other athletes.

> When I came here [as a freshman athlete] I realized there were a lot of people [women distance athletes] around me that were a level above me. At first I felt I really did not belong here. It seemed like everyone else was on a different level. I looked at everyone else as "wow." There were times I felt like I fit in, but that was only when I ran really well, and was, like, top 3 or 4 on the team. Then I felt, "okay, I do belong here."

The lack of attention she received from her college coach was also a **contributing factor** to Julie's feelings of inadequacy.

> My high school coach was proud of me. I was the center of attention. I was the one good runner on my team. Everything I did, I did to please him. So, when I came here as a freshman, it was the same kind of thing. I wanted to be noticed...just get some attention from my coaches--a pat on the back; but here I was just another runner.

Kaye's feelings of inadequacy were based on a perceived disadvantage she had as a freshman "wannabe" football cheerleader.

> I felt a lot of pressure to make the cheerleading squad. I was at a disadvantage because a lot of girls from bigger schools had [experience stunting with guys], but I had never stunted with guys. I did not know how to stunt. I had to learn how to stunt. I was so intimidated by everybody. It was all up to me to get myself ready for try-outs in April.

Because Kaye did not know how to stunt and she needed to learn, she determined that she needed to look good to one of the guy cheerleaders "so he would practice with me and teach me." So when Kaye went to the gym the first day her freshman year she said she thought, "oh my gosh, I've got to lose weight." Noticing that the smaller girls got all the

attention, she determined that her weight of 110 lbs was too much weight, even though at 5'4" she was underweight. The desire of some athletes to present an aesthetically appealing body to enhance their performance has been identified as an influential factor in eating disorder development (Bickford, 1991; Gruber & Humphries, 1988; Ryan, 1989; Walberg, 1990). For the athletes in this study, the perception that they were not in control, particularly during their first year of college when they were dealing with the stress of new friends and new routines and, in one instance, following a weight gain due to an injury, was a factor they identified that made them susceptible to the development of an eating disorder (Bickford, 1991b).

Other sport-related factors that were identified by the athletes as influential in the development of their eating disorders included the expectations of significant others.

At the beginning of her junior year when she was playing well, Tu felt the pressure.

> I was in the groove, you know--confident and stuff; I was doing well..., and so I thought that now everyone was expecting me to do as well, or better. I felt a lot of pressure [to continue performing well];.... but, that's when all that eating mess came about.

Julie said that being an athlete contributed to her eating disorder. "I was really gung-ho trying to eat perfectly, and eat what the nutritionist said, and have the perfect body comp, and it just got out of hand; it...became obsessive."

Sarah said, "I had to be a certain way...run a certain time...I had to be really good...in that way, I think athletics contributed to my eating disorder.

Tu set personal goals in her practice-related fitness activities. To achieve those goals she engaged in unhealthy eating, excessive exercise, and diet pill behaviors. When Tu felt pressure--from feeling a general pressure to play well or feeling anxious about an upcoming match--she would respond with unhealthy behaviors.

Even though Jennifer's anorexic behavior began after her sport career was terminated, she identified another factor that appeared to be sport-influenced. She said that her eating disorder behavior progressed from excessive exercise and restricting food to

purposeful avoidance of fat in her nutritional intake in response to intense competition with herself:

> I was competing with myself. My goal was never to lose weight; never thought about weight. Never thought, "ugh, I need to lose 15-20 lbs." And, it's not like I ever looked at somebody and thought, "I want to be just like them," like someone in a magazine or in a movie. You hear a lot about the media. That was never my thing. It was just competition within myself.

For Kaye, weigh-ins, the associated pressures of being a football cheerleader, and the comments of other people in her sport appeared to be influential in the development of her eating disorder behavior. When Kaye was selected to the football cheerleading squad her junior season she was aware of the pressures associated with being a football cheerleader.

> ...we were in the public eye...in football....I was going to be in lots of pictures; we did ads [photo shoots] for tanning bed places. My partner told me he wanted me to lose weight. I felt like my coach wanted me to lose weight. She never told us, "you've got to lose weight or you can't cheer,...." but I just perceived it because she weighed us all the time. She weighed us religiously--every work-out that year which was Monday, Wednesday, Fridays....I was thinking, "she weighs us this much she must have some kind of hang-up about weight."

The comments of Kaye's cheerleading partner may have contributed to her eating disorder. In response to Kaye's weight gain during Christmas Break her freshman year, her male partner chided her, "You're so fat! I can't even lift you!" This partner also claimed the rumor that Kaye's coach said that she needed to get 10-15 lbs off of her because there was no way she could have someone as big as Kaye cheering for her. Obviously, my partner didn't know I had an eating disorder.

Ironically, personal benefits these athletes experienced also seemed to reinforce their eating disorders. During Kaye's freshman year when she was following her plan she said, "I remember a time when I went 10 or 12 days on raisins and water, and I was practicing out the butt; I was good, then."

Because her times in the fitness activities "were so much better than before," Tu determined that her excessive exercise, restricting, and bingeing and purging behaviors were working. "I was like, 'yeah!'" The improved times "made up for all the craziness that I did. Stopping it [eating disorder and excessive exercise behavior] was not on the agenda."

The result of bingeing and purging also benefitted Sarah.

> My eating disorder kept me ticking right along. I put on my blinders and trotted right along. It's like I never looked around to see what was around me or where the trail was going. The only thought processing I did was to get the things done that kept me trotting. I never stopped and thought about what I was doing. It was like I was automatic.

According to Black (1990), the use of eating disorder behavior to manage feelings is a common symptom of individuals addicted to food.

> Starving and purging are defenses erected to protect one from further hurt and pain. Unfortunately, these defenses don't work. Using food to manage feelings may temporarily distort one's perception of the truth, but it cannot alter the truth. Feelings may be disguised, denied, and rationalized, but a painful feeling will not go away until it has run its natural course" (pp. 128-129).

The positive affirmations from coaches and significant other people in sport also seemed to reinforce the athletes' practice of unhealthy behaviors. Kaye talked about the work-out schedule she maintained during her freshman year from January until try-outs in April that garnered praise.

> I loved the affirmations from others. Everybody's approval was what I always wanted, and so that just fanned my disease even more. I remember people saying, "her determination is unbelievable." People would say, "I can't believe you get up every morning at 5:30. I can't believe you're still running at midnight. How do you do it?" I loved the thought that I had more will-power than anybody; more determination than anybody else.

Kaye's resulting weight loss did not go unrecognized either.

> I got so much attention.... Everybody approved of my weight loss and so it just fed it [eating disorder] even more. I made the [cheerleading] squad and everybody loved me because I weighed 102 lbs. I was getting all this verbal approval, and everybody wanting to stunt with me, and I thought everybody liked me. When the guys said they wanted to try-out with me, that just fanned my disease because I thought everybody liked me.

Tu said that she loved the attention she received when she improved in the tennis-related fitness activities.

> It made up for all the craziness [that she was in involved in]. People recognized me because my times were faster. It was like a reward.

As Jennifer lost weight she became motivated to lose even more.

> achieving my exercise and restricting goals was reinforcing for me to continue, even though when I first began losing weight I was losing body fat that I needed to menstruate and stuff like that. Eventually, I was losing muscle. I didn't have anything else to lose; muscles and tissues were going. People's comments were reinforcing. Some people would come up to me in the gym and say, "wow, you look great!"

Kaye achieved the things she desired the most; but paradoxically, achievement of those goals was not satisfying. As a lean freshman Kaye was flattered by the attention of her male stunt partners.

> The guys would ask me, "Kaye, will you stunt with me today? Will you help me work on this?" Everybody just loved me, and I loved that, and I loved guys wanting to stunt with me. I got the attention, but I could never relax....

When she made the football cheerleading squad, Kaye basked in the attention and praise she received from everyone.

> When I made cheerleader they put a big write-up, with a huge picture of my face at the first football game of the season, on the front page of the newspaper. I received so many letters and phone calls from people, "congratulations, we saw you on t.v." I was on t.v. just about every game. I got so many affirmations... from other people. The approval felt good, but then I had to go and do it all again, or do something else better.

Several of the women worried about the approval of family members. For Tu, it was her mother.

> I thought that she was pointing out something about me [when her mother commented on Tu's weight gain and subsequent change in clothing size] ...she didn't like about me.... I felt rejected. I respect my mom and her opinion, and for her to think that of me, I'm like, "something must be really wrong."

Disapproval from her dad was linked to Tu's sport performance.

> During my first two years of college tennis...when I wasn't playing well...because of the long rehabilitation process from my knee surgery, I

> disappointed my dad again. It was a long dry spell from my junior year of high school to close to my junior year in college. For the first time in a long time my dad was excited again about me playing well. So, I was like, "Dad's real excited. I have to keep this up." I don't want to disappoint him. I like pleasing him or seeing him happy or proud of me.

Black (1990, p. 85) has suggested that "with anorexics there is...the problem of never feeling as if you're good enough." For Kaye, even her low weight was not perceived to be good enough.

> I had to make it appear like my low weight was natural. It had to be natural because...I always felt like I had to be perfect, and that if I looked like I had to work very hard I wouldn't be perfect.

The perceptions these athletes had of their teammates, coaches, and parents appeared to interact in a manner that contributed to their eating-disordered behavior. They assumed that other people were just as critical of them as they were. This discrete interpretation reflected an all or none thinking pattern that was pervasive throughout the experiences of the athletes.

A characteristic of both the beliefs the athletes held and the preoccupation of the athletes with their single focus, i.e., body image, was that they seemed to be influenced by an external focus on other peoples' perceptions of them. The following comment by Kaye is representative.

> The fear of being fat is so strong. Being fat is more than being a total failure. It's that people would see me as a blob and they would say, "she doesn't have any discipline. Look at how much weight she has gained. She doesn't have any will-power." All my life people have said, "it's amazing what Kaye can do. Her determination is unbelievable. She's got an incredible amount of discipline." If I've heard it once, I've heard it a million times, "she's got an incredible amount of discipline." I assume that if I got fat people would say, "oh, where did the discipline go?" The image wouldn't be there anymore...a blown image.

The preoccupation with having the perfect image that these athletes experienced has been addressed by addictions specialist Claudia Black in Double Duty: Food Addicted (1990).

> Bulimics and anorexics often have major issues around perfectionism. They have bought into the notion that if they can control their exteriors, they can become more acceptable in their interiors, where they often feel fear,

> hurt, loneliness, and shame. The control they experience with food may be the only control they feel they have in their lives (p. 46).

The athletes in this study were preoccupied with presenting a perfect image; paradoxically, what people praised--the discipline, drive, and determination so often found in elite athletes paralleled the discipline, drive, and determination to self-destruct when these women were involved in their eating disorder behavior.

> I wonder if I got so tired of keeping up that image of being so disciplined that when I was by myself, when I was alone and no one could see, I wanted to binge and purge...that it was okay to be a failure...like a way of rebellion because I always had to be so perfect. And, it was a way to not be perfect. It was such a contrast, because the only way I could exist in front of people was to be the image that I allowed others to see of me. I had created this image, and they were reinforcing it by their comments about me, and so the only way I could exist was to be this perfect person (Kaye).

While there were commonalities to the factors these women identified as contributing to their eating disorders, there were also individual differences, some of which were rooted in family history and personal issues.

> Things weren't right in the family. The screaming and yelling and the cocaine.... For example, when I was eight years old or so, I would go into my parents' [room] late at night,...and they would be smoking pot. This happened every night; and, other times I found their cocaine.
>
> I began to realize things weren't supposed to be like that; so I took on the role of being a parent because I didn't want them to get caught. I feared they weren't going to be here [her parents would be taken to jail for drug possession and use] (Sarah).

> I always felt like...there was something missing--like there was one more thing I had to do that was just great that would make even me say, "wow"--to make me feel complete. I just felt like there was always...a missing piece in the puzzle.
>
> Here at college, I was still dealing with the appearance thing--that was a big issue. Always trying to be thinner, look better. The obsession just became being thin. Running--that was a big thing; being the model member of the team, doing what the nutritionist said and having the perfect body comp--that became a big thing to me (Julie).

> If I made it through the day eating the way I thought was correct--according to my definition of health--it was a great day. I felt very good. And, at the same time, sometimes my back was in so much pain, I would cry myself to sleep (Jennifer).

> Shame led to my, "I've got to be perfect...that perfectionistic drive to make up for the shameful thing I had done. It was like I was consumed in

> practicing so as to rectify the past [including a dysfunctional relationship with a boyfriend]. And, I think, possibly I was consumed, too, so that I wouldn't have to think about it...so that I could block it out of my mind. Forget that it ever happened (Kaye).

Several of these athletes attempted to "rectify the bad deeds by being good." Of the interaction between shameful feelings and a quest for perfection, Black (1990) has commented.

> [Individuals] seek perfectionism in an attempt to control and/or mask shame. Sometimes areas they can affect are so limited, their only control rests with their bodies. Their preoccupation with needing to look good is often an external way of protecting themselves and protecting their families. If they look good, they believe their problems and those of their families will remain hidden from others. No one will be able to see beyond the false exterior to the real chaos and sickness in their lives. Starving and purging are clearly actions in pursuit of perfection.
>
> ...children...raised with...emotional abandonment...did not get the approval, the attention, or the love they needed. Very early they came to believe there was something extremely defective inside them, that they could never be good enough.... Food anesthetizes the pain of the growing-up years and fills the emptiness that comes with past and present shame. Anorexics or bulimics often seek to escape from their feelings of inadequacy by driving themselves to perfect their bodies by starving and purging (pp. 50-51).

When the last layer of the "onion" was peeled off, the core was revealed to these women. Kaye found that her core, just like that of the onion, was hollow.

> I don't even know who I am. Everybody keeps saying, "what's Kaye doing?" I don't know 'cause I don't know what makes me happy, because I don't know who I am.
>
> I've always been what other people have told me to do.... do what I think makes everybody else happy. Suddenly, no one's telling me to do anything, and I'm really lost. My identity had always been cheerleading. I was so clouded by the obsession to be a cheerleader, and the obsession to be skinny, and to be attractive, and want everyone to approve and say, "oh, isn't it great, look at her, she's a cheerleader." I mean, who cares? But then, I thought it was such a great thing. I thought...that identity, was so important. I'm thinking to myself, "did you really think that was that important?"

For Jennifer the inability to compete in sport was simply too much pain to bear.

> I had been a competitor since age 4...it's like an era of my life is over. All that I've known...what I've really been...it's not there anymore. Here, you have this normal way of life that has been yours from the time you were two years old until it is suddenly taken away, and you can no longer be that

person. The loss of athletics was the main thing driving my eating disorder, I think. Throughout my life, that [athletics] was my life.

The athletes of this study revealed that while there were a variety of very intense pressures associated with being a college athlete, those pressures in themselves were not the sole contributor to the genesis and continued practice of their eating disorder. For these individuals their disorder appeared to be associated with more with a fundamental inability to deal with the pressures of life (Ryan, 1989).

The result was a series of futile attempts to control the one thing they perceived they were in complete control of--their bodies. Fortunately, when these athletes realized some of the factors contributing to their eating disorder, it marked the beginning of their recovery of The Real Me.

The Struggle to Recover

The second subtheme of **Recovery/The Real Me** was **the struggle to recover** that these women experienced.

> My behavior really wasn't changing at all; and, especially the thinking wasn't changing. I hated that feeling--of not being able to do what I wanted to do. Knowing that I should do something, and I wanted to do something, and I couldn't do it. There really wasn't anything else to it. It's almost feeling like a loser. I lost. I'd been winning with this Monster this whole time, and at that point, with him, I lost to him--to this Monster (Jennifer).

> I could not stop from giving in to this driving force... It was like, "ugh"... a sense of helplessness...it was uncontrollable. I could not stop. It was like I didn't have enough will-power. It was rapid--just shoveling food into my mouth; and, I was bingeing on junk food.... It was like the binges that I had heard about in treatment...(Julie).

> I just feel I've been stripped of everything. In high school, I could do anything. Now that I'm in college, I can't do anything. I don't even go to class. Will I ever sit down and complete a project? Even if I sat down and really wanted to do something, for some reason, I just don't think I could do it. In high school I could get it done. I'm at the other end of the spectrum--total helplessness (Sarah).

That the athletes could not begin consistent recovery from their eating disorders when they first began receiving professional assistance is consistent with research by Zerbe (1993) who found that one in four bulimic patients do not respond to treatment, and only a

few years after their initial treatment, 30% of anorexia nervosa patients are either dead from their illness or are chronically afflicted by it.

The athletes described numerous factors that contributed to their **struggle to recover**. Some of these factors included denial of their condition and of their need for help, rationalization of their eating disorders, feelings of shame and fear, self-isolation, and magical thinking.

Recovery was a struggle because the athletes denied the seriousness of their eating disorders.

> When I left treatment, I was still fighting the idea that I had to do certain things to recover (Julie).

In some cases rationalization took the form of denial.

> People would say, "you look too skinny. Jennifer, you don't look good. I don't know what you think you look like, but you're too skinny. Your legs are too skinny. Your neck is too skinny. You can see all the bones in your back."
>
> People didn't want to look at me, then. I would walk through the gym and have on my sports bra and biking shorts, and the guys would stare at me, and I thought it was 'cause I looked great. But, looking back, it was probably because, "that's disgusting." I never knew what I looked like. I couldn't see it. Since I've been in recovery I've seen girls with eating disorders, and it's hard to look at them because they look so sick. To think that I was there and that was the way people looked at me....(Jennifer).

Of a particular binge-purge episode Julie said, "there was this point where I didn't want to stop bingeing because that meant something else had control of the situation" while at the same time Julie expressly stated, "I could not stop." This paradox portrayed the deceptive quality of denial (Hemfelt et al., 1989, pp. 93-95). In this episode, it seemed that psychological denial adjusted Julie's interpretation of the experience in such a way that she still thought she had control, i.e., "I can stop, but I just don't want to."

Sometimes **the struggle to recover** included an attempts to "cover up" the eating disorder.

> I had to go out the next morning and buy cookies to replace the ones [stolen from her roommate] I binged on, so that I would have the Fig Newtons back in her cupboard before she found out.

> When I was buying the cookies I was thinking to myself, "I am so disgusted with myself. I had to make a special trip to the store to buy cookies because I binged. And, I had to have THESE cookies." That was a really, really awful feeling (Julie).
>
> I even began to lie to my boyfriend about it. Before treatment I was always honest with him. I would lie to other people, but I wouldn't lie to him about my bingeing and purging. Until this time that was my safety. It's like, "well, at least there is one person I am being honest with...." Now there was nobody except for me that knew what was going on (Julie).

Sarah said, "I did just enough social activity for everyone to think I was okay." Her actions were intended to indicate to others that she was okay.

Shame continued to perpetuate the unhealthy behaviors and exacerbate the **struggle to recover**. Julie said she felt "tainted" for lying; Tu worried that she would be found to "have a flaw" which "would kill whatever self-esteem I had left;" and Sarah felt shame for not being able "to get it together." According to Minirth et al., (1990) such responses are typical of **the struggle**.

> A typical relapse response [of eating-disordered people]--to remove yourself from support. This is exactly the wrong thing to do. When you are feeling weakest is the time you most need the strength of your support system. Secrecy leads to shame, and shame is the feeling that keeps the entire addiction cycle going" (p. 197).

In some cases, shame led to self-imposed isolation from others.

> I couldn't talk to my friends about my internal struggle because I was afraid of their reaction. Regardless of what they might say, I would be thinking about what they are thinking and not saying. I think they would think, "why can't this girl just get it together? Why doesn't she just eat until she's full, and then leave?" That's what I think it should be. I don't think it should be such a big deal. I was sitting there the entire time bantering back and forth with "I have got to get out of here" and, "what else can I eat?" (Sarah).

Magical thinking also contributed to **the struggle to recover**.

> I had always thought, "when I stop being bulmic. then...." (Sarah)

Sarah assumed that suddenly everything would change when she stopped being bulimic. Looking for the one thing that will make everything okay is "magical thinking" (Hemfelt et al., 1989). Magical thinking seems to be a series of quests--quests for the "one thing" that

will make all the difference. Some of the quests that these athletes identified included having everybody's approval, achieving superior levels of performance, and being a "model" athlete.

Recovery was a struggle because the athletes tried to recover from their eating disorders by doing what was familiar to them: control.

> It means I'm not trying to control it. Before, when I was trying to control it, it was still out of control. The harder I tried to control, the more out of control I got. I think the reason for that is that I was trying to control needs.... I was in an uncontrollable situation and I was trying to make things controllable (Sarah).

Sarah recognized that the binge-purge bulimic behavior was her attempt to control the uncontrollable. "For the bulimic...seeking control is the central issue" (Black, 1990, p. 130). For the athletes to begin recovery they had to confront their need to control. The following comment by Sarah illustrates this confrontation against a stark background of paradox.

> I know now that I was trying [binge eating was an attempt] to cope with the way I was feeling. I don't know if it's out of control or just not feeling; not knowing what to feel. I don't want to feel.... I don't know how to feel. So, I eat to avoid that. As long as I was eating I was escaping. I can't control my feelings, but I attempt to by choosing not to feel. I didn't want to feel, and so I would eat (Sarah).

Dr. Whitfield (1987) has addressed the issue of control in an eating-disordered person.

> Control is perhaps the most dominant issue in our lives. No matter what we think we have to control, whether someone else's behavior, our own behavior or something else, our codependent self tends to latch on to this notion and won't let go. Most of the time they [people with eating disorders, or other codependent behaviors] believe they have overcome.... They even believe they can somehow control life itself. The result is often suffering, confusion, and frustration. Ultimately, we cannot control life, so the more that we try to control it, the more out of control we feel because we are focusing so much attention on it. Frequently the person who feels out of control is obsessed with the need to be in control (pp. 68-69).

Recovery was a struggle because these athletes had to identify, and then deal with, the feelings that they had been using their eating disorders to escape from. Recovery meant being specific as to where that pain came from. Kasl (1989) has addressed the

importance of asking why. "When we rid ourselves of unwanted behavior, without seeking to understand the source of that behavior, it merely boomerangs on us. In other words, what we resist persists" (p. 176).

Jennifer said that the pain of all that happened to her drove her, and so she took control. To **recover** from her eating disorder, Jennifer had to confront the loss of her identity as an athlete.

> To no longer have the 2-3 hour work-outs every day "is really hard to adjust to. My life has just always had the exercise. I've never thought of it as, "I'm exercising today because I'm going to gymnastics practice. I was just going to the gym to work-out. It was my regular three hour training. No longer having structured athletics... "is really hard to deal with. My normal way of being was to be a toned athlete: it was to be muscular and it was to be fit. That was just natural; and I never had to think about it, plan for it. It was just my life. I don't like not being athletic, as far as...competitive athletics is concerned....

The **struggle to recover** included not only a recognition of where the pain came from but also the experiece of grief over a loss.

> At school people would always go, "aren't you that diver? Don't you dive here?" I used to be able to say, "yeah. Come to one of the meets." Now it's kind of like, "well, I don't exactly dive anymore." They ask, "when are you going to dive again?" I'm, "I can't exactly dive anymore. And that makes me really sad....
>
> I hate to say words like "era" because I'm only 20 years old, but it's like an era of my life is over. All that I've known--what I've really been...it's not there anymore. It's no longer current. I'm not even capable of doing it anymore. Now I just have to accept, or try to accept this new way of life (Jennifer).

> Even though I know they didn't give me happiness, I struggle with not going after those things. I'm grieving the person I used to be. That's hard. To be the person I was: who won all the awards and honors is what the world thinks is good...what my parents thought was good; and, what I thought was good. I'm having a hard time, because I was like that, and now I'm not like that. I'm in limbo....
>
> Maybe that's not what I thought it was...that receiving all the awards and honors doesn't matter (Sarah).

According to Minirth et al., (1990), "Grief is the core of the healing process" (p. 177). Grief is the key to making room for healing and also the key to continued wellness. Grieving losses opens the door for forgiveness (Minirth et al., pp. 182, 128). Saying

goodbye results in experiencing a sense of loss of the things loved in the past. Grieving the pain is the hardest in recovery, but it is the most essential. As the athletes in this study opened themselves to excising pain, it was like having surgery. Their true healing began.

For some, the **struggle to recover** was harder.

> I've just given up. I feel like it's not worth it. What am I supposed to do? There is so much. Where do I even start? I just want to quit... everything. I'm just worn-out. Is it worth it all? The only way to do that is to die. I don't really want to die. Sometimes I do, but I don't. I don't want to take my own life. If God could create an accident for me, I'm ready to go. I just want to start over; cut everything off.... just move, just start over (Sarah).

Paradoxically, confronting recovery meant acknowledging the "value" the eating disorder had served in their lives. In response to the challenges and difficulties in their lives, they developed survival tools--their eating disorders. In recovery, though, they learned how to give up their defenses and develop healthy concepts about control (Black, pp. 132, 152). Ultimately, the need to control their body through the eating disorder was to be reframed so that the athletes learned there were other ways to self-regulate and soothe themselves.

All five athletes in this study found that their means of interpreting life events did not result in healthy behaviors. Something the athletes brought with them to their college sport experiences was not adequate in assisting them in the transition to a higher level of competition; nor was it adequate in helping them relate to life events, their sport and associated pressures, coaches, academic rigors, and to themselves in a manner that promoted health.

As horrific as Kaye's eating disorder was for her, and as difficult as her recovery had been, she offered the following thought on her experience of being an eating-disordered woman athlete.

> I'm thankful I have an eating disorder. I may have buried the high school situation and not thought another thing about it had I not actually hit bottom with an eating disorder. I had to do this step stuff [12 step program] and go back and pull it all up and talk about it. Some people never look at their

lives and try to figure out anything, but my eating disorder has forced me to look back and figure out what's going on.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Through **recovery** the five athletes in this study demonstrated a commonalty: they were women who had the courage and strength to endure. Regardless of how they responded to the pain in their lives, it was their way of surviving. They found their life lines, i.e., bulimia, anorexia, and over-exercising; denying or ignoring, and minimizing their pain; being perfect; deceiving others and being deceived--ultimately being controlling--and they used these tools for survival (Black, 1990).

In using their eating disorders to survive, though, they found themselves controlled by **The Monster**. The athletes found themselves **powerless to stop at will** their **unhealthy behaviors**. Involvement in the unhealthy behaviors resulted in **harmful consequences** personally, physically, and socially. The lives of the athletes became **unmanageable**, to which their response was to **escalate the use** of their eating-disordered behaviors and isolate themselves; this resulted in even greater self-destruction. The athletes finally "hit bottom" and admitted helplessness to deal with their eating disorders. This marked **beginnings of awareness**.

In **recovery** the athletes found that they had to **identify the contributing factors** leading to their disorder to experience recovery of **The Real Me**. Still, the **struggle to recover** was an arduous one. Eventually, their tendency to use food and be preoccupied with their body image became less prevalent. At that time the driving force in their lives became **The Real Me** rather than **The Monster**.

Conclusions

Based on the analysis of the responses of the athletes of this study the following conclusions are offered

1. The experience of the athletes in this study was a Life of Paradox that was comprised of two phases: The Monster and Recovery/The Real Me.

2. Factors associated with sport participation, i.e., the transition from high school to college athletics and the pressure of other sport-related people (parents, coaches and teammates) interacted with factors pointed out in the clinical literature to exacerbate the eating disorder condition of the athletes of this study.

Recommendations

In future research endeavors the following recommendations are offered:

1. The eating disorder experiences of athletes in "high risk sports" should be examined in order to ascertain whether or not the pressures associated with those sports exacerbate the eating-disordered condition. Four of the five athletes in the present study were athletes from sports that are frequently considered to be high risk for eating disorder development (i.e., those sports where appearance of the athlete is considered in performance scores, e.g., diving, gymnastics. dancing, synchronized swimming and cheerleading; and those sports that require a need to maintain a low body mass for optimal performance, e. g., distance running, and other endurance sports).

2. The experiences of eating-disordered athletes who are in a consistent recovery process should be assessed. The struggle to recover from a clinically-diagnosed eating disorder was intense for all five athletes of this study even though they were confronted by people who loved them, received assistance from professionals at in-patient or out-patient eating disorder treatment facilities, and possessed a vast knowledge base regarding healthy nutritional practices for athletes.

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APPENDICES

APPENDIX A

INFORMED CONSENT

I,_____, on this the _____day of _____, agree to participate in the doctoral research study conducted by DeeAnne Pearson for the purpose of facilitating the collection of data regarding the perceptions of my experiences as an eating disordered intercollegiate female athlete. I understand that my participation is voluntary, and that it may be withdrawn at any time at my request. I understand that my honest response is important to the success of this study. I am aware that the interview sessions of approximately one hour in duration each will be audio taped, but that my identity will be protected through use of a pseudonym. I understand that confidentiality will be maintained throughout the course of this study, such that at no time will my name be used in the study. I will select a pseudonym which will be used during the interviews, the data analysis process in which the transcriptions will be read by a qualitative research group, and in the written document following completion of this study. I understand that DeeAnne will consult me as needed when she has questions concerning the interpretation of the meanings from our audio taped conversations. I give DeeAnne permission to publish the information from these interview sessions in her doctoral dissertation and other written publications following completion of this study.

_____I would like to receive a summary of the results.

_____I would not like to receive a summary of the results.

Mailing address for summary: _____
Name

_____
Phone Address

_____

I, DeeAnne Pearson, promise that confidentiality will be maintained throughout the course of this study. The audio tapes of the interview sessions will be erased once the process of data collection and analysis has been completed. Transcriptions will be kept in a locked file in the locked office of the researcher. Three years following the completion of this study, I promise to destroy this contract. If requested, I will send a summary of the results to the above named participant.

I have discussed the possibility of experiencing risks and benefits to the above named athlete arising from her participation in this study. Possible risks include psychological and emotional discomfort/distress during and following the interview sessions. I have shared with the athlete the following possible benefits of her participation in this study:

1. the therapeutic effect that may result in response to her telling of "her story;"
2. possible self-discovery of issues and factors contributing to her eating disordered condition; and
3. an opportunity to reflect on the positive changes she's made in her life since the conception of her recovery process.

_____

For further questions, contact: DeeAnne Pearson Date
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(423) 974-8964

or

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APPENDIX B

Table 4.1. Descriptive Elements of "The Monster"

Descriptive Elements of "The Monster"	**Jennifer**	**Julie**	**Kaye**	**Sarah**	**Tu**
Driven/controlled by a force, i.e., Monster, psychotic, "that powerful/uncontrollable thing," "possessed"	x	x	x	x	x
Distorted thinking	x	x	x	x	x
Creatively unique in making ED acceptable	x	x	x	x	x
Obsessive behavior & compulsive thoughts	x	x	x	x	x
Excessive exercise	x	x	x		x
Experienced no rest	x	x	x	x	x
Experienced altered reality, i.e., zone, numb, mode, robot, chunk of time taken out	x	x	x	x	x
No pleasure in eating; doesn't taste food		x	x	x	x
Doesn't remember eating (binge process)		x	x	x	x
Automatic in binge-purge process		x	x	x	x

Table 4.1. (continued)

Descriptive Elements of "The Monster"	Jennifer	Julie	Kaye	Sarah	Tu
Experiences sabotage as a result of ED	x	x	x	x	x
Helpless/powerless to stop unhealthy thoughts, feelings & behaviors; helpless to help herself	x	x	x	x	x
Experiences paradoxes/ opposites	x	x	x	x	x
Experiences harmful consequences as a result of ED, i.e., lack of energy for training, decreased practice performance, loss of friends, or body becomes injured	x	x	x	x	x
Eating disorder use escalates--participation in types of unhealthy behaviors increases and engagement in them is more frequent, i.e., excessive exercise, b-p, use of pills, restricting food	x	x	x	x	x
Life becomes unmanageable socially, academically, athletically, & personally	x	x	x	x	x
Narrow focus: life is reduced to a single focus on food, body image, or other external focus as ED progresses	x	x	x	x	x

Table 4.1. (continued)

Descriptive Elements of "The Monster"	Jennifer	Julie	Kaye	Sarah	Tu
Feels simultaneous control/out of control	x	x	x	x	x
Attempts to control existence					
* Isolated self	x	x	x	x	x
* Secretive about ED behaviors	x	x	x	x	x
* Hiding ED behaviors and emotional hurts from other people	x	x	x	x	x
* Hides true feelings from others	x	x	x	x	x
* Deceiving others about ED behaviors & personal status	x	x	x	x	x
* Deceiving others to preserve her image	x	x	x	x	x
* Striving for/preoccupation with perfection	x	x	x	x	x
Bingeing and purging					
* Planned b-p; & b-p happened without a plan, i.e., automatically		x	x	x	x
* ED provided control of/ escape from current and past feelings, but had to continue in ED behavior to continue the escape	x	x	x	x	x
* Uses ED to self-comfort/ soothe; provides momentary results only	x	x	x	x	x

Table 4.1. (continued)

Descriptive Elements of "The Monster"	Jennifer	Julie	Kaye	Sarah	Tu
Bingeing and purging (cont'd)					
* Alters experience, i.e., purge wipes slate clean, "trotting along," relieved	x	x	x	x	x
Dichotomous, i.e., one-way/all-or-none thinking	x	x	x	x	x
Ascribes to schedules--"busy" to isolate from others; "to do" lists; diet pill use plan; exercise, homework, and house cleaning schedule	x	x	x	x	x
During involvement in ED experiences uncomfortable feelings	x	x	x	x	x
* Shame about the past			x		
* Fear of being found to have an ED		x	x	x	x
* Anger			x	x	x
* Hurt, betrayal	x				x
* Disappointment with life	x			x	x
* Self-loathing, or self-disgust or self-hatred		x	x	x	x
* Guilt	x	x	x	x	x
* Out of control	x	x	x	x	x
* Inadequate		x	x		x
* Hopeless/helpless	x	x	x	x	x

Table 4.1. (continued)

Descriptive Elements of "The Monster"	Jennifer	Julie	Kaye	Sarah	Tu
During involvement in ED experiences uncomfortable feelings (continued)	x	x	x	x	x
* Stress from life &/or athletic demands	x	x	x	x	x
* Family stress	x	x	x	x	x
* Internal emptiness		x	x	x	x
Experiences difficulty adjusting to college from high school (feels disadvantaged &/or dissatisfied &/or unrecognized for athletic exploits &/or unhappy with the college experience)	x	x	x	x	x
ED is a coping strategy for dealing with feelings, past & present	x	x	x	x	x
Minimizes feelings, i.e., physical &/or emotional pain	x	x	x	x	x
As ED progressed, she felt vain, shallow, or self-absorbed	x	x	x	x	x

Table 4.1. (continued)

Descriptive Elements of "The Monster"	Jennifer	Julie	Kaye	Sarah	Tu
Influence of self in perpetuating the ED					
* Attainment of personal goals, ideals reinforced ED behavior	x	x	x	x	x
* Self-deceived, i.e., thought she had it all together, or thought she could win approval, or thought she was in control when involved in her ED; and realized she was deceived	x	x	x	x	x
* Attempted to maintain an ideal identity	x	x	x	x	x
* Self-destructed through ED involvement	x	x	x	x	x
Influence of other people in perpetuating ED					
* Perceptions athletes have of other people's thoughts toward them prevents openness in sharing about true feelings and struggles		x	x	x	x
* Comments of other people influenced continued involvement in ED	x	x	x	x	x
* Deceived by other people, i.e., coach, team, society/culture, people--resulted in continued ED involvement		x	x	x	x
* Affirmations of other people reinforces ED behavior	x	x	x	x	x
* Desire to please others; get attention		x	x	x	x

Table 4.1. (continued)

Descriptive Elements of "The Monster"	Jennifer	Julie	Kaye	Sarah	Tu
Influence of other people in perpetuating ED, (cont'd)					
* Comparison of self to teammates results in uncomfortable feelings		x	x		x
* Alone	x	x	x	x	x
* Approval from others didn't satisfy her inner desire/quest		x	x	x	x
* Sets self apart--a different league, or different standard from everyone else		x	x	x	
Aware of ED, tried to stop the unhealthy behaviors with her own strength of will, but couldn't	x	x	x	x	
Beginnings of awareness of ED occurred; "hit bottom"--came to the end of personal resources & broke personal rules or boundaries;	x	x	x	x	x
Confrontation by other people intervened in the ED, and assisted in beginning a recovery program	x	x	x		x
Experienced a professional clinical diagnosis; determined to be eating-disordered according to the criteria in the DSM-IV	Anorexia Nervosa (AN)	BN	BN	BN	BN

Table 4.2. Descriptive Elements of "Recovery/The Real Me"

Descriptive Elements of "Recovery/The Real Me"	Jennifer	Julie	Kaye	Sarah	Tu
Other people & programs assisted in maintaining a recovery process	x	x	x	x	x
Received professional assistance from eating disorder specialists during initial recovery	x	x	x	x	x
Recovery is hard/was a struggle, i.e., struggled a. with negative thoughts, & b. feelings motivating her to engage in self-destructive ED behaviors	x	x	x	x	x
Experienced relapse into ED behavior following initial treatment process; became worse than before treatment	x	x	x	x	
Wants to die		x	x	x	x
Identifies factors contributing to and perpetuating ED	x	x	x	x	x
To live, she dies to old way of thinking/perceiving, & responding to life--begins a restructuring process	x	x	x	x	x
Experienced a distortion in self-perception of body image	x	x			
Rationalized, denied, minimized condition; magical thinking, etc makes recovery a struggle	x	x	x	x	x

Table 4.2. (continued)

Descriptive Elements of "Recovery/The Real Me"	Jennifer	Julie	Kaye	Sarah	Tu
Confronts her need to control; involves pain of the past & present	x	x	x	x	x
Experiences a grieving process	x	x	x	x	x
Experiences a change in emphasis on what is important in life	x	x	x	x	x
Former identity was found lacking	x	x	x	x	x
Struggles with personal identity; experiences a process of replacing the old identity with a new one	x	x	x	x	x
Dichotomous thinking process begins to change; things are not all or none/black or white	x	x	x	x	x
Automatic response to feelings results in ED/self-destructive behaviors	x	x	x	x	x
During initial recovery, she determined guidelines for making decisions rather than making decisions in response to her feelings	x	x	x	x	x
Choices in behavior are in opposition to her feelings	x	x	x	x	x

VITA

DeeAnne Pearson was born in Corvallis, Oregon October 14, 1966. Her early years were filled with various "chores" that accompany cattle ranching; showing cattle, sheep and horses at fairs; hunting big game animals; camping; hiking; and athletic involvement. Her love for athletics, family, the out of doors and for her Heavenly Father ran deep in her being by the time she graduated from Eddyville High School in June, 1984.

Athletic involvement was an important element in DeeAnne's life. Intercollegiate basketball competition began during September, 1984 when she enrolled at Western Oregon State College in Monmouth, Oregon, following a summer time basketball tour team trip with high school athletes from the northwest to England and Scotland. Her love for athletics led to the completion of a Coaching Concentration. She was also a double major in Health and Physical Education when she graduated with a Bachelor of Science Degree in June, 1989. She began teaching and coaching at Paisley High School in Paisley, Oregon the next August. Following two memorable and fun-filled years where it seemed that high school sports were at the heart of that rural ranching community, she enrolled at Eastern Washington University to obtain a Master's Degree in September, 1991. While completing her studies, DeeAnne was a student assistant women's basketball coach for EWU, and was a graduate assistant for the physical education department. She graduated in August 1993 and then entered the University of Tennessee, Knoxville that same August in pursuit of a Ph.D. In August, 1998 she received a Doctor of Philosophy Degree in Education, with a major emphasis in Sport Psychology. While completing her Ph.D., DeeAnne was a graduate teaching associate for the Department of Health, Leisure and Safety Sciences during 1993; and was a graduate assistant sport psychology consultant for the University of Tennessee Department of Intercollegiate Athletics for Women from 1994-1997. Her

involvement with the athletes and coaches included performance enhancement and eating disorder recovery. She was a member of the UT Performance Team and cooperated in co-creating and co-facilitating the Peer Assistance Group.

DeeAnne is currently pursuing two loves in her life: young people and athletics. She is employed at Cody High School in Cody, WY as a health and physical education instructor, and head girls basketball coach and volleyball coach. Her future plans are to continue to follow God's leading in her life and to live every moment fully. "God's gift to us is our life; what we do with our life is our gift to God."