8-2000

The development and evaluation of an eating disorder prevention program for college age women

Bethany B. Spiller

To the Graduate Council:

I am submitting herewith a dissertation written by Bethany B. Spiller entitled "The development and evaluation of an eating disorder prevention program for college age women." 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.

Suzanne Kurth, Major Professor

We have read this dissertation and recommend its acceptance:

Marla Peterson

Accepted for the Council:

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THE DEVELOPMENT AND EVALUATION OF AN EATING DISORDER PREVENTION PROGRAM FOR COLLEGE AGE WOMEN

A Dissertation

Presented for the

Doctorate of Philosophy

Degree

The University of Tennessee, Knoxville

Bethany B. Spiller

August 2000

ACKNOWLEDGEMENTS

As I review the last several years, I marvel at the changes in my life both personally and professionally. No doubt, the evolution of this dissertation is much like my own evolution: slow, arduous, yet gratifying and meaningful. I am fortunate to say that those who most shaped my development as a student were also the ones essential to the development and refinement of this manuscript. As I wrote this dissertation in all of its forms, I experienced true feminism. My committee of four women supported me, challenged me, encouraged my creativity, and urged me to use my own voice. I'll never forget Cheryl Travis' email to me asking that I speak out loud in her social psychology class concerning issues in which she knew I had strong feelings. She said I was doing a disservice to my fellow students by not sharing my ideas and contributing my perspective! I believe I have not been silent since. Suzanne Kurth, my chair and mentor, was the one to teach me by example how to be a woman who values the feminine yet exemplifies strength. She continues to astound me with her knowledge, her intuition, and her loyalty to her students. She is truly my friend and I am grateful to have her companionship. My friends, Marsha and Lisa, are my strongholds. We have bonded in ways that will endure long after the degree is attained. I am grateful to my husband, Bill, for his patience as I trudged through graduate school. I still cannot imagine what it must be like to be married to a doctoral graduate student. He and our child are an essential part of my life and have completed me in ways that school alone could not. Lastly, I am grateful for my parents, Judy and Ben Beaird, for their love and support through my many years of schooling. They gave me a strong foundation from which all else has been built. For all of these people, I am truly indebted.

ABSTRACT

Initially, eating disorders in women were conceptualized as diseases caused by abnormalities within the individual: genetic predispositions, physiological abnormalities, psychological pathology, and consequences of family dysfunction. More recent etiological models emphasize the influence of sociocultural forces which help create and maintain the phenomena. Research on the biological and psychological effects of dieting and starvation, as well as an examination of the traditionally accepted ideals for women illuminate how dysfunctional eating behaviors are learned and perpetuated. Establishing the role of culture and learned behaviors and attitudes introduces the appropriateness of and need for prevention programs which challenge prevailing cultural assumptions. Examination of previously studied prevention programs shows the need for the programs' content to be soundly based on a theoretical viewpoint that emphasizes these factors. Such a programming format provides the opportunity to deconstruct myths of dieting and other weight loss behaviors, and to introduce alternative attitudes and behaviors for women. Three groups of eight to twelve college sorority women participated in three week workshops on eating behaviors and attitudes. The three one hour weekly sessions built on feminist collaborative tenets involved dissemination of information, group exercises, and open discussion. Participants completed three scales of the Eating Disorders Inventory (EDI-2), the Eating Attitudes Test (EAT), and an Attitude Scale and Behavior Scale before and after participation to assess whether statistically significant changes occurred in participants' levels of knowledge, their attitudes, and their behaviors. A follow-up assessment one month later measured the resiliency of any such changes. Paired t-tests showed participants' scores on the EDI-2's Drive for Thinness scale, and the Attitude

and Behavior Scales to be significantly lower after the completion of the program. In their open ended evaluations of the program participants reported an increased awareness of the negative effects of dieting and decreased likelihood of dieting. Follow-up scores showed statistically significant reductions on all measures except the Behavior Scale, but few participated in follow-up. These results suggest the effectiveness of conducting a prevention program based on feminist principles that allows participants the opportunity to challenge beliefs and begin establishing new behaviors within an environment of respect and empowerment.

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CHAPTER I

INTRODUCTION

Any visit to a college campus reveals that many if not most young female students possess a persistent desire to be thin. Many spend significant amounts of time, money, and attention in their quest to lose weight and achieve the perceived ideal body. They read women's magazines and books, purchase food and pharmaceutical products, watch television shows, and engage in exercise for the sole purpose of losing weight. Some of these women begin engaging in weight reducing behaviors such as taking diet pills, abusing laxatives and diuretics, excessive exercising, and purging. Drawing the line between what is normal and what is not is difficult because many of these behaviors are considered common especially on college campuses. The media often portray the strong independent woman (the goal of most young females) as unrealistically thin. The irony then is that women view the characteristics of being thin and frail as exemplifying strength and power. Women's learned desire to attain the contemporary physical ideal of beauty can lead to behaviors which are culturally syntonic, yet dangerous to women's psychological and physical health. These behaviors lead some to develop eating disorders. The focus of this chapter is the contemporary history of eating disorders as recorded in psychological and medical literature and the questions posed by researchers as they try to identify the disorders' etiology.

The prevalence of eating disorders in western cultures has dramatically increased in the later half of this century (Mitchell and Eckert, 1987; Russell, 1985; Schwartz, Thompson, and Johnson, 1982). Conservative estimates are that approximately .5 to 1% of females meet diagnostic criteria for anorexia nervosa and approximately 3 to 5% of females meet criteria

for bulimia (Graber, Brooks-Gunn, Paikoff, Warren, 1994; Shisslak, Crago, and Estes, 1995). Estimates vary widely due to variations in the age of females sampled and the populations from which they are drawn. The incidence of problematic subclinical cases (do not fully meet the criteria) is believed to be substantially higher. More than two-thirds of normal weight (western culture) females regularly attempt to control their weight (French, Perry, Leon, & Fulkerson, 1995) and as many as 20% of them exhibit bulimic symptoms (Schwartz, Thompson, and Johnson, 1985).

The growing prevalence of these disorders raises questions about what societal conditions or historical circumstances are associated with this growth. Cases of apparent anorexia appear in physicians' records as early as the seventeenth century yet because of sketchy descriptions and different prevailing etiological models, they cannot be said to meet current diagnostic criteria. In the late 1800s, the equivalent of anorexia was thought to be a female dysfunction of the psyche with some physicians labeling it a form of hysteria (Beumont, Touyz, and Touyz, 1987). This type of hysteria was marked by a lack of appetite, cessation of menses and an emaciated body. During the early 1900s, patients with anorexic symptoms were thought to be experiencing a pituitary deficiency and the disorder's perceived cause moved from the psychological to the physiological origin (Casper, 1983). Such cases were subsumed under various diagnoses and descriptive accounts of these anorexic like cases apparently were not maintained. Behaviors now classified as anorexia resurfaced in the clinical literature in the mid twentieth century as clinicians such as Bruch (1974) reintroduced the psychological etiological model reframed using psychoanalytic theory. The disorder was thought to involve a fear of sexuality and maturity, and possible unconscious fantasies of oral

pregnation (Beumont, Touyz, and Touyz, 1987). In the 1970s and 1980s, anorexia, refusal to maintain 85% of expected normal weight, amenorrhea, undue influence of body shape on self evaluation, and the intense fear of fatness (American Psychiatric Association, 1994), increasingly became more prevalent as a diagnosis.

The first published account of a bingeing and purging syndrome separate from anorexia appeared in the medical literature in 1944 (Casper, 1983). At this time, theorists and clinicians thought it was a variant or symptom from anorexia. Not until 1979 was the term bulimia nervosa introduced (Russell, 1985) and not until the mid 1980s was bulimia designated a disorder separate from anorexia. Some researchers have stated that anorexia nervosa was the disorder of the 1970s and bulimia, the disorder of the 1980s (Polivy and Herman, 1985). Although this shift was due partly to changes in diagnostic practices as well as changes in patients' presentations, during these decades more women were engaging in these behaviors for the purpose of attaining thinness-- a characteristic that was widely being accepted as synonymous with female beauty. Currently, the diagnostic criteria of bulimia nervosa are recurrent episodes of binge eating, recurrent inappropriate compensatory behavior, and undue influence of body shape on self evaluation (American Psychiatric Association, 1994).

As reports of these disorders became more frequent, researchers and clinicians became more interested in studying the phenomena. Research on anorexia and bulimia proliferated: the number of articles listed on PsychLit increased from 188 in 1974 to over a thousand in 1993. The number of eating disordered patients described in the literature rose from 250 in 1950 to approximately 5000 in 1982 (Schwartz, Thompson, and Johnson, 1982).

Eating disorders became a recognized field of research in the 1970s (Levine, 1996). Heightened interest, as well as more accurate medical records, probably did play a role in the increased number of diagnosed cases, but empirical and clinical evidence overwhelmingly suggest that the increase is real and related to other social conditions (Schwartz, Thompson, and Johnson, 1982).

While research on eating disorders grew exponentially, much disagreement continued (and continues) to exist regarding the etiology of eating disorders (Baker, 1996; Russell, 1985). One reason for the lack of consensus is the continuing debate over the continuum hypothesis (Estes, Crago, and Shisslak, 1996; Garner, Olmsted, Polivy and Garfinkel, 1984; Polivy and Herman, 1987). The debate is over whether people with clinically diagnosable eating disorders are qualitatively different than those who are at subclinical levels (people who engage in stringent weight reducing behaviors and hold strict attitudes about their body but do not meet diagnosis criteria) or whether the differences between the groups are a matter of degree. The continuum question is whether there is a progression from the less severe to more severe eating attitudes and behaviors or whether there is specific pathology unique to clinical cases. A few studies (Garner, Olmsted, Polivy, and Garfinkel, 1984; Rossiter, Wilson, and Goldstein, 1989) have examined psychological and behavioral differences between non restrainers, normal dieters, those with maladaptive attitudes and behaviors, and those with clinical eating disorders (see also Shisslak, Crago, and Estes, 1995 for review). One longitudinal study by Graber, Brooks-Gunn, Paikoff, and Warren (1994) was conducted to identify behavioral patterns or a progression of behaviors associated with the development

of eating disorders. The question continues to be unanswered mainly because of lack of research.

A second reason for disagreement on etiology hinges on the appropriateness of the traditional medical model in conceptualizing eating disorders. Using the medical model, researchers look for "pathology" within the individual. Individual differences are emphasized and many times isolated in anticipation of finding abnormalities or deficits that explain the phenomenon under investigation (Smead, 1983). More recent research on eating disorders is not based on locating the "pathology" solely within the individual. Assuming the disorders are multifaceted, a different approach is needed. A multifaceted conceptualization runs counter to traditional conceptualizations of eating disorders and raises questions about treatment interventions that focus solely on the individual.

Two multifaceted models are Garner and Garfinkel's (1980) etiological model for anorexia and Scott's (1986) diathesis-stress model for eating disorders. Both of these models include the interaction between individual genetic inheritance and environmental factors. In Garner and Garfinkel's (1980) model, an individual's genetic makeup, along with familial and sociocultural factors, predisposes the person to anorexia, but the absence or presence of stressors in the environment mediates its expression. Similarly, in Scott's (1986) model, a genetic component is necessary but not sufficient for the expression of the disorder.

Schwartz, Thompson, and Johnson (1982) propose a multifaceted model, the risk factor model, similar to the two types above. This model incorporates aspects of the more traditional etiological models with the influence of the cultural environment and focuses on the interaction between biology and environment. Differential weights can be assigned to each

of the components involved. Therefore, those who have a high genetic propensity toward an eating disorder may exhibit symptoms regardless of the influence of other variables, while others who may not have as strong a predisposition but encounter strong environmental influences would also manifest the symptoms. Extrapolating from this model, it could be hypothesized that the increased prevalence of eating disorders in recent years may be largely due to the conduciveness of the current cultural milieu which places women at risk who in other environments would not have exhibited symptoms.

These three multifaceted models introduce sociocultural influences as important etiological components. In a similar vein, Mitchell and Eckert (1987) view eating disorders as unique because the cultural milieu plays a major role in their relative prevalence. Culture does not cause eating disorders (Vandereyecken and Meerman, 1984), but the cultural milieu is important in understanding the relative incidence of these disorders. A focus on sociocultural influences (learned eating behavior) does not preclude considering other influences (Smead, 1984), but rather encourages understanding the relative contribution of sociocultural environments in the manifestation of the syndromes. These models are not overtly feminist in orientation, but they are congruent with a feminist view that sociocultural forces shape people. Feminist ideology would go a step further by insisting that social and political factors such as differences in power and the objectification of females' bodies play a major role in the disorders' manifestation (Brown, 1994; Wolf, 1991).

Recognition of the role that sociocultural influences play in the development and perpetuation of eating disorders calls into question the adequacy of the traditional forms of treatment for eating disorders (individual/group psychotherapy). It also serves to locate the

source of the maladaptive behaviors from being exclusively in the individual to residing in the sociocultural environment as well. If this is the case, the possibility of preventing some cases of eating disorders then exists. The sociocultural influences promoting thinness and dieting are ubiquitous, yet as educational and prevention programs for smoking have proven, modifications in cultural ideals, values, and accepted behaviors are possible (Braucht and Braucht, 1984; Polivy and Herman, 1987).

Few prevention programs that are both empirically developed and evaluated can be found in the psychological literature. Less than ten published evaluations of controlled primary prevention programs for junior high and high school exist and none for elementary students or college students. These studies have obtained only minimal success. Lack of control groups, exclusion of high risk populations, and lack of formal evaluation are viewed as contributing factors (Shisslack and Crago, 1987). A lack of a consistent theoretical viewpoint from which to develop and evaluate the programs also may have impacted the effectiveness of such prevention efforts.

This study modifies an existing prevention program (Ciliska, 1990) so it can be used with a high risk population, college age females. Like Ciliska's, this study uses a small group format for the treatment group, a control group, and formal evaluation procedures. This prevention program differs because it uses a feminist perspective to guide program construction and content. Changes were made so that program format and topic selection reflect feminist tenets such as the impact of sociocultural influences and socialization processes on women's attitudes and behaviors. The purpose of the study is to evaluate the effectiveness of an feminist eating disorder prevention program for college age females in

reducing maladaptive attitudes and behaviors regarding body dissatisfaction, preoccupation with weight and dieting, and body image. It is hoped that conducting a program grounded in feminist ideology will facilitate participants feelings of empowerment and efficacy thereby strengthening their potential for change.

A review of the clinical literature begins by outlining in more detail different types of research based on the medical model. A critique of this literature follows. Then, a discussion of other models highlights the contextual and cultural factors which play important roles in the development of the disorders. Research on the effects of dieting, starvation, and laboratory studies on restraint are then detailed. The burgeoning research on the development and evaluation of prevention programs is discussed to emphasize the appropriateness and feasibility of such programs for reducing the prevalence of eating disorders. Again, the prevention literature is not overtly feminist, but it is fundamentally compatible with feminist arguments about the role of social cultural processes. Thus feminist tenets can provide a new but congruent framework for the development of eating disorder prevention programs. The literature review concludes by proposing modifications of an existing prevention program for female college sorority students using feminist tenets. Because of the scope of this review and the purpose of this project, the studies reviewed only include women.

CHAPTER II

REVIEW OF THE LITERATURE

Past clinical research located the pathology of eating disorders primarily within the individual. Researchers examined various individual differences in efforts to isolate a variable responsible for the illness. Variables commonly investigated included genetics, biochemical imbalances, perceptual abnormalities, preexisting psychopathology, family dynamics, and gender role behavior.

As with other medical conditions, researchers hypothesized that eating disorders possessed a hereditary component. Scott (1986) reviewed the literature focused on the role genetics play in anorexia nervosa and reported that monozygotic (MZ) twin studies show that between 44 and 50% of MZ twins are concordant for anorexia. The estimated prevalence of anorexia in sisters (not twins) ranges between 3 and 10% (Scott, 1986). Several research studies summarized by Strober and Humphreys (1987) indicated that first and second degree relatives of eating disordered patients have a significantly higher rate of eating disorders than control groups. Such research provides only correlational evidence of a genetic source of eating disorders.

Biochemical imbalances such as abnormal functioning in neurotransmitters, high levels of cortisol, elevated levels of neuropeptide Y and peptide YY and abnormal levels of serotonin all have been linked to the development of eating disorders (National Institute of Mental Health, 1994). Some researchers report women with anorexia and bulimia have low levels of a specific type of endorphin and therefore hypothesize that opioid dysfunction may lead to the development of eating disorders (Brewerton, Lydiard, Laraisa, Shook, Ballenger,

1992; Kaye et al., 1990). These bio-chemical studies take their measures with subjects who have a history of eating disorders. The research is correlational and cannot hypothesize whether or not the abnormalities in the brain are the cause or result of the disordered eating.

Another hypothesis is that eating disorders are symptomatic of underlying psychopathology. Researchers have examined the psychological profiles of eating disordered women using personality inventories like the MMPI or various depression scales trying to differentiate them from normal populations (Bram, Eger, and Halmi, 1982; Dykens and Gerrard, 1986; Garner, Olmsted, Polivy, and Garfinkel, 1984). For example, Dykens and Gerrard (1986) sought specific psychological traits that distinguished bulimics from dieters and controls and found that bulimics scored significantly higher on MMPI measures of psychomania and psychopathic deviance. On several measures, Esman, Dechillo, and Moughan (1986) and Johnson, Tobin, and Enright (1989) found significant correlations between the scores of eating disordered patients and borderline personality patients. Garner et al. (1984) reported that anorexic women scored differently than weight preoccupied women on the Interoceptiveness and Ineffectiveness scales of the Eating Disorders Inventory (EDI). Garner et al. (1984) inferred from their results that general psychopathology, such as ego deficits and perceptual disturbances, may be linked to the development of the disorders. These studies suggest that eating disorders are not unique syndromes, but rather represent variations on the presentation of other, more traditional mental disorders.

In the same vein, other researchers have linked eating disorders to underlying disorders such as depression. Depressive symptoms are often reported in bulimics (Hudson, Laffer, and Pope, 1982; Russell, 1979) and anorexics (Crisp, Hsu, Harding, and Hartshorn,

1980; Eckert, Goldberg, Halmi, Casper, and Davis, 1982). This argument is also made because anorexics have responded to drugs such as lithium (Gross et al., 1981) and amitriptyline (Mills, 1976); and bulimics have responded to antidepressants (Hudson, Laffer, Pope, 1982). Scott (1986) and Strober and Humphrey (1987) also point to the overrepresentation of relatives with affective disorders in families with eating disordered patients. Fairburn and Cooper (1984) who gave the first published description of the clinical features of bulimia using standardized assessment measures reported many of their subjects fulfilled the criteria for major depressive disorder (80% were categorized as "psychiatric cases" using a standardized interview known as the Present State Examination). The nature of the relationship between eating disorders and affective disorders is not known, i.e., whether these affective disorders co-exist with an eating disorder, whether the eating disorder stems from the depressive disorder, or vice versa.

Another etiological model proposes that eating disorders develop in women because of specific dysfunctional dynamics in the family. Eating disordered patients are believed to come from families that are characterized by overprotectiveness, rigidity, and enmeshment (Minuchin, Rosman, and Baker, 1978). Strober and Humphrey (1987) cite studies that suggest that anorexics have families that are overintrusive, controlling, and that prevent separation and individuation.

Some researchers hypothesize that the expansion of women's roles and the increasing pressures on women to succeed in various arenas cause identity confusion and gender role problems. Adjustment problems from these stresses (Palazzoli, 1978) and gender role conflict (Timko, Streigel-Moore, Silberstein, and Rodin, 1987) are thought to play a role in the

development of the disorders. Lewis and Johnson (1985) found bulimics scored lower on the masculine and feminine scales of the Bem Sex Role Inventory. Based on their data, they inferred that bulimics may have low self esteem, less sense of identity and greater role confusion. Dykens and Gerrard (1986) reported that bulimics showed a premature rush into adult female sexual behaviors (such as wearing nylons and make-up, dating, and engaging in sexual intercourse) and hypothesized that such behavior may be significant in the disorder's development. These hypotheses do not necessarily treat the cultural milieu as an important explanatory variable, but rather tend to focus on women's inability to master their environment.

A Critique of the Traditional Literature

The above research illustrates a traditional perspective which assumes that pathology resides at the individual level. A critical examination of the research is needed to assess its validity. A number of studies (e.g. Bram et al., 1982; Brewerton et al., 1992; Fairburn and Cooper, 1984) had small sample sizes limiting generalizability. Almost all of the samples were of white females. If most eating disordered patients are white females, then samples may be representative of the patient population but not of the general population. Cooper and Fairburn (1984) reported pathological levels in their nonrepresentative sample of individuals who previously came to them requesting psychological treatment. Their research does not include bulimics who have not requested psychological treatment but meet diagnostic criteria. Thus, Graber, Brooks-Gunn, Paikoff, and Warren's (1994) assertion that most descriptive studies use clinical samples and have limited generalizability is supported.

Another criticism is that most research is correlational, so that causality cannot be established (Vandereyecken and Meerman, 1984). For instance, descriptive studies which report anorexics' and bulimics' family characteristics cannot clarify whether dysfunctional dynamics cause the disorders or if the dynamics are created by the interactions with a family member who has an eating disorder. Correlational research also does not answer whether or not family characteristics of eating disorder patients are distinct from those of families with members having other psychological disorders (Strober and Humphrey, 1987). The research that shows a correlation between depressive symptoms and eating disorder patients' symptoms cannot answer whether the depressive characteristics existed prior to the eating disorder, coexist with it, or exist as a result of it. This is also the case with correlations obtained between eating disorders and abnormalities in the biochemistry of the brain (Brewerton et al., 1992). Correlational research lends little insight into questions about etiology.

Also, in many studies, no control groups are used and therefore necessary comparison cannot be made. For instance, most of the studies that purport the existence of perceptual abnormalities in eating disordered women did not use control groups or did not report their control groups' scores. Without control groups, faulty conclusions may have been drawn. Thompson (1986), who did include control groups in his research, found that in general, 95% of all women he studied (both control and treatment groups) overestimated their body size an average of one fourth their actual size. Non-clinical men in their sample overestimated their bodies on average one fifth their actual size.

Misinterpreted results exist as well. For instance, Dykens and Gerrard (1986) stated that purging bulimics' MMPI profiles showed elevated mean scores on the mania and

psychopathic deviance scales. Their profiles apparently indicate pathology. Mean scores on the MMPI though are not relevant and should not be used to indicate the existence of pathology. Rather, it is the percentage of those subjects whose scores fall within the clinical range that should be used when reporting results. Therefore, Dykens and Gerrard's (1986) misinterpreted findings cannot be accepted as valid.

Differences between normal dieters, subclinical cases and eating disordered patients are frequently emphasized (Bunnell et al., 1990; Garner at al., 1984), yet the similarities are more striking and the differences though statistically different are many times not clinically significant. Rather than focusing on those who have a diagnosis of an eating disorder, a broader look with explanation of nonclinical populations is essential as well. By studying groups characterized as stringent dieters, normal dieters, or dieters with "subclinical" levels of eating disorders, researchers can begin to trace what, if any, commonalties these groups have. The continuum hypothesis which proposes that a significant number of women who adopt weight reducing behaviors will later exhibit more dangerous symptoms which lead to a clinical diagnosis may be correct. Even if the continuum hypothesis is not true, researchers could begin to understand the differences between those whose symptoms progress and those whose symptoms do not.

In sum, no one individual characteristic is responsible for eating disorders (Schwartz, Thompson, and Johnson, 1982). The hypothesis that eating disorders are symptoms of psychological or physical defects has not been validated. Assuming this hypothesis leads one to look for genetic or characterological differences (weaknesses) within the individual and to overlook contextual or environmental factors.

Identifying the Commonalities

Insight can be gained by examining the characteristics that are common to most eating disorder cases including the sociocultural context. Rather than "controlling for" these contextual intervening variables (as they are typically called), examination of them helps to further understanding of influences that are important in the development and perpetuation of the eating disorders. Examples of these variables are commonalities in the prototypical patient, common developmental variables, and shared sociocultural influences.

Eating disorder cases have been middle to upper class white females who reside in western cultures, and are between the ages of adolescence and young adulthood (Fairburn and Cooper, 1984; Jeffery, Adlis, and Forster, 1991; Shisslak and Crago, 1987). Only one African American anorexic case had been documented by 1986 (Silber, 1986). Once considered a white woman's disease, the number of lower SES and ethnically diverse cases has risen in the past decade (Hsu, 1987; Osvold and Sodowsky, 1993; Smith and Krejci, 1991). Although empirical research is limited, the rise in numbers may reflect the pressure to adopt western ideals of beauty (Pumariega, 1986). As members of ethnically diverse groups adopt dominant cultural values, they may adopt the emphasis on restraint and thinness of middle class and upper class whites (Silber, 1986). Ethnically diverse women who do not accept nor adopt these western values are less likely to develop symptoms characteristic of eating disorders (Osvold and Sodowsky, 1992).

Another common characteristic of eating disorder cases is the age range for the development of anorexia and bulimia. Usually onset occurs between 12 and 20, with anorexia more frequent in younger females and bulimia more frequent in older females. Some

researchers have claimed that a lack of identity or individuation plays a role in the disorders' development (e.g. Friedlander and Siegel, 1990). These ages of onset match the time period when a sense of self is in the *process* of being developed, so an examination of the normal developmental processes which are at play is needed. Levine (1987) argues that it is no coincidence that eating disorders coincide with developmental challenges, that anorexia is usually exhibited around the transition into puberty and bulimia around the time of the transition into young adulthood (high school and college).

Ambivalence surrounding gender roles and identity during these ages is normal and leads to an increased emphasis on physical appearance (Baker, 1996). During this period the sociocultural environment plays a crucial role as adolescents are trying to define themselves using others (peers, adults, role models) as references. Concerns about body shape and weight are important components in the psychological development of all females-- clinical and nonclinical alike (Bunnell, Cooper, Hertz, and Shenker, 1992). These concerns begin to appear between the ages of nine and eleven and dramatically increase at junior high school age (Shisslak et al., 1995). How concerns about physical appearance interact with normal developmental stages during these ages is important to understanding how the disorders develop (Rodin, 1992). Young women do not have to have a specific deficit that makes them vulnerable to eating disorders, rather, they are at a vulnerable age when developmental processes intersect with cultural values and facilitate the development of maladaptive behaviors.

A developmental component to American culture is that young women who are entering college are learning to feed themselves for the first time (Smead, 1984). Rather than

having a structured meal schedule or previously selected food items, young people are making decisions regarding food selection, appropriate portions, and eating schedules (Grodner, 1995). In a context of cultural values emphasizing thinness, the women's new diet choices and their developing sense of identity can negatively affect eating behaviors and attitudes.

Another commonality in females with eating disorders is their fear of fatness. (Fairburn and Cooper, 1984; Russell, 1985). This fear is important for two reasons. First, this characteristic was not considered part of anorexia's clinical presentation until the mid 1970s and 1980s, although some clinical accounts do state that concerns about body size began to surface in the medical literature as early as the 1940s (Casper, 1983). Now this fear represents one of the typically reported characteristics in the diagnosis of anorexia. This new defining feature represents a shift in emphasis in anorexia's central pathology (Russell, 1985). Bulimia (which was not formally acknowledged until 1979) has as its most notable characteristic a gross concern about body shape. Secondly, this commonality illustrates a similar component in the development of these two disorders- obsessive concerns about body shape and, specifically, a fear of being overweight.

The shift in anorexia's clinical presentation, coupled with the emergence of bulimia as an identifiable syndrome, appears to be directly related to a gradual shift in cultural norms and values. The disorders' pathology mimics the emergent cultural preoccupation with thinness and restraint. Over the past several decades, the cultural ideal for a woman's weight has dropped significantly although the average weight for women has risen (Schwartz et al., 1982). As the difference between these two numbers has increased, so has the intense cultural preoccupation with the size of women's bodies. This preoccupation with women's body shape

and weight is evidenced by the significant increase in the number of articles and books on the subject of women's weight loss over the past thirty years (Garner, Garfinkel, Schwartz, and Thompson, 1980; Wiseman, Gray, Mosimann, and Ahrens, 1992). In our society, thinness is equated with beauty and femininity as well as success and power (Garner and Garfinkel, 1980; Shisslak and Crago, 1987). Social acceptance and thinness are intertwined, and the well known adage, "One can never be too rich or too thin," is illustrative of this cultural belief. Some suggest that the overrepresentation of females among eating disorder patients is because the cultural preference for thinness is more marked for women, as are the negative sanctions for being "overweight" (Garner and Garfinkel, 1980).

The parallels between the behaviors and attitudes characteristic of the disorders and the prevailing cultural beliefs suggest the importance of cultural explanation. Many of the symptoms of anorexia and bulimia are congruent with the behaviors and attitudes that are accepted, even promoted by the culture. The abnormal eating typical of eating disordered patients is very similar to the eating behaviors of normal dieters (Polivy and Herman, 1987), and eighty-five percent of adult women at any given time are on a diet (Kogel, 1996). Intense dissatisfaction about one's body and attempts to change it via strict dietary intake, exercise, or medication characterize what has been termed as the "normative discontent" of women in the late twentieth century. What is currently considered normal eating is not normal by physiological standards, and it displays many of the features indicative of eating disorders (Polivy and Herman, 1987). The recent societal emphasis on physical exercise has been likened to a disguised, less discernible type of purging (Wiseman et al., 1992). The fitness craze legitimizes the cultural drive for thinness, treating a thin physique as a symbol of

health. Because some of the behaviors indicative of eating disorders are culturally syntonic, the lines between what is abnormal and normal, healthy and pathological, are blurred. Therefore, the culture is encouraging unhealthy eating while simultaneously stigmatizing those who carry it to its logical extremes.

The Effects of Dieting and Restraint

A perspective which sheds insight into the pathology of eating disorders comes from the research on dieting, the biology of starvation, and the analogue research on the effects of food restraint. Examination of the effects of learned weight reducing behaviors (those introduced and reinforced by the environment) reveals how the acquisition of these behaviors is related to the development of the symptoms reported in eating disorder research. Empirical evidence of this link supports the continuum hypothesis previously discussed and underscores the importance of prevention of maladaptive weight reducing behaviors in women.

Effects of Dieting

Research on the effects of dieting appears mainly in the literature debating the promotion of dieting in the treatment of human obesity. Simply, obesity researchers advocate the use of dieting as a successful treatment for obesity while eating disorder researchers emphasize its ineffectiveness and associated health risks, i.e., the development of bulimia or anorexia (Azar, 1994).

Empirical evidence is conflicting, but obesity researchers continue to state that weight loss via restricting food intake lowers mortality and decreases health risks (Garner and Wooley, 1991). They emphasize that obese people are more likely than normal weight people to exhibit psychological problems and have health conditions such as hypertension, diabetes,

cardiovascular disease, and gall bladder disease (Garner and Wooley, 1991). For them, the benefits of dieting outweigh the risks especially for those who are morbidly overweight. Some such as Brownell and Rodin (1994) espouse that even minimal weight loss significantly reduces risk factors. In response to recent criticisms of dieting, some researchers acknowledge and suggest that context and individual difference should guide the dieting decision (Azar, 1994).

These researchers agree that many diets do not lead to permanent weight loss, but counter that much of the documented failure of dieting is because research is conducted with clinical populations (Brownell and Jeffrey, 1987). Binge eaters, they state, have a poor prognosis for treatment, and because many of the samples are obese people who binge, the dismal findings are not thought to be generalizable to all overweight people (Brownell and Rodin, 1994). Some recent research on new weight loss programs has shown improved long term maintenance of weight loss (e.g. Beliard, Kirschenbaum, and Fitgibbon, 1992; Nunn, Newton, and Faucher, 1992). Brownell and Rodin (1994) suggest that dieting may not have harmful side effects for those who are not overweight. Research generally excludes this population so the effects of dieting are unknown.

Researchers in the opposing camp reiterate that studies have yet to experimentally prove that losing weight improves health (Ernsberger and Haskew, 1987; Wooley, 1995). "Beneficial effects of weight loss on 'risk factors' have not generally translated into reduced morbidity and mortality, a perplexing finding but not an incomprehensible one"(Wooley, 1995). Many question the effectiveness of dieting (Ciliska, 1990; Garner and Wooley, 1991; Garner, 1995) and whether or not obesity should be treated at all (Wooley and Wooley,

1983). The normal consequences of aging include some increase in weight, and this normal weight gain is associated with lower not higher mortality rates (Andres, Muller, and Sorkin, 1993). Some research has suggested that mild to moderate obesity in adult women is not a significant health risk (Wooley and Wooley, 1983). They argue the repeated losing and gaining of weight (commonly known as yo-yo dieting), the psychological effects of being stigmatized as obese, and the psychological and physical effects of restraint increase the likelihood of health problems (Brownell and Rodin, 1994; Garner and Wooley, 1991; Rossner, 1989).

Researchers question the practice of dieting in normal weight people. (Garner, 1995). They argue that to study dieting in normal weight people, or to base the effectiveness of dieting on a population which has no physical need to diet, is nonsensical. Obesity researchers' claim that findings are biased due to the use of clinical populations is rejected because many of the people who engage in binge eating are the ones who request dietary interventions.

In general, the research which suggests that dieting is harmful to one's health cannot be ignored (Wooley, 1995). Dieting lowers metabolism (Steen, Oppliger, and Brownell, 1988; Wooley and Wooley, 1982), precipitates binge eating (Wardle, 1980; Wardle and Bienart, 1981), causes depression, irritability, and anxiety in some people (Foreyt, 1987; Garner and Wooley, 1991), as well as fuels an unhealthy preoccupation with food. As people regain previously lost weight, it is redeposited as fat to the detriment of muscle mass and vital organs (Cleary and Vessili, 1984). Because dieting increases metabolic efficiency, dieting in

effect perpetuates itself. As the cycle continues, the diets become more restrictive only to further a seemingly endless pursuit of thinness.

Effects of Starvation

Research conducted on human starvation reveals the behavioral and psychological abnormalities of eating disordered patients are similar to the symptoms of those in a state of starvation or semi-starvation (Garfinkel and Garner, 1982; Mitchell and Truswell, 1987). Although the cause of the symptoms has yet to be established and differences exist between the two groups (Mitchell and Truswell, 1987), researchers hypothesize that many of the symptoms of eating disorders are initiated and perpetuated by starvation of the body (Kaplan and Woodside, 1987). This relationship is proposed also for "normal weight" bulimics who many times are below their biological set point weight (Garfinkel, Moldofsky, and Garner, 1980). One tendency is for starvation to exacerbate personality traits, although once refeeding occurs, the intensity of these traits recede. Also, symptoms such as early morning waking and other sleep disturbances commonly are reported in starvation research. Often in eating disordered patients these symptoms are seen as evidence of depression (Kaplan and Woodside, 1987) rather than effects of deprivation of food.

The classic study of the effects of semi-starvation was conducted at the University of Minnesota at the end of World War II. The Keys et al. (1950) study was a carefully monitored investigation of the effects of semi-starvation using a group of conscientious objectors. During the five week experiment the subjects became extremely preoccupied with food. They spent considerable amounts of time reading cookbooks, talking about food and recipes, and planning meals. At the same time, they became extremely irritable, socially

withdrawn, and were emotionally labile. Their concentration and alertness waned, and they suffered from insomnia despite feelings of fatigue. Not only are these symptoms similar to those of anorexia (and some to bulimia), but also these symptoms were observed in men. These data raise questions about hypotheses which purport that essential gender differences (not physiological effects of starvation) play a role in eating disorders. Also, specific symptoms such as metabolic and endocrine alterations are associated with the types of food a person is avoiding; therefore a variety of physical symptoms can be caused by variations in restraint (Pirke and Ploog, 1987).

Personality changes cannot be overemphasized, according to Kaplan and Woodside (1987). The cognitive and behavioral effects of starvation resemble affective, obsessive-compulsive, even psychotic disorders. Until disordered eating is recognized as the primary feature of these disorders, researchers and clinicians may continue to incorrectly treat them and thwart prevention efforts (Kaplan and Woodside, 1987).

The Link Between Restraint and Disinhibition

A body of research initiated by Polivy and Herman has contributed significantly to understanding the relationship between restraint and disinhibition in eating. They and others have conducted a series of analogue studies investigating the suppression of eating in restrainers. In these studies, restrainers were those who had a history of dieting and scored above a specified cut-off point on The Restraint Scale (Herman and Polivy, 1979). The researchers found that restrainers after consuming a small "preload" (a measured amount of food, usually a milkshake) or in the absence of a preload ate significantly less than nonrestrainers. Restrainers, though, ate considerably more than nonrestrainers after a medium

preload and even increased their consumption after a large preload (Herman and Mack, 1975; Herman, Polivy, and Silver, 1979; Hibscher and Herman, 1977; Polivy, 1976; Ruderman and Wilson, 1979). This disinhibited eating, or counterregulation, also was apparent when restrainer subjects were anticipating a large preload, when they considered the preload to be a "forbidden food" or when they perceived the preload to be high in calories (Knight and Boland; 1989; Polivy, 1976; Spencer and Fremouw, 1979; Woody, Castanzo, Liefer, and Conger, 1981). Research also identified consumption of alcohol and distressing feelings such as anxiety as sources of disinhibition. These relationships did not hold for nonrestrainers (Herman and Polivy, 1975; Herman and Polivy, 1976; Schotte, Cools, and McNally, 1990; Ruderman, 1985). In sum, restraining one's food intake increases vulnerability to disinhibition under circumstances that otherwise would not have that effect.

Research on the nature of the restrainers' disinhibition showed that a ceiling effect exists such that extra large preloads do not cause increased counterregulation. Restrainers apparently respond to satiety cues or other implicit norms of appropriateness after an extra large preload (Herman and Polivy, 1984; Herman, Polivy, and Esses, 1987). The boundary model accounts for this phenomenon. A physiological continuum exists with a hunger state on one end and a satiated state on the other. Restrainers cognitively set a diet boundary (stop eating) in-between hunger and satiety, so they quit eating before their bodies naturally signal feeling full. When this cognitively set boundary is broken, the person defaults back to the physiological boundaries. *Chronic* restrainers (chronic dieters) do not default back to normal satiety cues and continue to display unregulated eating. Researchers suggest that either continued restraint weakens physiological cues or fosters an inability to perceive the

physiological cues correctly (Polivy and Herman, 1987). This disinhibition model has not been verified in naturalistic settings, but is supported by data which indicates chronic dieters who abstain longer before claiming to be hungry eat significantly more before claiming to be full (Polivy and Herman, 1987).

Some have criticized Polivy and Herman's research (Agras, 1989; Charnock, 1989; Tuschl, 1990). For example, Charnock (1989) argues that the Restraint Scale used to identify restrainers is not a valid measure. She points out that overweight people received high scores regardless of whether or not they were restrainers and questions whether the increase in the amount of food consumed by the restrainers is clinically as well as statistically significant. Another criticism is that the disinhibition behavior studied is not the same as the bingeing behavior in bulimics and therefore the findings cannot be used to support the claim that dieting causes bingeing. No one knows whether in naturalistic settings similar behavior would be observed.

Wardle (1980) collected self reports of dieters and nondieters on a college campus and found that both groups exhibited a positive relationship between level of restraint and frequency of bingeing. Davis, Freeman, and Garner (1988) and Wardle and Beales (1988) also tested the restraint theory and obtained confirmation that bingers were indeed restrainers and restraint preceded binge eating. Although this line of argument still requires empirical verification in naturalistic settings, the evidence is strong that restriction of food interferes with one's innate appetite mechanisms and appears to make a person more susceptible to overeating.

The Link Between Dieting and Eating Disorders

Not all who diet develop eating disorders, but research suggests that for a significant number of people, the adoption of weight loss behaviors leads to increasingly more severe and maladaptive behaviors and attitudes which for some, eventually meet the diagnostic criteria for an eating disorder (Herzog, Hopkins, and Burns, 1993; Polivy, Zeitlin, Herman, and Beal, 1994; Shisslak, et al., 1995). In clinical studies, the most commonly cited reason for vomiting in bulimics is a binge episode, and the most commonly identified precipitant for a binge is the previous restraint of food (Abraham and Beumont, 1982; Fairburn and Cooper, 1984). Clinical reports by Boskins-Lodahl and Sirlin (1977) and Pyle, Mitchell, and Eckert (1981) indicated that almost every bulimic female in their studies reported a period of dieting prior to the onset of her illness. Wooley and Wooley (1983) state that anorexia always is precipitated by a diet as most bulimia cases are. Garner (1995) argues the link between dieting and eating disorders is generally recognized among experts in the field.

The Economics of Dieting

As illustrated in obesity research, the role of the medical profession in the legitimization and perpetuation of dieting is important to understanding the perpetuation of eating disorders. Contrary to much research, the medical community continues to validate the belief that being slender is healthy, and other body sizes are deviant and preventable. The evidence that one is genetically predisposed to a certain body weight (set point theory) seems to be de-emphasized. Medical weight charts which serve as the reference for what is deemed "normal weight" were normed on white, socially affluent male insurance policy holders without regard to age or body frame size (Foreyt, 1987). Currently, 74% of people in the US

do not conform to the charts, a situation used to support the "fact" that 74% of people are overweight (Knoxville News-Sentinel, 1996).

Critics claim that the general ineffectiveness of diets is not explicitly presented to consumers of diet programs. Potential consumers should be made aware of the risks associated with dieting as well as the outcome statistics--much like any other experimental treatment intervention requires (Garner and Wooley, 1991; Wooley, 1995). Vandereyecken and Meerman (1984) argue the forced weight reduction that physicians may recommend leads to a state of starvation in which new psychological conditions are created due to the resulting behavioral and psychological changes. The apparent reticence to acknowledge the ineffectiveness and risks of dieting is probably due more to the economics of dieting than to equivocal research. The weight loss industry is an annual 30 billion dollar business (Brownell and Rodin, 1994), and many profit from the stringent ideal of the "attainable thin body." Thus Garner and Wooley (1991) argue "the stigmatization of obesity, the overstatement of health risks, and the pervasive influence of the lucrative diet industry have maintained public demand for dietary treatment" (p. 729).

A Feminist Perspective

At least two questions remain about eating disorders: "Why do women, many of whom would be described as self-determined, engage in these behaviors?" and "Why is it that women and not men are more susceptible?" A feminist approach to the conceptualization of eating disorders recognizes that cultural ideologies shape how all people come to understand themselves, their identities, their personal beliefs and behaviors. Therefore, these behaviors should be understood as manifestations of processes operating in a larger social context

(Brown, 1994). Recognition of contextual issues such as power imbalances, and the objectification and violation of women's bodies is essential as researchers try to understand why disordered eating occurs particularly among women.

In various times and cultures, females have been (and still are) valued for their physical beauty. They have been given access to limited power via this beauty. In spite of the efforts of feminists, young women still are socialized to establish self worth in terms of physical appearance. In recent years, beauty has been equated with thinness, and thinness is now associated with the contemporary ideals of self control and success (Striegel-Moore et al., 1986). Women trying to attain the ideal of equality through professional success or autonomy are expected to meet the prevailing standards of attractiveness as well. "Today's woman is allowed to be strong as long is she is pleasing to the 'eyes of the beholders'"(Russo, 1998, p. 4). She states that the beholders are women and men who together fuel a collective negative critique of women's bodies. Attaining thinness is synonymous with achievement, and the "strength" that is necessary for attaining it is culturally glorified. Therefore, as Smead (1983) points out, it is not weak females who engage in these stringent weight reducing behaviors, but women who are strong in will and who are highly aware of the seemingly great cultural payoffs for thinness.

Cultural messages emphasizing physical characteristics lead to the *dis*empowerment of women. The strength that it takes to attempt to achieve the body ideal weakens women both physically and emotionally. Rather than offering women the opportunity to exercise power, the messages challenge women's sense of self-efficacy and relegate women's worth to their bodies. "Dieting represents a surrender to cultural norms that define women in sexual terms"

(Brownell and Rodin, 1994, p. 782). Engaging in these behaviors is a covert investment in the objectification of women's bodies. Women are taught to view their bodies as objects to be molded and modified for the enjoyment of others. As stated above, a collective negative critique exists such that women's bodies are open to the scrutiny of men and women alike. The consequence is that many women experience their bodies as separate entities and feel disconnected or detached from them (Baker, 1996). This detachment is disempowering by inducing feelings of vulnerability, shame, and guilt about one's own body. Levine (1994) questions if a even more far reaching consequence of this pursuit is that unwittingly women are undermining their own political and economic power, the power that ironically they are trying to gain.

It is misleading to assume that women have an objective choice when choosing whether to diet, whether to work towards the ideal body, and whether to worry about their looks. Personal esthetics, preference, or autonomous action cannot fully explain why women engage in such behaviors (Travis, Meginnis, and Bardari, 2000). Choices are limited because sanctions exist for not adhering to these norms. Social psychologists have repeatedly shown that attractive people are perceived as more competent, sociable, well adjusted, successful, congenial, and more intelligent than less attractive people (Brigham, 1980; Feingold, 1990; Gillen 1981; Hassenbrauck, 1988; Moore, Graziano, and Millar, 1987). Positive attributes are associated with people who meet current standards of beauty and therefore do in fact receive some social benefits that others might not as easily access.

The actual rewards for adhering to these defined ideals pale in comparison to the mythical rewards that are promised by the media and the culture at large. Women are told

(overtly and covertly) that thinness will lead to personal contentment, satisfaction, success, and freedom. The shared perception is that once a certain weight is attained, then a woman has earned the right to assert herself, be powerful, and achieve her goals. Collectively held images of females shape how women come to understand themselves, and especially who they are in relation to men. Although some changes are evident, current images continue to promote women's worth in terms of their bodies by teaching women that they physically must alter themselves to gain acceptance or recognition of others, namely men. Images also convey judgments about what women should want and how they should feel (Travis et al., 2000). The authors allude that women themselves should not accept their natural bodies but rather should exert power over their bodies (such as their desire to eat). The power inherent in these messages shape women's thoughts, behaviors, and experiences. These influences cannot be overlooked when attempting to understand the phenomenon of maladaptive weight loss behaviors.

To counteract these influences, a feminist approach calls for the empowerment of women through heightened awareness of socialization processes. A feminist perspective necessitates the consideration of the social context (Taylor, 1996). Sociocultural, medical, and psychological perspectives on weight, thinness, and body image are politically motivated and must be viewed as such. A feminist approach acknowledges that the social context affects women's behavior. Such a perspective should validate women's experiences with regard to the inequality between men and women in social and economic rights and status (Mowbray, 1995). By raising awareness, women can see the embedded presence of patriarchy, so its influence can be named and then resisted (Brown, 1994). Through this awareness, women are

able to see how they may circumvent their own power by supporting dominant cultural norms. They are allowed the opportunity to refuse to accept dominant cultural norms, and to begin visualizing ways of being that are not restricted by patriarchal rules (Brown, 1994).

Prevention Programs

The research on eating disorders suggests the utility of prevention efforts. Because eating disorders are linked in part to acceptance of misinformation (concerning dieting and the malleability of weight) and indirectly to the influence of socialization agents, psychoeducational programs could be effective (Smolak and Levine, 1994). Modifying culturally syntonic attitudes and behaviors is a daunting task. Systemic cultural values serve vested interests; therefore, proponents of societal change must acknowledge these interests when devising intervention strategies. However, individual change in incremental steps can initiate these needed societal changes. In the research literature, the few prevention programs that are both empirically developed and evaluated are for two populations: school age children and adolescents and adult women.

School Age and Adolescent Programs

The majority of prevention programs for school age children and adolescents are developed as curriculum units for teachers to present to their students. They range in the amount of information covered and length (number of lessons) based on students' developmental capacities. Most of the programs focus on increasing knowledge about dieting and eating disorders, developing healthy attitudes and behaviors toward food and body image, and improving coping skills for resisting cultural pressures (Killen et al., 1993; Moreno and Thelen, 1993; Moriarty et al., 1990; Porter, Morrell, and Moriarty, 1986; Paxton, 1993;

Shisslak, Crago, and Neal, 1990; Smolak and Levine, 1996). Some also include lessons about self esteem and assertiveness (Carney, 1986; Gresko and Karlsen, 1994). Programs typically employ a didactic approach with a teacher or expert conveying information via lecture and audiovisual presentations (Piran, 1995). Neither their format nor content normally gives consideration to feminist issues which are at play in the development and perpetuation of the behaviors.

Results from outcome studies on these types of programs for school age children have been mixed. The program components designed to increase knowledge have been successful (Killen et al., 1993; Moreno and Thelen, 1993; Moriarty et al., 1990; Shisslak et al., 1990; Smolak and Levine, 1996). Program components designed to change attitudes and those designed to change behaviors have not been as successful. Only one program (Moreno and Thelen, 1993) showed significant changes for both attitudes and behavioral intentions (not behavioral changes). This format included the presentation of a short videotape of an older sister talking with a younger sister about bulimia and the risks and pressures associated with dieting. A thirty minute classroom discussion followed which highlighted the information presented in the video. Significant differences on an attitude and behavioral questionnaire existed between the control group and the experimental groups. These differences persisted at the one month follow-up.

Some programs have used group exercises targeting some of the attitudes and behaviors thought to be indicative of eating disorders. Porter, Morrell, and Moriarty (1986) developed a unique program which incorporated dance, music, and art therapy for the purpose of targeting three predisposing factors thought to be associated with anorexia: drive

for thinness, perfectionism, and interpersonal distrust. For example, during the art exercises students drew each others' bodies on paper and talked about the differences in sizes and shapes. They also looked at magazine pictures of women and discussed who looked more successful, more attractive, and more popular. Leaders incorporated discussion on how television, magazines, and movies teach beliefs which contribute to unhealthy behavior.

Porter et al. (1986) used the Drive for Thinness, Interpersonal Mistrust, and Perfectionism scales of the Eating Disorders Inventory (Garner, Olmsted, and Polivy, 1983) pre- and post test to assess changes in the three targeted factors. Post test assessment showed significant differences for the students on the Drive for Thinness scale only. A criticism of the study is the researchers' use of measures which were not valid. This is because the characteristics of perfectionism and personal mistrust do not significantly distinguish eating disorder symptomatology from other forms of general pathology (Anderson and Meshot, 1992; Cooper, Cooper, and Fairburn, 1985; Hurley, Palmer, and Stretch, 1990).

Adult Programs

Programs for adult women that were empirically evaluated and found to be effective are few in number and typically were tailored for a specific adult population. Two of these programs are the Undieting Program (Polivy and Herman, 1992) for chronic dieters and Ciliska's (1990) Beyond Dieting Program for overweight women. These programs are preventative in that they are designed for nonclinical females and are based on the premise that dieting is unhealthy and can lead to pathological behaviors and attitudes.

Polivy and Herman's program was a ten week educational program designed to heighten awareness of the costs and side effects of dieting. Eighteen women divided into three

small groups served as the subjects; no control group was used. Women were recruited from a data base at the National Eating Disorders Information Center in Toronto, Canada. All women were screened beforehand to eliminate those who met DSM-III-R criteria for an eating disorder. Each of the ten two hour sessions included an informational component, group exercises, and group discussions.

The program's content was based on Polivy and Herman's book, Breaking the Diet Habit (1983). The session by session script is not available (it is currently being developed for marketing). The session topics include breaking the myths of the malleability of weight and the effectiveness of dieting, the dangers and correlates of dieting, the effects of dieting on eating, the social pressures to diet, gaining self acceptance and a tolerance for diversity, and introducing natural eating as a means of weight stabilization and psychological health (Polivy and Herman, 1992). Each subject was assessed pre-, post, six months and one year post using the Eating Disorders Inventory (Garner, Olmsted, and Polivy, 1983), the Beck Depression Inventory (Beck, 1967), the Restraint Scale (Herman and Polivy, 1979), the Janis-Field Self-Esteem Scale (Pliner, Chaiken, and Flett, 1990) and a State Self-Esteem Scale (Heatherton and Polivy, 1991). All scores other than the four EDI scores (Body Dissatisfaction, Perfectionism, Interpersonal Mistrust, and Maturity Fears) were significantly different at the .05 level. The significant improvements on all measures except for the EDI Bulimia and State Self-Esteem scales were sustained at the six month follow up. Overall, the program results were encouraging, and Polivy and Herman argue the subjects' changes (per subject debriefing) had clinical as well as statistical significance (Polivy and Herman, 1992).

The second study (Ciliska, 1990) included 142 overweight females over the age of twenty. The topics covered were similar to Polivy and Herman's although Ciliska focused on introducing and maintaining normal eating patterns. The Beyond Dieting Program also included information on the risks of obesity and body image work. Twelve sessions were conducted in either a small group format or a large group lecture format. The small group format involved an informational component, group exercises and discussion, and homework assignments. The lecture format only involved dissemination of information from the leader to the audience. She conducted four lecture groups, seven small groups, and a wait list/control group.

Ciliska's pre- and post tests included many dependent measures. The psychological measures were the Eating Disorders Inventory (EDI), two restraint scales, two self esteem scales, a depression scale, and a self report social adjustment scale. Post test results showed that the small group format was more successful in inducing change than the lecture format. No differences were found between the control group and the lecture groups when the five outcome variables were combined. Significant differences existed between the small group and lecture formats on all measures except the Janis-Field Self-Esteem Scale and the Body Dissatisfaction scale of the EDI. Based on regression analysis, group format was found to be the best predictor of scores. Scores from the EDI's Body Dissatisfaction, Bulimia, and Drive for Thinness scales for the small group subjects all showed significant differences from pre- to post test. In summary, Ciliska's study illustrated the effectiveness of using a small group format (incorporating a more equal partnership between participants and leader), rather than using the standard expert/novice structure as in the lecture format.

Critique of Prevention Literature

Several of these prevention programs outlined in this review could be considered successful, but overall prevention programs have not obtained the effects desired by researchers. Vandereycken and Meerman (1984) argue that as long as the etiology of the disorders is still in question, those conducting prevention programs cannot be expected to produce positive results. Others suggest other reasons for the lack of success, such as the overall dearth of research on prevention. According to Levine (1996), fewer than ten published evaluations of controlled primary prevention programs for middle and high school students exist and none exist for elementary students or college students. The paucity of prevention research may reflect adherence to the medical model with its emphasis on rehabilitation. Evidence suggests not only that the majority of scientific interest is in the area of treatment but also that funding for prevention research in general is not as readily available. As of 1982, only 2% of the National Institute of Mental Health's budget was allocated to prevention (Albee, 1982).

Researchers also claim that the documented lack of success in prevention programs is due to methodological problems in the research such as lack of control groups and exclusion of populations that are considered high risk (Shisslak et al., 1987). The lack of control groups in prevention research excludes the possibility of making causal links in the efficacy of programs. Populations like college age females have been excluded because it is generally thought that this age category would be highly resistant to prevention programs. Rather, younger females (who have not yet developed extreme beliefs and behaviors) and adult women (who have tried unsuccessfully to diet) are assumed to be more receptive (Ciliska,

personal communication, September, 1995). Formal evaluation including qualitative feedback from participants is needed to assess participant interest in specific program components, but only Ciliska (1990) included participant evaluations of her program in her study. Feedback of this type can help in understanding the ineffectiveness of programs for certain high risk groups like college age students.

A Call For Feminist Ideology

As the literature review indicates, researchers have not purposefully incorporated feminist ideas into their programs, even though unhealthy dieting practices may be better understood and addressed using a feminist perspective. No one set of characteristics can be proclaimed to encapsulate the many forms of feminist thought. However, some tenets are identified often enough to be put forth as representative of much feminist thought.

Looking through the feminist literature in the second half of the century, common beliefs undergird the diversity of key feminist texts (Friedan, 1963; Millett, 1971; Rich, 1976; Ruth, 1995; Spender, 1983; Whelehan, 1995). The following themes emerge as relevant to conducting prevention programs. First, a recognition must exist that each person has a voice that deserves to be heard. Feminism's greatest strength is its heterogeneity; therefore, feminist tenets purposefully call for decentralized organization to ensure everyone's participation (Whelehan, 1995). Hierarchical arrangements that lead to one voice being heard while others are silenced must be rejected. No one's experience is viewed to be more truthful or accurate than another's.

Secondly, a belief must exist that the personal is political. In other words, women's private experiences of oppression affect and are affected by the larger socio-political sphere.

Feminists insist that these personal experiences should be of public concern. The famous slogan "the personal is political" also represents the belief that women (and men) can learn about the processes which shape their lives by exploring personal experiences. The idea that "objective evidence" is more valid than subjective experience must be discarded. In particular, feminism concentrates upon the exploration, explaining, and validating of women's experiences that describe the pressures by the promotion of an ideal type femininity (Ruth, 1995). The Feminine Mystique (Friedan, 1963) was one of the first books in the contemporary feminist movement which gave validity and voice to women's reality by simply describing the experiences of white middle class women.

Thirdly, sharing and discussing experiences in groups is viewed as essential for raising awareness, giving names (and credibility) to the problems experienced, and promoting social change. Consciousness raising groups were a central process to politicizing the personal (Whelehan, 1995). Women were encouraged to reassess their lives and negotiate autonomous identities. The goal was to have the women interact and learn from one another. Heightening awareness continues to be emphasized as feminists still believe in the capacity of women to reject cultural images of women through the processes of sharing information and collectively resisting. Group interaction also facilitates the emergence of a common or collective language in which to talk about and describe women's lives. Because those in power (males) shape what is considered knowledge, women's issues were invisible mainly because their problems were without names (Spender, 1983).

Lastly, a rejection of patriarchal models must exist such that hierarchical arrangements in general are acknowledged and resisted. As described in Sexual Politics

(Millett, 1971), a system of power operates in all types of social relations. Because men in general have held such power, patriarchy affects women's perceptions of social reality and the choices that are overtly or covertly made. Women must recognize that patriarchy is entrenched in knowledge itself (Millett, 1971). Consequently, there are distortions in male created ideologies which inaccurately portray women and incompletely describe the world (Rich, 1976). Women must act out this recognition and reject the traditional images of women. A way of rejecting patriarchy is presenting women with information that is different than that presented by the majority culture. Common goals of feminism are for people to value women for themselves, to value their autonomy as individuals and as a group, and to create conditions that allow women the power to control their personal and public destinies (Ruth, 1995).

Creating a Prevention Program With Feminist Tenets

Many programs set up a didactic structure with an "expert" who disseminates information. This format limits communication and prevents development of rapport within the groups. Instead, the researcher should be sensitive to power differentials and work to balance the distribution of power thereby empowering the participants. Programs should have a facilitator, not a leader, who engages participants and models respect for the lived experiences and knowledge that the young women have. Encouraging young women to have a voice and to experience the power inherent in that voice should be viewed as a means of enabling young women to withstand cultural forces and to openly express themselves. "Empowering women to get in touch with their individual and collective power " in order to

"expand their alternatives, opinions, and choices" is an important tenet in feminist therapy (Wyche and Rice, 1997, p. 61) and should be for feminist prevention efforts as well.

Feminist ideas have not been incorporated into program content either. Although Ciliska's (1990) small group format is facilitative of feminist ideals, she reinforced societal values of weight management and neglected discussion about gender stereotypes and their role in the perpetuation of disordered eating. Programs like Paxton's (1993), and Killen's et al. (1993) focused on developing healthy attitudes toward food and body image but reinforced negative societal influences by emphasizing weight management and presenting weight charts (Piran, 1995). These programs fail to challenge the cultural value of thinness and covertly continue placing the locus of the problem (not attaining the ideal) on the individual. Programs such as these continue valuing the thin ideal and only help women to find alternate strategies of reaching the same ideal. To avoid sending these potentially mixed messages, researchers should explore values and attitudes that are guiding the development of programs (Piran, 1995).

Adherence to a feminist perspective would facilitate empowerment and presumably behavioral change. It would guide development of program content to include important sociocultural issues which affect attitudes about self and body. A feminist orientation recognizes the socialization processes and views women through sociocultural as well as intrapsychic lenses (Wyche and Rice, 1996). Although research findings on prevention programs are equivocal, the majority of researchers still believe that it is possible to conduct empirically sound prevention research. Such research would not only increase the likelihood of developing effective prevention programs, but also would aid in the understanding of the

disorders' development and progression (Smolak and Levine, 1996). Feminist tenets can be the grid from which sound prevention programs and research are developed and conducted.

Statement of Purpose

The origins of eating disorders are multifaceted, involving the interaction of individual characteristics, learned behaviors and attitudes, and the micro and macro environment. *How* these influences interact is unknown, but all should be addressed in etiological models. The premise of this study is that prevention programs can intervene in the learning and reinforcing of behaviors and attitudes which contribute to the development and perpetuation of eating disorders. Prevention programs can make target groups aware of the ways in which interpersonal and societal influences contribute to negative perceptions of self and promote unhealthy eating behaviors.

This study uses Ciliska's (1990) small group format tailored for a group drawn from a high risk population, college age sorority females. Previous outcome research has focused on middle and high school students and adult women, but not college age females. This program differs from others in the explicit use of a feminist perspective in program construction and topic selection.

Presumably, conducting a program grounded in feminist ideology should facilitate participants' feelings of efficacy and empowerment thereby strengthening their potential for change. The feminist components of this program are derived from key feminist tenets described in the previous section. Small groups are used to facilitate a decentralized, egalitarian organization. Everyone's experience and comments are valued as truth and reality. Sharing experiences within the group is encouraged to practice using one's voice and learning

to appreciate the diversity and commonalties among women. Making the invisible visible is attained by giving the participants opportunity to talk about their experiences, and offering them a new way to dialogue and express themselves. The program offers information and perhaps a new perspective in which to understand and view their experiences and feelings. New information, new perspectives, new ideas and ways of viewing themselves are offered as impetuses for change. Time in each session is devoted to generating ways of resisting the influences of feminine ideals and developing ways of supporting one another.

Dependent measures for this study included the Eating Attitudes Test (EAT), (Garner and Garfinkel, 1979), the Drive for Thinness, Bulimia, and Body Dissatisfaction scales of the Eating Disorders Inventory-2 (EDI-2) (Garner, 1991), and an Attitude and Behavior Questionnaire designed by the researcher. The treatment group consisted of three small groups. A separate control group was used to test for any changes in assessment scores due to the effects of time or other intervening variables. Assessment of attitudes and behaviors of the treatment group was conducted at the beginning of the workshop, at the conclusion of the third session, and one month later. A modified version of Ciliska's (1990) participants' program evaluation form was included in the post test assessment to assess the participants' perceptions of the program's format, as well as their interest in various program components.

CHAPTER III

METHODS

Subjects

Female participants were solicited from a major southeastern university. All participants were white sorority members between 18 and 20 years of age. Although various population groups are showing increases in the number of eating disorders, young white women who are sorority members are considered a high risk group which has been neglected in the prevention research.

The researcher solicited participants for the workshop (prevention program) by speaking to undergraduate women during sorority chapter meetings and by posting flyers in the Greek residence hall on campus. The women were told that the purpose of the program was to offer a forum in which women would be encouraged to learn about and discuss the effects of cultural pressures to "look thin" and the health risks associated with stringent dieting and other weight reducing behaviors. Potential participants were told that the researcher was not only interested in disseminating information, but also interested in discussing how they believed their life experiences had affected their eating behaviors and beliefs about body image and self. They were informed that participation was voluntary and no incentives were offered for participation.

The researcher did state that snacks would be provided before the start of each session. Food was offered for two reasons. Presumably, serving snacks would make the experience seem more pleasurable and increase the likelihood of participation. More importantly, it modeled an important goal of the program itself. The presence of food

signified that eating is a normal and necessary activity that can be engaged in without feelings of guilt or anxiety.

Intervention

The prevention program was similar to Ciliska's (1990) program with several modifications made based on feminist ideology. Ciliska (1990) found that a small group format, not a lecture format, led to significant changes in reported attitudes and behaviors, so a small group format was used. A small group format allows all participants to engage in group discussions and exercises. Compatible with feminist tenets, it also encourages the facilitator and participants to build personal relationships with one another thereby increasing trust and respect within the group.

One set of modifications were made because, unlike Ciliska's sample, the sample in this study was undergraduate Greek women who were not necessarily overweight and not recruited because they had previously expressed concern regarding their eating behaviors. To tailor the program for its target age group, sessions were designed to include life experiences and concerns of college age women. A decision was made to omit discussion of normal weights for women of particular heights and builds, as well as discussion about weight management. The assumption was that this material inadvertently emphasizes the societal myths of the "ideal" body size that the program was developed to debunk.

Other modifications were based on feminist analyses of the societal ideals and attitudes concerning women and their bodies. One discussion topic added included how women and men have been socialized to relate to one other and how the social arrangements underlying these sexual scripts lay the groundwork for the objectification of women and

disownership of women's bodies. In addition, traditional beliefs about how women can obtain power and self esteem were subjected to challenge, and participants were encouraged to discuss how accepting unrealistic and unhealthy physical ideals can lead some women to engage in potentially dangerous behaviors.

Another change, a reduction in the number of sessions, was made after consulting with residence hall program coordinators and staff members who advised that a program with more sessions would not be successful. Programs with fewer sessions may improve the feasibility of using such programs because they are less expensive and more efficient.

The program consisted of 3 sessions with the same major content areas as Cilisksa's: 1) heightening awareness of cultural and media pressures on women, 2) exploring effects of dieting on mood, behavior, metabolic adaptations, and eating patterns, 3) reviewing evidence of set point theory of weight, 4) discussing "normal eating," and 5) examining body image/body satisfaction. The major content areas, group exercises and discussion topics for each of the three sessions are outlined in Appendix A.

The researcher, who had formal training and experience in leading small groups, served as the group leader as in Ciliska's (1990) study. Research in various prevention programs has shown that "peer-group leaders" are most effectual at producing desired changes (Shisslak et al., 1987). The researcher who is a female in her twenties and a sorority alumnus was not a peer, but hopefully was seen as adequately similar.

Dependent Measures

The study used participants' scores from six scales as the dependent measures. Three of the scales were the Bulimia, Drive for Thinness, and Body Dissatisfaction scales of the

Eating Disorders Inventory, Second Edition. A composite scale from the Eating Attitudes Test, and two scales from an Attitude and Behavior Questionnaire developed by the researcher were used as well.

Eating Disorders Inventory (EDI-2)

The Eating Disorders Inventory, Second Edition, (EDI-2), is a self report inventory which assesses attitudes and behaviors that various clinicians and researchers believe to be associated with anorexia and bulimia (Garner, 1991). The EDI-2 has the same eight clinical scales as the original EDI, but the EDI-2 has three additional provisional scales. The eight clinical scales were developed using subjects diagnosed with anorexia and bulimia. The scales are Drive for Thinness, Bulimia, Body Dissatisfaction, Ineffectiveness, Perfectionism, Interpersonal Distrust, Interoceptive Awareness, and Maturity Fears. Reliability studies reported in the 1995 Mental Measurement Yearbook showed the internal consistency of each clinical scale to be .80 or higher (Conoley and Impara, 1995). Designed to be an adjunct to clinical judgment for diagnosing eating disorders, the inventory is promoted as a screening device and research outcome measure.

Some researchers question the specificity of several of the clinical scales in measuring characteristics that are unique to eating disorders. Certain studies have found that the Ineffectiveness, Perfectionism, Interpersonal Distrust, and Maturity Fears scales measure traits that are characteristic of general psychological distress rather than specifically indicative of eating disorders (Anderson and Meshot, 1992; Cooper, Cooper, and Fairburn, 1985; Hurley, Palmer, and Stretch, 1990). Positive correlations between these EDI scores and other personality inventories suggest that some of the constructs measured in the EDI involve other

personality characteristics not unique to eating disorders (Conoley & Impara, 1995). Clinical observation and theory, rather than experimentation, undergirds the scales. Factor analytic studies indicate that the eight scales do not measure distinctly different dimensions (Klemchuk, Hutchinson, and Frank, 1990; Welch, Hall, and Walkey, 1988).

For this study, only the scores from the Bulimia, Drive for Thinness, and Body Dissatisfaction scales were selected for use. These scales assess attitudes and behaviors involving eating behavior, weight, and shape. These scales measure severity of traits that are considered necessary for the diagnosis of an eating disorder and have been empirically linked to the presentation of eating disorders.

Respondents answer "never," "rarely," "sometimes," "often," "usually," or "always," to each of the scale items. Responses that are most symptomatic receive a score of 3 with the next adjacent response receiving a score of 2. A score of 1 is given for the next adjacent response, and a score of 0 is given to the remaining asymptomatic responses (Garner, 1991). A scale score is the sum of the item scores for that scale. The Bulimia and Drive for Thinness scale scores can range from 0 to 21, and the Body Dissatisfaction scale scores can range from 0 to 27.

The Bulimia scale measures behaviors and thoughts related to bingeing. Items include "I eat when I am upset," and "I have gone on eating binges where I felt that I could not stop." The Body Dissatisfaction scale assesses overall dissatisfaction with one's shape and size. Examples are "I think that my stomach is too big," and "I think that my hips are just the right size." The Drive for Thinness scale measures extreme preoccupation with dieting and a fear of becoming fat. Sample items from this scale are "If I gain a pound, I worry that I will keep

gaining," and "I feel extremely guilty after overeating." The American Psychological Association does not permit unapproved reproduction of copyrighted material and permission to include a copy of the EDI-2 was not granted, so it is not appended.

Eating Attitudes Test (EAT)

The 40 item Eating Attitudes Test (EAT) is a self report measure that was designed to assess attitudes and behaviors indicative of anorexia nervosa (Garner and Garfinkel, 1979). It was normed on both bulimic patients and binge eaters. EAT scores discriminate eating disorder groups from nonclinical controls and binge eaters from anorexics and bulimics. The EAT scores have a potential range of 0 to 120. A minimum cutoff score of 30 is used to identify eating disordered attitudes and behaviors symptomatic of anorexia nervosa. Research has established that the reliability coefficient for the total score is .94 (Williamson et al., 1995). Concurrent and discriminant validity coefficients have also been established and range from moderate to high correlations (Williamson et al., 1995).

Sample items include " I exercise strenuously to burn off calories," "I avoid eating when I am hungry," and "I take laxatives. "Respondents answer "always," "very often," "often," "sometimes," "rarely," or "never," to each of the 40 items. The most extreme anorexic responses receive a score of 3. The next adjacent responses receive a score of 2 , and the next a score of 1. Scores of 0 are given to the least anorexic responses. The EAT score is the sum of item scores. (See Appendix B).

Attitude and Behavior Questionnaire

Using Moreno and Thelen's (1993) questionnaire as a model, the researcher developed 25 Likert items addressing the major areas covered in the workshop. As other

researchers have found, no standardized measures can assess the components of a researcher's specific program. The items developed assessed attitudes and behaviors regarding the major content areas: dieting, body image, and awareness of cultural pressures. Eleven items addressed participants' attitudes, and fourteen items their behaviors.

The eleven attitude items of the questionnaire comprise the Attitude scale. Items include statements such as, "Women can show strength and willpower by restricting their eating and losing weight," and "When I see other females who are constantly dieting and are really thin, I wish that I could be like them." Fourteen behavioral items comprise the Behavior scale. Sample items from this scale are "I frequently look at pictures of models in magazines or on TV and wish I could be thinner," and "I spend a significant amount of time figuring up how many calories and/or fat grams I have eaten each day."

Respondents indicate on a 5 point Likert scale whether they agree or disagree with each item statement. Anchors of "strongly agree" and "strongly disagree" are assigned to 1 and 5 respectively with 3 assigned as "unsure." Responses indicative of the most maladaptive behaviors or attitudes were given a score of 3. Less extreme responses were given a score of 2 and an item marked "unsure" was given a score of 1. Nonsymptomatic responses were given scores of 0. The Attitude scale had a potential range from 0 to 33 and the Behavior scale a possible range from 0 to 42 (See Appendix C).

Program Evaluation Form

A modified version of Ciliska's (1990) process evaluation form was developed. The evaluation form asked participants about their perceptions of the program, specifically their level of interest in each of the major program components and their level of satisfaction with

the program's format. They were also asked to write comments-- suggestions for the leader, aspects of the program that they believed had the greatest impact on them, and other topics they wished would have been included (See Appendix D).

Procedure

After the researcher solicited participants, forty-three women signed up to participate. The women were divided into three small groups (one group from each of the three sororities). The participants were grouped by sorority so the women would be familiar with one other. Presumably being acquainted would foster development of cohesiveness in the groups. The workshop programs were conducted in each sorority's meeting room. The rooms were located on their respective floors in the University's Greek dormitory. The meeting rooms had comfortable seating although most groups chose to sit in a circle on the floor. The researcher brought an easel with large sized paper on which to write and show displays as the groups discussed topics.

Workshop programs for the three small groups were run consecutively. The program for the first group was conducted during the first three weeks of September. Workshops for the second group were conducted during November, and the third group during January. The three treatment groups filled out their consent forms (Appendix E) before the beginning of the workshop and assessment packets (including a qualitative evaluation form) after its conclusion. Another small group from a fourth sorority served as the control group. They filled out the assessment packets twice with a waiting period of three weeks in between (the length of time between assessments of the treatment groups). One month after each of the three treatment groups completed the program, they were contacted and asked to fill out the

assessment packet for the third and final time. Packets from participants who missed more than one session were shredded.

As stated above, consent forms were filled out by the participants at the beginning of the first session. The researcher collected the original forms, and copies of the consent forms were made and given to each of the participants. The consent form stated, and the researcher informed them, that participation was voluntary and that they could discontinue participation at any time. The phone numbers of the researcher and her advisor were given so participants could contact them if there were questions or concerns. Social security numbers, not names, were used to identify the assessment packets. Only the researcher had access to the identifying information.

CHAPTER IV

RESULTS

The treatment group was composed of 43 women who signed consent forms and filled out assessment packets. Sixteen of the women did not attend either the second or third sessions. Their scores were eliminated from the data analysis though they were allowed to continue participation. No observed consequence resulted from having participants who missed the second session participate in the third. The treatment group therefore had 27 women, with 13 in the September sessions, 8 in the November sessions, and 6 in the January sessions. They all completed post test assessment packets at the conclusion of the third session. One month follow-up scores were collected from 9 of the 27 women. There were 7 women in the control group. The marked difference in size was not due to differences in attrition rates; rather the size differences were an artifact of the order in which the groups were conducted. Initially, the researcher was told by sorority officers and dormitory staff that as the school year progressed, potential participants would become more active in sorority and academic activities and less able to commit to the program. Due to conflicts in the three sororities' schedules (sorority meetings, intramural sports, study nights, swaps) it was not feasible to run all three groups at the same time, so the decision was made to run the groups consecutively anticipating that group size would be affected.

Measures

The dependent measures for this study were the participants' scores from the Drive for Thinness, Bulimia, and Body Dissatisfaction scales of the EDI-2, the EAT composite scores, and the Attitude scale and the Behavior scale scores from the researcher's

questionnaire. In total, there were six dependent measures. Most scale scores were evenly distributed with no outliers except on the Bulimia scale. The distribution of Bulimia scores was positively skewed with three scores that were substantially more severe than the rest.

The control group was administered pre- and post test assessment packets three weeks apart using the same time frame as for the treatment groups' pre- and post test assessments. The control group's scores on all dependent measures did not significantly decrease (Table 1). Any effects due to education, social change, time, or testing were not enough to produce a significant reduction in the treatment group's scores. Significant differences in the treatment group can be inferred as a result of participation in the treatment.

The treatment group's pre-test mean scores on the three EDI-2 scales were above the norms for female college students as reported in the EDI-2 manual (Garner, 1991). Table 2 presents the means and standard deviations for each measure for the treatment group at pre- and post test. Their mean score for Drive for Thinness (DT = 10.0) was farthest from the reported norms. EDI-2 means for non-patient college females on the Drive for Thinness scale as reported in Garner (1991) were between 4.6- 5.5. The Body Dissatisfaction mean score for the treatment group (BD= 15.15) was slightly higher than anorexic patients of the bulimic subtype (14.4). The Bulimia mean score (B= 3.1) was approximately one standard deviation above the reported norms for non patient college females (B= 1.2-1.9). Participants' EAT mean score of 26 was below the cut-off score of 30, though 10 of the 27 participants scored higher than 30. The cut-off score for the EAT is the value above which the test developer suggests a person may be exhibiting symptomatology similar to anorexia. The control group's mean scores were somewhat lower on each measure but followed a similar pattern.

TABLE 1. T-TESTS FOR CONTROL GROUP

	Paired Differences					
	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (1-tailed)
EAT Pre-test - Post test	-2.71	7.43	2.81	-.966	6	.186
Bulimia Pre-test - Post test	.43	1.13	.43	1.000	6	.178
Body Dissatisfaction Pre-test - Post test	-1.29	2.69	1.02	-1.264	6	.126
Drive for Thinness Pre-test - Post test	-.57	2.70	1.02	-.560	6	.298
Attitude Scale Pre-test - Post test	-2.71	2.43	.92	-2.955	6	.013
Behavior Scale Pre-test - Post test	-.86	4.38	1.65	-.518	6	.311

TABLE 2. MEANS AND STANDARD DEVIATIONS FOR TREATMENT GROUP

	Mean	N	Std. Deviation	Std. Error Mean
EAT Pre-test	25.93	27	17.80	3.43
EAT Post test	24.41	27	18.04	3.47
Bulimia Pre-test	3.15	27	5.48	1.06
Bulimia Post test	3.56	27	4.95	.95
Body Dissatisfaction Pre-test	15.15	27	7.83	1.51
Body Dissatisfaction Post test	14.26	27	7.94	1.53
Drive for Thinness Pre-test	10.00	27	6.85	1.32
Drive for Thinness Post test	8.11	27	6.66	1.28
Attitude Scale Pre-test	16.52	27	7.39	1.42
Attitude Scale Post test	13.48	27	7.24	1.39
Behavior Scale Pre-test	20.07	27	10.04	1.93
Behavior Scale Post test	17.19	27	10.50	2.02

Pre- and Post Test Results

Differences between pre- and post test scores were analyzed using a series of paired t-tests. Statistical significance was set at or below the .05 level. Three of the six dependent measures showed significant decreases between pre- and post test scores (Table 3). There were significant decreases in Drive For Thinness ($p < .007$), the Attitude score of the Attitude and Behavior Questionnaire ($p < .005$), and the Behavior score of the Attitude and Behavior Questionnaire ($p < .007$). The EAT and Body Dissatisfaction scores showed a decrease in the means, but none decreased at or below the $p < .05$ level of statistical significance.

Evaluation

The 24 program evaluation forms that were complete were analyzed. All but one of the participants liked all components of the workshop and all expressed satisfaction with the size of their group and the amount of time given to each discussion. One-fourth stated that the workshop included too few sessions, while none said that there were too many. Regarding the role of the facilitator, the vast majority of the participants wrote that they liked the open discussion format of the workshop and enjoyed the opportunity to talk with their peers and the facilitator. Some components of the program had more impact than others. Half of the participants stated that they thought the discussion, video, and magazine exercises regarding "cultural influences and their links to women's behaviors" had the greatest effect on them. Only three of the participants wrote that the discussion on the effectiveness and consequences of dieting had the greatest impact on them.

TABLE 3. T-TESTS FOR TREATMENT GROUP

	Paired Differences					
	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (1-tailed)
EAT Pre-test - Post test	1.52	6.95	1.34	1.135	26	.133
Bulimia Pre-test - Post test	-.41	2.53	.49	-.837	26	.205
Body Dissatisfaction Pre-test - Post test	.89	3.68	.71	1.254	26	.110
Drive for Thinness Pre-test - Post test	1.89	3.72	.72	2.635	26	.007
Attitude Scale Pre-test - Post test	3.04	5.67	1.09	2.781	26	.005
Behavior Scale Pre-test - Post test	2.89	5.69	1.10	2.637	26	.007

Perceptions of others' and one's own dieting behaviors were explored. When asked if participants' perceptions of females who stringently diet or who excessively worry about their weight had changed in any way, over half (13) stated that their perceptions had changed. Seven of them wrote that they realized that their friends were not helping themselves by engaging in weight reducing behaviors or focusing on their weight. Four of them wrote that since completing the program, they found it annoying to be around females who excessively worry and complain about their weight or size. One stated that she realized that it is "not normal" to worry about one's weight. Ten of the 24 participants indicated that as a result of the workshop, they would not engage in stringent dieting or unhealthy weight reducing behaviors. The most frequently requested topics that participants wished had been included were "how to get past all of the negative images in the media and not just be aware of them," "how to boost self image," "how to eat healthy," and "how to lose weight without being obsessive."

Only nine of the twenty-seven women who attended all three sessions were available for the one month follow-up. Because the follow-up group was comprised of so few of the treatment group subjects, no basis existed for assuming that the nine women's mean scores were representative of those in the treatment group. Therefore, t-tests were conducted to compare their pre- and post-test scores before engaging in further analysis of one month follow-up scores. As with the treatment group's scores, all scores but the EDI-2's Bulimia score were reduced, but the paired t-tests yielded no significant decreases in any of the six dependent variables for the nine participants. See Table 4. A paired t-test comparing pre-test means to one month follow-up scores established significant decreases in the Bulimia ($p <$

TABLE 4. T-TESTS FOR FOLLOW-UP GROUP

	Paired Differences					
	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (1-tailed)
EAT Pre-test - Follow-up	7.11	8.99	3.00	2.372	8	.023
Bulimia Pre-test - Follow-up	.78	.97	.32	2.401	8	.022
Body Dissatisfaction Pre-test -Follow-up	2.44	3.78	1.26	1.941	8	.044
Drive for Thinness Pre-test - Follow-up	2.67	2.50	.83	3.200	8	.006
Attitude Scale Pre-test - Follow-up	2.44	3.50	1.17	2.093	8	.035
Behavior Scale Pre-test - Follow-up	2.22	6.69	2.23	.997	8	.174

.022), Drive For Thinness ($p < .006$), Body Dissatisfaction ($p < .044$), EAT ($p < .023$), and the Attitude scale ($p < .035$). With the expanded time frame, dependent measures may have assessed changes in behaviors and attitudes that required more time to be firmly established. Although the small number in the follow-up group limits interpretation, these results call for further use of follow-up assessments as a means of detecting change in participants.

CHAPTER V

DISCUSSION

The purpose of this study was to evaluate the effectiveness of a three week program for college age females in modifying eating behaviors and attitudes. College age Greek females are considered at high risk for developing maladaptive attitudes and behaviors, but prevention studies on this population are notably absent from the research literature. This omission may reflect anticipated resistance to involvement (attitudes and behaviors resistant to the effects of short term intervention) and general pessimism about the effectiveness of prevention efforts (Vandereyecken and Meerman, 1984). It also could reflect a lack of successful prevention programs, for most studies yielding nonsignificant findings are not published.

The prevention workshop consisted of three one hour sessions each focused on one of the following areas: cultural ideals regarding women's bodies, the physical and psychological effects of dieting, and body image and body satisfaction. The treatment group consisted of three small groups as in Ciliska's (1990) study. Through open discussion in small groups, participants had the opportunity to consider more in-depth the effects of cultural influences on women's physical and emotional health by sharing relevant life experiences.

Session 1 included the presentation of a portion of a video "Slim Hopes" and a display of magazine advertisements created by the researcher both of which illustrated cultural influences on women's bodies and behaviors. The goal for the session was to illuminate the cultural ideals of beauty and thinness for women, the messages inherent in these ideals, and how these ideals are disseminated and reinforced. Both the video and the

presentation of the magazine ads were intended as group activities to foster dialogue. Therefore, the magazine ads were passed around the room as everyone discussed them and the video was stopped as participants had comments. Because the images were familiar to everyone, participants were able to relate to one another as they shared their opinions or observations about the images. Because the participants were given the opportunity to guide the discussion, they hopefully experienced mutual respect and acceptance from the facilitator. An important part of the role of researcher was help them learn how these images translated into their lives as women on a college campus.

During this session, participants identified sources which they believed reinforce these cultural ideals. Sources identified included the media, the college environment, parents (mothers and fathers), boyfriends, and female peers. Participants in all three groups talked about the pressures to restrain their eating in front of other female peers in order to "fit in, " "be admired," or "not appear unfeminine."

Session 2 focused on the effects of dieting. The facilitator presented information on the set point theory of weight, information on the relationship between metabolism and dieting, and the psychological and biological effects of restraint. Feminist objectives such as heightening one's awareness of choices and viewing these choices as potential expressions of one's power structured the development of the activities and discussion.

A substantial portion of the session was open for the participants to collectively devise a typical college weekly schedule and then to discuss the pressures inherent in trying to adhere to a stringent diet while keeping the schedule. Their discussions included commonly experienced failures, feelings of guilt as a result of "breaking the diet," the unrealistic goals

which begin the cycle of dieting, and the unrecognized amount of time spent thinking about food which serves to perpetuate and accentuate a focus on food and weight. Participants also initiated discussion of how such a preoccupation with food/ weight interferes with the development and maintenance of personal relationships and social activities. They shared that often they are limited in how much they can go out or with whom they can go because food is so often a part of college activities. They either feel uncomfortable eating in front of others or feel they can not withstand the temptation to overeat. Participants also discussed their use of alcohol and cigarettes as ways of curbing their appetite, though many stated that their use of alcohol usually resulted in disinhibition. Overall, the facilitator helped the participants examine their behaviors to see if their choices were getting them what they wanted. In other words, "Were their reported feelings of stress and the physical repercussions of dieting worth it to them?" and "Were they achieving the satisfaction and contentment with their body as a result of their dieting?"

Session 3 centered on body image and body dissatisfaction. From a feminist point of view, the facilitator opened with a discussion of the "normalcy" and social "acceptability" of women disliking and verbally demeaning their bodies. Participants shared instances in which they perceived it was more socially appropriate to state that they "hated" their bodies than it was to say that they "liked" them. Discussion included how dissatisfaction with one's body appeared to be gender specific, i.e., young men rarely experience their own bodies in a similar manner, men often talk about females' bodies as objects to like/ dislike or want/ not want. Participants commented that it seemed that men were permitted a greater amount of weight variability. Many stated that unlike women, it appeared that men could gain a

significant amount of weight without initiating social disapproval or negative attention. Discussion also included the idea that women's bodies were automatically open to the scrutiny of others. Participants shared that it was common that men and women would evaluate other women's bodies, that women expected to be rated by their body size, and that they did not previously experience it as a violation.

The facilitator then initiated an exercise (see Appendix A) that illustrated how most people have difficulty approximating the size of different body parts. In line with previous research findings, all participants overestimated their waist size by at least a fourth The leader discussed this common distortion that females and males exhibit when trying to gauge the size of different body parts. The participants discussed how their eyes can "deceive them," and listed factors that influence how they experience their bodies (e.g. feelings of depression, frustration, or feeling bloated during menses). Participants talked with one another about the times when they know they are more likely to feel hatred towards their bodies and subsequently engage in destructive weight reducing behaviors. Being aware of these instances ahead of time, they concluded, helped them to acknowledge these thoughts during such stressful times and not act on them.

Because the facilitator's job in all sessions was to listen and foster dialogue, the young women had "equal voice" and were able to give direction to the discussions. The hoped product of such a process was interaction with everyone and a sense of empowerment as young women connected with others and openly questioned commonly held beliefs. The workshop offered a place where the "unspoken" stress of having to look good or the stress of failing to achieve the ideal body was voiced. Support was gained as participants heard others

share their feelings and for some, their exhaustion in trying to live up to the unattainable ideals.

Dependent Measures

The workshop had a positive effect in significantly reducing the participants' scores on the EDI-2's Drive for Thinness scale. Items on this scale assess excessive preoccupation with weight and dieting, and a fear of fatness (Garner, 1991). The program's emphasis on the negative effects of dieting and the effects of a gross preoccupation with food apparently affected the participants' awareness of these behaviors and reduced the likelihood of their engaging in such behaviors.

Participants' scores showed a statistically significant reduction in the Attitude scores on the Attitude and Behavior Questionnaire. These items assess the participants' beliefs regarding dieting and their bodies. The items closely resemble the workshop discussion topics and therefore are an appropriate measure of the effectiveness of the workshop. After the workshop the women were less likely to believe in the efficacy and safety of diets. They were also less likely to positively view or idealize other women who stringently restrict their food intake.

The Behavior score of the Attitude and Behavior Questionnaire measured any changes in the reported behavior of the participants. Again, the content of the items paralleled the material covered in the workshop. Participants' scores showed a significant reduction in specific stringent weight reducing behaviors, behaviors illustrative of poor body image, and those indicative of a preoccupation with one's weight (comparing one's body to others,

looking at TV ads or magazines and wishing one could be thinner, routinely complaining about one's weight or shape to others).

The composite EAT scores of the participants were not significantly reduced between the pre- and post tests. The EAT was developed to measure levels of attitudes and behaviors symptomatic of anorexia, although the test has been normed on bulimic patients also. The lack of change in the participants' EAT scores was initially difficult to interpret for the other three measures focused on seemingly similar constructs.

Two explanations may account for these results. Gross, Rosen, Leitenberg, and Willmuth (1986) found that scores on the EAT and the scores of the EDI have a somewhat weak correlation with one another and may actually be measuring different constructs. Reappraisal of items composing the EAT generates another explanation. The EAT was developed in 1979 and includes items (approximately a fourth) that may be out of date. For instance, items like, "I like my clothes to fit tightly," or "I am aware of the caloric content of foods that I eat," frequently elicited a response that was interpreted as "most symptomatic" of disordered eating. This interpretation may no longer be valid considering most young women are now familiar with caloric values of food and many of women's fashions include baggy or loosely fitted clothing. Also, marking "never" or" rarely" on the item "I particularly avoid foods with a high carbohydrate content" may not be a valid indicator of disordered eating considering many current diets include a high proportion of carbohydrates. Other items such as "I prepare food for others but do not eat what I cook," and "I eat the same foods day after day, "may not be appropriate for this study's sample. Resident college women may not cook for others, and daily eating of the same food may be indicative of constraints due to

environment (campus cafeterias) rather than purposeful restraint behavior. Although the EAT has been used as a dependent measure for research involving eating disorder prevention and treatment (Gross, Rosen, Leitenberg, and Willmuth, 1986), its usefulness for contemporary college age women may be questionable.

The Bulimia scale of the EDI-2 showed little difference as well. The Bulimia scale assesses the degree to which subjects think about or engage in purging or bingeing. The pre- and post test means both hovered around 3. Norms from a large bulimic sample reported by Garner (1991) showed an average score of B = 10.8. Excluding three women who scored high on this scale, most women who chose to participate in the program were those who reported they did not engage in these behaviors. Because of this sample's lack of variation on the Bulimia scale, this measure was not helpful in measuring behavior changes. Also other influences such as social desirability may have affected the likelihood of respondents reporting bulimic behaviors, although participants did not appear to respond in a socially desirable manner to other measures in the study. Scores on other measures, for the most part, were more normally distributed.

Scores from the Body Dissatisfaction scale of the EDI-2 did not significantly decrease although one of the three main emphases of the workshop was body image work including group exercises aimed at increasing positive body image. The participants became more conscious of the "normative discontent" with their bodies that they and other females commonly experience, but the program did not reduce their level of discontent. Participants in this study revealed in their discussions that they were socially reinforced for not liking their bodies rather than being positively reinforced for liking how they looked. By objectifying

their own bodies, they believed they "fit in" with and gained approval from their peers. Piran (1995) proposed in assessing her prevention program (for young female dancers) that many young women feel a disconnection with their bodies due both to their struggle with unrealistic standards of appearance and to their perception of their bodies as commodities.

Focusing on the hyperthin standards of appearance without addressing the objectification of women's bodies may reduce program effectiveness (Piran, 1995). This program addressed this objection mentioned by Piran but statistically significant results using the EDI's Body Dissatisfaction scale were not obtained. Polivy and Herman (1992) who also did not obtain reduction in body dissatisfaction scores stated that becoming more knowledgeable about the limitations of dieting does not automatically make one more satisfied with one's body. As the literature review discussed, normative discontent is well entrenched by college with many young females expressing dissatisfaction with their bodies as early as elementary school (Smolak and Levine, 1994). "Raising awareness" as discussed by feminists is viewed as essential before behavioral change can take place, therefore, even though participants still reported discontent with their bodies, it can be seen as progress that they became able to acknowledge it, view it from a sociocultural perspective, and see how it affected their beliefs and behaviors.

Differences between pre-test scores and one month follow-up scores were significant for the Bulimia, Drive for Thinness, Body Dissatisfaction, and EAT scores. These follow-up differences were proposed, but surprising in light of the post program lack of differences. These finding must be interpreted with caution. Small sample size may have weakened the power of the test and affected the results obtained. Respondent bias could have affected the

candidness of the participants' answers. Also, the results could have been due to a biased follow-up sample. The nine participants who were available to complete the assessment measures for a third time might have been those that were most interested in the workshop and the topics covered. Because of their interest, they may have sought other relevant experiences (other programs, reading material, or continued conversation with peers) that affected their attitude and behavior scores. The possible existence of heightened interest does not diminish the apparent effectiveness of the program's components when explaining their reduction in scores, but it does not allow generalizing from these results to all participants. Another possible explanation is that some of the behaviors and attitudes that the measures assessed were not adequately established immediately following the end of the workshop. It may be that a longer period of time is needed between intervention and assessment before such changes can be detected.

Participant Feedback

The qualitative feedback from the participants confirmed the quantitative results. In their written responses, all participants expressed a heightened awareness of the influences that affect women's views about their bodies and the ideals that women internalize. Participants expressed increased awareness of the effects of dieting on women's mental and physical health and said that they were less likely to engage in these behaviors, although several were unsure how they could "get past all of these negative images of women" and "boost their self image." Some said they were unsure how to overcome their underlying desire to "attain the ideals" in order to "feel good about themselves." A continued investment in the cultural ideal of thinness is illustrated by four participants' comments: two wished they

had learned "how to lose weight without being obsessive" and another two participants wanted to know "how they could lose weight healthily." (All of the participants were observed by the researcher as being of average weight.) A minority of these participants still apparently were invested in the belief that "thinness gives one happiness."

Feedback also addressed which of the components of the program were perceived as most effective. All participants indicated that they liked the small group format of the workshop and the open discussion. Participants showed their interest in the topics discussed by expressing eagerness to share their experiences, to ask questions and to vent frustrations. From the researcher's observation, many of the young women already were knowledgeable regarding much of the information about dieting and body image that was covered in the workshop. What appeared to be novel was the program's feminist orientation. The open discussion format, discussions about cultural ideals and gender roles, and the ideas of empowerment and choice were effective in increasing participant interest and participant change.

Incorporating A Feminist Perspective

The significant statistical results and the young women's expressed enthusiasm and participation supported the effectiveness of developing and conducting a prevention program grounded in feminist ideology. The goal of the program was to alter beliefs and behaviors, but within an environment of respect and empowerment. Participants were told that they were the experts of their lived experiences and that both the facilitator and the participants could learn from each other. As Piran (1995) stated, respect should be given to the women's knowledge and experiences. Rather than conceptualizing the participants as vulnerable or

"problem-prone," the facilitator reinforced the idea that they could change their own lives and make educated decisions regarding their bodies and how they choose to treat them. By minimizing hierarchical distinctions between the facilitator and the participants, the young women were given a greater sense of power, voice over their own bodies, and the opportunity to generate alternatives and solutions in an environment of support and validation.

Participants discussed how women give away their power by "buying into the cultural myths." They examined whether or not their attempts to obtain or maintain a slim physique were giving them what they wanted (e.g. happiness, feelings of success, freedom from possible feelings of inadequacy). Many participants recounted how their continued efforts to attain the cultural feminine ideals led them to feeling more self conscious and uncomfortable with their own bodies. The participants and the facilitator also discussed the normalcy of women demeaning their bodies and conceptualizing their bodies as "objects" to be modified for others' enjoyment. Participants shared stories of friends as early as junior high school who had undergone plastic surgery in order to feel better about themselves and to look more attractive to others. One participant shared her reasons for having her breasts enlarged. Discussion also included the women's experiences of hearing young men speak about and critique women's bodies and how such comments affected their views of themselves. These discussions were helpful in giving an awareness of how others or society in general shape what is considered attractive, how women's bodies should look, and consequently how women learn to experience their bodies.

As evidenced by the discussion in the small groups and the feedback written by the participants, the women were comfortable sharing their experiences and related feelings.

Many of the pressures to conform to society's ideals are said to be intensified by female peers, but in this workshop, young women perceived they were supported by others in their group. Participants were surprised to find that many other group members shared similar feelings of guilt, frustration, or anger. Because the program format facilitated communication among members regarding topics that usually are not discussed openly, it allowed the women to hear one another's experiences. This atmosphere helped to develop an environment of acceptance, not one of competition. By allowing the women to direct the flow of conversation, it was intended to give them a feeling of ownership of the experience and an opportunity to experience power by using their own voices to express feelings and thoughts that otherwise may have been kept secret.

The prevention program was developed using feminist tenets and reflected feminist thought. The program was neither promoted nor described as feminist. Using the word "feminist" potentially could have led participants to assume that the workshop would be different than it was based on societal stereotypes of feminism.

Limitations of the Study

Various aspects of the study's design limited the validity and generalizability of the findings. Two sources of limitations are response bias and sample limitations. As with all self report measures, social desirability may have affected some of the responses given by some participants, for many of the items on the inventories could be easily identified as assessing undesirable behaviors or attitudes. Also, although the participants were not told what type (if any) changes were being assessed, the young women could have elected to answer the items

in such a way as to appear less extreme in their attitudes and behaviors at the end of the workshop.

The lack of randomization of subjects may have influenced the results of the study. Because all participants were volunteers, the effectiveness of the program cannot be generalized to the female college Greek population. Those who volunteered for the program already may have been interested in learning more about eating behaviors and been less resistant to the treatment. Those that dropped out were not included in the data analysis. Those women stated that the main reason for dropping out was the conflict of the program's times with sorority activities such as choral competitions, intramural sports, and school work. As the academic year progressed, the young women had more obligations to their sororities and to their studies. Because of the effects of time in the semester, each treatment group that was conducted was smaller than the one before. The sample size may have also weakened the study's results. This especially could have been the case with the follow-up group.

The use of only one facilitator could have biased the results of this study thereby limiting its generalizability. Like Ciliska (1990), the researcher served as the group facilitator. Using only one facilitator cannot answer whether the content of the program caused participant changes. Characteristics of the person providing the treatment could have affected scores on the dependent measures. Varying facilitators would be necessary to rule out intervening variables such as facilitator skill.

The lack of adequate standardized measures also is a limitation of this study and may possibly be to all eating disorder prevention program research. The EAT appears to need revision since its publication in 1979. A fourth of its items (because of the wording) do not

seem relevant to a contemporary sample, especially college females. Only three of the EDI-2's scales are considered to measure constructs that are generally accepted as indicative of eating disorder symptomatology. Although these three scales can be used as dependent measures, the wording of the items may limit their utility in prevention research. Some scale items appeared not to be sensitive enough to assess recent or anticipated changes in participants' behavior or beliefs.

Implications for Future Research

This study presents evidence for the efficacy of an eating disorder prevention program, and recommends structure for future programs. This study supports the use of key feminist tenets in developing program format and content. The following components derived from the feminist tenets outlined in an earlier chapter must be incorporated in future programs that are designed to emulate the nature of this study's program.

Using small groups of women with a group facilitator is necessary to facilitate an egalitarian, respectful relationship among the women. The purposeful minimization of hierarchy fosters group cohesion and empowerment of the participants. The small group format allows for interaction with all participants in an atmosphere of trust which seems to be integral for participant investment. Using groups that are previously acquainted with one another readily facilitates cohesiveness within the group. Unlike other types of groups in which anonymity is preferred, pre-existing relationships are desirable because of the brevity of the program.

Sharing experiences and listening to one another's perspective is essential. Facilitating this dialogue will allow young women to begin the exploration and description of their

experiences. This, in turn, will assist in the recognition of the interplay between individuals and existing social structures. It is through this recognition that a person's world view and view of self can be made salient. Using a feminist perspective in the conceptualization of eating and weight loss behaviors facilitates an interpretation of the research findings which indicate that the combination of individual factors in a context of sociocultural influences sets the stage for maladaptive eating behaviors.

This feminist perspective offers more than heightened awareness of social forces, it also opens up choices, alternatives, and a new framework from which to understand these experiences. Contextual factors generally are recognized as important influences yet prevention programs have not developed adequate strategies for counteracting their influence. Future programs modeled from this program must give opportunities to generate new ways of acting and reacting to the cultural influences and inevitable feelings that occur when women are faced with ideals that are unrealistic and destructive. This component of "generating choices" is one that is creative and consequently will be shaped by the participants in each group. Creating alternatives for women is congruent with the feminist belief that all women in their diversity have the capability to be strong, creative, and intelligent human beings in the face of challenging situations.

Using female facilitators who are similar in characteristics to participants helps minimize possible hierarchical distinctions because of similar frames of reference. The facilitator in this study was somewhat similar to the participants (in age and educational background), but perhaps using peer facilitators to conduct this type of workshop would be ideal. As has been established by organizations such as Alcoholics Anonymous and awareness

training workshops for sexual harassment, participants can identify readily with peer leaders. If the use of peer facilitators proves useful, preventative workshops would be more feasible because they would be less costly and easier to increase in number.

Facilitators would be trained to follow the specific program outline. Prior participation in the program could be a prerequisite. It is recommended that facilitators have experience and skills in leading groups and group discussions. Future studies should use treatment groups that are facilitated by several different individuals. Only then could researchers eliminate the possibility that participant change was due to characteristics of the facilitator, not the program. A larger number of participants would be needed to allow for the use of multiple facilitators.

The utility of assessing behavioral and attitude changes after a significant period of time has passed also should be explored. Follow-up assessments should be conducted to ascertain the short term and long term effects of programs and the resiliency of changes. Some behaviors or attitudes may not be fully manifested or established until several weeks or months after intervention. Assessments taken one and two months after a program could measure changes that otherwise would not be detected if assessed immediately after a program. This study's follow-up scores suggest the existence of such time delayed changes, but because of the small number of subjects, further research is needed. If later changes (as found in this study) are due in part to participants subsequently seeking out additional related information or experiences, prevention efforts should be conceptualized as providing the impetus for such changes and therefore a successful stimulus for change. Programs should make sure that participants have easy access to such materials.

Researchers conducting programs with follow-up groups should strive for treatment groups large enough to withstand the inevitable attrition that occurs across time. Future research also should test how large the groups of participants can be and still be effective. Larger groups' discussions can be enhanced because of the diversity of the participants' perspectives, although groups that are too large do not encourage participants to interact with one another and with the facilitator.

Researchers should develop measures that will assess the effectiveness of their programs. They may need to develop their own measures to be used in conjunction with existing standardized inventories because of the overall lack of standardized instruments in this field and their questionable utility. Only using those that currently exist does not give adequate information about the effectiveness of a prevention program's components. Also, researchers should measure the effectiveness of their programs in changing the beliefs and behaviors that their programs specifically target. If researchers want to know about participant reactions to content selection, program format, and participant changes, they may need to develop their own questionnaires to obtain this information.

Finally, researchers should examine what population is most appropriate for prevention programs. Estes et al. (1996) states that the costs for offering prevention programs to the general population may outweigh the benefits. This researcher's position is that primary prevention for the population at large has yet to be proven effective, but high risk populations such as the college age females in this study appear responsive to prevention programs.

By constructing the prevention programs as feeder programs, the varied needs of the participants may be met. A "feeder" program could offer an initial prevention program (such

as this study's program), make available the names of organizations or other professional resources in the community for those who request such information, and offer the option of additional sessions for those who want to continue. Feedback from this study indicated that the needs of the participants differed. Only some participants were satisfied that they had obtained all they needed from the program. Others indicated that they were uncertain how they could achieve body satisfaction and self esteem in general without succumbing to many of the societal mandates regarding women's bodies. These participants requested additional sessions which focused on generating solutions to these questions. Group facilitators could conduct initial prevention programs for young women in high risk groups and simultaneously identify at the program's conclusion those who would like to continue. These additional sessions would include group exercises and discussions about how women can build support systems for themselves and how they can actively make changes in their behaviors and attitudes which are congruent with their desire to reject traditional conceptions of beauty and health. Ideally, the experience would give the participants a support group in which their new or alternative behaviors and attitudes would be reinforced.

Conclusion

Eating disorders can be conceptualized best as disorders with multifaceted roots. Influences both at the individual and societal levels play a role in the prevalence of the disorders. Initially, individual explanations were emphasized, but more recently the role of sociocultural influences has been recognized. Research on the psychological and biological effects of eating restraint and the effects of gender stereotypes further illuminate the etiology. Learned behaviors and attitudes syntonic with the culturally accepted ideals for women serve

as a springboard for the development of unhealthy eating behaviors and belief systems. If attitudes and behaviors are recognized as learned, then they are potentially amenable to change through prevention programs. A feminist perspective links these explanations and gives researchers a framework from which to develop and implement effective prevention programs.

No prevention program can combat all the societal influences to which young women are exposed. These influences begin early in girls' lives and attitudes are well established by young adulthood. Prevention programs should not be viewed as a panacea. Rather they should be viewed as one of many vehicles which can help women increase their knowledge of and consequently power over their bodies and how they choose to treat their bodies. Data from such research also can provide information regarding how and when attitudes and behaviors are developed and how they best can be prevented or modified. Such information can aid in the continued refining of etiological models and treatment strategies. Ultimately, society must modify unrealistic and ultimately harmful ideals for women. Such changes evolve from the collective efforts of individuals who believe that such changes are needed. Prevention programs are attempts to aid in such an evolution.

REFERENCES

REFERENCES

Abraham, S., & Beumont, P. (1982). How patients describe bulimia or binge eating. Psychological Medicine, 12, 625-635.

Agras, W. (1990). Is restraint the culprit? Appetite, 14, 111-112.

Albee, G. W. (1982). Preventing psychopathology and promoting human potential. American Psychologist, 37, 1043-1050.

American Psychiatric Association. (1993). Eating Disorders [Brochure]. Washington, DC: Author.

American Psychiatric Association. (1994). The diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.

Anderson, T., & Meshot, C. (1992). The relationship of the Eating Disorders Inventory with the SCL-90 and MMPI in college women. Personality and Individual Differences, 13(3), 249-253.

Andres, R., Muller, D. C., & Sorkin, J. D. (1993). Long term effects of change in body weight on all-cause mortality: A review. Annals of Internal Medicine, 119, 737-745.

Ash, P. (1995). Eating Disorder Inventory-2. In J. C. Conoley & Impara (Eds.), Mental Measurement Yearbook (12th ed.) (pp. 333-335). Highland Park, N.J.

Azar, B. (1994, November). Mixed messages fuel dieting dilemmas. APA Monitor, p. 1, 22.

Baker, C. (1996, Spring). Never too late to act: Preventing eating disorders on the college campus. The Renfrew Perspective, 2(1), 13-14.

Beliard, D., Kirschenbaum, D. S., & Fitzgibbon, M. L. (1992). Evaluation of an intensive weight control program using a priori criteria to determine outcome. International Journal of Eating Disorders, 16, 505-517.

Beumont, P., Touyz, A., & Touyz, S. (1987). The evolution of the concept of anorexia nervosa. In P. J. V. Beumont, G. D. Burrows, & R. C. Casper (Eds.), Handbook of eating disorders, part 1 (pp. 106-116). New York: Elsevier Science Publishers.

Beumont, P., O'Conner, M., Touyz, S., & Williams, H. (1987). Nutritional counseling in the treatment of anorexia nervosa and bulimia nervosa. In P. J. V. Beumont, G. D. Burrows, & R. C. Casper (Eds.), Handbook of eating disorders, part 1 (pp. 349-351). New York: Elsevier Science Publishers.

Boskind-Linahl, M., & Sirlin, J. (1977, March). The gorging-purging syndrome. Psychology Today, pp. 50-52, 82, 85.

Bram, S., Eger, D., & Halmi, K. (1982). Anorexia nervosa and personality type: A preliminary report. International Journal of Eating Disorders, 2(1), 67-74.

Braucht, G. N., & Braucht, B. (1984). Prevention of problem drinking among youth. In P. M. Miller & T. N. Nirerburg (Eds.), Prevention of alcohol abuse (pp. 253-279). New York: Plenum Press.

Brewerton, T., Lydiard, R., Laraisa, M., Shook, J., & Ballenger, J. (1992). CSF-endorphin and dynorphin in bulimia nervosa. American Journal of Psychiatry, 149(8), 1086-1090.

Brigham, J.C. (1980). Limiting conditions of the "physical attractiveness stereotype": Attributions about divorce. Journal of Research in Personality, 14, 365-375.

Brown, L. (1994). Subversive dialogues. New York: Basic Books.

Brownell, K. D., & Jeffrey, R. W. (1987). Improving long term weight loss: Pushing the limits of treatment. Behavior Therapy, 18, 353-374.

Brownell, K., & Rodin, J. (1994). The dieting maelstrom. American Psychologist, 49(9), 781-791.

Bruch, H. (1961). Conceptual confusion in eating disorders. Journal of Nervous Mental Disorders, 133, 46-54.

Bruch, H. (1974). Eating disorders: Obesity, anorexia nervosa, and the person within. London: Routledge and Kegan Paul.

Bunnell, D., Shenker, R., Nussbaum, M., Ajcobson, M., & Cooper, P. (1990). Subclinical versus formal eating disorders: Differentiating psychological features. International Journal of Eating Disorders, 9(3), 357-362.

Bunnell, D., Cooper, P., Hertz, S., & Shenker, I. (1992). Body shape concerns among adolescents. International Journal of Eating Disorders, 11(1), 79-83.

Carney, B. (1986). A preventive curriculum for anorexia nervosa and bulimia. Canadian Association for Health, Physical Education and Recreation, 52, 10-14.

Casper, R. (1983). On the emergence of bulimia nervosa as a syndrome. International Journal of Eating Disorders, 2(3), 3-16.

Charnock, D. (1989). A comment on the role of dietary restraint in the development of bulimia nervosa. British Journal of Clinical Psychology, 28, 329-340.

Chiodo, J., & Latimer, P. (1983). Vomiting as a learned weight-control technique in bulimia. Journal of Behavior Therapy and Experimental Psychiatry, 14(2), 131-135.

Ciliska, D. (1990). Beyond dieting. New York: Brunner/Mazel.

Cleary, M. P., & Vasselli, J. R. (1981). Reduced organ growth when hyperphagia is prevented in genetically obese Zucker rats. Proceedings of the Society for Experimental Biology and Medicine, 167, 616-623.

Cooper, Z., Cooper, P., & Fairburn, C. (1985). The specificity of the Eating Disorders Inventory. British Journal of Clinical Psychology, 24, 129-130.

Crisp, A. H., Hsu, L., Harding, .B., & Hartshorn, J. (1980). Clinical features of anorexia nervosa. British Journal of Medical Psychology, 24, 179-191.

Davis, R., Freeman, R., & Garner, D. (1988). A naturalistic investigation of eating behavior in bulimia nervosa. Journal of Consulting and Clinical Psychology, 56(2), 273-279.

Dykens, E. & Gerrard, M. (1986). Psychological profiles of purging bulimics, repeat dieters, and controls. Journal of Consulting and Clinical Psychology, 54(3), 283-288.

Eckert, E. D., Goldberg, S. C., Halmi, K. A., Casper, R., & Davis, J. M. (1982). Depression in anorexia nervosa. Psychological Medicine, 12, 115-122.

Ernsberger, P., & Haskew, P. (1987). Health implications of obesity: An alternative view. Journal of Obesity and Weight Regulation, 6, 58-137.

Esman, A., Dechillo, N., & Moughan, V. (1986). "Hidden" eating disorders in female patients. American Journal of Psychiatry, 143, 803.

Estes, L., Crago, M., & Shisslak, C. (1996, Spring). Eating disorders prevention. The Renfrew Perspective, 2(1), 4-5.

Fairburn, C., & Cooper, P. (1984). The clinical features of bulimia nervosa. British Journal of Psychiatry, 144, 238-246.

Feingold, A. (1990). Gender differences in effects of physical attractiveness on romantic attraction. Journal of Personality and Social Psychology,

Friedlander, M., & Siegel, S. (1990). Separation-individuation difficulties and cognitive behavioral indicators of eating disorders among college women. Journal of Counseling Psychology, 37(1), 74-78.

Foreyt, J. (1987). Issues in the assessment and treatment of obesity. Journal of Consulting and Clinical Psychology, 55(5), 677-684.

Friedan, B. (1963). The feminine mystique. New York: Norton.

Garfinkel, P. E., & Garner, D. M. (1982). Anorexia nervosa: A multidimensional perspective. New York: Brunner/Mazel.

Garfinkel, P. E., Moldofsky, H., & Garner, D. M. (1980). The heterogeneity of anorexia nervosa. Archives of General Psychiatry, 37, 1036-1040.

Garner, D. V. (1991). Eating disorder inventory professional manual. Odessa, Florida: Psychological Assessment Resources, Inc.

Garner, D. M. (1995). Dieting maelstrom or painful evolution? American Psychologist, 50(11), 944-945.

Garner, D., & Garfinkel, P. (1979). The eating attitudes test: An index of the symptoms of anorexia nervosa. Psychological Medicine, 9, 273-279.

Garner, D., & Garfinkel, P. (1980). Socio-cultural factors in the development of anorexia nervosa. Psychological Medicine, 10, 647-656.

Garner, D. M., Garfinkel, P. E., Schwartz, D., & Thompson, M. (1980). Cultural expectations of thinness in women. Psychological Reports, 47, 483-491.

Garner, D. M., Olmsted, M. P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. International Journal of Eating Disorders, 2, 15-34.

Garner, D., Olmsted, M., Polivy, J., & Garfinkel, P. (1984). Comparison between weight-preoccupied women and anorexia nervosa. Psychosomatic Medicine, 46(3), 255-266.

Garner, D., & Wooley, S. (1991). Confronting the failure of behavioral and dietary treatments for obesity. Clinical Psychology Review, 11, 729-780.

Gillen, B. (1981). Physical attractiveness: A determinant of two types of goodness. Personality and Social Psychology Bulletin, 7, 277-281.

Graber, J., Brooks-Gunn, J., Paikoff, R., & Warren, M. (1994). Prediction of eating problems: An 8 year study of adolescent girls. Developmental Psychology, 30(6), 823-834.

Gresko, R., & Karlsen, A. (1994). The Norwegian program for the primary, secondary, and tertiary prevention of eating disorders. Eating Disorders: The Journal of Treatment and Prevention, 2(1), p. 57-63.

Grodner, M. (1995, Fall). The psychology of eating disorders among college students. American Anorexia/Bulimia Association Newsletter, 1, 1.

Gross, H. A., Ebert, H. M., Faden, V. B., Goldberg, S. C., Nee, L. E., & Kaye, W. H. (1981). A double-blind controlled trial of lithium carbonate in primary anorexia nervosa. Journal of Clinical Psychopharmacology, 1, 376-381.

Gross, J., Rosen, J., Leitenberg, H., & Willmuth, M. (1986). Validity of the eating attitudes test and the eating disorders inventory in bulimia nervosa. Journal of Consulting and Clinical Psychology, 6, 875-876.

Hart, K., & Ollendick, T. (1985). Prevalence of bulimia in working and university women. American Journal of Psychiatry, 142(7), 851-854.

Hassenbrauck, M. (1988). Beauty is more than "name" deep. Journal of Applied Social Psychology, 18, 721-726.

Herman, P. & Mack, D. (1975). Restrained and unrestrained eating. Journal of Personality, 43, 600-660.

Herman, P. & Polivy, J. (1975). Anxiety, restraint, and eating behavior. Journal of Abnormal Psychology, 84, 666-672.

Herman, P., & Polivy, J. (1979). Effects of an observer on eating behavior: The induction of "sensible" eating. Journal of Personality, 47(1), 85-99.

Herman, P. & Polivy, J. (1984). A boundary model for the regulation of eating. In A. J. Stunkard & E. Stellar (Eds.) Eating and its disorders. New York: Raven.

Herman, P., Polivy, J., & Esses, V. (1987). The illusion of counter- regulation. Appetite, 9, 161-169.

Herman, P., Polivy, J., & Silver, R. (1979). Effects of an observer on eating behavior: The induction of sensible eating. Journal of Personality, 47, 85-99.

Herzog, D. B., Hopkins, J. D., & Burns, C. D. (1993). A follow-up study of 33 subdiagnostic eating disordered women. International Journal of Eating Disorders, 14, 261-267.

Hibscher, J. A., & Herman, C. P. (1977). Obesity, dieting, and the expression of "obese" characteristics. Journal of Comparative and Physiological Psychology, 91, 374-380.

Hsu, L. K. G. (1987). Are the eating disorders becoming more common in blacks? International Journal of Eating Disorders, 6, 113-124.

Hudson, J. I., Laffer, H. G., Pope, H. G., Jr. (1982). Bulimia related to affective disorder by family history and response to dexamethasone suppression test. American Journal of Psychiatry, 137, 695-697.

Hurley, J., Palmer, R., & Stretch, D. (1990). The specificity of the Eating Disorders Inventory: A reappraisal. International Journal of Eating Disorders, 9(4), 419-424.

Jeffrey, R., Adlis, S., & Forster, J. (1991). Prevalence of dieting among working men and women: The healthy worker project. Health Psychology, 10(4), 274-281.

Johnson, C., Tobin, D., & Enright, A. (1989). Prevalence and clinical characteristics of borderline patients in an eating disordered population. Journal of Clinical Psychiatry, 50, 9-15.

Kaplan, A., & Woodside, D. (1987). Biological aspects of anorexia nervosa and bulimia nervosa. Journal of Consulting and Clinical Psychology, 55(5), 645-653.

Kaye, W. H., Berrettini, W. H., Gwirtsman, H. E., Gold, P. W., George, D. T., Jimmerson, D. C., & Ebert, M. H. (1990). Contribution of CNS neuropeptide (NYY, CRH, and beta-endorphin) alterations to psycho-physiological abnormalities in anorexia nervosa. Archives of General Psychiatry, 47, 548-556.

Keys, A., Brozek, J., Henschel, A., Michelsen, O., & Taylor, H. L. (1950). The biology of human starvation. Minneapolis: University of Minnesota Press.

Killen, J., Taylor, C., Hammer, L., Litt, I., Wilson, D., Rich, T., Hayward, C., Simmonds, B., Kraemer, H., & Varady, A. (1993). An attempt to modify unhealthy eating attitudes and weight regulation practices of young adolescent girls. International Journal of Eating Disorders, 13(4), 369-384.

Klemchuk, H. P., Hutchinson, C. B., & Frank, R. I. (1990). Body dissatisfaction and eating related problems on a college campus: Usefulness of the Eating Disorders Inventory with a nonclinical population. Journal of Counseling Psychology, 37, 297-305.

Knight, L., & Boland, F. (1989). Restrained eating: An experimental disentanglement of the disinhibiting variables of perceived calories and food type. Journal of Abnormal Psychology, 98(4), 412-420.

Kogel, L. (1996, Spring). Prevention during psychotherapy. The Renfrew Perspective, 2(1), p. 14.

Lewis, L. D., & Johnson, C. (1985). A comparison of sex role orientation between women with bulimia and normal controls. International Journal of Eating Disorders, 4(3), 247-257.

Levine, M. (1987). Student eating disorders: Anorexia nervosa and bulimia. Washington DC: National Education Association.

Levine, M. (1994). Beauty myth and the beast: What men can do and be to help prevent eating disorders. Eating Disorders, 2, 101-113.

Levine, M. (1996, Spring). Researching the future of primary prevention. The Renfrew Perspective, 2(1), 6-7.

Millett, K. (1970). Sexual politics. Garden City, NY: Doubleday.

Mills, I. H. (1976). Amitriptyline therapy in anorexia nervosa. Lancet, ii, 687.

Minuchin, S., Rosman, B. L., & Baker, L. (1978). Psychosomatic families: Anorexia in context. Cambridge,MA: Harvard University Press.

Mitchell, J. & Eckert, E. (1987). Scope and significance of eating disorders. Journal of Consulting and Clinical Psychology, 55(5), 628-634.

Mitchell, P., & Truswell, A. (1987). Body composition in anorexia nervosa and starvation. In P. J. V. Beumont, G. D. Burrows, & R. C. Casper (Eds.), Handbook of Eating Disorders, Part 1 (pp. 45-81). New York: Elsevier Science Publishers.

Moore, J.S., Graziano, W.G., & Millar, M.G. (1987). Physical attractiveness, sex-role orientation, and the evaluation of adults and children. Personality and Social Psychology Bulletin, 13, 95-102.

Moreno, A., & Thelen, M. (1993). A preliminary prevention program for eating disorders in a junior high school population. Journal of Youth and Adolescence, 22(2), 109-124.

Moriarty, D., Shore, R., & Maxim, N. (1990). Evaluation of an eating disorder curriculum. Evaluation and Program Planning, 13, 407-413.

Mowbray, C. (1995). Nonsexist therapy: Is it? Women and Therapy, 16(4), 9-30.

National Institute of Mental Health. (1994). Eating Disorders [Brochure]. NIH.

Nunn, R. G., Newton K. S., & Faucher, P. (1992). 2.5 years follow up of weight and body mass index values in the Weight Control for Life! program: A descriptive analysis. Addictive Behaviors, 17, 579-585.

Osvold, L., & Sodowsky, G. (1993). Eating disorders of white American, racial and ethnic minority American, and international women. Journal of Multicultural Counseling and Development, 21, 143-154.

Palazzoli, M. S. (1978). Self-starvation. London: Jason Aronson.

Paxton, S. J. (1993). A prevention program for disturbed eating and body dissatisfaction in adolescent girls: A 1 year follow-up. Health Education Research, 8(1), 43-51.

Pirke, K., & Ploog, D. (1987). Biology of starvation. In P. J. V. Beumont, G. D. Burrows, & R. C. Casper (Eds.), Handbook of Eating Disorders, Part 1 (pp. 79-104). New York: Elsevier Science Publishers.

Piran, N. (1995). Prevention: Can early lessons lead to a delineation of an alternative model? A critical look at prevention with schoolchildren. Eating Disorders: The Journal of Treatment and Prevention, 3, 28-36.

Piran, N. (1996, Spring). On prevention and transformation. The Renfrew Perspective, 2(1), 8-9.

Polivy, J. (1976). Perception of calories and regulation of intake in restrained and unrestrained subjects. Addictive Behaviors, 1, 237-243.

Polivy, J., & Herman, C. (1983). Breaking the diet habit. New York: Basic Books.

Polivy, J., & Herman, C. (1985). Dieting and binging: A causal analysis. American Psychologist, 40(2), 193-201.

Polivy J., & Herman, P. (1987). Diagnosis and treatment of normal eating. Journal of Consulting and Clinical Psychology, 55(5), 635-644.

Polivy, J., & Herman, P. (1992). Undieting: A program to help people stop dieting. International Journal of Eating Disorders, 11(3), 261-268.

Polivy, J., Herman, P., & McFarlane, T. (1994). Effects of anxiety on eating: Does palatability moderate distress-induced overeating in dieters? Journal of Abnormal Psychology, 103(3), 505-510.

Polivy, L., Zeitlin, S., Herman, P., & Beal, L. (1994). Food restriction and binge eating: A study of former prisoners of war. Journal of Abnormal Psychology, 103(2), 409-411.

Porter, J., Morrell, T., & Moriarty, D. (1986). Evaluation of a pilot project for early and pre-adolescents. Canadian Association for Health, Physical Education, and Recreation, 52, 21-26.

Pumariega, A. J. (1986). Acculturation and eating attitudes in adolescent girls : A comparative and correlational study. Journal of the American Academy of Child and Adolescent Psychiatry, 25, 276-279.

Pyle, R. L., Mitchell, J. E., & Eckert, E. D. (1981). Bulimia: a report of 34 cases. Journal of Clinical Psychiatry, 42, 60-64.

Rich, A. (1976). Of women born: Motherhood as experience and institution. New York: Norton.

Rodin, J. (1992). Body traps: Breaking the binds that keep you from feeling good about your body. New York: William Morrow and Company.

Rossiter, E. M., Wilson, G. T., & Goldstein, L. (1989). Bulimia nervosa and dietary restraint. Behavior Research and Therapy, 27, 465-468.

Rossner, S. (1989). Weight-cycling- A new risk factor? Journal of Internal Medicine, 226(4), 209-211.

Ruderman, A., & Wilson, G. T. (1979). Weight, restraint, cognitions an counterregulation. Behaviour Therapy and Research, 17, 581-590.

Ruderman, A. (1985). Dysphoric mood and overeating. Journal of Abnormal Psychology, 94, 78-85.

Russell, G. (1979). Bulimia nervosa: An ominous variant of anorexia. Psychological Medicine, 9, 429-448.

Russell, G. (1985). The changing nature of anorexia nervosa: An introduction to the conference. Journal of Psychiatry and Research, 19(2/3), 101-109.

Russo, D. (1997, Fall) . Eating disorders among women: Considering the illness from a feminist perspective. APAGS, 9, 3-5.

Ruth, S. (1995). Issues in Feminism: An introduction to women's studies. Mountain View, CA: Mayfield Publishing Company.

Schotte, D., & Cools, J., & McNally, R. (1990). Film-induced negative affect triggers overeating in restrained eaters. Journal of Abnormal Psychology, 99(3), 317-320.

Schwartz, D., Thompson, M., & Johnson, C. (1982). Anorexia nervosa and bulimia: The social context. International Journal of Eating Disorders, 1(3), 20-36.

Scott, D. (1986). Anorexia nervosa: A review of possible genetic factors. International Journal of Eating Disorders, 5(1), 1-20.

Shisslak, C., & Crago, M. (1987). Primary prevention of eating disorders. Journal of Consulting and Clinical Psychology, 55(5), 660-667.

Shisslak, C., Crago, M., & Estes, L. (1995). The spectrum of eating disturbances. International Journal of Eating Disorders, 18(3), 209-219.

Shisslak, C., Crago, M., & Neal, M. (1990). Prevention of eating disorders among adolescents. American Journal of Health Promotion, 5, 100-106.

Silber, T. (1986). Anorexia nervosa in blacks and Hispanics. International Journal of Eating Disorders, 5(1), 121-128.

Smead, V. (1983). Anorexia nervosa, buliminarexia, and bulimia: Labeled pathology in the western female. Women and Therapy, 2(1), 19-35.

Smead, V. (1984). Eating behaviors which may lead to and perpetuate anorexia nervosa, bulimarexia, and bulimia. Women and Therapy, 3(2), 37-49.

Smith, J. & Krejci, J. (1991). Minorities join majority: Eating disturbances among Hispanic and native American youth. International Journal of Eating Disorders, 10(2), 179-186.

Smolak, L., & Levine, M. (1994). Toward an empirical basis for primary prevention of eating problems with elementary school children. Eating Disorders: The Journal of Treatment and Prevention, 2, 293-307.

Smolak, L., & Levine, M. (1996, Spring). Eating smart, eating for me: A pilot of an elementary school eating curriculum. The Renfrew Perspective, 2(1), 9-10.

Spencer, J. A., & Fremouw, M. J. (1979). Binge eating as a function of restraint and weight classification. Journal of Abnormal Psychology, 88, 262-267.

Spender, D. (1983). Modern feminist theorists: Reinventing rebellion. In D. Spender (Ed.) Feminist theorists: Three centuries of women's intellectual traditions. London: The Women's Press.

Steen, S. N., Opplinger, R. A., & Brownell, K. D. (1988). Metabolic effects of repeated weight loss and regain in adolescent wrestlers. Journal of the American Medical Association, 260, 47-50.

Striegel-Moore, R. H., & Silberstein, L. R., & Rodin, J. (1986). Toward an understanding of risk factors for bulimia. American Psychologist, 41, 246-263.

Strober, M., and Humphrey, L. (1987). Familial contribution to the etiology and course of anorexia nervosa and bulimia. Journal of Consulting and Clinical Psychology, 55(5), 654-659.

Timko, C., Striegel-Moore, R. H., Silberstein, L.R., & Rodin, J. (1987). Femininity/masculinity and disordered eating in women: How are they related? International Journal of Eating Disorders, 6(6), 701-712.

Three in four Americans are overweight, poll finds. (1996, February 5). The Knoxville News Sentinel, p. A5.

Thompson, J. (1986, April). Many women see themselves as roundfaced and pudgy, even when no one else does. Psychology Today, 39, 42-44.

Travis, C., Meginnis, K. & Bardari, K. (2000). Beauty, sexuality, and identity: The social control of women. In C. Travis and J. White (Eds.) Sexuality, society, and feminism (pp. 237-272). Washington, D.C.: A.P.A.

Tuschl, R. (1990). From dietary restraint to binge eating: Some theoretical considerations. Appetite, 14, 105-109.

Vandereyeken, W., & Meerman, R. (1984). Anorexia nervosa: Is prevention possible? International Journal of Psychiatry in Medicine, 14(3), 191-205.

Wardle, J. (1980). Dietary restraint and binge eating. Behavioural Analysis and Modification, 4, 201-209.

Wardle, J., & Beales, S. (1988). Control and loss of control over eating: An experimental investigation. Journal of Abnormal Psychology, 97(1), 35-40.

Wardle, J., & Beinart, H. (1981). Binge eating: A theoretical review. British Journal of Clinical Psychology, 20, 97-109.

Welch, G., Hall, A., & Walkey, F. (1988). The factor structure of the Eating Disorders Inventory. Journal of Clinical Psychology, 44(1), 51-56.

Whelehan, I. (1995). Modern feminist thought: From the second wave to 'post-feminism.' New York University Press.

Wiseman, C., Gray, J., Mosimann, J., & Ahrens, A. (1992). Cultural expectations of thinness in women: An update. International Journal of Eating Disorders, 11(1), 85-89.

Wolf, N. (1991). The beauty myth: How images of beauty are used against women. New York: William Morrow.

Woody, E. Z., Costanzo, P. R., Leifer, H. & Conger, J. (1981). The effects of taste and caloric perceptions on the eating behavior of restrained and unrestrained subjects. Cognitive Research and Therapy, 5, 381-390.

Wooley, O, W. and Wooley, S. (1982). The Beverly Hills eating disorder: The mass marketing of anorexia nervosa. International Journal of Eating Disorders, 1, 57-69.

Wooley, S. C. (1995). Maelstrom revisited. American Psychologist, 50(11), 943-944.

Wooley, S., & Wooley, O. (1983). Should obesity be treated at all? Psychiatric Annals, 13(11), 884-888.

Wyche, K.F., & Rice, J. K. (1997). Feminist theory: From dialogue to tenets. In J. Worrell & N. Johnson (Eds.), Shaping the future of feminist psychology: Education, research, and practice (pp. 57-71). Washington, DC: American Psychological Association.

APPENDICES

APPENDIX A

THREE WEEK PROGRAM

WEEK ONE

INTRODUCTION

1. The facilitator introduced herself. She described the program and the "group norms" (the participants' roles in the group). She encouraged interaction and discussion.

2. Met the participants and discussed their expectations and any experiences similar to this program that they may have had.

3. Handed back participants' copies of consent forms.

CONTENT

1. Cultural ideals and values: their messages and their effects on perceptions and behaviors
    a. drive for thinness
    b. diet and exercise craze
    c. link between thinness and beauty

PRESENTATION OF CONTENT AND GROUP EXERCISES

1. The facilitator began with a discussion of what is meant by the term "cultural message."

2. Participants collectively listed messages in which they were aware. Typically listed messages were:
    thin = attractive
    being fit = being thin
    overweight = unattractive
    women's bodies are completely malleable

3. A discussion regarding where these messages originate followed. Typically discussed sources included magazines, television, female and male peers, and parents. The leader gave a presentation of current advertisements and magazine covers depicting overt and covert messages aimed at women. Pictures illustrated messages such as:
    *the ideal of thinness
    *the ideal shapes of various body parts (thighs, stomach, legs)
    *the message that fattening foods are "sinful" and one should feel guilty for eating
    *thin women are successful, intelligent, happy, attractive to males

4. A portion of the video "Slim Hopes" produced and written by Jean Kilbourne was shown to the participants and then discussed.

5. The media's inherent "mixed messages" were discussed. The mixed messages were illustrated via magazine clippings. They included:

*eating is enjoyable but eating is sinful
*indulge in fattening food to "escape" but don't eat fattening food
*do not diet but you must lose weight to be attractive
*feel good about yourself as a women but you must change how you look

6. Participants and the facilitator discussed the "strength" of these messages. Participants took a "test" to illustrate how most women are aware of these overt and covert messages via advertising. Examples of test items included 1) writing down the names of products that go with their respective slogan, 2)Naming current fashion models from magazine pictures and the products they were selling. A few of the examples of slogans that were used were:

"Just do it"
"Shake for breakfast..."
"Hey cookie man!"

7. The group discussed the effects of these messages on women's beliefs about themselves. Beliefs included "thinness is the norm," "women can change their body shape if they try hard enough," "women's bodies are objects that should be modified for the enjoyment of others," "becoming thin will give me self esteem."

8. The facilitator initiated a discussion challenging these messages and beliefs. Participants and the facilitator discussed how to become more aware of how messages promote unrealistic ideals for women and myths about beauty. Participants made suggestions such as not buying certain magazines, not watching certain television programs, and not buying certain products as ways of actively refusing to accept certain societal ideals.

WEEK TWO

INTRODUCTION

1. Briefly review last week's meeting.

CONTENT

1. Discussion of dieting as a means for losing weight and reaching the "ideal."
    a. Effects of dieting on mood, body, and eating.
    b. Effectiveness of dieting

DISCUSSION OF CONTENT AND GROUP EXERCISES

1. Participants were asked to write down a question they each had about dieting or eating that they would like discussed during the workshop. They gave these to the facilitator.

2. Participants then were asked to write down whether or not they were currently dieting, what their usual impetus to diet was, and how they felt before and during a diet. They also wrote down the most typical times they "broke" their diet and what foods they considered to

be "forbidden" vs. those that are "acceptable". The group made a collective list of these foods with the facilitator and discussed the inherent "criteria" for each list.

3. Participants discussed their answers as the facilitator discussed information regarding dieting and eating behavior. Topics included:

the norm of dieting
effects of dieting on mood, metabolism
the effects of a "preoccupation on food" as a result of dieting
set point theory
diet cycle (taken from Polivy and Herman's research)

4. The facilitator discussed expectations and results of today's popular diets. Participants were asked to share their own experiences of dieting.

5. Participants collectively made a typical weekly college schedule. Once the schedule was completed with all activities listed, the facilitator and the group discussed when the young women normally ate, when and what food was readily available to them, and the feasibility of sticking to a diet like those discussed previously.

6. Participants and the facilitator discussed how the media's promotion of dieting as an effective weight loss tool runs counter to research findings. Visual aids such as diet advertisements were used. The participants and the leader discussed the amount of money participants typically spend on diet literature, diet programs, and weight loss food and medicine as a means of illustrating the power of the industry.

7. The session concluded with a brainstorming of "things women can do to be more aware of false beliefs about dieting." The group listed suggestions such as:

- being aware of diet foods' role in breaking the link btw eating normal portions and feeling full (a normal portion of a diet food rarely results in satiety)
- not categorizing food into good and bad
- being aware of amount of time one is spending on food (either its consumption or its avoidance)
- asking oneself questions like, "Is dieting giving me what I want?"
"Have I attained freedom from food as a result of dieting?"
- trying to use physiological not culturally derived cues for eating

WEEK THREE

INTRODUCTION

1. Review last week's meeting and address any questions of participants

CONTENT

1. Discussion of body image
   a. the role of dieting and unrealistic ideals on body image
   b. the effects of negative body image

c. the normalcy of body dissatisfaction

2. The participants were asked to write on index cards their weight, their "ideal" weight, and the difference between the two. The facilitator asked those whose ideal weight was less than five pounds different from their actual weight to raise their hands. The facilitator then asked those whose weight was between 6 - 8 pounds different and then more than 9 pounds different. Participants were then asked if anyone had actually weighed their ideal weight for any significant amount of time. Discussion from the participants followed.

3. The facilitator and the participants discussed what it is like to rarely if ever weigh what one wants to weigh. Points of discussion included:

*evident normative discontent among women about their bodies
*poor body image fuels maladaptive weight reducing behaviors which in turn fuels poor body image
*the phenomenon of attaching self esteem to ambiguous numbers.
*evidence of women having exceptionally stringent ideals regarding their bodies
*the differences between how men and women feel about their bodies.
*the objectification of women's bodies

4. Facilitator initiated a group exercise of listing common complaints that women have about their bodies. The facilitator then asked the participants to list features that women commonly feel good about. Everyone then discussed the discrepancy between the two lists and the fact that the very features that women hate about themselves are the ones that are emphasized in the media. Discussion also included how "normal" it is for a woman to dislike her body.

5. Facilitator led a second group exercise called the "string exercise." The purpose was to demonstrate how misleading perceptions of one's body can be. The string exercise illustrated this phenomenon by testing participants' perceptions of their waist sizes. The participants each placed a string in a circle on the floor in front of them that they believed approximated the size of their own waist. They were given scissors to cut the string as needed. Lengths of string that were the actual size of each participant's waist were then compared to their original approximations (the circle of string that represented the actual size of their waist was placed on top of the first circle of string). All participants over estimated the size of their waist. Discussion followed which highlighted how perceptions can be misleading and how mood can affect perceptions of one's body.

6. The session closed by generating alternative behaviors and attitudes that women can adopt. They included:

*be aware of the tendency to view one's body negatively
*become irritated when someone or yourself talks negatively about one's body
*become aware of the typical times that one feels "fat"
*be aware that "hanging out" with people who are overly weight conscious is contagious
*question the healthiness of weighing everyday

7. The session closed by having participants fill out the assessment packets and evaluation forms.

APPENDIX B

EATING ATTITUDES INVENTORY

Always	Very often	Often	Sometimes	Rarely	Never	
( )	( )	( )	( )	( )	(X)†	1. Like eating with other people.
(X)	( )	( )	( )	( )	( )	2. Prepare foods for others but do not eat what I cook.
(X)	( )	( )	( )	( )	( )	3. Become anxious prior to eating.
(X)	( )	( )	( )	( )	( )	4. Am terrified about being overweight.
(X)	( )	( )	( )	( )	( )	5. Avoid eating when I am hungry.
(X)	( )	( )	( )	( )	( )	6. Find myself preoccupied with food.
(X)	( )	( )	( )	( )	( )	7. Have gone on eating binges where I feel that I may not be able to stop.
(X)	( )	( )	( )	( )	( )	8. Cut my food into small pieces.
(X)	( )	( )	( )	( )	( )	9. Aware of the calorie content of foods that I eat.
(X)	( )	( )	( )	( )	( )	10. Particularly avoid foods with a high carbohydrate content (e.g. bread, potatoes, rice, etc.).
(X)	( )	( )	( )	( )	( )	11. Feel bloated after meals.
(X)	( )	( )	( )	( )	( )	12. Feel that others would prefer if I ate more.
(X)	( )	( )	( )	( )	( )	13. **Vomit after I have eaten.
(X)	( )	( )	( )	( )	( )	14. Feel extremely guilty after eating.
(X)	( )	( )	( )	( )	( )	15. **Am preoccupied with a desire to be thinner.
(X)	( )	( )	( )	( )	( )	16. Exercise strenuously to burn off calories.
(X)	( )	( )	( )	( )	( )	17. **Weigh myself several times a day.
( )	( )	( )	( )	( )	(X)	18. ‡Like my clothes to fit tightly.
( )	( )	( )	( )	( )	(X)	19. Enjoy eating meat.
(X)	( )	( )	( )	( )	( )	20. Wake up early in the morning.
(X)	( )	( )	( )	( )	( )	21. Eat the same foods day after day.
(X)	( )	( )	( )	( )	( )	22. Think about burning up calories when I exercise.
( )	( )	( )	( )	( )	(X)	23. Have regular menstrual periods.
(X)	( )	( )	( )	( )	( )	24. Other people think that I am too thin.
(X)	( )	( )	( )	( )	( )	25. Am preoccupied with the thought of having fat on my body.
(X)	( )	( )	( )	( )	( )	26. Take longer than others to eat my meals.
( )	( )	( )	( )	( )	(X)	27. Enjoy eating at restaurants.
(X)	( )	( )	( )	( )	( )	28. **Take laxatives.
(X)	( )	( )	( )	( )	( )	29. Avoid foods with sugar in them.
(X)	( )	( )	( )	( )	( )	30. Eat diet foods.
(X)	( )	( )	( )	( )	( )	31. Feel that food controls my life.
(X)	( )	( )	( )	( )	( )	32. Display self control around food.
(X)	( )	( )	( )	( )	( )	33. Feel that others pressure me to eat.
(X)	( )	( )	( )	( )	( )	34. Give too much time and thought to food.
(X)	( )	( )	( )	( )	( )	35. *Suffer from constipation.
(X)	( )	( )	( )	( )	( )	36. Feel uncomfortable after eating sweets.
(X)	( )	( )	( )	( )	( )	37. Engage in dieting behaviour.
(X)	( )	( )	( )	( )	( )	38. Like my stomach to be empty.
( )	( )	( )	( )	( )	(X)	39. Enjoy trying new rich foods.
(X)	( )	( )	( )	( )	( )	40. Have the impulse to vomit after meals.

APPENDIX C

ATTITUDE AND BEHAVIOR QUESTIONNAIRE

PLEASE ANSWER THE FOLLOWING QUESTIONS BY CIRCLING THE NUMBER THAT BEST DESCRIBES YOUR OPINION. PLEASE ANSWER ALL QUESTIONS, EVEN IF YOU ARE UNCERTAIN ABOUT YOUR ANSWER.

1. Strict dieting is an effective way for me to control my weight.

1 2 3 4 5 6 7
strongly agree strongly disagree

2. If I wanted to lose weight, I would eat very little food for a few days.

1 2 3 4 5 6 7
strongly agree strongly disagree

3. I constantly compare the size of my body to other females that I see.

1 2 3 4 5 6 7
strongly agree strongly disagree

4. I frequently look at pictures of models in magazines and wish I could be thinner.

1 2 3 4 5 7
strongly agree strongly disagree

5. If I wanted to lose weight and my friends were going on a strict diet, I would probably go on one with them.

1 2 3 4 5 6 7
strongly agree strongly disagree

6. I believe that diets do not work in the long run and that they are a waste of my time and money.

1 2 3 4 5 6 7
strongly agree strongly disagree

7. Even if my friends told me that I should lose some weight, I would not go on a strict diet.

1 2 3 4 5 6 7
strongly agree strongly disagree

8. I will try to keep up with the latest diets by reading about them or watching ads on television.

1 2 3 4 5 6 7
strongly agree strongly disagree

9. If I wanted something fattening to eat, I would rather eat it by myself than let my friends see me eat it.

1 2 3 4 5 6 7
strongly agree strongly disagree

10. Strict dieting speeds up your metabolism so your body can burn calories faster.

1 2 3 4 5 6 7
strongly agree strongly disagree

11. I might try making myself throw up in order to keep from getting fat.

1 2 3 4 5 6 7
strongly agree strongly disagree

12. It is more attractive to eat a small amount of food in front of others rather than risk looking like a "pig."

1 2 3 4 5 6 7
strongly agree strongly disagree

13. It is not normal to worry about how much one weighs.

1 2 3 4 5 6 7
strongly agree strongly disagree

14. Women can show their strength and will power by restricting their eating and losing weight.

1 2 3 4 5 6 7
strongly agree strongly disagree

15. Strict dieting is a relatively safe to lose weight.

1 2 3 4 5 6 7
strongly agree strongly disagree

16. I will be better liked and accepted by men and women alike if I maintain a thin physique.

1 2 3 4 5 6 7
strongly agree strongly disagree

17. I would do anything to be thinner than I am.

1 2 3 4 5 6 7
strongly agree strongly disagree

18. If I gained 10 pounds, I would go on a strict diet to lose the weight.

1 2 3 4 5 6 7
strongly agree strongly disagree

19. I'd rather be a few pounds overweight than risk the dangerous effects of stringent dieting.

1	2	3	4	5	6	7
	strongly agree				strongly disagree	

20. I spend a significant amount of time figuring up how many calories or fat grams I have eaten each day.

1	2	3	4	5	6	7
	strongly agree				strongly disagree	

21. If I want to lose weight, I will make small changes in the amount of food I eat.

1	2	3	4	5	6	7
	strongly agree				strongly disagree	

22. If I stick to my diet and really try, I can lose the weight I want and keep it off.

1	2	3	4	5	6	7
	strongly agree				strongly disagree	

23. I'd never make myself throw up even if I thought I ate too much.

1	2	3	4	5	6	7
	strongly agree				strongly disagree	

24. When I see other females who are constantly dieting and are really thin, I wish I could be like them.

1	2	3	4	5	6	7
	strongly agree				strongly disagree	

APPENDIX D

PARTICIPANTS' EVALUATION FORM

This form has been devised for you to anonymously give feedback to the program developer. Please keep in mind that others will be participating in the program after you. We would like to make it as beneficial as possible. Therefore, we look forward to your honest comments. Circle the number for each component of the workshop that best describes how you felt about it.

0= cannot remember or was absent
1= uninteresting or useless
2= somewhat interesting and useful
3= very interesting and useful

Cultural pressures to be thin and the role of the media
0 1 2 3

Effects of dieting on mood
0 1 2 3

Effects of dieting on eating behavior
0 1 2 3

Effects of dieting on physical health
0 1 2 3

Explanation of set point theory
0 1 2 3

Discussion about "Normal Eating"
0 1 2 3

Discussion about eating disorders
0 1 2 3

Rating of the overall program
0 1 2 3

1. Size of the group
too big o.k. too small

2. Amount of time for each group discussion
too much o.k. too little

3. Length of the program

too long o.k. too short

PLEASE ANSWER THE FOLLOWING QUESTIONS IN AS MUCH DETAIL AS YOU LIKE

1. Do you have any suggestions or comments for the group facilitator?

2. What aspect of the program has had the greatest effect on your attitudes or behavior?

3. Have your perceptions of your friends or other females who diet or excessively worry about their weight changed in any way? If so, how?

4. Do you think that the program has affected the likelihood of you engaging in stringent dieting and other unhealthy weight reducing behavior?

4. On which topics would you have liked to have seen more time spent?

APPENDIX E

CONSENT FORM

The study of Bethany Spiller has been explained to me. Any questions I have asked have been answered to my satisfaction. I have been informed that participation is voluntary. I understand the benefits and risks (if any) of joining the above study. I am aware that I can withdraw at any time. I know that I may ask now or in the future any questions that I may have. Any information that I provide will be kept strictly confidential. Assessment packets will be coded with numbers after initial screening is complete. Only the primary researcher will have access to the completed assessment materials. No information will be released that would disclose personal identity.

I agree to attend three weekly meetings for three weeks. I am willing to fill out assessment packets that will take approximately 15- 20 minutes to complete both before, after, and one month after the completion of the program.

_____

Signature

_____

Date

VITA

Bethany Spiller was born in La Crosse, Wisconsin on September 17, 1968. She and her family moved to Tennessee and then to Mississippi where she completed elementary, junior high, and high school. She attended Rhodes College in Memphis, Tennessee and earned a B.A. in psychology. As a result of her studies at Rhodes and her senior internship at Le Bonheur Hospital Day Treatment Program, she became interested in pursuing a career as a psychologist. She then moved to Knoxville, Tennessee to begin a doctoral program in Counseling Psychology at the University of Tennessee. She worked in several hospitals during her years in graduate school. She taught psychology classes as a graduate teaching assistant at U.T. and as an adjunct faculty member at Pelissippi State Community College in Oak Ridge, Tennessee. During this time, she became interested in the study of gender, women's issues, and feminist theory. Currently, Bethany is interning at the Veteran's Medical Center in Memphis, Tennessee. She, her husband, and three year old son anticipate the completion of her internship which will mark the fulfillment of her doctoral requirements for her degree. Following completion, she will begin a post-doctoral fellowship in health psychology at the Veteran's Medical Center in Memphis, Tennessee.