A MULTI-MODAL EVALUATION OF AN INTEGRATED TREATMENT PROGRAM FOR COLLEGE WOMEN WITH EATING PROBLEMS

by

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(ABSTRACT)

This study evaluated an integrated treatment program that was provided for college women with self-identified eating problems, both clinical and subclinical, using both quantitative and qualitative methodologies. The treatment model is based upon the biopsychosocial model integrating treatment from each of these dimensions: biological, psychological, and social. Eleven college students were self-referred and participated in bi-weekly nutritional counseling (biological), bi-weekly individual psychotherapy (psychological), and weekly group psychotherapy (social) over the course of one college semester. Details concerning these therapies are included.

An evaluation was performed of both behavioral and psychosocial outcomes using both quantitative and qualitative data. Data were organized within the framework of the biopsychosocial model. Quantitative data (Eating Disorders Inventory-2, Eating Disorders Inventory Symptom Checklist, Beck’s Depression Inventory, Rosenberg’s Self-
Esteem Scale, Initial Questionnaire) indicated improvement in depression scores (biological/psychological), sense of effectiveness, impulse regulation, confidence in their ability to change (psychological), asceticism and body image (psychological/social), as well as a decrease in over-exercise and binge eating. Recurrent themes that emerged through the qualitative data (individual interviews at the end of the treatment program and focus group interviews) included biological themes: changing eating patterns, need for general and personalized nutritional information; psychological themes: exploration of emotions, need to feel understood, setting goals, self care, need for personal understanding and identification of needs, and body image; and social themes: sharing with others, social connectedness, and family relations. These themes are discussed to provide a better understanding of the process of participating in this program for the participants as well as providing an evaluation of this program. Suggestions for future programs and research as well as issues concerning program delivery, methodology, and other considerations are explored.
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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>ii</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>iv</td>
</tr>
<tr>
<td>List of Tables</td>
<td>xi</td>
</tr>
<tr>
<td>Chapter I - Introduction</td>
<td></td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>1</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>4</td>
</tr>
<tr>
<td>Rationale for Program Evaluation</td>
<td>4</td>
</tr>
<tr>
<td>Theoretical Framework</td>
<td>5</td>
</tr>
<tr>
<td>Rationale for Study</td>
<td>9</td>
</tr>
<tr>
<td>Research Objectives</td>
<td>10</td>
</tr>
<tr>
<td>Chapter II - Review of the Literature</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>11</td>
</tr>
<tr>
<td>Eating Problems</td>
<td>11</td>
</tr>
<tr>
<td>Bulimia Nervosa</td>
<td>12</td>
</tr>
<tr>
<td>Anorexia Nervosa</td>
<td>16</td>
</tr>
<tr>
<td>Other Eating Problems</td>
<td>18</td>
</tr>
<tr>
<td>College Population</td>
<td>20</td>
</tr>
<tr>
<td>Biopsychosocial Factors Associated</td>
<td>21</td>
</tr>
<tr>
<td>Biological Factors</td>
<td>22</td>
</tr>
<tr>
<td>Psychological/Social Factors</td>
<td>24</td>
</tr>
<tr>
<td>Social/Cultural Factors</td>
<td>29</td>
</tr>
<tr>
<td>Common Treatments and Outcomes</td>
<td>31</td>
</tr>
<tr>
<td>Overview</td>
<td>31</td>
</tr>
<tr>
<td>Biological</td>
<td>34</td>
</tr>
<tr>
<td>Psychological</td>
<td>37</td>
</tr>
<tr>
<td>Social</td>
<td>40</td>
</tr>
<tr>
<td>Clinical Application of the Biopsychosocial Model</td>
<td>43</td>
</tr>
<tr>
<td>Other Clinical Issues</td>
<td>44</td>
</tr>
<tr>
<td>Eating Problems</td>
<td>44</td>
</tr>
<tr>
<td>Integrated Treatment Program</td>
<td>48</td>
</tr>
<tr>
<td>Summary</td>
<td>49</td>
</tr>
<tr>
<td>Chapter III - Methodology</td>
<td></td>
</tr>
<tr>
<td>Description of Integrated Treatment Program</td>
<td>51</td>
</tr>
<tr>
<td>Methodology</td>
<td>56</td>
</tr>
<tr>
<td>Sample</td>
<td>56</td>
</tr>
<tr>
<td>Procedure</td>
<td>57</td>
</tr>
<tr>
<td>Sample Description</td>
<td>60</td>
</tr>
</tbody>
</table>
Instrumentation

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Questionnaire</td>
<td>61</td>
</tr>
<tr>
<td>Eating Disorders Inventory (EDI-2)</td>
<td>62</td>
</tr>
<tr>
<td>Eating Disorders Inventory Symptom Checklist</td>
<td>66</td>
</tr>
<tr>
<td>Beck's Depression Inventory</td>
<td>66</td>
</tr>
<tr>
<td>Rosenberg's Self-Esteem Scale</td>
<td>67</td>
</tr>
<tr>
<td>Family Relationship Form</td>
<td>68</td>
</tr>
<tr>
<td>Focus Group Interview Guide</td>
<td>69</td>
</tr>
<tr>
<td>Rating Instrument for Focus Group</td>
<td>69</td>
</tr>
</tbody>
</table>

Data Analysis

<table>
<thead>
<tr>
<th>Type</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative</td>
<td>70</td>
</tr>
<tr>
<td>Qualitative</td>
<td>71</td>
</tr>
</tbody>
</table>

Chapter IV - Results

<table>
<thead>
<tr>
<th>Component</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Component</td>
<td>77</td>
</tr>
<tr>
<td>Eating Patterns</td>
<td>78</td>
</tr>
<tr>
<td>General Nutritional Information</td>
<td>79</td>
</tr>
<tr>
<td>Personalized Nutritional Information</td>
<td>81</td>
</tr>
<tr>
<td>Participant Concerns</td>
<td>82</td>
</tr>
<tr>
<td>Summary</td>
<td>83</td>
</tr>
<tr>
<td>Biological/Psychological Variables</td>
<td>85</td>
</tr>
<tr>
<td>Interoceptive awareness</td>
<td>85</td>
</tr>
<tr>
<td>Depression</td>
<td>88</td>
</tr>
<tr>
<td>Psychological Component</td>
<td>89</td>
</tr>
<tr>
<td>Exploration of Emotions</td>
<td>90</td>
</tr>
<tr>
<td>Feeling Understood</td>
<td>92</td>
</tr>
<tr>
<td>Goal Setting</td>
<td>93</td>
</tr>
<tr>
<td>Self Care</td>
<td>94</td>
</tr>
<tr>
<td>Personal understanding and identifying needs</td>
<td>99</td>
</tr>
<tr>
<td>Therapist characteristics</td>
<td>100</td>
</tr>
<tr>
<td>Participant Concerns</td>
<td>101</td>
</tr>
<tr>
<td>Other Measures of Psychological Functioning</td>
<td>102</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>102</td>
</tr>
<tr>
<td>Impulse Regulation</td>
<td>104</td>
</tr>
<tr>
<td>Confidence in Recovery</td>
<td>105</td>
</tr>
<tr>
<td>Summary</td>
<td>106</td>
</tr>
<tr>
<td>Psychological/Social Component</td>
<td>108</td>
</tr>
<tr>
<td>Asceticism</td>
<td>108</td>
</tr>
<tr>
<td>Body image</td>
<td>108</td>
</tr>
<tr>
<td>Summary</td>
<td>112</td>
</tr>
<tr>
<td>Social Component</td>
<td>112</td>
</tr>
<tr>
<td>Weekly group session topics</td>
<td>113</td>
</tr>
<tr>
<td>Sharing with others</td>
<td>114</td>
</tr>
<tr>
<td>Participant concerns</td>
<td>119</td>
</tr>
<tr>
<td>Summary</td>
<td>120</td>
</tr>
<tr>
<td>Other measures of social functioning</td>
<td>121</td>
</tr>
<tr>
<td>Social connectedness-Interpersonal relations</td>
<td>121</td>
</tr>
<tr>
<td>Family relationships</td>
<td>125</td>
</tr>
</tbody>
</table>
Behavioral Aspects of Change ......................... 128
Exercise .............................................. 130
Binge Eating ......................................... 132
Purging ............................................... 134
Overall Evaluation of Integrated Program .......... 136
Goal Attainment ..................................... 155

Chapter V - Conclusions and Discussion
Summary of Results ................................... 159
Desire for Change .................................... 159
Nutritional Therapy .................................. 161
Relationship with Therapist ......................... 161
Personal Understanding, Goal Setting .......... 162
and Self Care
Body Image ............................................ 164
Depression ............................................ 164
Self Esteem .......................................... 165
Termination Issues .................................. 166
Overall Evaluation .................................. 167
Suggestions for Future Programs ................. 168
Prevention Programs ................................. 171
Suggestions for Future Research ................. 172
Controlled Studies .................................. 172
Subclinical Features of Eating Problems .... 174
Limitations and Considerations ..................... 175

References ............................................ 179

Appendices

Appendix A: Food Journal ............................ 197
Appendix B: Daily Log ............................... 198
Appendix C: Self Assessment Form ................. 203
Appendix D: Flyer .................................... 205
Appendix E: Advertisement ......................... 206
Appendix F: Announcement for classes .......... 207
Appendix G: Informed Consent I ................... 208
Appendix H: Eating Disorders Inventory-2 .... 210
Appendix I: EDI-2 Symptom Checklist .......... 214
Appendix J: Available Counseling Services .... 218
Appendix K: Beck's Depression Inventory ...... 219
Appendix L: Rosenberg's Self Esteem Scale .... 221
Appendix M: Family Relationship Form ........ 222
Appendix N: Center for Family Services ........ 223
Agreement Forms
Appendix O: Initial Questionnaire ............... 228
Appendix P: Informed Consent II ................. 235
Appendix Q: Initial Questionnaire Post-Test ... 238
Appendix R: Focus Group Interview Guide ...... 246
List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Participant and Non-Participant Comparison on EDI-2 Symptom Checklist</td>
<td>58</td>
</tr>
<tr>
<td>2</td>
<td>Participant and Non-Participant Comparison on EDI-2 subscales</td>
<td>59</td>
</tr>
<tr>
<td>3</td>
<td>Participant Ratings of Nutritional Counseling</td>
<td>84</td>
</tr>
<tr>
<td>4</td>
<td>Quantitative Analysis of Biological/Psychological Variables</td>
<td>86</td>
</tr>
<tr>
<td>5</td>
<td>Quantitative Analysis of Psychological Variables</td>
<td>103</td>
</tr>
<tr>
<td>6</td>
<td>Participant Ratings of Individual Therapy</td>
<td>107</td>
</tr>
<tr>
<td>7</td>
<td>Quantitative Analysis of Psychological/Social Variables</td>
<td>109</td>
</tr>
<tr>
<td>8</td>
<td>Participant Ratings of Weekly Group Therapy</td>
<td>122</td>
</tr>
<tr>
<td>9</td>
<td>Quantitative Analysis of Social Variables</td>
<td>123</td>
</tr>
<tr>
<td>10</td>
<td>Participant Ratings of Topics Covered</td>
<td>129</td>
</tr>
<tr>
<td>11</td>
<td>Quantitative Analysis of Behavioral Variables</td>
<td>131</td>
</tr>
<tr>
<td>12</td>
<td>Self Report of Behavioral Changes</td>
<td>157</td>
</tr>
<tr>
<td>13</td>
<td>Self Report of Changes in Cognitions and Feelings</td>
<td>158</td>
</tr>
</tbody>
</table>
CHAPTER 1

Introduction

An overwhelming majority of women, particularly college-aged women, exhibit some of the behavioral symptoms generally associated with primary anorexia and bulimia (Hesse-Biber, 1989) although they fail to meet the Diagnostic and Statistical Manual of Mental Disorders (DSM) specific criteria for either eating disorder. These symptoms typically include weight preoccupation, eating or restricting food without reference to hunger and satiation, berating oneself for eating and needing to eat, being obsessively concerned about food, devaluing one's body (Bloom, Gitter, Gutwill, Kogel, Zahiropoulos, 1994), severe weight loss, compulsive binge eating, and/or purging methods (vomiting, laxative abuse, diuretic abuse, over exercise). Other characteristics shared by these women with those who do not meet DSM diagnostic criteria for eating disorders involve difficulty in coping with stress, fears about coping with stress in the future, significant confusion regarding affects, feelings of helplessness and ineffectiveness, and low self-esteem, particularly in the interpersonal realm (Klemchuk, Hutchinson, Frank, 1990). These subclinical problems are of enormous concern since they appear with great frequency, particularly among college women (Klemchuk, Hutchinson, Frank, 1990).
Increasingly over the past years, eating problems have come to be viewed as a psychosomatic disorder in which biological, familial, socio-cultural, and intrapsychic factors interact to predispose the onset of symptoms (Johnson, Tobin, & Steinberg, 1989). These psychosocial aspects of disordered eating are evident in that eating disorders are frequently accompanied by depression, low self-esteem, body image devaluation, and difficulties with interpersonal relationships. More and more attention has been paid to the social/cultural realm in order to understand better the prevalence and persistence of eating problems. Hesse-Biber (1989) writes that establishing links between social or cultural influences and illness behavior is difficult, but that there is evidence that when style and fashion dictate thinness, there are greater outbreaks of eating disorders. Others have examined the role of biological factors in the onset and perpetuation of eating disorders. This biological role is unclear but what appears to be clear is that the extreme eating patterns associated with some eating problems have biological consequences with psychological repercussions (Laessle, Schweiger, & Pirke, 1988). It appears that eating problems are a composite of social, personal, interpersonal, biological, and cultural realms.

Treatment of disordered eating is considered difficult
regardless of the treatment method employed (Price, 1988). For example, there are few outcome studies of clinical cases of bulimia nervosa (Treasure, 1991). In fact, of those that do exist, it is very difficult to isolate a consistent pattern of treatment outcomes. Treatment approaches to working with clients with eating problems, in general, have included individual psychotherapy (insight-oriented, cognitive, supportive, behavioral), group therapy, family therapy, hypnotherapy, electroconvulsive treatments, and pharmacotherapy (Garfinkel and Garner, 1982). Traditional treatment programs for college women have consisted of primarily individual psychotherapy and/or a psychoeducational group. Occasionally referrals may be made to a nutritionist. The most common treatments currently used are cognitive-behavioral therapies, group therapy, and pharmacologic interventions. Many write of the multi-determined nature of eating problems and the need for combining approaches from various orientations (Boskind-White and White, 1983; Johnson, Connors, and Stuckey, 1983; Loro, 1984; Mitchell, Hatsukam, Goff, Pyle, Eckert, & Davis, 1985; Dixon, 1987; Herzog, Franko & Brotman, 1989). However, few studies have evaluated a multi-modal approach to treating eating disorders. As has been stated previously, those that do, combine therapeutic approaches (cognitive, behavioral, experiential) rather than modalities
(individual therapy, group therapy). There are presently no evaluation studies of an integrated (multi-modal) treatment approach with women suffering a range of eating problems.

**Purpose**

The present study evaluated an integrated treatment program that was provided for college women with self-identified eating problems, both clinical and subclinical. This program attempted to integrate the physical, emotional, and communal needs of these women. This treatment program included bi-weekly nutritional counseling, bi-weekly individual psychotherapy, and weekly group therapy over the course of one college semester. This study evaluated behavioral and psychosocial outcomes and attempted to understand the process of participating in this program, therefore, providing an evaluation of the integrated treatment program.

**Rationale for Program Evaluation**

Rossi and Freeman (1989) recommend that during the design of an intervention, or during the beginning of implementing a new intervention, a formative evaluation be performed. Formative evaluations are evaluations that assess the conduct of programs during their early stages. They can be directed at specific questions related to developing how a program is delivered, to whom it is delivered, as well as the structure of the intervention
itself. Formative evaluations can be performed at one site and with a small sample. These evaluations provide insight into the problems an intervention may face and ways to overcome these problems and they provide an opportunity for testing not only the intervention, but the evaluation procedures and instruments. Rossi and Freeman recommend that evaluators engaged in formative studies become involved in the actual design and programming effort since the emphasis is on increasing the success of subsequent intervention efforts and their evaluations. An evaluation plan can be quite comprehensive or include only selected activities.

I wanted to evaluate the delivery of the intervention program in two different ways. I not only wanted to understand the effect of the intervention program on some routinely used quantitative instruments (outcome data) but I also wanted to know what the experience of being involved in the intervention program was like for the participants. Because of this, I used multi-modal evaluation methods incorporating both quantitative and qualitative measures.

Theoretical Framework

The biopsychosocial model attempts to consider and explain the interaction of biological, psychological, and social factors in the processes of illness, disease and dysfunction. This model is an extension of a systems
approach whereby one part of the system is viewed as influencing other parts of the system which then is related to a feedback mechanism between the parts (Yodfat, 1985).

Ludwig von Bertalanffy, renowned biologist, applied laws that pertained to biological organisms to other areas, such as the human mind. He developed a model, General Systems Theory, although this was not intended to be a theory, but rather an approach, a way of thinking, or as a set of assumptions that can be applied to all different types of systems (Nichols and Schwartz, 1991). There are several components of his general systems approach that were further developed into the biopsychosocial model. One of the components is that a system is more than the sum of its parts. Therefore, when things are organized or put together, something different emerges out of the pattern, and the relationship between the parts change. Bertalanffy found import in focusing on the pattern of relationships within a system or among systems rather than on the individual parts themselves.

Another important concept in General Systems Theory is that an organism is an open system, continuously interacting with its environment. Bertalanfy stressed the importance of the relationship between an organism and its environment rather than seeing organisms simply as reactors to a given environment or as passive recipients (Nichols and Schwartz,
1991). The principles of general systems theory acknowledge the hierarchical, interdependent relationships of biological, psychological, individual, family, and community systems. Each factor is considered crucial and as part of an interdependent whole.

Engel took these principles, developed them into a biopsychosocial model, and in 1977 proposed using it to organize medical care. Engel believed that medical care and training reflected a cultural context and that the biomedical model accounted for disease by its biochemical factors without considering social or psychological dimensions. The biomedical model essentially disconnected the mind from the body. (McDaniel, Hepworth, & Doherty, 1992).

The biopsychosocial model is a framework for understanding how psychophysiological responses to life interact with somatic factors, how a patient’s understanding affects communication of symptoms and use of treatment strategies, and how communication and treatment are affected by relationships between the patient and health care providers (McDaniel, Hepworth, & Doherty, 1992). Engel’s biopsychosocial model has been adopted into family medicine and the medical family therapy movement (Hubbard, 1991). During the late 1970s and early 1980s, medical family therapists began applying the systems concepts developed in
family therapy to the world of medicine (McDaniel, Hepworth, Doherty, 1992). They write:

"We now know that human life is a seamless cloth spun from biological, psychological, social, and cultural threads; that patients and families come with bodies as well as minds, feelings, interaction patterns, and belief systems; that there are no biological problems without psychosocial implications, and no psychosocial problems without biological implications. Like it or not, therapists are dealing with biological problems, and physicians are dealing with psychosocial problems. The only choice is whether to do integrated treatment well or do it poorly."

The clinical application of the biopsychosocial model, as developed by Engel, incorporates three interacting dimensions of the client's functioning: biological (physical or organic processes), psychological (aspects of mental functioning which include thoughts, behaviors, and emotions), and social (interactions with others) (Amchin, 1991). By considering these three interacting facets, rather than only one alone, one can gain a more meaningful understanding of the client leading to a more comprehensive approach to assessment and treatment. Viewing these three dimensions as separate yet interactive led to the development of the integrated treatment model used in this study. The biological component included the involvement of a nutritionist, the psychological component was represented by individual therapy, and the social component relied on the group therapy process.
Rationale

Using the biopsychosocial model, eating problems are viewed as an intersection of biological, psychological, and social/cultural factors. This combined view led to using an integrated treatment approach when working with women experiencing eating problems. This study assessed the efficacy of this integrated, multi-modal treatment program for these women. Through pre and post tests, differences between group scores on several measures that have been frequently used to study eating problems were explored. The primary measure was The Eating Disorders Inventory-2 with its 11 subscales (drive for thinness, bulimia, body dissatisfaction, personal ineffectiveness, impulse regulation, perfectionism, interoceptive awareness, maturity fears, interpersonal distrust, social insecurity, and asceticism). It was developed on the premise that eating disorders are multidetermined and multidimensional. Also included was the Eating Disorders Inventory-2 Symptom Checklist which involves behavioral aspects of eating problems.

Other variables have frequently been studied in relation to eating problems. High depression scores are frequently seen among those who are suffering from eating disorders (Gross and Rosen, 1988; Mizes, 1988; Martin, 1989, Garner, Olmsted, Davis, & Wendi, 1990; Schwartz & Schwartz,
In addition, low self esteem (Kendler, MacLean, Neale & Kessler, 1991; Rosch, Crowther & Graham, 1991; Baell & Wertheim, 1992; Gendron, Lemberg, Allender & Bohanske, 1992), and poor interpersonal relationships (Klemchuk, Hutchinson, Frank, 1990; Clark, Levine & Kinney, 1989; Pyle, Mitchell, & Eckert, 1981; Boskind-Lodahl, 1976) have been found to be associated with eating problems.

**Research Objectives**

An overall evaluation of the integrated treatment program using both the quantitative and qualitative data was provided in order to understand whether an integrated approach was beneficial for recovery from eating problems. It was hypothesized that there would be significant improvement between pre and post test mean measures for the group of participants on each measure. In addition, through the use of individual interviews, field notes from the nutritionist and therapist, and focus group interviews, these quantitative data were more fully explored in order to illuminate the participants’ feeling, thoughts, and reactions to being part of the integrated treatment program.
CHAPTER II

Review of the Literature

Introduction

In order to understand an evaluation of an integrated treatment program for eating problems, bulimia, anorexia, and subclinical eating problems will be addressed in terms of their history, definitions, duration, and prevalence in the college population. A biopsychosocial theoretical perspective is adopted and explained in order to explore eating problems and their biological, psychological, and social/cultural components in addition to current treatment models, and outcomes. This chapter concludes with a summary of evaluation research.

Eating Problems

We know that an overwhelming majority of women, particularly college aged women, exhibit some of the behavioral symptoms generally associated with primary anorexia and bulimia (Hesse-Biber, 1989) although they fail to meet Diagnostic and Statistical Manual and Mental Disorders’s (DSM) criteria for either specified eating disorder. These symptoms typically include weight preoccupation, body dissatisfaction, obsession with food, starvation dieting, severe weight loss, compulsive binge eating, and/or purging methods (vomiting, laxative abuse, diuretic abuse, over exercise). These subclinical problems
are of enormous concern since they appear with great
frequency, particularly among college women (Klemchuk,
Hutchinson, Frank, 1990). In order to better understand the
range of eating problems, I will first describe those eating
problems for which there has been the most interest and
research to date (bulimia and anorexia), and then discuss a
subclinical range of eating problems.

Bulimia Nervosa

Bulimia nervosa, the binge-eating syndrome, as a
distinct disorder has gained much interest in the past two
decades from both researchers and clinicians. Bulimia,
literally "ox-hunger" in Greek, is characterized by a
pattern of binge eating and pathological methods of weight
control (vomiting, diuretic use, laxative abuse, over
exercise, and severe dieting or fasting).

Although bulimia is typically thought of as a contemporary
concept, diagnoses and writings of bulimia have been
documented since the 1700s (Stein & Laasko, 1988). In 1825,
Hooper described "bulimia emitica" or "bulimia canina" to
designate a voracious appetite followed by vomiting (Blinder
& Cadenhead, 1986). Clinical symptoms of bulimia were
described by many researchers since that time (Abraham,
1916; Bruch, 1962, Kirshbaum, 1951, Lindner, 1955, Stunkard,
1959, Wulf, 1932 in Blinder & Cadenhead, 1986) but bulimic
symptoms were not recognized as a distinct syndrome until
the 1970s. At that time, it became evident that binge-eating and vomiting behavior occurred in individuals who did not suffer from anorexia nervosa or from obesity (Blinder & Cadenhead, 1986). In 1976, Boskind-White created the term "bulimarexia" to describe alternating episodes of eating and rigid dieting. She found that disordered eating was frequently accompanied by low self-esteem, body image devaluation, and a fear of rejection in heterosexual relationships. Others, also found that the frequent pattern of binge eating and then feeling shame after eating further lowered self-esteem (Herzog, Keller, & Lavori, 1988).

Bulimia is most frequently found in young women, usually in their early twenties. This would put college aged women at a particularly high risk for experiencing bulimia. The study by Stangler and Printz (1980) first brought attention to the high frequency of bulimia in college aged women. They found that over five per cent of women who came to a university clinic for treatment met the DSM-III diagnostic criteria for bulimia. Since that time, many prevalence studies have been performed and bulimia has been found to occur in between one and thirteen percent of adolescent and college age women. The wide range of prevalence rates is most likely due to discrepancies in diagnostic criteria, sampling, and frequency criteria (Connors & Johnson, 1987). These discrepancies continue and
have made comparisons between studies very difficult.

The average duration of bulimic symptomatology prior to seeking treatment ranges from four to almost eight years (Pyle, Mitchell & Eckert, 1981; Russell, 1979). The frequency of the binge eating and/or purging behavior varies with individuals, and it is not unusual to find that individuals shift back and forth between anorexic and bulimic behavior (Bilich, 1989). However, bulimia is most frequently found in young women, usually in their early twenties, of all socioeconomic classes. Binge eating behavior typically begins in the late teens while purging behavior, if it occurs, usually does not follow for one to two years. Many bulimics report that their current feelings of loss of control over their eating began with dieting (Streigel-Moore, Silberstein; & Rodin, 1986), and others (Polivy and Herman, 1985) report an association between dieting and the onset of binge-eating and bulimia.

In 1980, in the Diagnostic Statistical Manual - III of the American Psychiatric Association, bulimia was first classified as a disorder distinct from anorexia nervosa. Definitions of bulimia both prior to and subsequent to this DSM classification have varied across studies creating difficulties in comparing results. However, the most widely used definition of bulimia is in the Diagnostic and Statistical Manual. The most recent definition (DSM-IV,
1994) is as follows:

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

(1) eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than most people would eat during a similar period of time and under similar circumstances

(2) a sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).

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

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

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

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

There are two types:

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

Anorexia Nervosa

Anorexia nervosa is a medically, psychopathologically, and interpersonally complex, serious, and often chronic condition. A comprehensive treatment plan for anorexia nervosa usually involves medical management, individual psychotherapy, and family therapy (American Psychiatric Association, 1994). It is believed that between one and four percent of adolescent and young adult women in predominantly white upper-middle and middle-classes experience anorexia nervosa. Women with anorexia tend to limit their food intake severely, limit food selection, and often demonstrate obsessive-compulsive symptoms regarding food. The drive for thinness overrides all other physical and psychological concerns (Phelps & Bajorek, 1991). There are many physical complications of anorexia nervosa which are side effects of the starvation state: emaciation, constipation, dry skin, brittle nails (first indicators), metabolic changes and estrogen deficiencies causing amenorrhea, hypothermia, anemia, lanugo, and leukopenia, thyroid, cardiac and renal abnormalities and complications.
(Edelstein, Yager, Gitlin, & Landsverk, 1989). Treatment goals include weight restoration, psychosocial treatment for the restoration of healthy eating patterns, to change dysfunctional thoughts, feelings, and beliefs, to correct defects in affect and behavioral regulation, and to improve associated psychological difficulties. Some may benefit from psychopharmacologic treatments as well. (Harris, 1991; Haller, 1992).

The definition of anorexia nervosa in the DSM-IV is as follows:

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

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

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

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

There are two types:

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

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

Other Eating Problems

Diagnostic criteria for other eating disorders that do not meet the criteria for any specific Eating Disorder in the DSM are stated in an Not Otherwise Specified category for disordered eating. Due to the lack of clear criteria for this diagnosis, our understanding of these women and their eating problems are limited. However, Streigel-Moore, et al (1989) conceptualize disordered eating along a continuum ranging from unconcern with weight and normal eating to "normative discontent" with weight and moderately disregulated/restrain eating, to bulimia nervosa. This "normative discontent" may not warrant categorization as a psychiatric diagnosis but can cause considerable distress and can be a potential risk factor for development of the full clinical syndrome of bulimia nervosa. Sesan (1989)
reported that close to 50% of all college students report binge eating and that an increase in disturbed eating among college-age women over last several years increased four-fold and Hotelling (1989) reports that 85% of college women demonstrate bulimic-like behaviors. Diagnostic criteria in the DSM-IV for the "not otherwise specified eating disorder" include:

1. For females, all of the criteria for Anorexia Nervosa are met except that the individual has regular menses.

2. All of the criteria for Anorexia Nervosa are met except that, despite significant weight loss, the individual’s current weight is in the normal range.

3. All of the criteria for Bulimia Nervosa are met except that the binge eating and inappropriate compensatory mechanisms occur at a frequency of less than twice a week or for a duration of less than 3 months.

4. The regular use of inappropriate compensatory behavior by an individual of normal body weight after eating small amounts of food (e.g., self-induced vomiting after the consumption of two cookies).

5. Repeatedly chewing and spitting out, but not swallowing, large amounts of food.

6. Binge-eating disorder: recurrent episodes of binge eating in the absence of the regular use of inappropriate
compensatory behaviors characteristic of Bulimia Nervosa.

**College Population**

The high prevalence of disordered eating among college students has caused considerable concern. The study by Stangler & Printz (1980) first brought attention to the high frequency of bulimia in college women when they determined that over five percent of women who came to their university clinic for treatment met the DSM-III diagnostic criteria for bulimia. Other studies have found the prevalence of bulimia (as defined by the DSM-III) has ranged between one and nineteen percent for female students (Halmi, Falk, & Schwartz, 1981; Pyle, et al, 1983; Pyle and Mitchell, 1986), and anorexia is found in about one percent of college women. Since those studies and the publication of the DSM-III-R, and DSM-IV, more stringent methods and tighter case definitions have been used. More current estimates for bulimia in adolescent and college-age women ranges between one and thirteen (13) percent (Schotte & Stunkard, 1987; Drewnowski, Yee & Krahn, 1988; Yager, 1988; Striegel-Moore, Silberstein, Frensch, & Rodin, 1989; Treasure, 1991; Luder & Schebendach, 1993). Prevalence estimates of symptoms of eating disorders in college females have ranged as high as 90% for binge eating (Hawkins & Clement, 1980) and 12% for vomiting (Halmi, Falk & Schwartz, 1981). The discrepancies
in incident rates for eating disorders is most likely due to discrepancies in diagnostic criteria, sampling, and frequency criteria (Connors & Johnson, 1987).

Certain factors associated with eating problems place young college women at high risk for disordered eating. High perceived stress, an increased sense of ineffectiveness, and an increase in negative feelings about weight are associated with a worsening of disordered eating symptoms among college freshmen women. College is the time in women's lives when they are dealing with issues of separation, differentiation, interpersonal conflict, cultural emphasis on achieving thinness, loneliness, and the need for belonging. It is also the time that they keenly feel the pressures to conform to societal standards of physical beauty (Clark, Levine & Kinney, 1989). Pyle, Mitchell & Eckert (1981) found that 88% of bulimic women studied reported that traumatic events (such as separation from significant others) were related to their onset of bulimic behaviors. Johnson, Stuckey, Lewis and Schwartz (1982) found that loneliness, depression, anger or boredom were involved in the onset of bulimic symptoms in 40% of college women experiencing bulimia in their sample.

**Biopsychosocial Factors Associated with Eating Problems**

Some have adopted the biopsychosocial model based on multiple risk factors to describe etiological factors
involved with eating disorders (Garfinkel & Garner, 1987; Tobias, 1988). The model not only presents risk factors that cause the disorder but those that perpetuate it.

**Biological Factors**

The contribution of biological factors to the onset and perpetuation of bulimia remains unclear (Johnson and Connors, 1987). One area that has recently garnered much attention is the role that dysregulation of neuroendocrine and neurotransmitter systems may play in bulimia nervosa. The brain monamine systems seem to play an important function in appetite, mood, and neuroendocrine function. Lower levels of plasma concentration of norepinephrine and CSF levels of dopaminemetabolite, homovanillic acid and increased plasma concentration of B-endorphin have been found in bulimic patients. (Haller, 1992). Further study as to the connection between neurochemical changes and bulimia nervosa is ongoing.

Many women experiencing disordered eating have responded favorably to antidepressant pharmacotherapy (Johnson & Connors, 1987; Hudson, Pope, & Jonas, 1985). Pope, Hudson, Jonas, & Yurgelun-Todd (1983) found that 90% of twenty subjects who were administered imipramine reported a 50% reduction in binge eating over a follow-up period of eight months. They found that antidepressant medications were effective in reducing the frequency of eating binges,
purging behavior, and depressive symptomatology in patients with bulimia nervosa, whether or not they showed depressive symptomatology. It seems unclear, however, whether these drugs actually reduce binge eating episodes or whether they decrease the depressive symptomatology that may then decrease the binge eating behavior (Herzog, Franko, & Brotman, 1989). Others have also found diminished bulimic behavior with the use of antidepressants (Walsh, Stewart, Roose, Gladis, & Glassman, 1984; Hughes, Wells, Cunningman & Ilstrup, 1986).

When seriously underweight, individuals with anorexia nervosa frequently display depressive symptoms (depressed mood, social withdrawal, irritability, insomnia). However, individuals without anorexia nervosa who are starving also display many of these depressive features. The semi-starvation or starvation characteristics of anorexia nervosa can affect most major organ systems and produce a variety of disturbances in hematology, body chemistry, eletrocardiography, electroencephalography, brain imagery, and in resting energy expenditure. In addition to amenorrhea, there are often other physical complaints (constipation, abdominal pain, cold intolerance, lethargy, and excess energy). These complaints can further develop into forms of anemia, impaired renal function, cardiovascular problems, dental problems, and osteoporosis
(DSM-IV).

The relationships among dietary intake, serotonin activity, and feeding behaviors of persons with anorexia and bulimia are receiving increased attention. Hypo-serotonergic states occur in persons with bulimia, even after weight recovery. For those with anorexia, low levels of serotonin metabolites lead to central serotonin dysregulation, and these metabolites remain significantly low even in persons who have recovered from anorexia (Phelps & Bajorek, 1991). Extreme eating patterns associated with anorexia and bulimia appear to have biological consequences that then have psychological repercussions (Phelps & Bajorek, 1991; Laessle, Schweiger, and Pirke, 1988).

Psychological/Social Factors

It appears that young women experiencing eating problems are involved in an adversarial relationship to their bodies. In order to understand these women, it is important to identify the cultural context in which this struggle takes place. Preoccupation with their appearance is a culturally approved mode of self expression for women (Orbach, 1986). To these women, as to many women in our culture, self esteem is derived from "looking good." In fact, there appear to be specific pressures towards thinness on college campuses. Those who strive for achievement and competition in academics may also feel compelled to
"achieve" in thinness as well (Streigel-Moore, et al., 1989). Eating problems may begin as an attempt to maintain low weight (to look good), but it becomes a habitual way to cope with maintaining a perfect image. The woman experiencing eating problems often appear cheerful, compliant, and tend to be great givers and caretakers of others - people pleasers. However, inside her is anger, hopelessness and desperation as she attempts to maintain a false perfect self that she is convinced is required of her. (Bloom, 1987) This may be further complicated by conflict between pursuing academic excellence and a traditional female sex role. Pursuing this type of excellence may challenge a woman’s identity which could increase sex role congruent behaviors, such as focusing on appearance and weight in order to reaffirm their feminine identity (Spence, 1985).

Pipher (1994) writes that adolescent girls deny their true selves and assume false selves to please their culture, such as how young children assume false selves to please their parents. She continues to state that young women are particularly vulnerable to their culture due to three things. One is their developmental level: everything is changing (body shape, hormones, skin, hair, way of thinking). The second is that adolescence is the time when girls move into a broader culture in which evaluation of
them is based solely on the basis of appearance. And third, this is the time for differentiating from families even though this is also the time they most need protection and closeness.

Bulimic behaviors may allow women to cope with eruptions of negative emotions, hide that which is deemed unacceptable (resentment and anger), and cover up neediness. Women can then project feelings of loneliness, inadequacy and difficulties with self assertion onto themselves in this self-destructive manner. This split between the public and the private selves is contained in the binge/purge cycle. (Bloom, 1987) As women begin to become aware of their own needs and can develop a more realistic relationship to themselves and others, they can then begin to achieve a sense of themselves and heal this split between good and bad.

Bulimia and anorexia nervosa have been found to be associated with several psychological factors: depression, low self-esteem, interpersonal relationship problems, impulse control problems, feelings of ineffectiveness, dependency on others for approval, and body-image distortions. The relationship between depression and bulimia/anorexia nervosa is clear and has been well documented as a consequence of eating problems (DSM-IV, 1994; Johnson and Larson, 1982; Pyle, et al, 1983; Gross,
1986, Martin, 1989). One assessment instrument, the Beck Depression Inventory, has been used in many of these studies to examine the relationship between depression and eating problems. Specifically, Garner, Olmsted, Davis, & Wendi (1990), using this inventory, found that although depressive symptoms do not predict outcome, they do decline with improved bulimic symptom control. Others (Mizes, 1988; Gross and Rosen, 1988) also used this depression scale and found that women with bulimia, compared to non-eating disordered women showed more evidence of depression. Schwartz & Schwartz (1993) also stated that women suffering from bulimia scored significantly higher on the Beck Depression Inventory than did those without eating disorders. Many studies cite neurochemical abnormalities as a result of starvation as being responsible for the depression so frequently seen in those suffering from anorexia nervosa (Fava, Copeland, Schweiger & Herzog, 1989; Garfinkel & Garner, 1987).

Low self-esteem has also been frequently examined in relation to eating problems. Many studies examining treatment outcomes for bulimia use the variable self-esteem to assess improvement (Baell & Wertheim, 1992; Gendron, et al, 1992; Rosen, 1987; Fairburn, et al., 1987). Others have reported on the relationship between low self-esteem and eating problems (Rosch, et al., 1991; Kendler, et al., 1991;

Body-image distortions have also been found to be associated with all eating problems. Boskind-White (1976) found that disordered eating was frequently accompanied by body image devaluation, and Herzog, Franko & Brotman (1989) found that cognitive aberrations (irrational beliefs concerning weight, food, and body image) were frequently found in those experiencing bulimia. Gross and Rosen (1988) also found that women with bulimia exhibit more negative body image than do women who do not experience bulimia. Other researchers have found that those suffering from anorexia nervosa have an intense fear of gaining weight or becoming fat. For example, Cash and Brown (1987) reviewed the literature on body image and found that a distorted body image was first empirically investigated in anorexia nervosa in 1973 by Slade and Russell and that the literature on body image in anorexia nervosa and bulimia nervosa has expanded dramatically. Women with anorexia nervosa typically
overestimate their body dimensions or display a large variability of estimates (Vandereycken, 1989). An intense fear of gaining weight or becoming fat and having a distorted image of body weight and shape is a common enough characteristic of anorexia nervosa to have made this aspect part of the criteria for its diagnosis.

Social/Cultural Issues

Bloom, Gitter, Gutwill, Kogel, and Zahiropoulos (1994) report that 85% of American women diet chronically, and 75% feel humiliated by their body size and shape. The ideal body type for Westernized women has become thinner and is now thinner than at any other time in our history. Fashion models are thinner, Miss America pageant contestants have become more slender than the average woman (Garner, Garfinkel, Schwartz & Thompson, 1980), and even Playboy centerfolds have become thinner. We are presented a thin female figure as one of the primary characterizations of health and beauty (Coward, 1984). This has continued to date. In fact, dieting is so widespread and accepted in our culture, that even if dieting assumes characteristics normally associated with anorexia or bulimia (such as, obsession with weight issues, binge eating, extreme fasting and dieting, and several weight-loss methods such as vomiting and the use of laxatives and diuretics), these dieting behaviors are not clinically diagnosed or viewed as
abnormal (Hesse-Biber, 1989). However, clinicians working with women who experience compulsive eating (binge eating) and/or compulsive restricting (dieting) have found that these women share many characteristics with those women experiencing anorexia and bulimia. They include eating or restricting food without reference to hunger and satiation, berating oneself for eating and needing to eat, being obsessively concerned about food, devaluing one’s body (Bloom, Gitter, Gutwill, Kogel, Zahiropoulos, 1994), present difficulty in coping with stress, fears about coping with stress in the future, significant confusion regarding affects, feelings of helplessness and ineffectiveness, and low self-esteem, particularly in the interpersonal realm (Klemchuk, Hutchinson, Frank, 1990).

Others have suggested that difficulties with interpersonal relationships are a central problem in eating problems. Boskind-Lodahl (1976) reported that these difficulties arise from several sources, one of which is the woman with an eating problem’s tremendous desire to please others and then base her sense of self-worth on others approval. Others have also found that women with bulimia frequently report difficulties with their interpersonal relationships (Mitchell, et al., 1986; Pyle, et al., 1981) and tend to score lower than controls on measures of social adjustment (Norman & Herzog, 1984). Pruitt, Kapjius and
Gorman (1992) examined the relationship between bulimia and the fear of intimacy. Using the Fear of Intimacy Scale, they compared women experiencing bulimia and a control group and found that the quantity of interpersonal relationships did not differ, but that the quality of relationships did. They concluded that women with bulimia experience a significantly greater fear of intimacy than do other women.

**Common treatments and outcomes**

Treatment of eating disorders is considered difficult regardless of the methods employed (Price, 1988). Treatment approaches to working with bulimia nervosa have included individual psychotherapy (insight-oriented, cognitive, supportive, behavioral), group therapy, family therapy, hypnotherapy, electroconvulsive treatments, and pharmacotherapy (Garfinkel and Garner, 1982). The most common treatments currently used are cognitive-behavioral, group, and pharmacologic therapies. Some practitioners/researchers advocate using an integrated approach combining at least two of these therapeutic components (Dixon, 1987; Herzog, Franko & Brotman, 1989) but in a qualitative review of outcome studies for bulimia, 15 reported on group therapy and 17 reported on individual therapy. No studies combined treatments and assessed outcome.

The basic tenet of treatment for anorexia nervosa is
that weight should be restored to normal levels, and weight maintenance facilitated by psychotherapy (Treasure, 1991). However, Agras and Kraemer (1984) reported that this treatment outcome has not improved over the previous decades although behavior therapy appeared to provide better results in the short term (Vandereycken, 1989). Waiting until after the weight is at a normal level for psychotherapy is important since starvation produces profound physiological and psychological effects which reinforce further weight loss and prevents effective therapy. The traditional method of producing reliable and effective weight gain is by hospital treatment as an inpatient (Vandereycken, 1985) with the use of behavioral and pharmacological interventions (Phelps & Bajorek, 1991). Very few between group outcome studies have been published. In the only large-scale between-groups study, Eckert, Goldberg, Casper, and Halmie (1979) randomly assigned 40 persons with anorexia to behavioral therapy and 41 to milieu therapy, and found nonsignificant weight-gain differences between the two groups (Phelps & Bajorek, 1991). However, family therapy, nutritional therapy and cognitive behavioral treatment have also been effectively used (Treasure, 1991).

Traditionally, treatment programs for college women with eating problems have consisted primarily of individual psychotherapy and/or a psychoeducational group.
Occasionally referrals may be made to a nutritionist. These would not be cases involving women with a diagnosis of anorexia nervosa; these women would typically be referred for in-patient treatment. There are few outcome studies of clinical cases of bulimia nervosa (Treasure, 1991). Of those studies that do exist, it has been difficult to isolate a consistent pattern of treatment outcomes. The variety in outcome categories, outcome definitions, and the small number of remaining subjects involved have made comparisons across studies difficult (Treasure, 1991). Poor outcomes of some short-term studies are available with approximately 40% of women experiencing bulimia still symptomatic and 40–60% experiencing relapse. (Mitchell, Hoberman, & Pyle, 1989). However, studies have shown that as eating behaviors normalize, depressive symptoms do tend to disappear (Fairburn, et al, 1987).

Treatment goals with those experiencing eating problems commonly include the following: eliminate binge-purge behavior, restore appropriate weight, normalize eating and weight patterns and attitudes, improve stress management, increase patient’s awareness of the connection between their bulimic attitudes and behaviors and chronic psychodynamic issues (Dixon, 1987). Common themes noted by all practitioners in those experiencing disordered eating usually include: need for others’ approval, use of food as
an avoidance of affect, escape from overly responsible lives, fear of success misidentified as fear of failure, use of eating symptoms in a hostile-dependent relationship, conflictual or mistrusting relationships with men and parents, fat identity, concerns of control and adequacy, procrastination, perfectionistic attitudes, and difficulties with impulse controls (Dixon and Kiecolt-Glaser, 1984; Roy-Byrne, Lee-Brenner, and Yager, 1984).

Biological

Pharmacologic therapy.

The first drug studied for use in bulimia was the anticonvulsant phenytoin - Dilantin (Green & Rau, 1974). Initial findings showed positive results, but patients quickly relapsed (Wermuth, Davis, Hollister, Stunkard, 1977). Others tried different anticonvulsants but found similar results (Kaplan, Garfinkel, Darby & Garner, 1983; Herridge & Pope, 1985). Monoamine oxidase (MAO) inhibitors were the drugs of choice in the treatment of atypical depression in the 1980s (Price, 1988). These were tried and found to be somewhat successful in reducing the symptoms of bulimia (Walsh, Stewart, Wright, Harrison, Roose & Glassman, 1982; Pope, Hudson, & Jonas, 1985; Walsh, et al., 1984; Kennedy, Piran & Garfinkel, 1985). However, their use is limited due to many side effects and necessary dietary compliance (Price, 1988). Tricyclic antidepressants
(imipramine, SK-Pamine and Tofranil) have also been used with women experiencing bulimia with success (Pope, Hudson, Jonas & Yurgelun-Todd, 1983). Fava, et al., (1989) summarized current research findings of pharmacologic therapy by reporting that the best studied and most promising psychotropic agents in bulimia nervosa are tricyclic antidepressants – desipramine and imipramine, and the MAO inhibitor, phenelzine. Others have shown that both types of medications reduce binge eating episodes, depression, and anxiety (Herzog, Hamburg, & Brotman, 1987). At present, antidepressants appear to decrease binge-purge behavior, improve attitudes about eating, and lessen preoccupation with food and weight (Haller, 1992). Several double-blind studies have shown notable improvement in patients treated with antidepressant drugs, but abnormal eating patterns may continue after treatment (Mitchell, et al., 1989). Although others have found that antidepressant medication is effective for the subgroup of women experiencing bulimia that are depressed or affectively predisposed (Brisman, 1989), others have found these improvements regardless of the presence or absence of clinical depression (Walsh, Gladis, Roose, Stewart, Stetner & Glassman, 1988; Edelstein, et al., 1989). A certain level of agreement exists that pharmacologic management of bulimia nervosa should not take place alone and should be part of a
multi-modal treatment approach (Price, 1988; Herzog, et al., 1989; Phelps & Bajorek, 1991). Palliative treatments such as hormone replacement therapy and potassium supplements are occasionally given to those experiencing anorexia nervosa. Hormone replacement therapy with implants or patches can prevent the progression or even reverse osteoporosis (Treasure, 1991), an outcome of starvation. Research on the pharmacological treatment of anorexia has included the use of Tricyclic antidepressants, monoamine oxidase inhibitors, antianxiety agents, and anticonvulsants to stimulate appetite, and antipsychotic medications (Phelps & Bajorek, 1991). Results have been varied leading physicians to try a variety of medications. No drug consistently has been effective in the treatment of anorexia nervosa (Fava, et al., 1989).

**Nutritional therapy.**

Most studies that describe treatment programs discuss individual and/or group therapy. Little attention has been paid by the therapy community to nutritional information as part of these programs. Luder and Schebendach (1993) discussed the need for nutrition management of eating disorders. They cite the need for nutritional assessment, anthropometric assessment, and metabolic assessments in those with eating disorders and provided guidelines for diet therapy for those with anorexia and bulimia. Willard,
Anding, & Winstead (1983) introduced nutritional counseling into an outpatient intervention plan. In addition, in 1994, The American Dietetic Association has taken the position that nutrition education and nutrition interventions be integrated into the team treatment of patients with eating problems (ADA Report). This nutritional dimension appears to be missing in most studies, outside of nutrition journals, reporting treatment of those suffering from a variety of eating problems.

**Psychological**

**Cognitive-Behavioral therapy.**

The cognitive approach to understanding eating problems emphasizes how symptom patterns logically derive from faulty assumptions (Garner, 1985). One central faulty assumption found in all eating problems is that dieting and weight control are essential for happiness or well-being. Cognitive assumptions are challenged during the therapy process. Garner and Bemis (1985) delineate features that characterize cognitive therapy: reliance on conscious and preconscious experience rather than on unconscious motivation; explicit emphasis on meaning and cognitions which lead to inappropriate feelings/emotions; use of questioning as a major therapeutic device; active and direct involvement of the therapist; clear specification of treatment methods, and objective assessment of changes in
client's behavior.

The behavioral approach to the treatment of eating problems has focused on behavioral components (binge eating, vomiting, obsessive thoughts of food, food restrictions), and treatment effectiveness for this approach is determined by reductions in these components (Rosen, 1987). Although exposure-response prevention studies are behavioral in nature, many researchers recognize the need to address cognitive distortions and incorporate cognitive restructuring when working with those experiencing eating problems. This combination then creates a cognitive-behavioral therapy in its application and is a major treatment model used when working with those experiencing eating problems (Cox, G. & Merkel, W., 1989; Giles, Young, and Young, 1985; Rosen, Leitenberg, Gross, & Willmuth, 1985).

Schneider and Agras (1985) used a multi-method cognitive-behavioral treatment program in a group therapy format. The behavioral changes to control binge eating included regular balanced meals, delayed binge eating, and stimulus control. Cognitive-behavior modification included restructuring of faulty beliefs related to binge eating and vomiting and practicing eating forbidden foods at home. Problem solving, assertiveness training, and relaxation were also included. Among the thirteen subjects, they found a
90% reduction in vomiting with 54% abstinent. At a six month follow-up, vomiting was reduced 84% on average with 38% abstinent. Improvements were also noted on measures of depression, eating attitudes, and assertiveness (Rosen, 1987).

Others have also reported success in controlled studies using a cognitive behavioral approach. Lee and Rush (1986) compared a waiting list control group with a group attending two group therapy meetings per week for six weeks. Treatment included education regarding weight regulation, scheduled meals, restructuring of faulty beliefs regarding weight and eating, relaxation training, and increasing activities out of the home. No improvements were found for those on the waiting list, but the treatment group had a significant reduction in vomiting of over 80% at post treatment and again 3-4 months later. However, only 14% were abstinent from vomiting. Lacey (1983) assigned 15 subjects to group treatment and 15 to no-treatment conditions. She found a 96% reduction in vomiting after treatment while subjects in the no-treatment condition were unimproved. Cox and Merkel (1989) in reviewing 32 outcome studies found that all groups which received active treatment had positive results on at least one outcome measure. These measures included behavioral changes (binge eating, purging), depression, self-esteem, body image,
assertiveness, and general anxiety. They also found that although treated patients appeared to improve, few became abstinent after treatment.

David Garner (1985) proposed a two-track approach to treatment whereby the therapist consciously adheres to both the patient’s current eating behavior and physical condition while also attending to modifying misconceptions reflected in self-concept deficiencies, perfectionism, poor impulse regulation, depression, and disturbed family or other interpersonal relationships. Descriptions of these stated programs were given but no findings from these studies were reported.

Social

Group therapy.

Several studies have provided evidence that group therapy is an effective adjunctive treatment (to prior or current individual therapy) modality for eating problems (Boskind-Lodahl and White, 1978; Lacey, 1983; Johnson, et al, 1983; Roy-Byrne, et al, 1984; Dixon and Kiecolt-Glaser, 1984). These studies vary in treatment approach (feminist, behavioral-experiential, behavioral/insight, psycho-educational, behavioral/insight/support, behavioral/insight), duration (5 days to 12 months), frequency (1 1/2 hours weekly to a five hour five day intensive program), and outcome measures (Body Cathexis
Test, California Psychological Inventory, Mood Analogue Scale, Eating Disorders Inventory, Berndt Depression Inventory, Tennessee Self-Concept Scale, Eating Attitudes Test, etc...), but most found an improvement in immediate outcome. For example, Johnson, et al (1983), found that of 9 participants, 2 were symptom free and 7 were improved after nine weeks of psycho-educational treatment. Dixon and Kiecolt-Glaser (1984) found that after 10 weeks of behavioral/insight treatment, 3 participants were symptom free and 8 participants had improved. Although these studies report successful outcomes, group therapy with those experiencing eating problems is considered to be successful only as part of a systematic and comprehensive treatment plan (Dixon, 1987).

An integration of behavioral and dynamic approaches is commonly used in group treatment for bulimia. The most frequent behavioral techniques used include self-monitoring through daily dairies, goal setting or contracting, assertiveness training, and cognitive restructuring, with relaxation training and guided fantasy used less often (Dixon, 1987). Premature termination is problematic in these groups with an average dropout rate of 10-35%. Griffiths (1990) found that neither demographic nor psychological characteristics played a role in identifying dropouts from bulimia nervosa treatment. In an effort to
reduce drop-out rates, Dixon required all group candidates to have prior individual psychotherapy and be recommended by their individual psychotherapist as ready for group treatment. She found that when most participants had the same therapist for both group and individual therapy, only 20%, compared to almost 44% who had different individual and group therapists, prematurely terminated.

Hendren, Atkins, Sumner & Barber (1987) write that the mutual support and socialization in the group setting have positive benefits and help prevent relapse. The important components involved in their group therapy are the strengthening of peer relationships and education about factors involved in eating disorders. Their group program is used as an adjunct to individual therapy, and sometimes, family and pharmacotherapy are also used. They use open-ended, ongoing, weekly meetings with an average of seven participants. They consider age and developmental level of the patient more important in determining group placement than the nature or severity of the eating disorder. These groups deal with age appropriate issues and develop cohesion since members are facing similar developmental issues and needs. Their model consists of an individual evaluation prior to admission to group and most members are in individual treatment prior to group referral. The therapists bring no specific agenda to group but are often
directive, ask questions, and ask each group member to relate to the topic being discussed. They found that in their college age group, the most common themes are efforts at emancipation from their families, recognizing their inability to be the best in everything, exploration of sexual feelings and activities, and inadequate career planning. To assess outcome, the two group therapists rated eating disordered symptoms as well as social relationships in and out of group. They found that those who had a better overall outcome at termination (lowered eating disordered symptoms and better social relationships) attended the group treatment for a longer period of time.

Quantitative measures in various studies indicate that patients in group treatment experience increased self-assurance, interpersonal adequacy and self-responsibility (Boskind-Lodahl and White, 1978; White and Boskind-White, 1981), a decrease in anger and in the associated increase in depression (Lacey, 1983), a decreased drive for thinness and decreased bulimic tendencies along with increased interoceptive awareness (Johnson, et al, 1983), and decreased somatization, anxiety, and depression (Dixon and Kiecolt-Glaser, 1984). However, no studies combining group therapy with individual psychotherapy were reported (Cox and Merkel, 1989).

Clinical Application of the Biopsychosocial Model

43
Other Clinical Issues

A biopsychosocial treatment approach has been employed with respect to many disorders. For example, Amchin (1991) incorporated this biopsychosocial perspective in the diagnostic process using the DSM-III-R. Schwartz (1990), used a biopsychosocial treatment approach with post-traumatic stress disorder (PTSD). He wrote that treatment for PTSD should include this management approach since all of these areas are important for the patient to come to terms with trauma. Wendorf (1987) examined Attention Deficit Disorder with regard to recognizing the child not only as having a probable organic pathology, but also including the family system, school system, and the child’s own feelings about him or herself. He went on to write "biology, personality, family, and community should be considered reciprocally interacting levels of a complex hierarchical system." Additionally, Mitchell and Drossman (1987) found that by integrating psychosocial dimensions of illness into assessment and treatment, irritable bowel syndrome can be better understood.

Eating Problems

Increasingly over the past years, bulimia has begun to be viewed as a psychosomatic disorder in which biological, familial, socio-cultural, and intrapsychic factors interact to predispose the onset of symptoms (Johnson & Maddi, 1986;
Johnson, Tobin, & Steinberg, 1989). Some researchers have even argued that bulimia is not a disease but a manifestation of underlying psychosocial problems (Martin, 1989). Nagel and Jones (1992) reviewed the socio-cultural, socioeconomic, and sex-related factors contributing to the development of eating disorders and recommended that professionals work with disordered eating patients by addressing unrealistic standards of appearance. Additionally, several researchers/practitioners have developed or promoted integrated programs for addressing eating disorders. Johnson and Connors (1987) describe how individual psychotherapy, group treatment, psychoeducational group, family therapy, psychopharmacological interventions, and/or nutritionist (registered dietitian) involvement can all aid in treatment for women experiencing bulimia.

Herzog, Franko & Brotman (1989) view bulimia as a mixture of thoughts, behaviors and affects and propose a multi-modal treatment program. They believe that several components are involved in bulimia nervosa: behavioral (binge eating, vomiting, fasting), cognitive aberrations (irrational beliefs concerning weight, food, and body image) and psychodynamic underpinnings (deficits at various developmental levels). They focus treatments on psychodynamic, cognitive-behavioral and pharmacologic modalities. Integration of these modalities takes place
either sequentially or simultaneously. Integrated sequential therapy takes place when symptoms are addressed through cognitive-behavioral therapy, and once some symptom control is in place, the therapeutic focus shifts to underlying psychodynamic issues. Or, in simultaneous therapy, all three modalities can be used simultaneously over the course of treatment.

In addition, a need has been cited for a multifaceted approach to provide treatment (Brisman, 1989). She stated that a variety of professionals and support groups be available to best serve the needs of this population. Hotelling (1989) reports that since bulimia is considered multidetermined, a variety of interventions are vital to a developmental approach on college campuses. The minimum treatment team should consist of a psychotherapist, physician and nutritionist. Clark, Levine & Kinney (1989) also discuss the need for an interdisciplinary approach to treatment. They propose a multifaceted and integrated approach to the prevention, identification, and treatment of bulimia on college campuses. Their approach requires an interdisciplinary team composed of mental health professionals (therapist) and medical professionals (nutritionist). This team approach takes on the form of an integrated treatment network with referrals being made between care givers with communication between them to
coordinate treatment for those being treated by several members of the team. They write that the most effective treatment is a combination of education about weight regulation and starvation, cognitive behavioral therapy, professionally led support groups, and the expert administration of anti-depressant medication. Johnson and Connors (1987) suggest that this type of a multifaceted treatment program would eliminate and/or reduce bulimic behaviors.

Lenihan and Kirk (1990) reported on using student paraprofessionals in the treatment of eating disorders. They reported on a program that integrated group therapy which included a cognitive behavioral orientation with a feminist emphasis, symptom management, psychoeducation, and principles of nutrition, with a peer counseling program (companion-therapists). An evaluation of this program found that in comparing pre and post-treatment measures, there was a significant reduction in negative eating behaviors, and significant improvements in perfectionism scores and on the Compulsive Eating Scale. In addition, the Therapist's Recovery Assessment gave a mean recovery score of 3.57 on a scale from 1=client deteriorating to 5= recovered with no need for further therapy.

Clark, Levine & Kinney (1989) also propose a multifaceted and integrated approach to the prevention,
identification, and treatment of bulimia on college campuses. Their approach requires an interdisciplinary team composed of mental health professionals and medical professionals. This team approach takes the form of an integrated treatment network with referrals being made between care givers with communication between them to coordinate treatment for those being treated by several members of the team.

Willard, Anding, and Winstead (1983) reported about a program which included individual, group, and nutritional counseling for bulimia. They called for regular consultation and collaboration between the nutritional counselor and the psychotherapist. This integrated model was not tested and only a case report given. Future research to test the efficacy of this integrated approach was recommended.

**The Integrated Treatment Program for Eating Problems**

In 1992, Mary Patzel, registered dietitian, recognized the need for an interdisciplinary, multi-modal treatment approach to working with college students with problematic eating at Virginia Tech. The only services available to students were individual therapy at the University Counseling Services and an optional psychoeducational group. Students were frequently referred to her from Student Health Services for nutritional assessments. That system did not
encourage or promote on-going collaboration between the professionals, an important element in integrated programs (Willard, Anding, Winstead, 1983; Clark, Levine & Kinney (1989), Brisman, 1989; Hotelling, 1989). In the fall of 1992, she attempted to coordinate services with Student Health Services and the Center for Family Services at Virginia Tech. At that time, each professional saw the same students but were not working together in an on-going collaborative way. In the fall of 1993, I became involved in this program and provided both individual therapy and group therapy with the nutritionist. The nutritionist and I consulted throughout program delivery with monthly staffings, and more frequent discussions as necessary. We also provided the weekly group therapy together and consulted with Student Health Services when appropriate. Since the fall of 1993, approximately 30 female college students have been involved with this multi-modal, biopsychosocial, interdisciplinary approach. A more detailed description of this interdisciplinary program follows in the Methodology chapter.

Summary

Prior research into treatment modalities for eating problems has been reported. It has been very difficult to compare across studies to determine what treatment modality brings the greatest success due to the varied definitions
for eating problems and the inconsistent measurement of outcome. However, there is a calling to incorporate a multi-modal treatment approach when working with women experiencing eating problems. At this point, no research has been reported to better understand integrated, multidisciplinary models of treatment, and no outcome studies have been reported on programs integrating a biopsychosocial framework. In addition, no studies have been reported which used a multi-modal evaluation method for assessing outcome and program efficacy. Therefore, the present study evaluates not only behavioral and psychosocial outcomes for participants in a program that attempted to integrate the physical, emotional, and communal needs of participants exhibiting a wide range of eating problems, but also attempts to understand the process of taking part in this program for the participants.
CHAPTER III

Research Methodology

Overview of Research Design

In order to understand more fully the effects of the integrated program for eating problems on individuals, a multi-modal evaluation process was conducted. Quantitative data as well as qualitative data were collected from participants. The qualitative data were used to gain further insight into the quantitative data. The study utilized the process of triangulation. This process is the combining of methodologies in order to study the same phenomena (Patton, 1980). This combined approach was used to provide insight into the effects of the integrated treatment program on the participants as well as to elaborate, corroborate and/or illuminate the research question (Rossman and Wilson, 1985).

Description of the Integrated Treatment Program

The program lasted 10 weeks and incorporated a team treatment approach to address the physical, emotional, and nutritional manifestations and consequences of problem eating. There were three mandatory components of this program:

1. bi-weekly nutritional counseling with a registered dietitian

2. bi-weekly individual therapy sessions with a family
therapist

3. weekly group therapy sessions facilitated by both the therapist and the Registered Dietitian. Topics for these weekly group meetings included as Chapter IV.

The registered dietitian met with participants bi-weekly to assess the nutrient intake and eating behaviors, counseled them about a high complex carbohydrate, low fat eating plan, encouraged aerobic exercise for 20-30 minutes four times per week for production of endorphin, and addressed food behaviors. As Luder and Schebendach (1993) pointed out, it is very important that a nutrition assessment be performed which includes diet history, food aversions and preferences, meal spacing, foods that commonly trigger binge-eating episodes, and the frequency and time of day at which binge/purge episodes occur. With this information, the Registered Dietitian then attempted to normalize participants’ eating habits and break the pattern of binge and purge cycles. For some, this included developing a meal plan that had sufficient amounts of carbohydrates to minimize craving and reasonable amounts of protein and fat for satiety (Luder and Schebendach, 1993). In addition, she pointed out potential underlying emotional issues that should be addressed in their psychotherapy sessions. Some of the following forms were provided to some participants, dependent on their needs: food journal to
assess foods which trigger eating-disordered behavior (Appendix A), daily log of food-related behaviors, coping activities, and interventions (Appendix B), and the daily self-assessment form for the participant to monitor her food-related behaviors and their effects on her well-being (Appendix C). She also offered time structure counseling to help participants organize daily activities which she believed would be conducive to recovery and to minimize stressful or unmanageable times which can lead to disordered eating. In addition, she provided weekly group therapy sessions in conjunction with the family therapist.

The family therapist was responsible for the psychological aspects of treatment. Using a systemic theoretical approach while combining cognitive-behavioral therapy with feminist and solution focused perspectives, the therapist met bi-weekly with the participants. Systems theory is not a coherent, standardized theory, it is more a way of thinking, a lens through which to view therapy and change (Nichols and Schwartz, 1991). Systems thinking lends itself to viewing a system as a collection of parts which influence other parts of the system. As each part influences other parts, changes occurs, which is then related to a feedback mechanism between the parts. The biopsychosocial model attempts to consider and explain this interaction of biological, psychological, and social factors
in the processes of illness, disease and dysfunction. Using this approach combined with a feminist perspective served as my meta-theoretical therapeutic stance. I could then use cognitive-behavioral and solution focused "techniques" in my therapy. Cognitive-behavioral therapy involved paying attention to both the eating problem behavior and the thoughts and feelings that accompanied the behaviors. Assignments were given to change behaviors while paying attention to the prevalent thought and feeling patterns. In this way, symptom reduction could also be accompanied by cognitive restructuring. My feminist approach involved highlighting the social and cultural issues that accompany eating problems and closely examining how many of the women's thoughts and feelings about themselves were reflections of societal messages and standards. The basic aspects of solution-focused therapy that were incorporated into the therapy were the focusing on strengths and personal resources of clients, use of goal setting, and scaling questions. Clients determined their own goals and through the use of scaling questions they could concretely state where they believed themselves to be on a 10 point scale in meeting those goals. This rating gave both client and therapist a clearer sense of as change occurred.

In individual therapy, goals were set by the participant at the first therapy session. Most goals
included minimizing destructive eating behaviors while developing healthier means of coping with life events and one’s internal experiences (Brisman, 1989). Most participants were given homework assignments between sessions and were encouraged to keep journals and write in them prior to binge eating and/or purging. Writing in a journal prior to and after a binge and/or purge acts as a behavioral change (delay of the bulimic/binge behavior) while also allowing participants to begin exploration of feelings, thoughts, experiences that typically prompt and accompany their food problem behaviors. Each participant and I determined whether additional therapies would be helpful; i.e. involving parents, partners, or other significant individuals. None chose to include others during the course of this program, but two did want to include others in their therapy after the completion of this program. In addition, the registered dietitian and I provided weekly group therapy sessions. Both the individual and the group therapy were clinically supervised by an AAMFT Approved Supervisor and faculty member in the Department of Family and Child Development.

Members of the treatment team (therapist, registered dietitian, supervisor) met monthly to review the diagnoses and progress of the participants. This review resulted in an ongoing, consistent approach, using the expertise of each
team member to meet the multifaceted needs of these participants.

**Methodology**

**Sample**

Students were recruited by flyers on the Virginia Tech campus inviting them to participate in a study/program for eating problems, (Appendix D), two presentations to residence hall students and sororities, newspaper advertisements in the college newspaper, "The Collegiate Times" (Appendix E), and announcements in many undergraduate Family and Child Development classes, several undergraduate Human Nutrition and Food classes, and two sections of Introductory Psychology classes (Appendix F).

Twenty students initiated contact with the researcher expressing an interest in participating. All twenty completed the first wave of paperwork (Informed Consent Form (Appendix G), Eating Disorder Inventory 2 (Appendix H), and Symptom Checklist (Appendix I) and were given a list of available counseling services (Appendix J). Then, due to a variety of reasons (lack of time, lack of interest, found counseling elsewhere), nine students decided not to participated in the integrated program. t-tests comparing participants with non-participants showed no significant differences between these two groups on any of the symptom checklist items or any of the subscales of the Eating

56
Disorder Inventory. However, even though no significant differences were found between the two groups, there were some differences worth mentioning. Participants binge ate and purged more often and felt more out of control during binges (see Table 1) than those who chose not to participate. This might indicate why they chose to continue their participation. However, participants exercised less frequently and used it less as a form of weight control than did non-participants. Perhaps, exercise as a "purge" is generally more acceptable and would warrant less concern for change. On the EDI-2 subscales non-participants had higher scores for bulimia, ineffectiveness, maturity fears and social insecurity (see Table 2). It might be hypothesized that having more difficulty on some intrapersonal variables might have kept some from participating. Although, as previously stated, these differences were not statistically significant, they could help us to understand why certain women would choose to continue their participation and others would not.

Procedure

Although the original intent of this study was to assign participants randomly to one of three group designs (integrated group treatment, individual therapy only treatment, and a psychoeducational
Table 1

**Participant and Non-Participant Comparison on Symptom Checklist**

<table>
<thead>
<tr>
<th></th>
<th>Participant</th>
<th>Non-Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Exercise/week</td>
<td>5.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Minutes/exercise</td>
<td>38.8</td>
<td>26.3</td>
</tr>
<tr>
<td>Exercise/weight control</td>
<td>3.7</td>
<td>2.3</td>
</tr>
<tr>
<td>Binge/week</td>
<td>2.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Binge at Worst</td>
<td>3.2</td>
<td>4.3</td>
</tr>
<tr>
<td>Binge out of control</td>
<td>3.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Purge/week</td>
<td>2.6</td>
<td>7.4</td>
</tr>
<tr>
<td>Purge at Worst</td>
<td>8.2</td>
<td>14.6</td>
</tr>
<tr>
<td>Laxative Use</td>
<td>1.2</td>
<td>.4</td>
</tr>
<tr>
<td>Laxative at Worst</td>
<td>2.8</td>
<td>8.9</td>
</tr>
<tr>
<td>Diet pill Use</td>
<td>1.4</td>
<td>.5</td>
</tr>
<tr>
<td>Pills at Worst</td>
<td>1.1</td>
<td>2.4</td>
</tr>
<tr>
<td>Diuretic Use</td>
<td>1.1</td>
<td>.3</td>
</tr>
<tr>
<td>Diuretics at Worst</td>
<td>.7</td>
<td>2.2</td>
</tr>
</tbody>
</table>

No significant differences found for any variable
Table 2
Participant and Non-Participant Comparison on EDI-2
subscales

<table>
<thead>
<tr>
<th></th>
<th>Participant</th>
<th></th>
<th></th>
<th>Non-Participant</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Drive for thinness</td>
<td>15.5</td>
<td>3.9</td>
<td>19.6</td>
<td>5.2</td>
<td></td>
</tr>
<tr>
<td>Bulimia</td>
<td>4.6</td>
<td>2.6</td>
<td>8.0</td>
<td>7.7</td>
<td></td>
</tr>
<tr>
<td>Body Dissatisfaction</td>
<td>23.0</td>
<td>5.3</td>
<td>22.2</td>
<td>8.5</td>
<td></td>
</tr>
<tr>
<td>Ineffectiveness</td>
<td>6.7</td>
<td>5.2</td>
<td>9.9</td>
<td>7.8</td>
<td></td>
</tr>
<tr>
<td>Perfectionism</td>
<td>8.8</td>
<td>4.5</td>
<td>11.4</td>
<td>5.2</td>
<td></td>
</tr>
<tr>
<td>Interpersonal Distrust</td>
<td>4.8</td>
<td>6.6</td>
<td>5.4</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td>Interoceptive Awareness</td>
<td>10.0</td>
<td>5.1</td>
<td>10.8</td>
<td>3.1</td>
<td></td>
</tr>
<tr>
<td>Maturity Fears</td>
<td>3.9</td>
<td>3.7</td>
<td>8.1</td>
<td>6.6</td>
<td></td>
</tr>
<tr>
<td>Asceticism</td>
<td>9.5</td>
<td>3.5</td>
<td>9.2</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>Impulse Regulation</td>
<td>5.0</td>
<td>5.3</td>
<td>6.0</td>
<td>6.3</td>
<td></td>
</tr>
<tr>
<td>Social Insecurity</td>
<td>6.8</td>
<td>5.3</td>
<td>10.0</td>
<td>6.1</td>
<td></td>
</tr>
</tbody>
</table>

No significant differences found for any variable
group), there were not enough interested students to allow for this research design. Therefore, the researcher changed the focus of the study into a multi-modal program evaluation. The twenty potential participants were contacted by telephone by the researcher, and the requirements for the integrated program were explained. Twelve agreed to participate, and an appointment was made to complete additional paperwork (Beck’s Depression Inventory (Appendix K), Rosenberg’s Self Esteem Scale (Appendix L), Family Relationship Form (Appendix M), Center for Family Services agreements (Appendix N), Initial Questionnaire (Appendix O), and another Informed Consent Form (Appendix P). The other eight decided not to continue. The researcher then determined through the participants’ class and work schedule times for group meetings. Two groups were formed - one with seven and the other with five participants. Only one participant failed to complete the additional paperwork, attended only one group session, and failed to continue in the program. All other participants continued in the program by attending bi-weekly therapy sessions, bi-weekly nutritional counseling, and weekly group sessions.

Sample Description

All eleven participants were female and ranged in age from 18 to 22. There were four freshmen and the rest were
sophomores, juniors and seniors. Although the EDI does not have "cut-off" scores, means and standard deviations for eating disorder groups ranged from 2.2 (s.d=3.0) to 11.6 (SD = 5.3). Means and standard deviations for female college comparison groups had means below 2.0 and the standard deviations were less than 3. Therefore, in setting a cut-off for this subscale, a somewhat arbitrary score of five was chosen. Of the eleven participants, six were classified as bulimic by DSM-IV criteria, and six had scores of five or higher on the EDI2's subscale of bulimia. Three used vomiting, and the others used exercise or diet pills for their purge. Two participants were recovering from anorexia and were neither restricting or purging. Three used exercise as a purging method, however, two did not meet DSM-IV criteria for bulimia since they were not binge eating at least two times per week for a period of three months. One participant binged but did not purge, however, she was considered bulimic by the EDI2 bulimia subscale; and one participant binged and purged, but did not score five or higher on the bulimia subscale.

Instrumentation

Initial Questionnaire. (Appendix O). These questions provided background/demographic information as well as information about the extent to which problem eating was affecting their lives. Questions attempted to assess their
current eating behaviors and their attitude towards their
eating and themselves. Parts of this questionnaire were
used as a post-test measure to assess participants’
perceptions as to the extent of their problem, their
commitment to working on these issues, and their confidence
that they would be able to improve. Three additional pages
were added to the initial questionnaire for the post-test
(Appendix Q).

Eating Disorders Inventory (EDI2). (Appendix H) has
been a widely used questionnaire developed for the
assessment of severe eating disorders (Garner, 1991). It
has also been widely used as a research instrument as it
provides descriptive information, allows comparison of
samples in one research setting to those from other research
sites, and has been used as an outcome measure and as a
prognostic indicator in treatment studies. It was developed
on the premise that eating disorders are multidetermined and
multidimensional. The EDI2 is a 91-item (each item has six,
Likert scale response categories), self-report scale
designed to measure the behavioral and psychological traits
associated with anorexia nervosa and bulimia. It takes
approximately 20 minutes to complete. The EDI consists of
eight subscales and three provisional subscales:

1. **Drive for thinness** assesses excessive concern with
dieting, preoccupation with weight, and fear of weight gain.
This subscale has an internal consistency reliability of between .83 and .86, a test-retest reliability of between .72 and .92 and an item analysis for validity yielded results between .39 and .70 for an eating disorder population.

2. **Bulimia** assesses tendencies to think about and to engage in bouts of uncontrollable overeating. This subscale has an internal consistency reliability estimate between .86 and .88 and a test-retest reliability between .44 to .90. An item analysis for validity yielded results between .49 and .73 for an eating disorder population.

3. **Body dissatisfaction** measures dissatisfaction with overall shape and size of regions of body that are of greatest concern to those with eating disorders. This subscale has an internal consistency reliability of between .90 and .92, a test-retest reliability of between .75 and .97, and an item analysis for validity that yielded results between .58 and .78 for an eating disorder population.

4. **Ineffectiveness** assesses feeling of general inadequacy, insecurity, worthlessness, emptiness, and lack of control over one’s life. This subscale has an internal consistency reliability of between .90 and .93, a test-retest reliability of between .55 and .92, and an item analysis for validity yielded results between .58 and .74 for an eating disorder population.
5. **Perfectionism** measures extent to which one believes that personal achievements should be superior. This subscale has an internal consistency reliability of between .80 and .85, a test-retest reliability of between .65 and .88 and an item analysis for validity yielded results between .45 and .64 for an eating disorder population.

6. **Interpersonal distrust** assesses general feeling of alienation and reluctance to form close relationships and measures reluctance to express thoughts or feelings to others. This subscale has an internal consistency reliability of between .84 and .85 and a test-retest reliability of .60 to .81. Item analysis for validity yielded results between .51 to .66 for an eating disorder population.

7. **Interoceptive awareness** measures confusion and apprehension in recognizing and accurately responding to emotional states and taps uncertainty in identification of certain visceral sensations related to hunger and satiety. This subscale has an internal consistency reliability of .83, a test-retest reliability of between .41 and .85, and an item analysis for validity yielded results between .30 and .65 for an eating disorder population.

8. **Maturity fears** assesses desire to retreat to security of childhood. This subscale has an internal consistency reliability of between .83 and .89, a test-
retest reliability of between .48 and .84, and an item analysis for validity yielded results between .46 and .63 for an eating disorder population.

9. Asceticism subscale measures tendency to seek virtue through pursuit of spiritual ideals such as self-discipline, self-denial, self-restraint, self-sacrifice, and control of bodily urges. This subscale has an internal consistency reliability of .70, a test-retest reliability of between .72 and .92, and an item analysis for validity yielded results between .31 and .48 for an eating disorder population.

10. Impulse regulation assesses tendency toward impulsivity, substance abuse, recklessness, hostility, destructiveness in interpersonal relationships, and self-destructiveness. This subscale has an internal consistency reliability of .77, a test-retest reliability of between .72 and .92, and an item analysis for validity yielded results between .31 and .55 for an eating disorder population.

11. Social insecurity measures belief that social relationships are tense, insecure, disappointing, unrewarding, and generally of poor quality. This subscale has an internal consistency reliability of .80, and an item analysis for validity yielded results between .26 to .70 for an eating disorder population.

The reliability (internal consistency) of the subscales
is above .80. Criterion-related, convergent, discriminant and construct validity are all reported to be good (Garner & Olmsted, 1984; Gross, Rosen, Leitenberg, & Willmuth, 1986). The EDI2 is normed for anorexia nervosa patients, those experiencing bulimia, recovered anorexics, normal comparison groups, male comparison groups, and the formerly obese.

Eating Disorders Inventory Symptom Checklist (EDI-SC). (Appendix I) (Garner, Olmsted, & Polivy, 1991). The EDI-SC gives detailed information about specific symptoms and symptom frequency. It is a structured, self-report form which is independent of the EDI. It is specifically designed to obtain information that has current and historical diagnostic relevance. Its categories include: dieting, exercise, binge eating, purging, laxatives, diet pills, diuretics, menstrual history, and current medication. It takes approximately 5-10 minutes to complete.

Beck’s Depression Inventory. (Appendix K)

High depression scores are frequently seen among those who are suffering from eating disorders (Johnson and Larson, 1982; Pyle, et al, 1983; Gross, 1986, Gross and Rosen, 1988; Mizes, 1988; Martin, 1989, Garner, et al., 1990; Schwartz & Schwartz, 1993). Because of this connection, it is important to isolate this phenomenon so as to determine statistically this relationship. In addition, comparison of post-test scores should inform us as to the potential
benefits of the integrated program. The Beck Depression Inventory (BDI) is a common rating scale that quantifies the severity of depressive symptomatology and assesses treatment response. This inventory was first introduced in 1961 and was later revised (Beck, Rush, Shaw, & Emery, 1979). It is a 21-item self-report scale whose scoring is completed by summing the severity of individual symptoms rated from 0 to 3. The overall scores can range from 0 to 63. It is widely used, and its psychometric properties have been well investigated in both adult populations and in outpatient adolescents. Ambrosini, Metz, Bianchi, Rabinovich, & Undie (1991) validated the usefulness of the revised BDI to identify adolescent syndromal major depressive disorder in an outpatient sample and analyzed the psychometric properties. They found that the BDI was internally consistent with high sensitivity, specificity, and had positive predictive power to differentiate syndromally depressed from non-affectively disordered adolescent outpatients. Specifically, the internal consistency as a measure of depression in adolescence ranged from .91 to .79, and the test-retest stability was .86.

Rosenberg's Self-Esteem Scale. (Appendix L)

It has also been found that those who suffer from eating disorders experience low self-esteem (Fairburn, et al., 1987; Rosen, 1987; Wagner, et al., 1987; Willmuth, et
al., 1988; Mintz & Betz, 1989; Beren & Chrisler, 1990; Shisslak, et al., 1990; Silverstone, 1990; Kendler, et al., 1991; Rosch, et al., 1991; Baell & Wertheim, 1992; Gendron, et al., 1992). In order to test this relationship and to inform as to the potential benefit of the integrated program, I administered the Rosenberg Self-Esteem Scale (RSES). The RSES is a ten item Guttman scale that can be used to measure overall self-regard or global self-esteem. The scale consists of positive and negative statements presented alternately in order to reduce the likelihood of a response set. It is brief, simple to administer and has been reported to be one of the most frequently used and well-validated measures of self-esteem (McCarthy & Hoge, 1982). This scale was administered to 5,024 high school juniors and seniors from 10 randomly selected public high schools in New York and was found to have internal reliability (Cronbach Alphas = .85); reproducability was 92% and scalability was 72% (Rosenberg, 1979). Using college samples in a two-week test-retest, the reliability coefficient was .85; and in another two-week test-retest using college samples, the reliability coefficient was .88.

Family Relationship Form. (Appendix M)

The family relationship form used two subscales of the EDI-2, interpersonal distrust and social insecurity, and adapted the questions to pertain to family relationships.
Two questions from the social insecurity scale were omitted since they could not be adapted (I feel like I am losing out everywhere and I feel that I really know who I am).

Focus Group Interview Guide. (Appendix R)

A guide was co-created by the researcher and the focus group moderator to understand how the integrated program impacted upon the participants.

Rating Instrument for Focus Group. (Appendix S)

A two page document was created for participants to assess the three components of the integrated program as well as to rate various topics and exercises in terms of their helpfulness in their own recovery.

Data Analysis

Both quantitative and qualitative data analyses were conducted in order to evaluate the integrated treatment program. Using both methodologies to study the same phenomena is frequently referred to as triangulation. Triangulation is defined by Marshall and Rossman (1989) as bringing together more than one source of data on a single point in order to enhance a study’s generalizability.

Triangulation does not just involve combining different kinds of data but attempts to relate different types of data in order to minimize threats to the validity of the analysis (Hammersley and Atkinson, 1983).

Krueger (1994) notes the benefits of combining
quantitative and qualitative methodologies in order to strengthen evaluation research. He proposes utilizing focus groups as the qualitative research technique. Focus group research is a socially-oriented approach to research. It allows for interaction with other respondents as well as the interviewer. The process of reflexivity among respondents occurs through focus groups. People are able to make decisions and present their own views through the process of listening to the viewpoints of others (Krueger, 1994). These focus group interviews are organized group discussions aimed at getting to opinions and perceptions, not to achieving consensus (Krueger, 1994). This method is frequently used following quantitative methods of data collection in order to gain additional insights into research results.

**Quantitative Data Analysis**

In an attempt to evaluate the integrity of the program, frequencies, descriptive statistics, and paired t-tests were performed to ascertain any quantitative differences in each individual's pre-test and post-test scores on the Eating Disorder Inventory's eleven subscales, Eating Disorder Symptom Checklist, Beck's Depression Inventory, Rosenberg's Self-Esteem Scale, and scaling questions from the Initial Questionnaire. I hypothesized that there would be improvement on all post-test measures, therefore, hypotheses
were tested in one direction with dependent t-tests. In addition, ratings for the focus group interview were also statistically analyzed for means and standard deviations.

Independent t-tests were conducted on the Eating Disorders Inventory-2 Symptom Checklist and the Eating Disorders Inventory-2 between participants (n=11) and those who decided not to continue their participation (non-participants, n=9). Results are reported in Table 1 and Table 2.

Although the study sample may be considered relatively small, quantitative data were still used and statistical analyses performed. Many other studies that reported on group therapy for eating problems usually enrolled between 9 and 12 members per group meeting (Dixon, 1987). These studies reported significant differences between groups with as few as 13 subjects in their study. Schneider and Agras (1985) were able to assess behavioral changes with the use of cognitive-behavioral interventions with only 13 bulimic subjects. Lee and Rush (1986) compared a waiting list control group (n=10) with a group attending two group therapy meetings per week for six weeks (n=10). Lacey (1983) assigned 15 subjects to group treatment, 15 to no-treatment condition, and then compared the two groups on behavioral changes.

Qualitative Component

71
Focus Groups.

In addition to these quantitative measures, a focus group was conducted with each group by an experienced focus group moderator and a graduate student in Human Nutrition and Foods as her assistant. Interviews were semi-structured and allowed for the group participants to discuss their thoughts, feelings, and beliefs about the program and their own recovery issues. Specifically, participants commented on the multifaceted approach of this program: nutritional counseling, individual psychotherapy, and group therapy. The focus groups were approximately one and a half hours long and were audio-taped and then transcribed by an independent transcriber. A short questionnaire was given to participants at the beginning of the focus group to help guide their subsequent discussion and to provide outcome data (see Appendix S).

The benefit of using a focus group for the purpose of understanding the participants in the integrated group is that it provides in-depth critical information of the individuals within the group setting. People tend to open up in focus groups and share insights that they may not in individual interviews (Krueger, 1994). Another advantage of using focus groups is that the dynamics of the group interaction can be captured since participants are placed in their natural, real-life group situation. Additionally, the
moderator has a lot of flexibility to explore unanticipated issues that develop out of the group interaction. A series of prepared open-ended questions were used for the focus groups (see Appendix R).

The focus group provided the participants’ voices as data concerning their personal experiences with the integrated treatment program. By considering the participants words and the meanings of their words, I could begin to understand the degree of similarity and differences among their responses while identifying opinions, ideas, or feelings that repeat. In addition, I attempted to determine the range and diversity of their experiences or perceptions. It was important to gain insights into the attitudes, perceptions, and opinions of the participants in order to understand their experiences and perceptions for the future delivery of treatment programs for those experiencing eating problems (Krueger, 1994).

Individual Interviews.

During the last individual therapy session, the therapist/researcher provided a list of all goals stated by the participant over the course of their therapy (an example shown in Appendix T). Participants were asked to scale from one (no change) to 10 (complete goal attainment) each goal and were invited to include other goals or delete any incorrect ones from the list. Furthermore, they were asked
to describe what was most helpful to them in attempting to reach their goals. A discussion then followed detailing their responses. These discussions were audio-taped (written permission was requested for the taping and subsequent transcription (Appendix U), and transcripts were created. Each transcriber signed a statement of confidentiality (Appendix V). These results are reported throughout Chapter IV.

Field Notes.

The Registered Dietitian and the therapist created case notes after each session with a participant. All notes were typed and considered to be field notes.

Qualitative Data Analysis

I analyzed my data using the grounded theory procedures and techniques framework provided by Straus and Corbin (1990). I began by reading all transcripts three times and began recognizing the emergence of common themes. I then began to place conceptual labels on my data. This is referred to as open coding which is "the process of breaking down, examining, comparing, conceptualizing and categorizing data" (Straus & Corbin, 1990, p. 61). I performed this open coding by placing theme notations in the margins of the various transcripts at the fourth reading. I then created file folders labeled with these theme names and cut each transcript into sections according to their themes and
placed them each in a labeled folder. I then read through these coded files and made changes in folders as seemed necessary. I then performed "axial coding." This is the process of taking data and putting them back together in a different way by making connections between the categories. I then needed to integrate my categories and so needed to conceptualize a core category in order to recognize how the other categories related best under the biopsychosocial theoretical framework. I grouped all remaining categories into one of four sections: biological, psychological, social, and overall evaluation. When attempting to place my data within this framework, I realized that there were overlapping areas. For example, depression is considered both a biological and psychological variable. To this end, I then expanded this framework to include an overlap between each category and added a behavioral category as well. This was an ongoing process of reflecting back and forth between the data and my conceptual framework. I then categorized the quantitative data according to these same four sections. These qualitative data were used to provide illumination to the quantitative findings, provide information as to the overall effectiveness of the program, and allow the participants experiences to be understood.
CHAPTER IV

Results

The integrated treatment program for eating problems adopted a biopsychosocial framework for its development and implementation. As others who have adopted this framework have written (Wendorf, 1987; McDaniel, Hepworth, Doherty, 1992), there is a reciprocal, bi-directional process that occurs between the biological, psychological and social realms. Because of this, it seems artificial to describe each factor separately; but for the sake of ease in reporting results, I will do so while also acknowledging the crossover between the factors. In the following chapter, I will reweave the biological, psychological, and social factors that contribute to the etiology, treatment, and outcomes for those experiencing eating problems. However, in this chapter, I will provide a detailed description of the integrated treatment program components, report on the results of both the quantitative and qualitative data, and provide an overall evaluation of the integrated treatment program. Participant quotes were taken from individual interviews and from focus group interviews. Participant goals and attainment scores, stated throughout this chapter, are based on the individual interviews at program completion. Individual goal attainment scores are in parentheses and are based on a scale from 1 (no improvement)
to 10 (goal fully met).

**Biological Component**

The biological component is represented by nutritional counseling provided by a registered dietitian. We did not employ biological measurements (for example, hormone levels) but did examine several factors that help account for changes that could crossover into the biological realm. During the course of the program, the nutritionist provided individual nutritional counseling. Participants received this counseling between one and six times with the median number of visits being two (one participant had one session, six had two, one had three, two had four, and one had six sessions). Counseling appointments were provided at the participants’ request. However, it became clear when analyzing the qualitative data, participants did not feel that they received as much nutritional counseling as they would have liked.

In reviewing the nutritionist’s notes, there were many similarities in the counseling she provided to the participants. All reviewed the four stages of recovery (Appendix W), six principles of the non-diet approach (Appendix X), and discussed the difference between listening to the eating disorder’s voice rather than to her healthier voice. Many discussed trigger foods for binge eating and/or purging, need for self care, and paying attention to the
cues of physical hunger and fullness. In addition, each participant’s current eating was assessed and discussed, and suggestions to modify diets in order to increase carbohydrates, and frequently fat intake, were made. The effect that various nutrients have on metabolism and issues involving exercise were often discussed. Several themes emerged from the participants concerning this aspect of the program: desired changes in eating patterns (discussed more throughout this chapter), need for general nutritional information, desire for personalized nutritional information, and participant concerns.

Eating patterns

Five participants stated that they wanted to change their eating patterns and attitudes towards food. Their goal and goal attainment scores included:

- Balanced food intake throughout day (6)
- Going out to eat with parents (7)
- Eat meals rather than snacking (6)
- Eat off food pyramid (7)
- Eat 2 pieces of pizza once a week (1)
- Think about other things rather than food (6)
- Eat like a "normal" person (5)

In a response to the question of how helpful discussing this topic was for their own recovery, the mean was 4.3 (SD=.71) on a five point scale. (See Table 11.)
General Nutritional Information

Several participants found that nutritional information was very important for their recovery process:

"The nutritional therapy I really, really benefitted from because I never paid any attention to nutrition at all. And all of the sudden I started cutting out my fat, well that's wrong too cause (nutritionist) told me that I don't get much protein at all, so I can lose all the weight I want but if I don't get any protein, I'm losing muscle."

"Nutrition has helped me in that now I'm still learning how to balance what I eat. Eat more protein, and stuff like that. Like before, if you asked me what a vegetable was I knew kind of, but I would call fruits vegetables. I didn't know. I learned now what kind of what I kind of need to eat at each meal. When I'm hungry I've learned what I could pick, which would make me less hungry and feel better.

"I labelled foods wrong, no you can't have that. Lately I've learned that I can't do that cause if you say something is a bad food then I am going to punish myself for eating it."
"I think she did a really good job, ... I went to a nutritionist before and, I guess, a typical nutritionist where she says eat this amount of this and this amount of that and this amount of that. Well, when I told (nutritionist) she was like, that’s not the way that you have a healthy lifestyle, that’s not something that you can live with ... I think that’s a really easy way to adjust your eating habits healthfully but also live with that and change your life. You know change it, you know, not just for your diet."

"She just sort of reinforced to me that I did know what I should be doing. I just needed to get on the right track and do it. It was like the steps to recovery, she went over that and those helped a lot. Just knowing that it goes back and forth, it’s not all just one straight line."

"(Nutritionist) answered a lot of questions about chemicals and things like that, that I didn’t know much about. The steps of recovery too, so I really liked the approach that it was scientific and emotional and spiritual."
Others still had difficulty incorporating their nutritional learnings:

"I count it.. but 30 grams of fat. If I added it to everything else in my diet, it’s like, an ordeal, it never was when I was growing up."

**Personalized Nutritional Approach**

The nutritionist’s personal approach was mentioned as being very helpful and relevant:

"I was afraid it was all going to be just food. Sit down and talk about diet. I was afraid that she was, I didn’t know her at that time, after meeting her I can tell you that it was much more of a personal thing. I was a person and there were more issues involved than just what my body needs. Your body is a machine and you need to give it fuel. I was afraid that someone wasn’t going to consider the fact that there were other issues involved.

"I think that she definitely understands where you’re coming from and gives you her personal point of view, like, she gives you examples of what happened to her too. I think that really helps because you really are like, wow, at least somebody else feels like this."

"For me the biggest thing for me is she helped me
realize I do have a problem. Like everybody else is doing this thing. She gave me some nutritional information that I didn’t want to hear."

"She just helped me realize that everybody has a different body type and not everyone is going to be this perfect size 5 or 6 that’s a model or whatever and that to listen to your body when it’s hungry and when its full.

"I feel she knows me personally, not just talking to someone they don’t know."

"I think it helped that she... takes notes on everything so they can come back and ask you questions about your life and it just seemed more personal. I think that helps - that helps me a lot."

"She was more than a nutritionist, she was Mary Pat."

**Participant Concerns**

In questioning participants about any concerns they might have with the nutritional component of this program, participants responded that they wished they had more meetings with her:

"Making an appointment because our schedule was just
not working."

"I wish I could have seen her more often." Others concurred:
"Yeah, I agree."

"I would want to meet with her more often. I know that she is very busy."

"I had to do with the fact that I didn't get enough meetings. She is very busy and I understand that."

Summary
Changing eating patterns was a goal stated by five participants although 10 participants listed some change in eating as a goal (later reported in behavioral changes). General and personalized nutritional information emerged as important themes for participants' recovery.

At the completion of the program, during the focus group, participants rated various aspects of the nutritional counseling they received. They were very pleased (scores above 4) with topics covered, found this component very helpful and liked the sharing of personal information by the nutritionist. They felt that the availability of the nutritionist and the number of meetings needed improvement. These results are reported in Table 3.
Table 3

Ratings of Nutritional Assessment and Counseling

<table>
<thead>
<tr>
<th></th>
<th>$M$</th>
<th>$SD$</th>
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<tbody>
<tr>
<td>Overall Helpfulness</td>
<td>4.6</td>
<td>.52</td>
</tr>
<tr>
<td>Availability of Nutritionist</td>
<td>2.5</td>
<td>.82</td>
</tr>
<tr>
<td>Convenience of Appointments</td>
<td>3.6</td>
<td>.81</td>
</tr>
<tr>
<td>Adequate Number of Meetings</td>
<td>2.8</td>
<td>1.33</td>
</tr>
<tr>
<td>Topics Covered</td>
<td>4.3</td>
<td>.79</td>
</tr>
<tr>
<td>Sharing of Personal Experiences by Nutritionist</td>
<td>4.8</td>
<td>.40</td>
</tr>
</tbody>
</table>

Five point scale:

5=excellent, 4=good, 3=average, 2=fair, 1=poor
Biological/Psychological Variables

Interoceptive awareness, or the awareness of physical hunger and fullness, and depression are the two variables that intersect the biological and psychological realms.

Interoceptive Awareness

Interoceptive awareness, a subscale of the EDI-2, was measured prior to and at the completion of the program ($M=10.0$, $SD=5.1$ to $M=8.4$, $SD=6.5$). Mean scores decreased somewhat but differences did not show statistical significance (see Table 4). However, despite the lack of statistical significance, several participants discussed becoming more aware of their physical hunger and fullness. Homework assignments were given to several participants by both therapist and nutritionist to make a conscious determination about hunger and fullness and to act accordingly. A food journal was often given in order to help participants to determine their level of hunger and fullness prior to eating. Three participants stated a specific goal of change in their eating. These participant goals and goal attainment scores include:

- Stop eating when feeling satisfied (3)
- Eat when physically hungry (6)
- Pay attention to cues of hunger and fullness (7)

These participants and others discussed the helpfulness
Table 4

Biological/Psychological Variables:

Interoceptive Awareness (IA) and Depression (Dep)

<table>
<thead>
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<th></th>
<th>Pre-test</th>
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<th>Post-test</th>
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<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>Corr</td>
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<tr>
<td>IA</td>
<td>10.0</td>
<td>5.1</td>
<td>8.4</td>
<td>6.5</td>
<td>.61</td>
<td>1.02</td>
</tr>
<tr>
<td>DEP</td>
<td>16.2</td>
<td>9.0</td>
<td>8.6</td>
<td>4.5</td>
<td>.48</td>
<td>3.16*</td>
</tr>
</tbody>
</table>

* p ≤ .05
of examining physical hunger and fullness:

"I’m trying to eat when hungry and stop when full and have had some success with this."

"I feel better trying to stop eating when satisfied but still eats until I’m full."

"I haven’t come away feeling stuffed yet, which is better than normal, and I’ve left food on my plate and stuff like that."

"I’ve been doing better, going back to eating my non-fat food, or fruit. I’m trying to take a piece of fruit every time I leave and organize juice or pretzels and just try to increase the amount of nutritious food as opposed to junk food."

"I come away full though. But not like before, I would come away saying I gotta have that, I gotta have that. I’ll come away yuck, why did I eat so much, almost ready to throw up and I have not done that. ... I’m trying to make myself space things out so I’m eating a lot of other things now... Every time I’m physically hungry I eat but sometimes I eat when I’m not."

In a response to the question of how helpful discussing
this topic was for their own recovery, the average rating for all participants was 4.4 \((SD=0.67)\) on a five point scale (see Table 11).

**Depression**

Depression was also conceptualized as intersecting both biological and psychological realms. No participants were taking any anti-depressant medication although it was suggested to one that she receive a medical examination in order to determine if that might be appropriate. Using the Beck’s Depression Inventory, a statistically significant difference was found between pre-test and post-test means. The pre-test mean was 16.2 (mild to borderline depression) \((SD=9.0)\) and post-test mean was 8.6 (no clinical depression) \((SD=4.5)\) (see Table 4). Depression was conceptualized as feelings of hopelessness, feelings of poor self-worth, and ineffectiveness. These underlying aspects of depression are explored more fully in the Psychological section below. Several participants talked about feeling happier and not feeling as moody. Two participants stated that having a more positive attitude was most helpful in having them meet their goals. In fact, one participant set not being so moody as a goal and felt she was reaching that goal (8).

"I feel happier... The fact that I’ve been getting better, everyone see’s that I’m making progress and that’s reassuring... and if I am getting better I am
reaching my goal I guess, cause I didn’t want to be as moody I guess and I knew that was a problem but in order to not be as moody I had to stop or at least slow down, you know, what I was doing... and I have, and so I got to see the results. So it’s like, I became happier and it made me happy."

Psychological Component

The psychological component of the integrated program is represented by individual therapy sessions. Most participants met with the therapist four times (7 participants), three participants met five times, and one met six times over the course of the program. Most sessions were scheduled every other week and occasionally a participant would request additional weekly sessions. In reviewing the therapist’s notes, there were many similarities in the therapy sessions between all participants. The therapist discussed forms of self care and its importance with all participants, developed coping strategies to deal with stress, explored emotions and feelings, and encouraged journal writing prior to binge eating and/or purging. Some participants dealt more with family of origin issues and others wanted to only focus on the present and future. All participants set goals at the first session, and these goals were reviewed at their final session.
Themes that emerged about their individual therapy sessions were: exploration of emotions, having someone to talk with that understood, goal setting, increased self care (with several components), gaining personal understanding in identifying their needs and attempting to have them met, therapist characteristics, and participant concerns.

**Exploration of Emotions**

Although only three participants set getting in touch with feelings, and identifying emotional needs as goals, many felt that they were out of touch with their emotions and wanted to relearn to identify them. For some, it helped in understanding their food related behaviors.

"Yea, trying to figure out why I’m bingeing ... it’s just given me things to think about like, um, am I eating to numb out feelings, um all of these kinds of assumptions we made have been true. So when I’m sitting down I’m thinking, am I eating because like my boyfriend. He’s over me. And that’s why I wanted to eat, cause I feel bad... I wanted him to still want me even though I don’t want him."

Other participants didn’t really enjoy exploring their emotions but found it had a lot of value in their recovery process:

"This will sound strange. You upset me, you make me angry, or you basically make me look at what’s
bothering me. Just the fact that I’m looking at something that has been bugging me for who knows how long, and I just sort of smoked it over and ignored it.

"Having to talk about it... It’s nice sometimes cause I never talk about it to anyone else, so it’s a relief. At the same time I’m like uuuh." ... It’s like when your mom asks you to do something. You don’t want to do it but you know you have to do it.

Dealing with emotions, even when they didn’t want to, seemed to be useful to many participants. When asked by the focus group moderator, "What do you think were the most important things that you accomplished during individual therapy", some responses involved use of questioning by the therapist concerning feelings:

"She brought up things that I had never really thought of before, like what emotions, I don’t know like "what do you feel?... I never thought about that."

"She would make me mad, I would get really angry. I mean, I wouldn’t like, I don’t think I showed it a lot but she’d ask me questions and I couldn’t answer them because I had no clue what I was feeling. And that would make me mad at myself, not mad at her, but I really had to think."
"She would ask you a question that you would get just totally blown out of your seat ... But it's good because then you answer – eventually form some kind of answer ... I think that you understand something, you figure out what she was talking... and then you realize that, well, she has a good point."

"I think it definitely had to do with, um, it helped you understand the different outlet wires or whatever that made you have this eating disorder or like things that I had never thought."

**Having someone to talk with that understood**

Some participants found being able to share their thoughts without being judged to be helpful in reaching their goals. In fact, six participants listed talking about problems and getting support as being most helpful in meeting their goals. Almost all of the participants had not told anyone else about their eating problems prior to entering the integrated treatment program.

"Being able to tell someone what I think or feel about what happened."

"Having someone to help me understand what I am feeling. To realize I'm feeling things and to have me put into perspective the thoughts I might have. Also,
it's been helpful to just hear that some of my thoughts and feelings are okay.

"The thing I was just saying was safety, I knew that I could say anything and I wasn’t afraid that she was going to say, "You’re wrong for thinking this." It wasn’t like that, I felt very safe, in a way that I could say what I wanted to and say what I was thinking or feeling or whatever... and maybe help me with some more positive aspects of everything ... that was very helpful, there was a big trust factor there."

Goal Setting

Three participants found that setting goals and concentrating on them was helpful in their recovery. When asked at the completion of the program by their therapist, "what was most helpful in having you meet your goals," six participants stated that just setting goals was most helpful.

"Having specific goals and concentrating on them"

"Knowing they (goals) were there and seeing them written down. That’s all it took cause I wasn’t working toward anything before. I didn’t think I was. It is definitely easier to focus and reach the goals."
Self Care

There were several subcategories of self care that emerged from the data: putting self first, less self punishment, asking for what they need, nurturing activities, use of coping strategies. All participants listed self caring behaviors as goals for the program and found improvement in this area yet still wanted to continue striving towards this goal. Participant goals and goal attainment scores include:

- Focusing on what I am doing (7)
- Being more healthy (7)
- Self-acceptance (5, 6)
- Get up and state I feel good (8)
- Give self time in morning (10)
- Compartmentalize eating disorder voice (9)
- Have conversation with eating disorder voice rather than listen (9)
- Recognize positives in life (7)
- Create better environment (8)
- Forgive self for past eating disordered behavior (6)
- Say positive things to yourself (8)
- Self Care (2, 5, 5, 7, 8)
- Don’t punish if don’t eat off food pyramid (5)
- Punish only one day after binge (8)
- Identifying their own needs and attempting to have them
Puttng self first.

"I’ve learned that I have to put myself first in a lot of situations. I can’t get through life putting others first and sacrificing what I need and what I want for them. It’s not healthy for me and I’m not good at it yet, obviously."

"Yeah, I’m getting better at that because everybody else does it. I’ve been noticing that. People do that. People are putting themselves first and you do need to put yourself first, because everyone else is putting themselves first, no one is watching out for you. ... I realize that if I ask for what I need, it’s going to benefit me as well as everyone else in the fact that it will be easier for me to keep giving. I want to be able to keep giving, I don’t want to be resentful about it."

"I’ve been getting better about saying leave me alone. Sort of a time out, which I’ve heard people use to punish children. But it’s kind of nice to say, that’s it, I’ve had it, go away. Taking a nap when I want to. Calling somebody and saying, Hello, I’m going to talk to you and if you don’t want to talk you can hang up
and I’ll probably call right back."

Another spoke about the this component in a focus group:

"She concentrates on dealing with – that we need to ask for what we need... And I just thought it was, I thought it was stupid – I just thought it was a stupid idea, I get what I need, it doesn’t matter. And then I found myself more and more, standing up for myself and telling people what I really felt and, like really asking for things, and I said, "Wait a minute, this is helping me" and I then realized it wasn’t a bunch of bull."

**Less self punishment**

Part of self care was doing less self punishing behaviors:

"Every so often it’s nice to say okay, that’s it, I’ve had it, today is a new day, I’m not doing everything."

"It’s like you miss (exercise) so many months in a row you start to deal with it"

"I’m only punishing myself one day instead of days and days after a binge."
"I'm only punishing myself about half the time after bingeing."

"I think a lot of it (forgiveness) comes from the fact that I just physically feel a lot better. It’s easier to let go of conflicts with yourself. When you can look at yourself and think I look like I’m sick. Well, I don’t think I look like I’m sick."

"Like three or four days later I could still be oooh, which usually resulted in doing it (binge eating) again. Oh, that was good wasn’t it. Now what. Now let’s go for a walk around the block once and we will deal with this when we get back."

**Asking for what they need**

Asking for what they needed was also viewed as helpful:

"The other day I used it in a sentence, I need you to ... It’s the first time I’ve ever really said that, but the point is I did it. I’ve thought about it a lot more, like what do I need, I need to go to bed now. I need sleep. I need maybe a nap. I need to eat heathy."

"Like when I was walking in here today, I was like maybe I could like, maybe I need to be busy or
something, like maybe next semester I'll volunteer a few hours or something."

Nurturing Activities

"I think I try to do things for myself. I try to eat healthy and things like that so I think that's a self caring type thing."

"I didn't know what self care was. I didn't know that little things like making a schedule for myself, I didn't know that something like that would be considered self care... Like well I do little things and I've been asking for more things that I need - that's a big deal.

"Like last year I was a mess, not a mess, but I would get up 20 minutes before class and just run to class you know. And this year I haven't done that at all, I've been getting up at least an hour, I mean usually I get up an hour and a half. Like today, I got up at 8 and went to an 8:30 aerobics class to 9:30 and didn't have class until 11:00. So I came home and took a shower and got myself organized and went to school."

"I'm getting better about that (self care and nurturance) and I'm realizing too that it's necessary.
I need to keep working on it but I've come a long way as well."

**Coping strategies**

Using coping strategies for dealing with stress contributed to less binge eating/purging and participants recognized the lack of self caring activities contributed to more self destructive behaviors. All participants created personalized lists to help them when they were feeling stressed, ready to binge and/or purge. Two participants felt that knowing there were strategies and options available to them was most helpful in meeting their goals.

"Because it is less of an excuse to binge. Like we talked about my bingeing, I deserve it. So it's less than excuse. So if I take a long shower, go for a walk, or do my nails, I do that for myself and that's good."

One participant reported having had a bad two weeks in relation to binge eating and purging and could identify that she stopped practicing self caring activities.

**Personal Understanding and Identifying Needs**

In response to a question by their therapist at the completion of the program as to what was most helpful in meeting all their goals, six participants stated that having a better personal understanding helped them the most. For three participants, gaining some personal understanding into
their food behaviors allowed them to take better care of themselves and be less self destructive. These three participant goals and goal attainment scores were:

- Getting in touch with own feelings (8)
- Stating own needs (6)
- Identifying emotional needs (2)
- Asking for what you need (5)
- Identifying physical needs (8)

"Yeah, well I didn’t realize this time thing would be such a problem, it wasn’t so much the food that I ate or that I ate a lot of it, it was the fact that I wasn’t used to being where I was and having all that free time. Christmas will be easier, because I’ll know, I’ll be aware of what’s going on and strategize ahead of time."

"I guess being able to identify it (feelings). I mean you never really think how do I feel right now, unless you said when you are really, really happy or something. But, just other feelings like stress. Cause you never really know you’re stressed, I think, I never do, unless you think about it."

**Therapist Characteristics**

Several mentioned that they thought the therapist was well-informed.
"She knew everything possible that you and I could tell her and would ask me later in a certain way."

"I mean, it's something about her therapy. She's got a smile - I mean, somebody you can just look and they're very trustworthy, or they're very warm, and very compassionate and just like that and she's just one of those people, you know, it's a quality about her."

"I knew she was a student and I didn't know how competent she was going to be. Obviously she is pursuing a high degree and she must have some competence. I didn't know how comfortable she was going to be with her knowledge. I was really impressed."

**Participant Concerns**

One participant did not find the therapist's questioning useful:

"I hate to say something bad here but I really - I really did get messed up and I would say like, "I don't know, stop asking me. And I would get really mad because and sometimes I thought she would get me to go crazy or something..."

Several mentioned during their focus group that they would have enjoyed longer sessions and on a regularly
scheduled basis (each session on the same day and time).

Others were concerned about the program ending:
"My concern was her (therapist) leaving and the individual therapy stopping. Trying to keep the group going but..."

Other Measures of Psychological Functioning

Several other factors (effectiveness, impulse regulation, perfectionism, self esteem, commitment to change, and confidence for recovery) are considered within the psychological realm. Although they all did not emerge as separate themes, quantitative data did support the literature in that most of these variables (effectiveness, perfectionism, impulse regulation, commitment to change, and confidence in ability to change (hopefulness) showed statistical significance between pre and post-test means. These results are reported in Table 5. Through the use of participants’ voices, we can better understand these quantitative measures.

Effectiveness, impulse regulation, and confidence in their own recovery did emerge as themes. All of these goals are associated with feelings of being in control of one’s life, not attempting to meet someone else’s goals for them, and feeling in control.

Effectiveness

Effectiveness and impulse regulation are viewed as
Table 5

Psychological Variables: Effectiveness, Perfectionism, Impulse Regulation (IR), Self Esteem, Commitment to Change, Confidence in ability to change

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Corr</th>
<th>t-value</th>
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<td>$SD$</td>
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<td>Effectiveness</td>
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<td>2.5</td>
<td>8.5</td>
<td>1.1</td>
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</table>

* p ≤ .05
connected in a drive for more balance and control in their lives. Seven participants set feeling more effective as goals:

More study time (8)
Balance between school and fun (6)
Better, firmer decision maker (5)
Study 3 times/week (10)
Feeling more comfortable at Tech (9)
Be honestly secure (6)
More self assurance (3)
recognize and arrange for needs (9)
Use coping strategies to deal with stress (6)
More balance in life with work, fun, food, sleep (10)

**Impulse Regulation**

Three participants listed goals associated with impulse regulation and their goal attainment scores were:

think more and act less impulsively (5)
schedule activities during weekend (6)
Create schedule for the week (10)

A few participants spoke about their improvements in the areas of feeling more effective and regulating their impulses. A general consensus was that scheduling and planning ahead helped them to feel more in control of their lives:

"My entire life I’ve never been able to make
decisions... Things just take so long for me to decide" and then went on to say "When I first got home I studied every single day. So I’ve just realized it’s got to get better. I’m the type of person when something’s gotta get done, I want it done. I just need to decide about things ahead of time."

"I feel really good about what I worked through it. It took so long and I kept blaming that on like her roommate was taking so long to move out and things like that. But I was really stalling, I realize that now. Just cause I was afraid of the change."

"Just realizing that I have to set time out for myself, cause I’ve always had someone else structure my time."

A better awareness of themselves made them feel healthier and more powerful:

"I think I have a pretty good grasp of when I’m talking nonsense. I know when my healthy voice and my eating disorder is coming in, but controlling that is a different thing but... it’s getting better."

Confidence in Recovery

This variable appeared to be an important one for recovery. On a ten point scale, 1 indicating no confidence
for recovery at all and 10 indicating total confidence for recovery, pre-test means for this variable was 7.3 ($SD=2.5$) and post-test means were 8.5 ($SD=1.1$). This indicates that participants felt hopeful and confident in their own ability to recover prior to entering this program and throughout the course of the program, their scores increased.

"I’m not hopeful. Hope would be if I wasn’t sure I could get there... It just seems so abstract right now. It’s sort, I want to get there but I don’t know where I’m going... The path is clearer, but it seems so much bigger now. I think that’s what it is."

**Summary**

Several important themes for recovery emerged concerning individual therapy. Having a safe context in which to explore some very personal feelings, set goals, and gain understanding appeared to be very important. In addition, increased self care emerged as an important component for recovery.

At the completion of the program, during the focus group, participants rated various aspects of the individual therapy they received. They were very pleased (scores above 4) with availability, convenience, and number of meetings with the therapist, the topics covered, and found this component very helpful. These results are reported in Table 6.
Table 6

Ratings of Individual Therapy

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<td>Adequate Number of Meetings</td>
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<tr>
<td>Topics Covered</td>
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<td>.52</td>
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Five point scale:
5=excellent, 4=good, 3=average, 2=fair, 1=poor
Psychological/Social Component

Variables placed in the psychological/social realms included body image, asceticism, and the degree to which they viewed their eating as a problem. These results are reported in Table 7.

Asceticism

Asceticism was measured by a sub-scale on the EDI-2. It is the tendency to seek virtue through the pursuit of spiritual ideals, such as self-discipline, self-denial, self-restraint, self-sacrifice, and control of bodily urges. There was a statistically significant difference found for pre and post test means ($M=9.5$, $SD=3.5$ and $M=6.4$, $SD=3.7$). See Table 7 for a reporting of this result. Most likely, the emphasis on self care and self promotion had some effect on this score change. The degree to which they felt their eating was a problem did not statistically change between pre and post-test means. However, the negative correlation score indicates that those who initially believed they had a large problem, rated them as less problematic and vice versa.

Body Image

The measures for drive for thinness and body dissatisfaction are viewed as body image. Poor body image is frequently, if not always, an accompaniment to eating problems. Two subscales of the EDI-2 (drive for thinness
Table 7

Psychological/Social Variables: Drive for Thinness (DT), Body Dissatisfaction (BD), Asceticism, Degree of Problem

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Corr</th>
<th>t-value</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>DT</td>
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<tr>
<td>BD</td>
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<tr>
<td>Asceticism</td>
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<td>6.4</td>
<td>3.7</td>
<td>.63</td>
<td>3.38**</td>
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<tr>
<td>Degree/Problem</td>
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<td>1.7</td>
<td>5.5</td>
<td>1.4</td>
<td>-.51</td>
<td>-.55</td>
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</table>

* p ≤ .05

** p ≤ .01
and body dissatisfaction) were used for quantitative data analysis and both showed statistically significant differences in mean scores prior to and after completion of the program. Most spoke about feeling better and more accepting of themselves, however, post-scores still showed high levels of body dissatisfaction.

Certain group activities were focused on body image, and body image was also explored in individual therapies. A frequently asked question was, "what would you be doing differently if you weighed (whatever their magical weight was)?" And in response, "when are you doing that now?" Many participants were asked to focus on some physical aspect they liked, and some were asked to give themselves compliments prior to leaving the mirror. One participant found that making and reciting a positive script to tell herself was helpful. Many were asked to explore other aspects of themselves that contribute to self esteem in addition to their physical self esteem. Several wanted to wear more fitted clothes as a goal, however, most completed the program not having accomplished that goal. Goals associated with body image as well as goal attainment scores given by three participants were:

Wearing more fitted clothing (1,9)
Say like the way you look before leaving mirror (7)
Becoming attractive (9)
Firm up through exercise (3)
Accessorizing more often (10)
Wear make-up (5)

Physical appearance was the key to their own self acceptance. Some participants found themselves making subtle shifts during the course of treatment:

"Before I was just looking at my body. I was looking at the physical aspects and not the inside."

"I put a 9 down for becoming more attractive. I have been accessorizing more and wearing makeup, I feel better."

"I think I am not comparing as much, just looking at myself."

One participant talked about her own negative self talk regarding her body image:

"I see myself getting bigger. What I do is I think I was such an ass to wear that outfit last week. Look at me in it, and I see how I look in it. I was so confident last week and I had no reason to be."

Two participants felt divided:

"Sometimes "better" in my head means more healthy and
like yourself more and then the other side of me says "better" in you need to lose 10 pounds."

"It’s hard because I would like to lose weight, but it’s like well is that my eating disorder or ... it’s not like I would like to lose so much weight but I would like to lose 8 pounds or 5 to 10 pounds."

**Summary**

Negative body image and basing one’s self worth on physical appearances created problems that led to difficulties for participants. Although participants significantly improved their scores on two body image subscales of the EDI-2, their overall scores still remained high. In addition, body dissatisfaction scores had a very high correlation (.92), meaning that those who began the program with the worst feelings about their bodies, still had the worst feelings.

**Social Component**

The social component of the integrated program is represented by the weekly group sessions. This group was co-led by the therapist and nutritionist. Each week had a different topic/theme determined by the co-leaders and assignments were usually given to participants. Both groups met the same number of times, discussed the same topics, and were given the same tasks. Group session topics included:
Session 1.
Introduction of history and meaning of integrated program
Discuss concept of confidentiality and commitment to program
Begin process of identifying personal goals and their relationship to their disordered eating
Begin process of identifying with group members
Homework: Write a letter to their eating disorder

Session 2.
Discussion of past week in relationship to beginning this program
Discussed group dynamics
Listed positives and negatives of disordered eating
Discussed disclosure of disordered eating with others
Read individual letters to their eating disorder

Session 3.
Discussed individual disordered eating behavior
Read individual letters to their eating disorder
Visualization of food (hunger and satisfaction)
Homework: try to recreate visualization
       use available support
       try to stay in touch with their body

Session 4.
Continued with letters to their eating disorder
Discussed homework
Discussion of conflict, people pleasing, and selfishness of the eating disorder
Continuum of eating disorder
Homework: Think of defining yourself or your day without using food, pounds, inches, etc... to do so

Session 5.
Discussed self care and Halloween
Discussed homework and their self definitions
Visualization of body talk
Homework: Make list of things you like about yourself

Session 6.
Discussed positive qualities and each member added one for each other
Listed what everyone thought they needed for recovery
Homework: Think about Thanksgiving problems and strategies
Session 7.
Discussed self care issues
Each participant listed what they can do for themselves this week
Listed potential barriers for going home for Thanksgiving and strategies
Discussed asking for what they need

Session 8.
Reviewed Thanksgiving break in relation to their barriers and strategies
Visualization of Fork in the Road
Stages of recovery
Ending Ceremony

Some common themes that emerged from the participants during their individual interviews and focus group interviews concerning group therapy included: importance of sharing with others, activities, and participant concerns.

Importance of Sharing with Others
Sharing their personal thoughts and feelings with others created a sense of comradarie. Three participants stated that feeling validated was most helpful in meeting their own goals.

"It was just more comfortable to know you’re not alone and I think that was a good part of it."

"I really liked the group cause everybody shared their story, but you felt special cause (nutritionist or therapist) asked you a question and would ask for your side and we would all listen and learn and we’d help. She just went through everybody and nobody was left
"I do think it was helpful because I had talked to one girl about it before who also was the same somehow I helped her stop, but I don’t know how. But otherwise people would just listen to me talk and everybody here knew where I was coming from had my same problem or similar and we were all afraid of the same things."

"Each week we had a different project to do, that made us look at things in a different way. It would bring us all together and make us feel like we weren’t alone. I like how they approached it in so many different ways, like every group was a different approach it seemed like. I thought that was neat."

"... and people, it really helps them, it makes you feel more comforted when someone else is feeling the same feelings as you. And then once we all talk about it and explain how we would deal differently or how it makes us feel in a different way. I don’t know ... I think it’s good to talk everything out."

"And I found that even if I didn’t talk, I think I got just as much and listen, you know it wasn’t required
that - you didn’t say everything you thought and feel sometimes, I didn’t say much. I guess it’s like I’m more of a listener and that was good for me."

"Just knowing I wasn’t alone and that was a big thing for me. I knew that if I didn’t want to say anything that I didn’t have to... I thought it was very helpful."

"Nobody’s going to put you down or think that you’re the oddball and no one because we all have different more or less problems, or whatever, but we all have an underlying understanding that everyone is equal and no one is getting judged. Like we feel like the whole world judges us, outside of this group."

"You feel safe because you’re all on an equal level and it’s not a bad level, you know, it’s a bonding level that’s making us all stronger."

"I can look forward to the future because I feel I’m a strong enough person because of this group."

"I think that acceptance is, was, I think that acceptance was a big deal, acceptance of each other in
the group, acceptance of ourselves, but if one of us made progress we were all happy for each other."

"No jealousy or spite or anything, that we see out and about in the world every day. So if we could live in this little room..."

Several assignments were mentioned as helping them accomplish their goals:

"You don’t know what you’re going to think, you have no idea what’s going to pop into your head (regarding visualizations)."

"I just thought that those visualizations were very clear and I’ve never known anything like that, you know, I’ve never had inspiration, like you know, all those things that really make you think and I thought it was really very beneficial and think that the next time she does this she should definitely keep it.

"I think the most helpful group we did was when we said to each other and everyone went around the room and said something about one person ... that really helped, we did that a couple of times.""We did an activity that was to prepare us for Thanksgiving. I think that was a
good activity because we went around the room and everybody said what they thought their problem at Thanksgiving was going to be. And it was kind of neat, because we were all supposed to give everybody else suggestions as to how to get through these problems at Thanksgiving... and then when it came to yourself, you got all these ideas you never really thought about... but also, it kind of gave you the idea that... it seems so easy to help everybody else... It's just a matter of realizing it... It's the idea that I can solve my problem."

"Hearing how others saw you makes you realize the good things about yourself instead of the fat thighs or whatever you know you think are the center of your life, which is stupid because you don't look - I found that I started to look at myself as more of a person, instead of an object. You know, I realize how others perceive me as who I am and not just thighs or legs."

"How we need to make self care our priority because I never even thought of that before."

"You just have to listen to yourself and if you can't get the answer then ask somebody else."
Participant Concerns

Several participants discussed confidentiality as an initial concern:

"I have concerns because when I first came there were people there and then people would come and go. I came a little late and there was a little anxiety. When new people would come in I would think now wait a minute, I have to start all over, and learn all this. More people that I don’t know."

"It was like disposable group or something. At least for a little while."

"I was sharing things that I won’t even share with my parents. And to have some people come to one meeting and not come again, I felt vulnerable.

"I think one thing, the first thing I was worried about were the people, and when I got in there I mean it was very confidential and it wasn’t a big deal. Everyone feels the same way, nobody’s going to go out and say, guess who I go to group with."

"It wasn’t, everything was going to stay in that room and that’s that."
Several participants spoke about their concern with not knowing what "group" was going to be:

"I think group was a concept that was amazing. I knew everybody had concerns, and I didn’t know how it was going to happen or what was going to happen. I don’t know anything about the way groups work. I wasn’t concerned with that after the first time. It was like the fear of the unknown, basically."

"I was scared the first time, but once it got going."

"I mean before you walk into group you have no clue what’s going to happen, and if you’re going to get along with everybody. And I thought from the first time I knew I liked it and I was going to go back."

Some participants had mixed feelings about group:
"I think I get a lot out of it but at the same time, I don’t want to go."

"I don’t know if I benefited as much from the group, because it was almost like I felt bad ... I never wanted to say if I was doing well or not because if somebody else wasn’t doing well..."

Summary

Having a safe context in which to explore themselves
with others who were in a similar situation appeared to be very helpful in their own recovery. At the completion of the program, during the focus group, participants rated various aspects of the weekly group therapy meetings they attended. They were very pleased (scores above 4) with the number of meetings, with the topics covered, and they found this component very helpful. These results are reported in Table 8.

**Other Measures of Social Functioning**

Quantitative measures of social functioning included interpersonal distrust, social insecurity (two subscales of the EDI-2) and family relationships. These variables were statistically analyzed to determine whether significant changes occurred between pre and post-test scores. No significant differences were found for interpersonal distrust, social insecurity, and family relationship scores (see Table 9) however, themes of social connection and interpersonal relationships emerged from the qualitative data.

**Social Connectedness - Interpersonal Relationships**

Seven participants specifically stated that they wanted to increase their social connectedness and improve on their interpersonal relationships. Their goals and goal attainment scores are:
### Table 8

**Ratings of Weekly Group Therapy Meetings**

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<td>Topics Covered</td>
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Five point scale:

- 5=excellent, 4=good, 3=average, 2=fair, 1=poor
Table 9
Social Variables: Interpersonal Distrust (ID), Social Insecurity, Family Relations

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<td>Social Insecurity</td>
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<td>5.3</td>
<td>4.9</td>
<td>4.5</td>
<td>.73</td>
</tr>
<tr>
<td>Family Relations</td>
<td>8.5</td>
<td>9.5</td>
<td>8.4</td>
<td>8.0</td>
<td>.75</td>
</tr>
</tbody>
</table>
Smiling more (7)
Making eye contact (8)
Focusing on others (7)
Focusing on surroundings and others (9)
Go out in the evening with friends (9)
Become involved with others (8)
Stay in touch with friends and family from home (6)
Think more about partner and child (10)
Continue partnership (10)
Go out with friends (10)
Go out with partner (8)
Have good relationship with boyfriend (10)
Getting more connected with others (3)
Being more direct with others (6)

Many found being with others helped them decrease/omit binge eating and/or purging. The isolation of being alone at home, particularly in the evenings, was a problem shared by many of the participants. In fact, many found that being with and/or interacting with others was on their list of coping strategies. Both the nutritionist and therapist continually stressed the need to reach out to other people rather than reaching out to food.

"I try to get around people, because I won't binge around people, I know that from experience. Or just leave the door open to the room so people can walk by
as a deterrent. It helps cause it is an effort to go bingeing. A lot of times you are thinking about it, but if you have any sort of distraction you can challenge it."

"See that’s where I’m really an introvert. I like to be left alone. But there are a lot of times that I will get depressed and I will stay down if I let myself be alone."

"I feel good about the connections I’ve made. I know I was going back, cause the entire situation (with a friend at home) changed my attitude towards friends and trusting people. Now that I’ve sort of figured out, not put to rest the situation, but I feel better about being able to trust people. It was something I was avoiding.

**Family Relationships**

Although means on the family relationship form did not significantly change, some scores are worth discussing. Three participants had pre-test scores (> 10) that indicated difficult relationships with their families. Two of them still had scores greater than 10 at post-test and one participant’s score decreased to eight. Two participants had pre-test scores (< 10) that indicated very positive
family relationships. However, at post-test these two participants had scores greater than 10 (12 and 21). I believe that these two participants gained a more realistic perception of their family relationships so that they could now effectively work toward building more honest, positive family relations.

Talking about family relationships was an integral part of eight of the participant's therapies. Two participants also mentioned some aspect of family relationships as a goal for this program:

Less tension with mother (1)
Resolve conflicts at home (8)

Family history was explored with all participants. However, not all wanted to continue looking at families for better understanding their problem or their solutions. At least four participants found that exploring family history helped them gain a clearer understanding of themselves in relationship to their eating problem. These participants, felt that their families could frequently provide a context for their problem eating and for recovery from them.

A dominant theme for participants was differentiating from home, an appropriate task for this age group. There appeared to be unresolved issues from the past for at least two of the participants.

"There was a lot of distance between myself and my
family when I came here cause I thought that would be the right thing to do. College, I don’t need to talk to my parents anymore. That was insane, so I picked up on that."

"There are issues for my mother, but the only thing that really bothers me, the attitude I get. It doesn’t bother me if she’s just leaving me alone, it really doesn’t both me, like when I call from down here it seems like things are good cause like she’ll give me money and stuff. And I feel bad that she’d do so much for me and then hold so much of a grudge against me."

Another participant was beginning to deal with her anger and sadness about her childhood and her father’s abusive past with her mother and herself. She was able to identify what she needed in terms of her parents and was beginning the process of communicating that directly to them.

Many were focusing on identifying their needs and asking family members to understand/respect their needs: "I said I have a letter for you and I need you to read it... I needed them to not have the issue of eating such a big thing and like not to worry. I would greatly appreciate it if I wasn’t told what I should and shouldn’t be eating, because I have it under control now... I need to deal with it myself, not
having somebody else telling me what to do."

Another participant spoke to her mom and her needs at home and mom very receptive.

Others tried to communicate with parents (usually mothers) but did not find themselves understood:

"I tried to have a conversation with my parents about my past eating behavior and my current injuries but they just don’t seem to understand."

Others found difficulties with bringing their "new" ideas and behaviors home and maintaining their newfound sense of themselves. This was a continuing theme with those beginning the recovery process.

"I need to figure out how to bring my new self home. I went 17 days without purging before going home and I did terribly at home." .

When participants were asked how helpful talking about social support issues were for their own recovery, the mean response was 4.1 (SD=.83), on a five point scale (see Table 10). In addition, participants rated how helpful discussing certain topics were for their own recovery. These results are also reported in Table 10.

**Behavioral Aspects of Change**

Psychological changes in eating problems are typically
### Table 10

**Individual Topics Discussed and Helpfulness for Recovery**

<table>
<thead>
<tr>
<th>Topic</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>History and rationale for program</td>
<td>4.0</td>
<td>.71</td>
</tr>
<tr>
<td>Setting personal goals</td>
<td>4.8</td>
<td>.40</td>
</tr>
<tr>
<td>Write letter to Eating Disorder</td>
<td>3.6</td>
<td>1.12</td>
</tr>
<tr>
<td>Pros and cons of disordered eating</td>
<td>3.7</td>
<td>1.12</td>
</tr>
<tr>
<td>Visualization of food</td>
<td>2.9</td>
<td>1.45</td>
</tr>
<tr>
<td>Behaviors of conflict avoidance</td>
<td>4.4</td>
<td>.50</td>
</tr>
<tr>
<td>and people pleasing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>continuum of Eating Disorders</td>
<td>4.5</td>
<td>.69</td>
</tr>
<tr>
<td>Visualization of Body Talk</td>
<td>3.8</td>
<td>1.23</td>
</tr>
<tr>
<td>Looking at Personal Strengths</td>
<td>4.6</td>
<td>.67</td>
</tr>
<tr>
<td>Needs for Recovery</td>
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<td>.52</td>
</tr>
<tr>
<td>Coping strategies and skills</td>
<td>4.4</td>
<td>.67</td>
</tr>
<tr>
<td>Identifying and addressing self care</td>
<td>4.6</td>
<td>.69</td>
</tr>
<tr>
<td>Barriers/strategies for Thanksgiving</td>
<td>3.6</td>
<td>1.29</td>
</tr>
<tr>
<td>&quot;Fork in the Road&quot; visualization</td>
<td>4.4</td>
<td>.88</td>
</tr>
<tr>
<td>Ending Ceremony</td>
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<td>.73</td>
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<td>Family themes</td>
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<tr>
<td>Concept of physical v. emotional hunger</td>
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<td>.67</td>
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<tr>
<td>Reflections on past week</td>
<td>4.0</td>
<td>.89</td>
</tr>
<tr>
<td>Evaluating and changing food behaviors</td>
<td>4.3</td>
<td>.71</td>
</tr>
<tr>
<td>Social support issues</td>
<td>4.1</td>
<td>.83</td>
</tr>
</tbody>
</table>

**Five point scale:**

5=excellent, 4=good, 3=average, 2=fair, 1=poor
accompanied by behavioral changes as well. Behavioral changes that emerged from both the quantitative and qualitative data included exercise, binge eating, and purging behaviors. Pre-test and post-test data from the EDI-2 symptom checklist were compared and the results of these analyses are reported in Table 11.

Exercise

Three participants were using exercise to control their weight. The mean scores for all participants at pretest for number of times exercise per week was 5.7 and at post-test was 4.4. This was a significant difference between group means. The number of minutes of exercise per week and how often they exercised to control weight did not statistically differ between pre and post tests. However, for the three that were using exercise as their purge, the number of times per week did decrease (from 14 to 10 times, from 7 to 6, and from 7 times to 5 times.) In addition, they changed the percentage of the exercise that was aimed at controlling their weight from a mean of 5.3 to 4.3 (4=50-75% and 5=more than 75%). For the entire group of participants, this mean number changed from 3.9 to 3.5, a non-significant difference. Three participants set goals around the issue of exercise:

Exercise 3x/week (10)
Become more active (1)
Table 11

Behavioral Variables: Exercise, Binge eating, Purging

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th></th>
<th>Post-test</th>
<th></th>
<th>Corr</th>
<th>t-value</th>
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<tr>
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<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
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</tr>
<tr>
<td>Exercise/week</td>
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<td>4.4</td>
<td>2.3</td>
<td>.70</td>
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<td>Minutes/exercise</td>
<td>39.4</td>
<td>25.0</td>
<td>44.6</td>
<td>18.0</td>
<td>.63</td>
<td>-.89</td>
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<tr>
<td>Exercise for weight control</td>
<td>3.9</td>
<td>2.3</td>
<td>3.5</td>
<td>1.6</td>
<td>.46</td>
<td>.57</td>
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<tr>
<td>Binge/week</td>
<td>2.8</td>
<td>2.0</td>
<td>2.3</td>
<td>2.1</td>
<td>.93</td>
<td>1.87*</td>
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<tr>
<td>Control/bingeing</td>
<td>3.8</td>
<td>2.6</td>
<td>1.7</td>
<td>2.4</td>
<td>.36</td>
<td>1.29</td>
</tr>
<tr>
<td>Purge/week</td>
<td>2.3</td>
<td>7.0</td>
<td>1.6</td>
<td>4.7</td>
<td>1.00</td>
<td>1.00</td>
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</tbody>
</table>

* p ≤ .05
Miss exercise without guilt (8)
Healthy exercise 10x/week (7)

**Binge eating**

Eight out of 11 participants wanted to change some aspect of their binge eating behaviors and felt that they were making good progress towards that goal. Their mean scores for binge eating per week decreased from almost three times (2.8) to a little over two times (2.3), and this difference was statistically significant. However, there was a high correlation between those scores (.93) indicating that those who were binge eating before were still binge eating. However, participants did feel that they were binge eating less and on better foods.

Decreased binge eating (3, 5, 7, 8, 9, 10)
Smaller binges (8)
No binge eating (6)
Better binge eating - not as much food, healthier food (5)

In addition, when asked if they felt out of control when they binged (a diagnostic criteria for bulimia), their pretest scores were 3.8 (3=sometimes and 4=often) and their mean post-test scores were 2.7 (2=rarely). This was not a statistically significant difference but did show a directional change.

There was little consensus about what constituted a
"binge":

"I can’t change my definition of binge eating but I haven’t had what I used to call a binge. Like all out eat, and eating cause I’m bored or whatever. I haven’t actually done that at all... Like I can’t remember the last time I actually binged. But, even when I ate those muffins, I ate two for breakfast and lunchtime the rest. So, I feel like I haven’t directly gone to food to make myself feel better, but a lot of times I overeat which could be considered a binge. But, I have a difference between over eating cause you’re not conscious of it. You’re not eating to feel good, you’re eating cause it’s there. I think a binge is when you turn directly to food, so I haven’t done that."

"I could eat just a tiny thing and just go (vomit). But I know bingeing isn’t characterized by a lot of food."

Some found themselves bingeing less:

"I don’t do it as often cause I realize it’s bad. I’m starting to get that into my belief structure. It’s time to grow up sort of thing."
"It's gotten better and I wrote as well that my binges are not as long, not as much food, and I'm usually making better choices. Like instead of just going for two candy bars, I'll eat popcorn and something else... It's still a binge but it's not as bad... I don't have to feel as guilty afterwards."

"I'm going to say a 5 (scaling score), like straight in the middle. I've got a long way to go, but I've gotten a lot better, so I'm halfway there kind of thing."

"At Thanksgiving I ate up until a point it would just be something I wouldn't do and I would start thinking, when was the last time? And it's kind of a great thing to think that I don't know when the last time was. Yes, this is fantastic, if I can't remember it has to have been a while ago."

"It's (bingeing) down. It's farther apart than once every two weeks. It's probably closer to once every three weeks or so. I think it had been almost three weeks before I went home."

Purging

Five participants were regularly purging prior to this program. Three through over-exercise and two through
vomiting. Although no statistically significant differences can be reported, improvements in individual's purging did occur. One participant was vomiting about 21 times per week prior to the program and during the course of treatment, experienced her first week of abstinence. After completing the program, she was purging between 3 and 14 times per week, having several abstinent days. Another participant was purging between 7 and 10 times per week. During the course of treatment, she went three weeks without purging. At post-treatment, she was purging an average of 3 to 4 times per week with days and even weeks of abstinence. One participant was not purging at the beginning of the program although she had a long-term history of doing so. She was not purging due to a pregnancy and nursing of her infant child. However, she purged once the week prior to the ending of the program. Two of the participants goals and attainment scores related to purging included:

Less purging (6,10)

No purging (6)

"I know that it's better than it used to be but I know that it's not better than... it's kind of in the middle and I probably should have put a 5 there (rather than a 7) it's just that I noticed so many changes that I had to put it higher because it's been making a lot of difference but working has made it hard."
"Probably a 6 (no purging) cause I've got a long way to go. I think that's a realistic goal, I hope it is."

**Overall Evaluation of Integrated Program for Eating Problems**

Participants met with their own group for a focus group interview. During these interviews, they were asked several questions about their perceptions of the integrated treatment program. Semi-structured interview questions were used and are shown in Appendix R.

"*Please share how you found out about this program.*"

Most related finding out about the program through flyers on campus and class announcements. The listing of characteristics on the flier created interest in participating for several of the participants. Nobody mentioned the advertisement placed in the "Collegiate Times", the most expensive of the advertising employed.

"*How was the program explained to you? What did you think of the amount of information that you received?*

In response to whether the program was effectively explained and whether they had enough information, all comments indicated that they felt they were well informed.

"*What made you decide to participate in the program?*

Some participants had previously planned to become involved and others hadn't really thought about it. Most were tired of the way things were and wanted to change.

"I think as a freshman I felt sort of out of sorts in a
way. This is something I was feeling before I cam to school anyway and I wanted to get involved in some sort of therapy and in some sort of group. I had called counseling services about it but I hadn’t really gotten a lot of information from them."

"I just thought it would be good to help me. Cause I knew I wanted to go about some route in finding some opportunities. It was a good option that was there."

"I didn’t like the way things were... I was tired, I wanted a change."

"I think for me, I knew my energy was getting worse, so I was going to try almost anything I could. And this gave me an opportunity to try something different... it helps you realize that you’re not alone and that to me was beneficial... It helped me integrate my thoughts and show me that they were incorrect."

"I just wanted to change my life. I wanted to understand why I had been feeling certain things and I wanted to stop them."
"I did it because I knew my actions were going to affect someone else" (she was breastfeeding her infant)

Some found themselves reevaluating their behaviors after reading flyers posted on campus:

"On the fliers it was a, can you relate to any of these things, it had a list and I went through it. It wasn’t just one or two, it was more than half of the things. I was oh, I do that. I guess I hadn’t thought about it as being something wrong. It was just something I did. So, it was like oh my, I have a problem. I’ll go see and find out."

"I did not think I had a problem. I mean I knew that there was something going on but I didn’t think it was really a total problem. And then I came to group and then hearing other people talk about their problems, I realized that I had the same thoughts and feelings, maybe I didn’t have the same problem as they did, but similar and it just made me realize that yeah, I did have a problem and I needed to do something about it."

Some were just ready:

"Actually, if I hadn’t gotten into this myself, if
somebody had tried to force me into it, I wouldn’t have
gotten anywhere if I hadn’t wanted this and done it on
my own. Unless you want help it’s not going to do you
any good."

"Disordered eating can be a very private and difficult issue
for many people to talk about, during the course of this
program would you please share any moments you may have had
similar to this?"

In response to questions about continuing in the
program after they had begun, the sense of similarity and
understanding between participants kept many involved.

"Just because I knew I was in a room full of people
that had similar or the same kind of concerns. I also
knew that, a lot of growth can come from sharing."

"When you realize you’re with people who have the same
problem, it’s easier to talk to them, because you can
relate to them and they can relate to you. An yeah,
they’re not going to think anything bad about you."

"I think that I almost enjoyed talking about it because
I haven’t talked about it to anyone else and there was
sometimes when somebody else made me realize it wasn’t
just me, and what I was thinking people would agree.
Just, just talking about it made me feel better."
"People acknowledged my concerns."

"I lot of times you talk to someone else about it, like your parents, and they never really understand."

Others held back during the course of group therapy:
"I didn’t always say what was on my mind. I know I didn’t, honestly."

"A lot of times I’m not exactly sure what I’m feeling. I noticed that in the last group, it’s like what’s wrong, I just don’t know. I’m not ready to figure out what the real problem is or I’d just rather not think about it."

"I just didn’t want to talk about it. Sometimes I just don’t feel like talking about it. It’s hard to talk about things, it’s almost bad to hear yourself say it. You don’t want to say it out loud."

"I didn’t want to face the emotions that would come, getting stirred up."

"I understand there were a number of forms for you to fill out for this program, what was that like for you?"

Participants responded with both positive and negative
comments. Some found that the forms provoked thought and were helpful:

"The first time I thought it was really interesting, just because of all the questions and the ways they went about asking them. I was like whoa. That was difficult the first time. the second time I just whipped these out, my answers weren't changing that much. I know it was part of the thing, it didn't bother me, it was just repetitious you know. I thought they were pretty interesting. Made me think about the problems, the ideas that went along with it, the different aspects of it. Just different questions."

"I think that some of the questions on there I had never even thought about or correlated with my problem, you know, like, family, like the way the questions were about how your relationship with your family. I had never thought about that and um just actions that you have or thoughts in your head like how you feel about yourself, over all."

"They made me think. I hadn't really had, it had a great impact on me because I was like, wow, I don't know how I feel, or I realized that a certain way that I felt about who I was, or certain feelings I had, made
me realize that wow, I do have that. And you don’t think about it, you just put it in the back of your head, just avoid it."

Some liked having to take the same tests both before and after completing the program:

"I think the second time around helps you to realize how you answered your questions differently, what you learned from the program."

"I noticed the difference in what I put down the first, remembering what I put down the first time, from what I put down the second time. And some of them were the same, but some of them were good in the same and some of them made me realize that I needed to work on those points further. But others had been changed for the good, I think."

"I thought there was a big deal. Because, I don’t know, I guess I made lot of progress or I was just in a better mood... I don’t know. I would love to see the differences."

"They’re a process that has to be done that nobody likes, but I mean, it’s just something that has to be
done.

Others really didn’t find filling out the forms helpful and found them impersonal:

"I felt that yesterday, it really upset me. That was the one part I got real worked up about. It felt really impersonal to me. It didn’t really insult me, but it just all of this very personal, like individual and group therapy, the program is filling out forms."

"In the beginning I felt like that (impersonal) but in the end I felt like the rest, a whole bunch of stuff, you didn’t know anything about these people. I’m an introvert by nature, I don’t want anyone to know anything about me unless I choose to tell them so. I was choosing to tell them so, still I’m sitting there reading these questions and going okay. You have to look at it in a different way. I don’t like my emotions to get away from me."

"When the questions repeated themselves, I hated that."

"They’re too long."

Some participants felt that the line of questioning was
inappropriate:

"I didn’t like it either because I felt like I was psychotic or something, you know? Maybe it’s because I’ve been through counseling before and it was the same, I don’t know I just felt like they were trying to make you sound like you were psycho or something and like a lot of questions just your everyday personal stuff, I didn’t see the correlation between them."

"Also, I think a lot of times they ask you too much about your family because a lot of times they just assume that it’s that everything is about family problems, a lot of psychologists do that, but I don’t think that’s always true."

One participant didn’t take the questions seriously and chose not to honestly answer them:

"You know what I did? I cheated. I put in "3" for everyone that had emotions in it because you couldn’t go wrong, you know, because if it said "I don’t feel this or when it said "I did feel this" it was in the middle either way."

One participant expressed concern that her post-test wouldn’t show improvement even though she felt that she had
made movement towards recovery:

"I was worried that, um, I think the program helped tremendously but I was worried that if they went back and compared them both, maybe I did worse, I didn’t know if it looked better or worse... I was worried on paper that it didn’t show. That’s what I’m worried about, that on paper it wouldn’t show, maybe I answered the same at the end as I did at the beginning and it wouldn’t show how much the program helped."

Some wanted a more personalized test to see if the program helped them individually:

"It’d be kind of rough on the person conducting the test, but I think if we all saw what we did and we could see, "oh, well I’m nothing like that now." You know, I don’t feel that way at all or yeah I still feel the same. Yeah I think it’d be a good idea."

"This program has attempted to address the emotional, the physical, the social ... Looking at this program as a whole, all three of those elements, what did you find the most helpful for you? In terms of emotional and physical?"

Most responses focused on the interaction of the three components:

"It was really hard to distinguish between group and therapy as what did the most for me. Individually, I
felt great about what happened with Lydia. Group I thought was great too. They were different. I mean obviously, group was a more holistic, generalized approach that was still really helpful. And individual was obviously more individual."

"Especially the support is what the group, that there were other people that you could talk to for support. Individual therapy you learned to think for yourself. I don’t know which is better, but I really liked both."

"I needed the support, on what I was going to do, was I going to be okay, I wasn’t crazy. The individual therapy really helped a lot and so did the group.

"I don’t think it was one or the other."

"You know, like, when you say, split this up and this up, we don’t want to look at it as just (the nutritionist) or just (therapist), because there were, we met separately but that was like part of the group thing. That was your commitment to the group, it was part of the package, so I guess we look at everything as the same."
"It all needs to go together."

"Having the three components together was most important?"

A lot of participants agreed with this comment.

"I know if they had said, I mean, I know if it was your option, how often you meet with Mary Pat or Lydia, ... more people wouldn't have voluntarily said, oh, I think I'll just go here. Because that's a lot of time, but if it's part of the package, it definitely helps."

"I know that it is hard to get three or four hours each week to something that you don’t like. Not that I didn’t like, I mean, I love coming, but it’s just something that’s your enemy - to deal with it, you know. Instead of putting it behind and not dealing with it."

"Maybe the most helpful thing was the fact that it was just all together as one program."

"I like the group, I like this (individual therapy) because it is what is the matter with me and not somebody else, which might sound selfish but that’s okay. It’s more personal... A lot of stuff you just want to shove under. It’s there but you don’t want to look at it, to feel it, it’s fine. Then I’ve got group
and all of these little emotions are running around and I'm thinking I can't do this. This is bad." (question: so group brings up stuff but then you can deal with it in individual therapy?) "Right."

However, some participants cited a specific component as being most helpful:

"I think individual therapy was the most helpful."

"We covered all three. Group gets you stirred up. Other people are there, they know what you are talking about. It's not like you are talking to strangers just shaking their heads saying I don't understand. They know how you feel, it is so nice not to feel like you are alone. That's how I spent a lot of time feeling. This is just me. Other people understand what you're talking about, they say yea, I've done that."

"This program attempted to address the emotional, physical, and support needs of persons with disordered eating, looking at this program as a whole... what did you find the least helpful from the program as a whole?"

"I wouldn't like to qualify as anything being the least in this program. I think if something didn't do its job then I would say it was the least helpful. But, I thought that everything followed through with its job. I don't know why I place less emphasis on nutrition,
but it just didn’t seem to be as large an issue with us. It was more emotional, less physical things."

"Everything was wonderful and everything helped. The nutrition part, I think had to do with the fact that I didn’t get as many meetings. She is very busy and I understand that. the other part is I’m a nutrition major, I have a nutrition class three days a week."

"What else would you have included if you were putting together a program to address an eating disorder. What else might you include?"

"Education, I did a lot of reading on my own... I think that helped a lot."

"You know what I was going to include... We wrote a letter to our eating disorder the very first day... and I think that writing it down and addressing it as a person or an object or whatever, really helped understand that it’s something that’s not you, it’s not you...I think that we were originally supposed to write a letter at the end to our eating disorder...I think that would have been really beneficial, just to hear, I mean, we can all do it on our own, but just to hear what other people said that were different from their original letters."
Several participants mentioned wanting the program to be longer than one semester so that they could continue and several discussed their fears about it coming to a close:

"I would have started it at the beginning of the semester and run longer. I think if it filled the whole year a lot more would be accomplished. I think it's too short, it barely touches the surface. I don't see it being that cohesive."

"I just started you know. On the stairs I'm only on the second stair.

"I'm just starting and I know if I get left alone I may not regress but I may not mature. I need things to make me do it, diet yo yo crazy stuff. I don't want to do that anymore."

"Sometimes I thought when we meet on Thursdays, on Wednesday, I'm already a little, it was nice. It was making it a part of school, there was classes and there's group. There's weekends, and its things that always came. I feel disappointed, I know that we are going to make efforts to have another group, and I really hope it works out. If it doesn't I know I'll be disappointed."
"I wish that it was too." (longer running)

"I’d like to see it available. I know the study has to end, but maybe there’s another student interested."

"I think continuation over break. Over summer, stuff like that. yeah, for the rest of your life, but I’m thinking in the college sense, just because we’re not in school anymore, we should have it continuing."

"... but I’m not strong enough to stand on my own feet yet, but I know I’m getting there."

"That’s one thing I was worried about, what happens at the end?"

"Hi, come back eating disorder. You know? You just, I don’t know, I think that it scares me. I think it’s good that we all have this number and I hope we’ll all help each other out and continue to work - just because I think we all need it, to get through everything."

Several discussed what their plans for their own group next semester would be and several expressed concern over the format being too unstructured. They requested that the
therapist and/or nutritionist provide certain information to them as "springing steps." Termination issues arose:

"I hope that you strongly relate to her (therapist) that we don’t want to be just left out in the cold."

"I just hope next semester, she’ll like give us a call or something, some good gesture or something."

Termination issues also arose in individual interviews. Two participants, in particular, voiced their concerns with their therapist when referral to another therapist was brought up by the therapist:

"I like you... Like being abandoned, but that’s okay... I get it. I don’t like it, but I get it."

"It’s kind of heartbreaking."

"How has this program affected you?"

Many spoke about their personal struggles, successes, and their paths to recovery. Some participants spoke about their increased sense of taking care of themselves:

"I feel better about myself. I’m getting on the right track, self-care is important. I’m taking care of myself. It’s a constant reminder, not constant, but a little tick that gets you back on the right track."
"I think if I hadn’t participated I would have had a lot more trouble this semester than I could imagine with food and just staying here. I don’t think I would have if I hadn’t gotten some sort of help to put myself back on track... I was just dealing with eating disorder issues. I think if I had not dealt with them I would have fallen back in old habits. That was just bad. I don’t think I could have stayed."

Others spoke about their increasing awareness of their own emotions and the difficulties that they are experiencing because of that:

"I’m starting to feel more. Right now, before I started the program I was going along day by day doing my own thing. I knew that it wasn’t okay, but it was comfortable. Now that I’ve made these changes, I’m scared, cause I’m at a point where I’m depressed, I’m sad and scared. I can see where I’ve changed, it’s good."

"I started feeling things, you don’t know if you want to but it’s better. I don’t want to be miserable, but the concept that I want to not feel anything is scary. I don’t want to cry, but it’s gotten to the point that it’s not such a terrible thing as it used to seem. Now
I can think that this too shall pass. Sort of wait and it will go away."

"I feel like I’m more balanced now. I don’t think anything is black and white anymore. Now I realize there’s a whole range of colors to choose from, I mean, there’s just be happy, be sad, that’s what I always thought. There’s other emotions. I never judged before, but I always thought that people judged me and I’ve come to realize the complications."

"I’ve gotten a little better about expressing like what I really think... In class situations I’m very outspoken like that... but the things I hold closest to my heart, and emotions that I’ve really value... I had a harder time expressing myself. And that what this group has given me a chance to do. I’m surprised that I’ve gotten used to doing that."

Several spoke about their increased self acceptance: "Helped me. Definitely helped me accept myself and recognize myself - all the positive things I have to offer others that I never thought about that I do all the time but I never thought of them as positive things. Or concentrate on the positive, I always
concentrated on the negative, about me that no one knows about. You know those things I don’t like about myself that are so nitpicky, it’s just stupid for me but I think that really helps. It helps me to know, like she was saying, it’s not a black and white, like if I don’t exercise one day, whoopdedo, you know? I used to be, I mean, I used to exercise every single day, 2 hours a day, you know? And if you are not enjoying it, why are you doing it, you know? Life should be enjoyable, not an obsession to be someone you’re not, as if you think you’re going to be someone better. Whoever you are you should concentrate on what you have now."

"I think I learned that it’s important what I think of myself and not what other people think... (talked about an argument with roommate). No, I’m a better person than this, you should know me, but you don’t and we’re not rooming together next year because of it. I don’t think I would have been like that without this group. My mom thinks it is negative but I think it is really positive because I’m not going to let her put me down like that, like I normally would."

Goal Attainment

When asked on the focus group interview form rating
scale, whether they would have reached any of their goals without the program, participants responded:

would not have reached any goals (5 participants)
would have reached a few goals (3 participants)
would have reached some of their goals (3 participants)
would have reached most of their goals (0 participants)
would have reached all goals (0 participants)

In addition, all eleven participants stated that they achieved some level of recovery from this program and would recommend it to others. Results from post-test questionnaires assessing changes in their food-related behaviors and thoughts and feelings are reported in Table 12 and Table 13.
Table 12

**Self Reported Changes in Behaviors - Post Treatment**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Do it more</th>
<th>Do it less</th>
<th>No Change in Freq/Intensity</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overactivity/exercise without enjoyment</td>
<td>0</td>
<td>6</td>
<td>3</td>
<td>2</td>
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<td>Compulsive Eating</td>
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<td>8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Binge Eating</td>
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<td>7</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Fad Dieting/Skipping Meals</td>
<td>0</td>
<td>7</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Forced Vomiting</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Laxative Abuse</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Use of Diet Pills</td>
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<td>0</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Use of Water Pills</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Use of Enemas</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11</td>
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*numbers indicate number of participants indicating response*
Table 13

**Self Reported Changes in Frequency and Intensity of Thoughts and Feelings—Post Treatment**

<table>
<thead>
<tr>
<th></th>
<th>More freq</th>
<th>Less freq</th>
<th>Less intensity</th>
<th>No Change Freq/Intens</th>
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<td>0</td>
<td>3</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Being Obsessed with thoughts of food</td>
<td>2</td>
<td>5</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Negative Thinking about your body</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Numbers indicate number of participants indicating response
CHAPTER V
Conclusions and Discussion

Purpose

This study evaluated a treatment program which integrated the physical, emotional, and social realms for college women with self-identified, clinical and subclinical, eating problems. It evaluated behavioral and psychosocial outcomes and attempted to understand the process of participating in this program for the participants.

Summary of Results

General themes emerged from the data as important components for recovery from these women’s eating problems. I will briefly summarize them and discuss their implications for future programming.

Desire for Change

Many participants stated their desire to make changes as one of their reasons for participating in this program. These changes involved all four domains: physical, psychological, social, and behavioral. For these women, desired changes included a change in their eating patterns, in their mood, and in their ability to know when they were hungry or full. In addition, participants wanted an increase in their sense of effectiveness, to feel better about themselves, to focus less on their physical
appearance, and to have better interpersonal relationships. This desire for change may have led to their engagement in the therapeutic process which is a necessary ingredient for therapeutic change (Brisman, 1989).

Not only did participants desire change, but the quantitative data lent support to the conclusion that change did occur in the group's level of effectiveness, impulse regulation, confidence in ability to change, asceticism, body image, depression, number of binge eating episodes, and number of times of exercise per week. In addition, most participants believed that their behaviors, cognitions, and feelings showed less frequency or intensity around problematic food behaviors.

These results of improvement need to be carefully interpreted. Although mean scores on several measures did improve, some of these means (drive for thinness, body dissatisfaction, asceticism) are still high, indicating further need for improvement. This is most likely a result of the long term nature of eating problems and the long time required for recovery. The ten week program may have helped participants begin the process of recovery, but more (continued) intervention is probably required for a fuller recovery. However, for the measure of impulse regulation, participant post-scores fell within the means of non-patient female college comparison groups although the pre-test
scores were closer to other clinical eating problem groups. Initially, mean depression scores could be categorized as borderline to mild depression while post-test scores were in a non-depressed range. These two variables appeared to be most affected over the course of these ten weeks.

Nutritional Therapy

Participants’ needs for general as well as personalized nutritional information were somewhat met through this program. Participants felt that they benefitted from their nutritional assessment and counseling yet they felt that they would have benefitted from even more contact with the nutritionist. This finding supports Luder and Schebendach (1993) who state that for effective management of eating disorders, nutritional assessment and counseling is essential.

Having a safe environment in which they could discuss thoughts and feelings about food with the nutritionist and therapist without fear of reprisal was very important to participants. This also supports prior research that building a therapeutic relationship with someone one can trust and talk openly with is considered one of the most important components for recovery (Beutler, Machado, & Neufeldt, 1994).

Relationship with Therapist

Therapy provided a different context for participants
to explore uncomfortable issues that they were unable to discuss prior to their participation in this program. This safe context is extremely important for these women since they tend to want to please others and base their sense of self-worth on others' approval (Boskind-Lodahl 1976). Including a feminist perspective with cognitive-behavioral therapy, provided support for each participants own value and self-worth not based upon others' prescriptions of appropriate behaviors and appearance. As other researchers have found (Norman & Herzog, 1984; Pruitt, Kappius and Gorman, 1992; Mitchell, et al., 1986; Pyle, et al., 1981) difficulties in interpersonal relationships often accompany eating problems. The ability to connect in a safe context was viewed by participants as very important for recovery, and supports prior research findings (Beutler, Machado, & Neufeldt, 1994).

**Personal understanding, goal setting and self care**

More pragmatic themes that emerged through the psychological component included goal setting, increased self care, and gaining personal understanding in identifying their needs and attempting to have them met. These needs may be food related or not. Some wanted to better understand what motivated their problematic eating behaviors, others wanted to learn how to pay better attention to their emotional as well as to their physical
needs, and still others were ready to not only identify those needs but attempted to have them met. This might mean asking a friend for something, recognizing their level of hunger or tiredness and responding appropriately.

Many women entering therapy for problem eating are at a point where they want to do something rather than only talking about their problem. All participants set goals for therapy and many stated the importance of having something concrete to work toward. These goals allowed them to increase their self care and gain more personal understanding about their needs. As others have found (Dixon, 1987), the use of goal setting gave participants something concrete to work toward which may have led to positive results for participants.

Self care activities ranged from one participant’s waking up earlier in order to have a more relaxed morning to another participant’s making drastic changes in her relationship with her family to better care for herself. Just discussing what they needed for themselves seemed to open up endless possibilities and more importantly, gave them the idea that they deserved to be well cared for. This improved sense of self combined with more personal understanding about food and non-food related behaviors, seemed to lead to an increased sense of effectiveness and lowered depression scores.
Body image

Body image scores between pretest and post-tests of participants were statistically significant. However, the scores indicated that they still remained very dissatisfied with their bodies. Some participants were beginning to recognize that there were other things on which to base their sense of self, but this process of change is considered long term (Boskind-White, 1976; Herzog, Franko & Brotman, 1989; Price, 1988). Most participants were able to recognize that their obsession with their bodies was unhealthy and contributed to their eating problems even if they believed that they currently were unable to make changes in their thoughts, feelings, or attitudes. Sometimes, changes in cognitions, feelings and attitudes precede behavioral change. The component of body image is very important in working with these women and perhaps more emphasis in therapy might be well placed on body image and related issues.

Depression

One of the most important and consistent findings was a decrease in depression scores. These scores were reduced by almost one-half as participants changed from mild or borderline depression prior to the program to no clinical depression at termination. Garner, Olmsted, Davis, & Wendi (1990), found that although depressive symptoms do not
predict outcome, they do decline with improved bulimic symptom control. Most of these women did feel that they had improved in behavioral and/or psychological and/or the social realms. Most did not feel that they would have made much improvement over the same course of time without participating in the program. However, having no control group does not allow me to draw that conclusion.

Self esteem

Although self-esteem, as measured by the Rosenberg’s Self Esteem Scale, did not significantly improve, the participant’s own descriptions of feeling healthier, more powerful, more in control, more effective, and generally better about themselves would lend one to believe that their self esteem had improved. Quantitative improvement in effectiveness, impulse regulation, confidence in ability to recover, and depression scores might be expected to improve self-esteem. However, this was not found in the present study. Perhaps participants did not significantly increase self-esteem, or perhaps we need to reassess how self-esteem was measured. The Rosenberg Self Esteem scale, a commonly used measure of self esteem, questions ones global feelings of self-satisfaction, abilities, and worthiness. As was found in this study, participants indicated that they did feel more effective, had a better sense of control, and felt more accepting of themselves. Perhaps these are some of the
important elements that are missing from this traditional measure of self esteem.

Termination issues

A recurring issue that emerged from participants was a feeling of abandonment at the end of the program. This was an interesting and somewhat unexpected theme. All participants were told at the beginning of the program that the program would end at the end of the semester but that transfers to other therapists would be made. Towards the end of the semester, several participants wanted to talk about what would be available after the program ended. However, I believe that several still hoped that the program would continue even though there was no indication that this would happen, and details were provided to the contrary. This termination issue has been discussed in relation to college students in therapy. The average number of sessions for college students seen in University counseling centers is between three and seven, with the mode being closer to two (May, 1989). Working within the context of University time creates an endpoint, and some consider knowing the end of therapy as helping to eliminate the ambiguity of termination (Pinkerton & Rockwell, 1989). I believe that the termination issues previously stated speak to the difficulties that women with eating problems have in forming relationships. When they are willing and able to do so, it
is difficult to engage and reconnect with someone new and forge a new relationship. Having a consistent therapist over the period of one year may be an important consideration in program implementation.

Overall evaluation

The overall evaluation of the integrated program was very positive. Participants thought all three aspects of the program were very useful in terms of their own recovery. Nutritional counseling received a mean of 4.6 out of 5.0; psychological counseling received a mean of 4.7 out of 5.0; and group therapy received a mean of 4.2 out of 5.0. These scores are quite high and show the value that the participants placed on all three components. Many couldn’t state which component was most helpful as they saw all three as being interwoven and connected.

Improvement was found (through either quantitative and/or qualitative data) in all three domains. In the biological domain, participants stated that they physically felt better, were more confident in their nutritional knowledge, and had increased interoceptive awareness. Gains in the psychological component included lowered depression, improved sense of effectiveness, improved impulse regulation, increased confidence in the ability to change, feeling less terrified of being fat, feeling less obsessed with thoughts of food, and less frequent negative thinking

167
about their bodies. Quantitative data from the social
domain did not show significant improvement although
participants felt that they were making more contact with
others and that improved social relationships were very
helpful in their recovery.

These findings lend support to the application of the
biopsychosocial model for working with women with eating
problems. Using a systemic approach to incorporate these
three dimensions seemed to provide a context for improvement
for participants physically, emotionally, and socially.
Controlled studies need to be conducted in order to
determine whether all of these needs would have been met
with only one dimension of the integrated program.

**Suggestions for Future Programs**

The results support continuation of the development of
programs that combine the biological, psychological, and
social components for the treatment of eating problems. The
drop-out rate for the present study and for two pilot groups
was almost non-existent. For this study, only one
participant came to one group and did not attend any
individual sessions and stopped participating. I believe
that the commitment of those who decided to participate was
enhanced by the integration of the components and those
administering the program. Premature termination is
problematic in eating disorder groups with an average
dropout rate of 10-35%. However, having the same therapist for both group and individual therapy has been found to reduce drop out rates (Dixon, 1987). I believe that also having the nutritionist for individual and group continued to solidify the program.

Participants suggested that the program be extended from one to two semesters. This suggestion would also be supported by the quantitative data. Treatment of eating disorders is considered difficult regardless of the methods employed (Price, 1988) and although most participants in active treatment have positive results on some outcome measure (behavioral changes (binge eating, purging), depression, self-esteem, body image, assertiveness, and general anxiety), few become abstinent after treatment (Cox and Merkel, 1989). Given this, it makes sense that treatment should be more long-term to help in recovery and to then prevent relapse.

However, due to the academic year schedule, there are cautions involved. In the past, we attempted to extend the program from one to two semesters at the participants’ request. However, after the long winter semester break, inherent in college schedules, many had difficulty getting back into the rhythm of the program. Making a year long (really 9 months) commitment at the beginning of the academic year might be difficult for many because of their
feelings of overload due to school and work schedules. Although I believe participants would benefit from a longer program, I’m not sure many who would benefit from at least one semester would be willing to commit to two semesters. Because of the tensions involved in this decision, therapists and participants might want to commit for one semester and renegotiate for continuing the program into a second semester.

For the participants in this study, all but two (who continued to see me) were referred to another therapist at the program’s completion. Group was to continue at the same place but with the group being run by the participants. The therapist and/or nutritionist could be invited at any point to the group to discuss a particular topic but the group was to be co-run by the participants. It is unclear how this structure is presently working and follow-up will be done at the end of the second semester to determine how this group operated and whether participants’ needs were met. Individual and nutritional therapy should continue to be offered to participants after the completion of the program, particularly if the program lasts only one semester. One person, in this case the therapist, continued contact with participants to determine what their future needs would be and helped to arrange for the continuation of group. This ongoing contact is probably important for the integrity of
the continued group.

Participants also requested more consistent structure with their nutritional and therapy appointments. This is perhaps due to the consistency of their class schedules over the course of the semester or the psychology of women with eating problems who tend to be obsessive, rigid, and have a great need for control (Harris, 1991; Haller, 1992). Practitioners might be more sensitive to this need early in treatment by scheduling appointments whether weekly or bi-weekly on the same day and time or later in therapy, talking about those needs for consistency and the effects of those needs in their eating related problems. Consistent scheduling with the nutritionist and therapist could also alleviate the problem of insufficient contact with deliverers of this program.

Prevention Programs

The need for prevention program development and implementation is great. As dieting and restrained eating continue to be the norm for women in our culture, we can expect a continuing increase in eating problems due to the causal relationship between dieting and binge eating (Polivy & Herman, 1985, 1987). Prevention programs not only need to lower the incidence of eating problems but also to recognize that students are not the sole cause of their problems, and as such, are not the only targets of change. Hotelling
(1989) writes of a tripartite concept of prevention. Primary prevention would include looking at elements of an environment which can be changed (food service operations, recreation facilities, athletic programs, courses, workshops, and publicity). Secondary prevention would be used to increase students awareness of eating problems, their origins, symptoms, and consequences in order to promote early and increased detection. This level of intervention would target faculty, staff, and students. Tertiary prevention would include knowledge of area inpatient programs so that appropriate referrals can be made when necessary.

Suggestions for Future Research

Controlled studies

There is a great need to test empirically whether this integrated treatment program is more effective than either traditional individual or group therapy. A controlled study to compare these three modalities could confirm findings from this study. In addition, it would allow us to further develop and test models to add to our clinical knowledge. As has been previously stated, no one model of treatment has been shown to be more effective for women with eating problems. Controlled outcome studies would assist in the development and implementation of the most effective treatment models.
It is also recommended that consistent definitions of eating problems be developed so that comparisons across studies can be made. There has been difficulty in making such comparisons due to the changing definitions of the Diagnostic and Statistical Manual for Mental Disorders and the use of various instruments for diagnoses. Since the DSM came out with a new edition in 1994, this is an opportunity for future studies to use these diagnoses so that this purpose can be accomplished. In subclinical cases, good descriptions need to be included so that across study comparisons can be drawn.

In addition, we need to develop and test prevention models in order to determine the most appropriate method of delivery and target audience. The most consistent and "positive" view of women in our culture is that of the attractive, thin and, and therefore, desirable woman. This image is perpetuated on a daily basis in all forms of media. As long as this image continues to be promoted by advertisers, film makers, television producers/writers, etc..., women who are attempting to become capable and competent feel the conflict between themselves and the culture in which they live. This conflict frequently leads to a devaluation of themselves and to taking extreme means to adapt to the cultural messages.

We need to understand better what can be done to limit
the strength of these cultural messages for our young women. How might they be interpreted differently? What can we do as educators, practitioners, and informers to deconstruct cultural messages of value for women? These issues are being looked at and written about, but direct programming for prevention, treatment, and referral needs to be developed for young men and women. It is not enough to ask young women to reconstruct media images, but young men must also understand what the consequences are for themselves and their future relationships. As part of prevention programs, we must also inform girls (and boys) about the connection between dieting and eating problems. Multi-faceted prevention programs aimed at young girls and boys need to be developed and evaluated to determine their effectiveness. Subclinical features of eating problems.

More research needs to focus on subclinical cases of problem eating. It is understandable that most research has focused on anorexia nervosa and bulimia due to the potential severity of these problems as well as the clear diagnostic criteria provided by the Diagnostic and Statistical Manual of Mental Disorders. However, when we are looking at young women, we know that a great range of problem eating interferes with feelings of self worth. To these women, as to many women in our culture, self esteem is derived from "looking good." In fact, there appears to be specific
pressures towards thinness on college campuses as preoccupation with appearance is a culturally approved mode of self expression for women (Orbach, 1986). Pursuing excellence that is not based on traditional notions of femininity may challenge a woman’s identity and increase sex role congruent behaviors. These behaviors might include focusing on appearance and weight in order to reaffirm a feminine identity (Spence, 1985). This idea is similar to Pipher’s (1994) writings that adolescent girls may deny their true selves and assume false selves to please their culture.

We need to also understand better how subclinical features of better known eating disorders (anorexia and bulimia) operate within women in the college setting. Just as Clark, Levine, and Kinney (1989) write of the need for obtaining meaningful incidence rates for a given campus in order to adequately address each University’s needs, this is true not only for anorexia and bulimia but for the wide range of existing eating problems.

Limitations and Considerations

This study was limited in scope to college women between the ages of 18 and 25. These delimitations restrict the populations to which the results of the present study can be generalized but provides more homogeneity in the sample so that findings could be generalized to the target
population of the present study.

The present study did not report on an experimentally designed program. It was difficult, if not impossible, to obtain the necessary sample size in order to have conducted an experimentally designed research study due to the secretiveness and isolation of women who experience eating problems. Because of this, the present study attempted to understand better the experiences of this group of women who experienced the process of being in the integrated eating disorders program rather than being able to compare it to other treatment programs.

The academic year calendar also presented some difficulties in program delivery and evaluation. Semesters are 16 weeks in length with a one week Thanksgiving or spring break, and exams comprise the last week of the semester. Semesters are separated by an approximately four week winter break. Given that it takes several weeks to publicize and recruit participation combined with the academic time schedule parameters, ten weeks of program delivery is probably the most realistic length per semester.

Additional problems with the academic year schedule also complicated collecting outcome data. It is best to collect outcome data after program completion, therefore, this process also became problematic. For example, the week prior to final examinations during the fall semester was the
week after returning from Thanksgiving break. Students usually returned home to their families during this break and most students reported some level of anxiousness. This anxiousness was related to personal changes they had made and their concerns about incorporating these changes at home. In addition, the Thanksgiving holiday itself is a holiday based upon food and over-eating. Returning home for such an occasion at the beginning of their recovery process had presented some difficulty for all the students who participated in this program. Many participants stated that if they could have filled out the paperwork the week before Thanksgiving, their responses would have indicated more improvement than they were currently feeling. The timing of filling out instruments could be an important aspect to consider when using outcome data for evaluating programs.

Wearing both therapist and researcher hats did create some tension in both program delivery and evaluation. It was important that I stayed very focused on whichever aspect I was currently performing. I tried to recognize this tension and discussed it with my supervisor (I had the same supervisor for both clinical and research aspects). Prior to program delivery, I worked as a researcher who was informed by my clinical knowledge in designing the program and subsequent evaluation. Once the program began, I tried consciously to leave my researcher role until after the
program was completed. As my therapist role was terminated, I then resumed my researcher role in performing this evaluation. There was tension between the two roles, but I believe that each role maintained and retained its own integrity.
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180


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<th>Location</th>
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APPENDIX B

DAILY LOG OF FOOD-RELATED BEHAVIORS, COPING ACTIVITIES, AND INTERVENTIONS

For each day on the calendar, please indicate by letters which behaviors and activities you engaged in. The purpose of this exercise is to chart any patterns in food-related behaviors, coping strategies, and intervention activities you are using during this study.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>B</td>
<td>binged (x number of times)</td>
</tr>
<tr>
<td>P</td>
<td>purged (overuse of laxatives or emetics; vomited; x number of times)</td>
</tr>
<tr>
<td>S</td>
<td>skipped a meal (x number of times)</td>
</tr>
<tr>
<td>W</td>
<td>weighed yourself (x number of times)</td>
</tr>
<tr>
<td>E</td>
<td>exercised (number of minutes)</td>
</tr>
<tr>
<td>R</td>
<td>relaxation/stress management techniques</td>
</tr>
<tr>
<td>G</td>
<td>support group or group therapy</td>
</tr>
<tr>
<td>I</td>
<td>individual counseling session</td>
</tr>
<tr>
<td>N</td>
<td>nutritional consultation</td>
</tr>
<tr>
<td>M</td>
<td>visit with medical doctor</td>
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<tr>
<td>MON</td>
<td>TUE</td>
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SEPTEMBER
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### Appendix C

**Daily Self-Assessment**

Date: ________________________  Code: __________

Please answer these questions based upon your experiences today:

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
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</thead>
<tbody>
<tr>
<td>I weighed myself</td>
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<tr>
<td>I skipped a meal or meals</td>
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<tr>
<td>I binged</td>
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<tr>
<td>I forced myself to vomit</td>
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<tr>
<td>I used laxatives to purge</td>
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<tr>
<td>I exercised to alleviate the effects of the binge</td>
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<tr>
<td>I exercised as part of my healthy recovery</td>
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<tr>
<td>I felt terrified of fat</td>
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<tr>
<td>I felt fat in spite of others saying I am too thin</td>
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<tr>
<td>I was obsessed or totally preoccupied with thoughts of food</td>
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<tr>
<td>I felt out of control when I binged</td>
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<tr>
<td>I felt miserable or annoyed after I binged</td>
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<tr>
<td>My eating behaviors interfered with my job or studies</td>
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<tr>
<td>My eating behaviors interfered with my daily activities (other than work or studies)</td>
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<tr>
<td>My eating behaviors interfered with a personal relationship</td>
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</table>

Was there any particular event today, either positive or negative, which you feel led up to your binge behavior?

- Deeds of significant other
- Feelings of loneliness or sadness
- Illness or injury to self
- Failure at school or work
- Problem at work
- Feelings of emotional pain
- Illness or injury to family member or significant other
- Difficult sexual experience
- Problems in romantic relationship
- Family problems
- Problem with another relationship
- Teasing about appearance
- Skipped one or more meals
- Other: Please specify

Check the times of day that you binged:

<table>
<thead>
<tr>
<th>Time</th>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>8 am - 10 am</td>
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<td>10 am - 12 pm</td>
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<td>12 pm - 2 pm</td>
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<td>2 pm - 4 pm</td>
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<td>4 pm - 6 pm</td>
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<td>6 pm - 8 pm</td>
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<td>8 pm - 10 pm</td>
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<td>10 pm - 12 am</td>
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<tr>
<td>After midnight</td>
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</table>
Daily Self-Assessment

Check the places where you binged:
- Home
- Work
- Restaurant
- Party
- Other; please specify

Which of the following people did you binge in the presence of? (Check all that apply.)
- Friends
- Parents
- Alone
- Spouse/Significant Other
- Children

Please check the feelings you experienced regarding the binge episode today:
- Calm
- Empty
- Confused
- Excited
- Angry
- Spaced out
- Inadequate
- Disgusted
- Lonely
- Bored
- Frustrated
- Panicked
- Relieved
- Guilty
- Depressed
- Nervous
- Unknown
- Other; please specify

Please check the feelings you experienced regarding the purge episode today:
- Calm
- Empty
- Confused
- Excited
- Angry
- Spaced out
- Inadequate
- Disgusted
- Lonely
- Bored
- Frustrated
- Panicked
- Relieved
- Guilty
- Depressed
- Nervous
- Unknown
- Other; please specify

<table>
<thead>
<tr>
<th>Do you feel hopeful about your recovery?</th>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>Do you feel committed to recovering from your eating problem?</td>
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<tr>
<td>Are you willing to share your experience, strength and hope with others facing similar problems to help you and others begin the road to recovery?</td>
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</table>

COMMENT:
ARE YOUR THOUGHTS OR BEHAVIORS ABOUT FOOD SCARING YOU?

DISORDERED EATING IS MORE COMMON AND MORE POWERFUL THAN YOU MIGHT THINK --

CAN YOU IDENTIFY WITH ANY OF THE FOLLOWING STATEMENTS?

- I over-exercise to compensate for excessive food intake.
- I go through long periods of time without eating or eating very little.
- I consume large amounts of food in a short period of time.
- I often feel out of control in relation to food.
- If I eat too much food, I make myself vomit to feel better.
- I take laxatives and/or diuretics to reduce bloating.
- I keep track of the fat and/or calories that I consume each day.
- I spend too much time thinking about food and my weight.
- I think people are always looking at my body.
- I have eating habits that are different from those of my friends.
- My friends tell me that I'm not fat, but I don't believe them because I feel overweight.

If any of these statements apply to you, you might be interested in participating in a study being conducted by the Department of Family and Child Development and the Department of Human Nutrition and Foods through the Center for Family Services.

Call Lydia Marek at 231-8997 for further information or come to one of two of the following informational meetings:

**Monday, August 29th at 5 PM, or**
**Wednesday, August 31 at Noon**
**in 300 Wallace Hall**
ARE YOUR THOUGHTS OR BEHAVIORS ABOUT FOOD SCARING YOU?
If so, you might be interested in participating in a study being conducted by the Dept. of FCD and HNF. For more information, call Lydia Marek at 231-8997 or come to an informational meeting on 8/29 at 5 p.m. or 8/31 at noon.
APPENDIX F

MEMORANDUM

TO: Family and Child Development Faculty
   and GIs

FROM: Lydia Marek

DATE: August 19, 1994

RE: Recruiting Participants for my Dissertation

I would appreciate your announcing the enclosed flyer in your class(es) as soon as possible. Please feel free to shorten the description of this study for this announcement. Also, please be advised that this study has received approval from the University Human Subjects Committee. I am enclosing a transparency overhead for your convenience. Please feel free to use it or just announce the study in your classes.

Thanks so much for your help - I really appreciate your assistance.

Also, if you know of any undergraduate students looking for research experience and you do not have an appropriate project for them, I could use help entering data and other related tasks!!
APPENDIX C

GENERAL INFORMED CONSENT

This study, entitled "Treatment Programs for Bulimia Nervosa: An Impact Assessment" is being conducted by Lydia I. Marek, M.S., a doctoral candidate in the Marriage and Family Therapy Program in the Department of Family and Child Development at Virginia Tech.

I. PURPOSE OF THIS RESEARCH

The purpose of the study is to identify components of treatment which are found to be most beneficial for students who have eating disorders, particularly bulimia nervosa. Your participation at this time is to allow Ms. Marek to make an initial assessment as to your potential involvement in this study.

II. PROCEDURES

If you choose to participate in this project you will be asked to complete several questionnaires (pre and post-tests) asking for information about your beliefs, attitudes, relationships, and food-related behaviors. There will be several other requirements for participating which will be explained to you after the initial assessment period is completed.

III. RISKS

No harm to you is expected to result from any of these activities. However, you may experience some emotional or psychological distress when completing the questionnaires, daily and/or weekly logs. If you experience any discomfort or distress at any time, please inform Lydia Marek.

IV. BENEFITS OF THIS PROJECT

Your participation in the project will provide information that may be helpful. At this time, your participation will allow the researcher to make a determination as to the appropriateness of your inclusion in this study. You will receive a listing of available counseling resources from the researcher.

V. EXTENT OF ANONYMITY AND CONFIDENTIALITY

The results of this study will be kept strictly confidential. All paperwork completed will be available only to the treatment team, and all files will be kept confidential; no names will be used. The information you provide will have your name removed and only a subject number will identify you during analyses and any written reports of the research.

VI. FREEDOM TO WITHDRAW

Your participation is voluntary and you are free to withdraw from this study at any time without penalty. Participation in this phase of the study does not constitute an agreement to continue with the study.

VII. APPROVAL OF RESEARCH

This research project has been approved, as required, by the Institutional Review Board for projects involving human subjects at Virginia Polytechnic Institute and State University and by the Department of Family and Child Development.

VIII. SUBJECT’S RESPONSIBILITIES

I know of no reason that I cannot participate in this study. I have the following responsibilities:

1. a commitment on your part to begin recovering from your eating disorder;
2. to complete the questionnaires.

Furthermore, I understand that the purpose of participating in this study is not to achieve weight loss. Rather, the goals I will strive to achieve are:

- increasing self-awareness about my eating disordered behavior
- decrease or eliminate those eating disordered behaviors as part of the healing process
- begin to achieve a healthy, optimal lifestyle
- remain committed to my recovery from eating disordered behaviors.

Lydia Marek can be available to discuss the study's purpose, objectives, or procedures at any time during the various activities you will participate in during the course of this study. She is happy and willing to answer any questions or discuss any problems with participants. In addition, continuing treatment is always available through the Center for Family Services or Student Health Services should you still require help with your eating disorder after this study is completed.

I agree to participate in this study

----------------------------------------
Signature of Participant                Date

XI. PARTICIPANT'S PERMISSION (for the participant to keep)

I have read and understand the informed consent and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent for participation in this project.

If I participate, I may withdraw at any time without penalty. I agree to abide by the rules of this project.

Should I have any questions concerning this research, I will contact Lydia Marek (231-7201), her advisor Howard Proinany (231-7201). Should I have any questions concerning the conduct of this research, I will contact Ernest Stout (231-6077).
APPENDIX II

DIRECTIONS

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

Name ___________________________________________ Date ________________

*Age ______ Sex _______ Marital status _______ Occupation ___________________________

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

P&I Psychological Assessment Resources, Inc.
P.O. Box 9950, Boca Raton, Florida 33429-9950 Tel: 1-800-231-9001

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9876 This form is printed in blue ink on white paper. Any other version is unauthorized. Revision #07/67/98 Printed in the U.S.A.
INSTRUCTIONS

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

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

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

1. I eat sweets and carbohydrates without feeling nervous.
2. I think that my stomach is too big.
3. I wish that I could return to the security of childhood.
4. I eat when I am upset.
5. I stuff myself with food.
6. I wish that I could be younger.
7. I think about dieting.
8. I get frightened when my feelings are too strong.
9. I think that my thighs are too large.
10. I feel ineffective as a person.
11. I feel extremely guilty after overeating.
12. I think that my stomach is just the right size.
13. Only outstanding performance is good enough in my family.
14. The happiest time in life is when you are a child.
15. I am open about my feelings.
16. I am terrified of gaining weight.
17. I trust others.
18. I feel alone in the world.
19. I feel satisfied with the shape of my body.
20. I feel generally in control of things in my life.
21. I get confused about what emotion I am feeling.
22. I would rather be an adult than a child.
23. I can communicate with others easily.
24. I wish I were someone else.
25. I exaggerate or magnify the importance of weight.
26. I can clearly identify what emotion I am feeling.
27. I feel inadequate.
28. I have gone on eating binges where I felt that I could not stop.
29. As a child, I tried very hard to avoid disappointing my parents and teachers.
30. I have close relationships.
31. I like the shape of my buttocks.
32. I am preoccupied with the desire to be thinner.
33. I don’t know what’s going on inside me.
34. I have trouble expressing my emotions to others.
35. The demands of adulthood are too great.
36. I hate being less than best at things.
37. I feel secure about myself.
38. I think about hanging (overeating).
39. I feel happy that I am not a child anymore.
40. I get confused as to whether or not I am hungry.
41. I have a low opinion of myself.
42. I feel that I can achieve my standards.
43. My parents have expected excellence of me.
44. I worry that my feelings will get out of control.
45. I think my hips are too big.
46. I eat moderately in front of others and stuff myself when they’re gone.
47. I feel bloated after eating a normal meal.
48. I feel that people are happier when they are children.
49. If I gain a pound, I worry that I will keep gaining.
50. I feel that I am a worthwhile person.
51. When I am upset, I don’t know if I am sad, frightened, or angry.
52. I feel that I must do things perfectly or not do them at all.
53. I have the thought of trying to vomit in order to lose weight.
54. I need to keep people at a certain distance (feel uncomfortable if someone tries to get too close).
55. I think that my thighs are just the right size.
56. I feel empty inside (emotionally).
57. I can talk about personal thoughts or feelings.
58. The best years of your life are when you become an adult.
59. I think my buttocks are too large.
60. I have feelings I can’t quite identify.
61. I eat or drink in secrecy.
62. I think that my hips are just the right size.
63. I have extremely high goals.
64. When I am upset, I worry that I will start eating.
65. People really like end up disappointing me.
66. I am ashamed of my human weaknesses.
67. Other people would say that I am emotionally unstable.
68. I would like to be in total control of my bodily urges.
69. I feel relaxed in most group situations.
70. I say things impulsively that I regret having said.
71. I go out of my way to experience pleasure.
72. I have to be careful of my tendency to abuse drugs.
73. I am outgoing with most people.
74. I feel trapped in relationships.
75. Self-denial makes me feel stronger spiritually.
76. People understand my real problems.
77. I can’t get strange thoughts out of my head.
78. Eating for pleasure is a sign of moral weakness.
79. I am prone to outbursts of anger or rage.
80. I feel that people owe me the credit I deserve.
81. I have to be careful of my tendency to abuse alcohol.
82. I believe that relaxing is simply a waste of time.
83. Others would say that I get irritated easily.
84. I feel like I am losing out everywhere.

(Continued)
65. I experience marked mood shifts.
66. I am embarrassed by my bodily urges.
67. I would rather spend time by myself than with others.
68. Suffering makes you a better person.
69. I know that people love me.
70. I feel like I must hurt myself or others.
71. I feel that I really know who I am.
APPENDIX I

DIRECTIONS

Enter your name, the date, your age, sex, marital status, and occupation. Complete the questions in this booklet as accurately as you can.

Name ______________________________ Date _______________________

Age _____ Sex _____ Marital status _____ Occupation __________________________

A. DIETING

* Have you ever restricted your food intake due to concern about your body size or weight? _____ Yes _____ No

How old were you the very first time that you began to seriously restrict your food intake due to concern about your body size or weight? _____ years old

B. EXERCISE

On average, over the last three months, how often have you exercised (including going on walks, riding a bicycle, etc.)? If you exercise more than once a day, please count the total number of times that you exercise in a typical week. _____ times a week

On average, how long do you exercise each time? _____ minutes

* What percentage of your exercise is aimed at controlling your weight?

_____ 0% _____ less than 25% _____ 25-50% _____ 50-75% _____ more than 75% _____ 100%

C. BINGE EATING

Please remember in answering the following questions that an eating binge only refers to eating an amount of food that others of your age and sex regard as unusually large. It does not include times when you may have eaten a normal quantity of food which you would have preferred not to have eaten.

* Have you ever had an episode of eating an amount of food that others would regard as unusually large? _____ Yes _____ No

If no, please skip to Question D.

How old were you when you first had an eating binge? _____ years old

How old were you when you began binge eating on a regular basis? _____ years old

* During the last three months, how often have you typically had an eating binge?

_____ I have not binged in the last three months.

_____ Monthly—I usually binge _____ time(s) a month.

_____ Weekly—I usually binge _____ time(s) a week.

_____ Daily—I usually binge _____ time(s) a day.

* At the worst of times, what was your average number of binges per week? _____ binges per week

How long ago was that? _____ months ago _____ at its worst right now
If you have not binged in the last three months, please skip to Question D.

*Do you feel out of control when you binge?

___ Never  ___ Rarely  ___ Sometimes  ___ Often  ___ Usually  ___ Always

Do you feel that you can stop once a binge has started?

___ Never  ___ Rarely  ___ Sometimes  ___ Often  ___ Usually  ___ Always

Do you feel that you can prevent a binge from starting in the first place?

___ Never  ___ Rarely  ___ Sometimes  ___ Often  ___ Usually  ___ Always

Do you feel you can control your urges to eat large quantities of food?

___ Never  ___ Rarely  ___ Sometimes  ___ Often  ___ Usually  ___ Always

Do you feel distressed by your binging?

___ Never  ___ Rarely  ___ Sometimes  ___ Often  ___ Usually  ___ Always

Do you find binging pleasurable?

___ Never  ___ Rarely  ___ Sometimes  ___ Often  ___ Usually  ___ Always

D. PURGING

*Have you ever tried to vomit after eating in order to get rid of the food eaten? ___ Yes ___ No

If no, please skip to Question E.

How old were you when you induced vomiting for the first time? _______ years old

*During the last three months, how often have you typically induced vomiting?

___ I have not vomited in the last three months.

___ Monthly—I usually vomit _______ time(s) a month.

___ Weekly—I usually vomit _______ time(s) a week.

___ Daily—I usually vomit _______ time(s) a day.

*At the worst of times, what was your average number of vomiting episodes per week? _______ vomiting episodes per week

How long ago was that? _______ months

E. LAXATIVES

*Have you ever used laxatives to control your weight or "get rid of food"? ___ Yes ___ No

If no, please skip to Question F.

How old were you when you first took laxatives for weight control? _______ years old

How old were you when you began taking laxatives for weight control on a regular basis? _______ years old

*During the last three months, how often have you been taking laxatives for weight control?

___ I have not taken laxatives in the last three months.

___ Monthly—I usually take laxatives _______ time(s) a month.

___ Weekly—I usually take laxatives _______ time(s) a week.

___ Daily—I usually take laxatives _______ time(s) a day.

How many laxatives do you usually take each time? _______ laxatives

What kind of laxatives do you take? _________________________________

*At the worst of times, what was the average number of laxatives that you were taking per week? _______ laxatives per week

How long ago was that? _______ months

215
F. DIET PILLS

*Have you ever taken diet pills? ___ Yes ___ No
   If no, please skip to Question G.

   *During the last three months, how often have you typically taken diet pills?
     ___ I have not taken diet pills in the last three months.
     ___ Monthly—I usually take diet pills ______ times a month.
     ___ Weekly—I usually take diet pills ______ times a week.
     ___ Daily—I usually take ________ diet pills a day.

   *At the worst of times, what was the average number of diet pills that you were taking per week? ______ diet pills per week
   How long ago was that? _______ months

G. DIURETICS

*Have you ever taken diuretics (water pills) to control your weight? ___ Yes ___ No
   If no, please skip to Question H.

   *During the last three months, how often have you typically taken diuretics?
     ___ I have not taken diuretics in the last three months.
     ___ Monthly—I usually take diuretics ______ times a month.
     ___ Weekly—I usually take diuretics ______ times a week.
     ___ Daily—I usually take ________ diuretics a day.

   *At the worst of times, what was the average number of diuretics that you were taking per week? ______ diuretics per week
   How long ago was that? _______ months

II. MENSTRUAL HISTORY

(For Females only)

*Have you ever had a menstrual period? ___ Yes ___ No
   If no, please skip to Question I.

   How old were you when you first started menstruating? ______ years old

*Do you have menstrual periods now? (check one)
   ___ Yes, regularly every month
   ___ Yes, but I skip a month once in a while
   ___ Yes, but not very often (for example, once in six months)
   ___ No, I have not had a period in at least six months
   ___ No, I am post-menopausal, have had a hysterectomy, or am pregnant

*How long has it been since your last period? ______ months

*Have you ever had a period of time when you did not menstruate for three months or more (excluding pregnancy)?
   ___ Yes ___ No
   If yes, how old were you when you first missed your period for three months or more? ______ years old
   For how many months did you miss your period? ______ months
   How much did you weigh when you stopped menstruating? ______ pounds

Are you currently taking birth control pills? ___ Yes ___ No
   If yes, how old were you when you first started using the pill? ______ years old
I. CURRENT MEDICATION

Are you currently taking any medication prescribed by a physician? ___ Yes ___ No
If Yes, please list the medications you are taking:

________________________________________
________________________________________
________________________________________
## Appendix J

**Available Counseling Services for Virginia Tech Students at Low or No Cost**

<table>
<thead>
<tr>
<th>Service</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center for Family Services</td>
<td>231-7201</td>
</tr>
<tr>
<td>Psychological Services Center</td>
<td>231-5914</td>
</tr>
<tr>
<td>University Counseling Services</td>
<td>231-6557</td>
</tr>
<tr>
<td>Campus Ministries</td>
<td>231-3757</td>
</tr>
</tbody>
</table>
This questionnaire consists of 21 groups of statements. After reading each group of statements carefully, circle the number (0, 1, 2 or 3) next to the one statement in each group which best describes the way you have been feeling the past week, including today. If several statements within a group seem to apply equally well, circle each one. Be sure to read all the statements in each group before making your choice.

<table>
<thead>
<tr>
<th>1</th>
<th>I do not feel sad.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I feel sad.</td>
</tr>
<tr>
<td>2</td>
<td>I am sad all the time and I can't snap out of it.</td>
</tr>
<tr>
<td>3</td>
<td>I am so sad or unhappy that I can't stand it.</td>
</tr>
<tr>
<td>4</td>
<td>I am not particularly discouraged about the future.</td>
</tr>
<tr>
<td>5</td>
<td>I feel discouraged about the future.</td>
</tr>
<tr>
<td>6</td>
<td>I can't think about it without becoming depressed.</td>
</tr>
<tr>
<td>7</td>
<td>I feel there is nothing I can do.</td>
</tr>
<tr>
<td>8</td>
<td>I feel depressed all the time.</td>
</tr>
<tr>
<td>9</td>
<td>I feel depressed all the time.</td>
</tr>
<tr>
<td>10</td>
<td>I feel depressed all the time.</td>
</tr>
<tr>
<td>11</td>
<td>I feel depressed all the time.</td>
</tr>
<tr>
<td>12</td>
<td>I feel depressed all the time.</td>
</tr>
<tr>
<td>13</td>
<td>I feel depressed all the time.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2</th>
<th>I get as much satisfaction out of things as I used to.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>I don't enjoy things the way I used to.</td>
</tr>
<tr>
<td>4</td>
<td>I don't get real satisfaction out of anything anymore.</td>
</tr>
<tr>
<td>5</td>
<td>I am dissatisfied or bored with everything.</td>
</tr>
<tr>
<td>6</td>
<td>I don't feel particularly guilty.</td>
</tr>
<tr>
<td>7</td>
<td>I feel guilty a good part of the time.</td>
</tr>
<tr>
<td>8</td>
<td>I feel guilty most of the time.</td>
</tr>
<tr>
<td>9</td>
<td>I feel guilty all of the time.</td>
</tr>
<tr>
<td>10</td>
<td>I am not feeling particularly guilty.</td>
</tr>
<tr>
<td>11</td>
<td>I am not feeling particularly guilty.</td>
</tr>
<tr>
<td>12</td>
<td>I am not feeling particularly guilty.</td>
</tr>
<tr>
<td>13</td>
<td>I am not feeling particularly guilty.</td>
</tr>
<tr>
<td>14</td>
<td>I am not feeling particularly guilty.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3</th>
<th>I do not feel like a failure.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>I feel I have failed more than the average person.</td>
</tr>
<tr>
<td>5</td>
<td>As I look back on my life, all I can see is a lot of failures.</td>
</tr>
<tr>
<td>6</td>
<td>I feel I am a complete failure as a person.</td>
</tr>
<tr>
<td>7</td>
<td>I get as much satisfaction out of things as I used to.</td>
</tr>
<tr>
<td>8</td>
<td>I don't enjoy things the way I used to.</td>
</tr>
<tr>
<td>9</td>
<td>I don't get real satisfaction out of anything anymore.</td>
</tr>
<tr>
<td>10</td>
<td>I am dissatisfied or bored with everything.</td>
</tr>
<tr>
<td>11</td>
<td>I don't feel particularly guilty.</td>
</tr>
<tr>
<td>12</td>
<td>I feel guilty a good part of the time.</td>
</tr>
<tr>
<td>13</td>
<td>I feel guilty most of the time.</td>
</tr>
<tr>
<td>14</td>
<td>I feel guilty all of the time.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4</th>
<th>I don't feel I am any worse than anybody else.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>I am critical of myself for my weaknesses or mistakes.</td>
</tr>
<tr>
<td>6</td>
<td>I blame myself all the time for my faults.</td>
</tr>
<tr>
<td>7</td>
<td>I blame myself for everything bad that happens.</td>
</tr>
<tr>
<td>8</td>
<td>I don't feel I am any worse than anybody else.</td>
</tr>
<tr>
<td>9</td>
<td>I am critical of myself for my weaknesses or mistakes.</td>
</tr>
<tr>
<td>10</td>
<td>I blame myself all the time for my faults.</td>
</tr>
<tr>
<td>11</td>
<td>I blame myself for everything bad that happens.</td>
</tr>
<tr>
<td>12</td>
<td>I don't feel I am any worse than anybody else.</td>
</tr>
<tr>
<td>13</td>
<td>I am critical of myself for my weaknesses or mistakes.</td>
</tr>
<tr>
<td>14</td>
<td>I blame myself all the time for my faults.</td>
</tr>
<tr>
<td>15</td>
<td>I blame myself for everything bad that happens.</td>
</tr>
</tbody>
</table>
14
- I don't feel I look any worse than I used to.
- I am worried that I am looking older or unattractive.
- I feel that there are permanent changes in my appearance that make me look unattractive.
- I believe that I look ugly.

15
- I can work about as well as before.
- It takes an extra effort to get started or doing something.
- I have to push myself very hard to do anything.
- I can't do any work at all.

16
- I can sleep as well as usual.
- I don't sleep as well as I used to.
- I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
- I have several hours earlier than I used to and cannot get back to sleep.

17
- I don't get more tired than usual.
- I get tired more easily than I used to.
- I get tired from doing almost anything.
- I am too tired to do anything.

18
- My appetite is no worse than usual.
- My appetite is not as good as it used to be.
- My appetite is much worse now.
- I have no appetite at all anymore.

19
- I haven't lost much weight, if any, lately.
- I have lost more than 5 pounds.
- I have lost more than 10 pounds.
- I have lost more than 15 pounds.
- I am purposely trying to lose weight by eating less. Yes _____ No _____

20
- I am no more worried about my health than usual.
- I am worried about physical problems such as ache and pains, or upset stomach, or constipation.
- I am very worried about physical problems and it's hard to think of much else.
- I am so worried about my physical problems that I cannot think about anything else.

21
- I have not noticed any recent change in my interest in sex.
- I am less interested in sex than I used to be.
- I am much less interested in sex now.
- I have lost interest in sex completely.

---

**Subtotals Page 2**

---

**Subtotals Page 1**

---

**Total Score**

220
PLEASE CHOOSE THE ANSWER THAT MOST CLOSELY CORRESPONDS TO YOUR BELIEFS ABOUT YOURSELF AND MARK IT NEXT TO THE QUESTION.

**APPENDIX L**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Agree</td>
<td></td>
<td></td>
<td></td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

1. On the whole, I am satisfied with myself.
2. At times, I think I am no good at all.
3. I feel that I have a number of good qualities.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I certainly feel useless at times.
7. I feel I'm a person of worth, at least on an equal basis with others.
8. I wish I could have more respect for myself.
9. All in all, I am inclined to feel that I'm a failure.
10. I take a positive attitude toward myself.
APPENDIX M

PLEASE DESCRIBE YOUR RELATIONSHIP(S) WITH YOUR MOTHER, FATHER, SIBLINGS AND OTHER SIGNIFICANT FAMILY MEMBERS:

MOTHER:

FATHER:

SIBLINGS:

OTHERS:

PLEASE PUT YOUR RESPONSE NEXT TO EACH QUESTION:

ALWAYS = 1 USUALLY = 2 SOMETIMES = 3 RARELY = 4 NEVER = 5

____ I am open about my feelings with my family

____ I trust my family

____ I can communicate with my family easily

____ I have close relationships in my family

____ I have trouble expressing my emotions to my family

____ I need to keep my family at a certain distance (feel uncomfortable if they try to get too close)

____ I can talk about personal thoughts or feelings with my family

____ I feel relaxed when I am with my family

____ I am outgoing with my family

____ My family understands my real problems

____ I feel that my family gives me the credit I deserve

____ I would rather spend time by myself than with my family

____ I know that my family loves me
APPENDIX N

CLIENT INFORMATION FORM

Case #______________
Therapist______________

EXCEPT IN CASES OF CHILD ABUSE OR IMMEDIATE DANGER TO YOURSELF OR OTHERS, ALL INFORMATION YOU PROVIDE WILL BE KEPT STRICTLY CONFIDENTIAL AND RELEASED ONLY IN ACCORDANCE WITH PROFESSIONAL ETHICS AND APPLICABLE LAW.

PERSONAL INFORMATION:

Name:_________________________ Birth Date __/__/____
Address:__________________________________________________________________________

Phone: (Home)_________ (Work)_________ SSN:__________________________
Marital Status: Married/Cohabiting__ Separated__ Divorced__ Widowed__ Single__ Engaged_____________________________
Who lives in your home?_______________________________________________

FAMILY OF ORIGIN:
Please fill in the names and ages of you and your spouse or partner’s parents, your past or present spouse or partner, and any children you may have. Please also indicate those family members who may be deceased.

PARENTS:

YOUR PARENTS

YOUR SPOUSE OR PARTNER’S PARENTS

YOU & YOUR SPOUSE OR PARTNER:

YOUR FIRST NAME

YOUR SPOUSE OR PARTNER’S NAME

PAST SPOUSE OR PARTNER:

YOUR PAST SPOUSE/Partner

YOUR SPOUSE/Partner’s PAST SPOUSE/Partner

YOUR CHILDREN OR STEPCHILDREN:

__________________________________________

223

(GO TO NEXT PAGE)
**WHY YOU'RE HERE:**

Who referred you to the Center for Family Services?__________________________

For what problem(s)?______________________________________________________

On a scale of 1 (mild) to 5 (severe), how would you rate your current problem(s)?____

How long has this been a problem?_________________________________________

How have you tried to correct this problem?___________________________________

Have you ever experienced this problem in the past?___________________________

Has anything changed since you made the decision to seek help?___If yes, what? __________

___________________________________________________________

Have you had counseling or therapy in the past?___If yes, Therapist?____Reason for treatment?____When was this?____Was it helpful?____

___________________________________________________________

**MEDICAL INFORMATION:**

Who is your physician?_____________________________________________________

Medical problems in last 5 years:___________________________________________

Present medical problems:__________________________________________________

Are you currently using any prescription drugs or medication?___If yes, Medication?_____Dosage?_____Prescribed by?_____Since when?____

___________________________________________________________

(See back of this page)
Do you regularly:

- Drink
- Smoke
- Use prescribed or non-prescribed drugs

If you do, does your habit hurt your relationship with others? Yes No

Is it difficult for you to stop or control the amount you take? Yes No

Is there any history of alcohol or drug abuse in your family? Yes No

Is there any history of violence, verbal or sexual abuse in your family? Yes No

Please check any of the following you have had.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye, ear, nose or throat trouble</td>
<td>Recent weight gain/loss</td>
</tr>
<tr>
<td>Hearing problems</td>
<td>Tumor/Growth/Cancer</td>
</tr>
<tr>
<td>Stutter/Stammer</td>
<td>Arthritis/Rheumatism</td>
</tr>
<tr>
<td>Double Vision</td>
<td>Frequent/Painful Urination</td>
</tr>
<tr>
<td>Head Injury</td>
<td>Prostate troubles</td>
</tr>
<tr>
<td>Frequent/Severe headaches</td>
<td>PMS/Endometriosis (<em>female</em> troubles)</td>
</tr>
<tr>
<td>Dizziness/Painting</td>
<td>Abortion/Miscarriage/Infertility</td>
</tr>
<tr>
<td>Loss of memory/Amnesia</td>
<td>Venereal disease</td>
</tr>
<tr>
<td>Periods of unconsciousness</td>
<td>Sleeping difficulties</td>
</tr>
<tr>
<td>Epilepsy/Seizures</td>
<td>Bed wetting</td>
</tr>
<tr>
<td>Asthma/Shortness of breath</td>
<td>Depression/Worrying</td>
</tr>
<tr>
<td>Allergies/Hay fever</td>
<td>Attempted suicide</td>
</tr>
<tr>
<td>Skin diseases</td>
<td>Physical/Sexual assault</td>
</tr>
<tr>
<td>Coughing up blood</td>
<td>Drug allergies</td>
</tr>
<tr>
<td>Chronic/Frequent colds</td>
<td>High/Low blood pressure</td>
</tr>
<tr>
<td>Rheumatic fever</td>
<td>Pain/Pressure in chest</td>
</tr>
<tr>
<td>Heart trouble/Pounding heart</td>
<td>Thyroid trouble</td>
</tr>
<tr>
<td>Numbness/Tingling</td>
<td>Excessive sweating</td>
</tr>
<tr>
<td>Indigestion/Stomach trouble</td>
<td>Diabetes</td>
</tr>
<tr>
<td>Eating disorder</td>
<td>Recent death of relative/friend</td>
</tr>
<tr>
<td>Adoption/recent birth</td>
<td>Legal problems/Job loss</td>
</tr>
</tbody>
</table>

Are there any related issues you think your therapist should know about?

In case of emergency, tell us whom we should notify:

Name: ___________________________ Phone: Home ________ Work ________

THANK YOU!

225
Therapy Agreement

Agreement to Treatment
I hereby give permission for any therapy, testing, or diagnostic evaluation seen as helpful by the Center for Family Services to treat me, my marriage, family, or other relationship. I understand that therapy may sometimes lead to an anticipated emotional stress as well as emotional improvement, and that the Center does not guarantee any particular results or outcome from the therapy process. I understand further that I am free to discontinue therapy at any time.

Agreement to Videotaping & Observation
Because the Center is part of the Ph.D. program in Marriage & Family Therapy at Virginia Tech, and is an educational facility, I further agree to allow videotaping and observation of my therapy for the purpose of clinical treatment and training. I understand that only members of the clinical staff, clinical supervisors, or authorized visiting mental health professionals, will be allowed to view these tapes or to observe actual sessions, and that they will treat any information they receive with strict confidentiality, except as noted below. I recognize that videotaping of all sessions is a requirement of therapy, while observation will occur at the initiative of my therapist. I understand that, as a courtesy, my therapist will inform me when a session is to be observed.

Understanding of Confidentiality
I understand that all records, videotapes, and other information concerning therapy will be kept in strict confidence by my therapist, Center staff, or anyone otherwise affiliated with the Center. Therapists and others may not give information about my therapy to others, including the fact that I or my companions or family members are in treatment, except when specifically required to by law, or with my specific written consent.

Exceptions to Confidentiality
While my therapeutic record is confidential, I realize that there are times when my therapist or Center staff may be legally or ethically required to divulge information against my wishes. I understand that my therapist or Center staff are required by professional ethics and law to report evidence or suspicion of child abuse or neglect, with or without client consent, including evidence or suspicions formed in the course of treatment. I further understand that my therapist and Center staff are required by professional ethics and law to report threats to physically harm others or ourselves that I, my companions, or members of my family may make, regardless of my or our wishes. Finally, I recognize that my therapist and Center staff are legally obligated to break confidentiality when ordered to testify by a court of law.

Understanding that the Center is Not an Emergency Service
I am aware that the Center is not an emergency or 24 hour service. In an emergency, I will call RAFT, the local police, medical emergency service, or another appropriate agency.
Understanding of Fees and Cancellation Responsibilities

I have discussed a payment plan with my therapist and have agreed to a fee of $___ per hour. I accept responsibility for this fee and recognize that this does not include services such as written reports, responding to subpoenas, 3rd party consultations, or other services, which are charged at a separate rate, and are not part of this agreement. I further understand that it is my obligation to notify the Center 24 hours in advance when I must cancel an appointment. In the event that I fail to notify the Center, I am aware that I may face a service charge equal to my hourly rate for therapy.

Signature

I have read or had explained to me all the above terms and conditions of therapy, and have signed below to indicate my agreement with each of these terms and conditions:

____________________________  ______________________________
Client                                                                 Therapist

________________________________
Client (Adult family member, domestic partner, or other adult)

________________________________
Client (Adult family member, domestic partner, or other adult)

____________________________  ______________________________
Legal Guardian (if client is minor) Date

rev. Novembre 7, 1993
APPENDIX O

Initial Consultation: Eating Disorders Questionnaire

GENERAL BACKGROUND INFORMATION:
Date: ____________________ Name: ____________________
Current Address: ____________________
Permanent Address: ____________________
Current Telephone: ____________________ Permanent: ____________________
Social Security Number: ____________________ Age: __________
Education Level: Fr So Jr Sr Grad Student
Major: ____________________ College of: ____________________
Desired Occupation: ____________________

Current Relationship Status (Check all that apply)
____ Single  ____ Steadily dating partner
____ Divorced  ____ Not dating presently
____ Married  ____ Recently broke up with partner
____ Cohabiting  ____ Not interested in dating at this time
____ Date variety of people

DISORDERED EATING INFORMATION

1. Please circle on the scale below how much your eating problems interfere with the following:

   Never  Rarely  Sometimes  Often  Always

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>School work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Paid Work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Daily Activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(other than work)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoughts</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Feelings about myself</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Personal Relationships</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Sleep</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Please feel free to write any comments that might clarify your responses or provide information which you feel is important for us to know:

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
2. Please indicate any of the following symptoms you have had in the past three (3) months:
   - Deliberate weight loss
   - Loss of menstrual period
   - Overactivity/exercise without enjoyment
   - Feeling terrified of fat
   - Feeling fat despite others saying you are too thin
   - Being obsessed or totally preoccupied with thoughts of food

Please feel free to write any comments that might clarify your responses:

3. Were there any particular events in your life, either positive or negative, which preceded or coincided with the onset of your eating problem? (Check as many as applicable)
   - Death of parent or sibling
   - Death of significant other
   - Leaving home
   - Illness or injury to self
   - Failure at school or work
   - Illness or injury to family
   - Member or significant other
   - Work transition
   - Pregnancy

Please feel free to write any comments that might clarify your responses:

FAMILY HISTORY AND INFORMATION

4. Marital status of parents:
   - married to each other
   - mother remarried
   - father remarried
   - mother cohabiting
   - father cohabiting
   - separated
   - divorced

5. Fill in all that apply:
   - Mother's occupation:
   - Mother's partner's occupation:
   - Father's occupation:
   - Father's partner's occupation:
   - Your Partner's occupation:

6. Number of siblings:
   - Number of brothers: ___  Ages: ___
   - Number of sisters: ___  Ages: ___
7. Please circle on the scale below the quality of your relationship with each of the following:

<table>
<thead>
<tr>
<th></th>
<th>Terrible</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Father</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Step-mother</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Step-Father</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Siblings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Spouse/Partner</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Male Friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Female Friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Please feel free to write any comments that might clarify your responses:

---

**WEIGHT INFORMATION**

8. Weight History

Current Wt: ____  Current Wt: ____  Desired Wt: ____

Highest Wt since age 12: ____  Lowest wt since age 12: ____

How long did you remain at your lowest weight? ______

At your current weight do you feel that you are (circle one):

<table>
<thead>
<tr>
<th>Extremely Thin</th>
<th>Somewhat Thin</th>
<th>Normal Weight</th>
<th>Somewhat Overweight</th>
<th>Extremely Overweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

9. Are you involved in an occupation or activity that requires you to maintain a certain weight? ____ Yes ____ No

10. How did you perceive your weight as a child between 6-12 years old?

<table>
<thead>
<tr>
<th>Extremely Thin</th>
<th>Somewhat Thin</th>
<th>Normal Weight</th>
<th>Somewhat Overweight</th>
<th>Extremely Overweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

11. As a child were you teased about your weight?

Yes, about being underweight: ____

Yes, about being overweight: ______

No ____

Please feel free to write any comments that might clarify your responses:

---
12. Check spaces below if you or any family members are currently experiencing, or have experienced any of the following:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Self</th>
<th>Spouse</th>
<th>Mother</th>
<th>Father</th>
<th>Sister</th>
<th>Brother</th>
<th>Grand-Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workaholism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcoholism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug Addiction or Abuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicide Threats or Attempts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overweight or Obesity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anorexia Nervosa</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Bulimia Nervosa</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Compulsive Eating</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatric Hospitalization</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Mood Swings</td>
<td></td>
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</tr>
<tr>
<td>Psychotherapy</td>
<td></td>
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</tr>
<tr>
<td>Rape</td>
<td></td>
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</tr>
<tr>
<td>Sexual Abuse</td>
<td></td>
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</tr>
<tr>
<td>Incest</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Emotional Abuse</td>
<td></td>
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</tr>
<tr>
<td>Physical Abuse</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stealing or Shoplifting</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Rigid Religious Belief System</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Ulcers</td>
<td></td>
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<tr>
<td>Colitis</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asthma</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Manic-Depressive</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Schizophrenia</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Paranoid Thinking</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Severe Anxiety</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Phobias</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Prescription Psychiatric Drugs</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
13. How often do you weigh or measure your body size?

- More than daily
- Daily
- More than weekly
- Weekly
- Less than monthly
- Monthly

14. How do you feel about the way your body is proportioned?

<table>
<thead>
<tr>
<th>Extremely Dissatisfied</th>
<th>Very Dissatisfied</th>
<th>Moderately Dissatisfied</th>
<th>Slightly Dissatisfied</th>
<th>Not at All Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

DIETING BEHAVIOR

15. Have you ever been on a diet? Yes No

16. If yes, at what age did you begin to restrict your food intake due to concern over your body size?

17. Please check your preferred way of dieting:

- Skip meals
- Fasting
- Restrict carbohydrates
- Restrict sweets
- Restrict fats
- Reduce portions
- Go on fad diets
- Reduce calories
- Other (specify)

18. If you have ever been encouraged to diet, please check the people that encouraged you to diet the most:

- Boyfriends
- Girlfriends
- Mother
- Father
- Brother
- Other
- Employer
- Teacher/Coach
- Other relative

Please feel free to write any comments that might clarify your responses:

19. If there has been a period when you have binged, purged, or severely restricted food, whether at the present time or in the past, please explain the circumstances that helped you to not binge eat, purge, restrict foods for that period of time and check all that apply:

- Began dieting
- Sought professional help
- Left romantic relationship
- Left home
- Marriage
- Work
- School holidays
- Started exercising
- Began romantic relationship
- Developed illness
- Divorce
- Pregnancy
- Vacation
- Other, please specify
20. What activities do you regularly engage in to prevent weight gain?

____ Yes  ____ No

If yes, please check all those that apply and their frequency:

___ strict dieting or fasting  ___ self-induced vomiting  ___ times per week
___ use of laxatives or diuretics  ___ times per week
___ rigorous exercise  ___ times per week

MEDICAL HISTORY

21. What physical problems have you had since the onset of your eating problems?

___ Sore throat  ___ Sore or calluses on fingers due to vomiting
___ Weakness or tiredness  ___ Dental problems
___ Seizures  ___ Constipation
___ Feeling 'bloates'  ___ Diarrhea
___ Stomach pains  ___ Heartburn/excess acid
___ Other

22. Please circle on the scale below whether, and if so, how frequently you experience the following symptoms:

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Anxiety</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Difficulty getting up in the morning</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Crying episodes</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Irritability</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Fatigue</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Difficulty falling asleep</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Thinking others are better than you</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Please feel free to write any comments that might clarify your responses:

_____________________________________________________________________

_____________________________________________________________________

PAST EXPERIENCES OF WORKING ON YOUR DISORDERED EATING

23. Have you ever been or are currently in therapy?  ____ Yes  ____ No

24. If so, when were you in therapy and what was the presenting problem?

_____________________________________________________________________

Approx Dates _______________________

_____________________________________________________________________

Approx Dates _______________________

_____________________________________________________________________

Approx Dates _______________________

233
25. Please indicate any treatments you have had for your eating problem and whether they have been helpful. Check all that apply:

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Helpful</th>
<th>Not Helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior modification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutritional counseling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual psychotherapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group psychotherapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-patient hospitalization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relaxation/stress management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypnosis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please feel free to write any comments that might clarify your responses:

26. On a scale from 1 (no problems) to 10 (extremely severe), how would you rate the extent of your disordered eating? 

27. On a scale from 1 (not at all committed) to 10 (extremely, completely committed), how committed are you to recovering from your eating problem? 

28. On a scale from 1 (no confidence at all) to 10 (absolutely no question that you will recover), how confident are you that you can recover from your eating problem? 

PLEASE WRITE ANYTHING ELSE THAT YOU THINK WOULD BE HELPFUL FOR US TO KNOW:
APPENDIX F

INFORMED CONSENT

This study, entitled, "An Integrated Treatment Program for Disordered Eating: A Program Evaluation" is being conducted by Lydia M. Marek, M.S., a doctoral candidate in the Marriage and Family Therapy Program in the Department of Family and Child Development at Virginia Tech.

I. PURPOSE OF THIS RESEARCH

The purpose of the study is to identify components of treatment which are found to be most beneficial for students who have eating disorders, particularly bulimia nervosa.

II. PROCEDURES

If you choose to participate in this project you will be asked to complete several questionnaires (pre and post-tests) asking for information about your beliefs, attitudes, relationships, and food-related behaviors. There are several other requirements for participating which are listed in section VII.

III. RISKS

No harm to you is expected to result from any of these activities. However, you may experience some emotional or psychological distress when completing the questionnaires, daily and/or weekly logs. If you experience any discomfort or distress at any time, please inform your therapist, Lydia Marek.

IV. BENEFITS OF THIS PROJECT

Your participation in the project will provide information that may be helpful. In addition, you will receive:
- free individual therapy sessions at the Center for Family Services
- free support group meetings at the Center for Family Services
- free nutritional assessment and counseling from Mary Pat Ward, R.D.
- access to Mary Pat Ward or Lydia Marek when you need help fulfilling your responsibilities under this treatment program

V. EXTENT OF ANONYMITY AND CONFIDENTIALITY

The results of this study will be kept strictly confidential. All paperwork completed will be available only to the treatment team, and all files will be kept confidential; no names will be used. The information you provide will have your name removed and only a subject number will identify you during analyses and any written reports of the research. The focus group interview will be audio taped and these tapes will only be reviewed by Lydia Marek, Mary Pat Ward, and the dissertation chair, Howard O. Pontikesky, M.D. The tape will be erased within 9 months from the taping date.

VI. FREEDOM TO WITHDRAW

Your participation is voluntary and you are free to withdraw from this study at any time without penalty.
VII. APPROVAL OF RESEARCH
This research project has been approved, as required, by the
Institutional Review Board for projects involving human subjects at Virginia
Polytechnic Institute and State University and by the Department of Family and
Child Development.

VIII. SUBJECT'S RESPONSIBILITIES
I know of no reason that I cannot participate in this study. I have the
following responsibilities:

1. a commitment on your part to begin recovering from your eating
   disorder;
2. to attend bi-weekly individual therapy sessions at the Center for
   Family Services;
3. to attend bi-weekly nutritional counseling;
4. to attend a weekly group therapy meeting at the Center for Family
   Services;
5. to complete the daily and weekly paperwork and assignments given by
   the dietitian and/or therapist;
6. to complete the pre and post-test questionnaires, and be part of a
   final interview in order to evaluate the effectiveness of the
   treatment program.

Furthermore, I understand that the purpose of participating in this
study is not to achieve weight loss. Rather, the goals I will strive to
achieve are:
- increasing self-awareness about my eating disordered behavior
- decrease or eliminate those eating disordered behaviors as part of the
  healing process
- begin to achieve a healthy, optimal lifestyle
- remain committed to my recovery from eating disordered behaviors.

Lydia Marek can be available to discuss the study’s purpose, objectives,
or procedures at any time during the various activities you will participate
in during the course of this study. She is happy and willing to answer any
questions or discuss any problems with participants. In addition, continuing
treatment is always available through the Center for Family Services or
Student Health Services should you still require help with your eating
disorder after this study is completed.

I agree to participate in this study

______________________________  ______________________________
Signature of Participant        Date
II. PARTICIPANT'S PERMISSION (for the participant to keep)

I have read and understand the informed consent and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent for participation in this project.

If I participate, I may withdraw at any time without penalty. I agree to abide by the rules of this project.

Should I have any questions concerning this research, I will contact Lydia Marek (231-1201), her advisor, Howard Protinsky (231-7201). Should I have any questions concerning the conduct of this research, I will contact Ernest Stout (231-6077).
## EATING DISORDERS POSTTEST

### APPENDIX Q

**Code** ____________________  **Date** ____________________

**Current Relationship Status (Check all that apply)**
- Single
- Divorced
- Married
- Recently broke up with boyfriend/girlfriend
- Steady boyfriend/girlfriend
- Not dating presently
- Not interested in dating at this time
- Date a variety of people

**Current Living Arrangements (Check all that apply)**
- Live on campus
- Live off campus
- Live with parents or relatives
- Live with roommate(s); no. of roommates
- Live alone

Please circle one on the scale below the current quality of your relationship with each of the following:

<table>
<thead>
<tr>
<th>Terrible</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Father</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Step Parent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Partner</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Male Friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Female Friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Your</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Please circle on the scale below how much your eating problems currently interfere with the following:

- School work
- Paid work
- Daily activities (other than work)
- Thoughts
- Feelings about myself
- Personal relationships
- Sleep

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

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233
Please indicate any of the following symptoms you have had in the past month:

- Deliberate weight loss (not due to medical illness)
- Loss of menstrual period
- Overactivity/exercise without enjoyment
- Feeling terrified of fat
- Feeling fat despite others saying you are too thin
- Being obsessed or totally preoccupied with thoughts of food

Check spaces below if you have experienced any of the following in the past month:

- Workaholism
- Depression
- Alcoholism
- Drug Addiction or Abuse
- Suicide Threats or Attempts
- Anorexia Nervosa
- Bulimia Nervosa
- Compulsive Eating
- Mood Swings

Current weight: ______ lbs
Current height: ______ inches
Desired weight: ______ lbs.

At your current weight do you feel that you are (circle one):

<table>
<thead>
<tr>
<th>Extremely Thin</th>
<th>Somewhat Thin</th>
<th>Normal Weight</th>
<th>Somewhat Overweight</th>
<th>Extremely Overweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Are you involved in an occupation or any activity that requires you to maintain a certain weight?

- Yes
- No

If yes, please explain:

How much does a two-pound weight gain affect your feelings about yourself?

<table>
<thead>
<tr>
<th>Extremely Negative</th>
<th>Negative</th>
<th>Neutral</th>
<th>Positive</th>
<th>Not at All</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

How much does a two-pound weight loss affect your feelings about yourself?

<table>
<thead>
<tr>
<th>Extremely Positive</th>
<th>Positive</th>
<th>Neutral</th>
<th>Negative</th>
<th>Not at All</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

How dissatisfied are you with the way your body is proportioned?

<table>
<thead>
<tr>
<th>Extremely Dissatisfied</th>
<th>Very Dissatisfied</th>
<th>Moderately Dissatisfied</th>
<th>Slightly Dissatisfied</th>
<th>Not at All</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
### Eating Disorders - Foster

#### How fat do you feel?

<table>
<thead>
<tr>
<th>Extremely Fat</th>
<th>Very Fat</th>
<th>Somewhat Fat</th>
<th>Not at All Fat</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

#### How often do you weigh or measure your body size?

- More than daily
- More than weekly
- Less than monthly

- Daily
- Weekly
- Monthly

#### Please check your preferred way of dieting:

- Skip meals
- Fasting
- Restrict carbohydrates
- Restrict sweets
- Restrict fats

- Reduce portions
- Go on fad diets
- Reduce calories
- Other (specify)

#### In the past month, have you experienced episodes of eating a large amount of food in a short space of time (an eating binge)?

- Yes
- No

#### How long does a binge usually last?

- Less than 15 minutes
- Less than 30 minutes
- Less than one hour
- 1-2 hours
- More than 2 hours

#### Please circle on the scales below, how characteristic the following symptoms are of your binge eating.

<table>
<thead>
<tr>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- I consume a large amount of food during a binge
- I eat very rapidly
- I feel out of control when I eat
- I feel miserable or annoyed after a binge
- I get uncontrollable urges to eat and eat until I feel physically ill
- I binge eat in private

What is the longest period you have had without binge eating in the past month?

- Days

#### Check the foods that you are most likely to binge on.

- Fried foods, butter
- Salty snack foods (ex - chips, nuts)
- Sweet snacks/desserts
- Bread/cereal/pasta

- Cheese/milk/yogurt
- Fruit
- Meat/fish/poultry/eggs
- Vegetables

What do you eat on a typical "good" day of eating?

240
What do you eat on a typical "bad" day of eating?

How willing would you be to gain 10 pounds in exchange for not binge eating any more?

<table>
<thead>
<tr>
<th>Extremely Willing</th>
<th>Very Willing</th>
<th>Somewhat Willing</th>
<th>Not at All Willing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

In the past month have you vomited food after eating in order to get rid of the food eaten?

Yes    No

During the past month, what is the average frequency that you have engaged in the following behaviors? (Check one for each behavior.)

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Never</th>
<th>Once a week or less</th>
<th>Several times a month</th>
<th>Once a week</th>
<th>Several times a week</th>
<th>Once a day</th>
<th>More than once a day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binge eating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vomiting</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Laxative use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of diet pills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of water pills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of enemas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercise to control weight</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Fasting (skipping meals for an entire day)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Greatly decreased food intake</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

How often are you now able to eat a "normal" meal without "binge eating" and without vomiting?

Never    Less than one meal a week    Several meals a week
About one meal a week    One meal a day
More than one meal a day  

On the average, how often have you exercised (including going on walks, riding bicycle, etc.) in the past month?

Hours per week    Minutes per day

241  

1
What physical problems have you experienced in the past month? (Check all that apply)

- Sore throat
- Weakness or tiredness
- Seizures
- Feeling "bloating"
- Stomach pains
- Heartburn/excess acid
- Sores or calluses on fingers due to induction of vomiting
- Dental problems
- Constipation
- Diarrhea
- Physical problems due to over-exercise
- Other

Please circle on the scale below how frequently you experienced the following symptoms in the past month:

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Anxiety</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Difficulty getting up in the morning</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Crying episodes</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Irritability</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Fatigue</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Difficulty falling asleep</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Are you currently taking any prescription or other medication?

- Yes
- No

<table>
<thead>
<tr>
<th>DRUG</th>
<th>REASON</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tbody>
</table>

On a scale from 1 (no problem) to 10 (extremely severe), how would you currently rate the extent of your disordered eating?

On a scale from 1 (not at all committed) to 10 (extremely committed), how committed are you currently to recovering from your eating problems?

On a scale from 1 (no confidence at all) to 10 (absolutely no question that you will recover), how confident are you now that you can recover from your eating problem?

On a scale from 1 (no change at all), to 10 (made all changes desired), how much have you changed your eating behaviors/thoughts/feelings since beginning this program?

On a scale from 1 (no help at all) to 10 (extremely helpful), how helpful do you feel the disordered eating program has been? ___________
Since beginning as a subject in this study 3 months ago, do you feel that you have made any changes in the following behaviors?

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Do it more frequently</th>
<th>Do it less frequently</th>
<th>No change in frequency or intensity</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overactivity/exercise without enjoyment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compulsive eating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Binge eating</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fad dieting/skipping meals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forced vomiting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laxative abuse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of diet pills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of water pills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of enemas</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Since beginning as a subject in this study 3 months ago, do you feel that you have made any changes the following thoughts and feelings?

<table>
<thead>
<tr>
<th>Thought</th>
<th>Do it more frequently</th>
<th>Do it less frequently</th>
<th>No change in frequency or intensity</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling terrified of being fat</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Being obsessed with thoughts of food</td>
<td></td>
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</tr>
<tr>
<td>Negative thinking about your body</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Overall, do you feel that you have achieved some recovery from your eating disorder?

_____ Yes  _____ No

Comments:
If you feel that you have achieved some recovery, which, if any, of the following activities seems to have helped you the most? Check any that apply.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Helped</th>
<th>Did not help</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition therapy and appointments with nutrition counselor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High complex carbohydrates and lowfat eating plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate exercise</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual sessions with therapist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekly Group Sessions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homework Assignments from Group Sessions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Homework Assignments from individual therapy sessions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relaxation/stress management techniques</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time structuring and organization techniques</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food journal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding why disordered eating began</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding the function of the disordered eating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talking through family issues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Eating Disorders Manual

Are there any activities you found especially helpful and that you wish to continue in the future?

____ Yes  ____ No
Which ones, if any?

Are there any other activities or coping strategies which you think should be incorporated into a campuswide program?

____ Yes  ____ No
Comments:

Overall, how satisfied are you with the quality of help you received as part of this study?

____ very satisfied
____ somewhat satisfied
____ not satisfied at all
Comments:

This questionnaire was adapted from:
FOCUS GROUP INTERVIEW GUIDE
DISORDERED EATING PROGRAM

1. Let's go around the room and would each of you please share how you found how about this program.

2. How was the program explained to you?
   Probe: What did you think of the amount of information that you received?

3. What made you decide to participate in the program?

4. Disordered eating can be a very private and difficult issue for many people to talk about, during the course of this program would you please share any moments you may have had similar to this.
   Probes: What actions did this evoke in you?

5. I understand there were a number of forms for you to fill out for this program, what was that like for you?

6. At this point I would like to talk about the different components of the program ....

Regarding the nutritional assessment with Mary Pat...
   What do you think was the most important things you accomplished?
   What was the most helpful in helping that happen?
   What concerns did you have?
   What might you have done differently with this aspect of the program?

Regarding individual therapy with Lydia Marek...
   What do you think was the most important things you accomplished?
   What was the most helpful in helping that happen?
   What concerns did you have?
   What might you have done differently with this aspect of the program?

Regarding weekly group therapy with Mary Pat and Lydia Marek...
   What do you think was the most important things you accomplished?
   What was the most helpful in helping that happen?
   What concerns did you have?
   What might you have done differently with this aspect of the program?

7. This program attempted to address the emotional, physical, and support needs of persons with disordered eating, looking at this program as a whole...
   What did you find the most helpful?
   What did you find the least helpful?
What else might you have included?

8. How has this program affected you?

9. What would you tell others about this program?

10. Now that you are coming to the end of this program, what other things do you see that might be helpful to you?

11. This ends our prepared discussion, however are there any more thoughts anyone might like to share?
FOCUS GROUP INTERVIEW FOR INTEGRATED TREATMENT PROGRAM FOR DISORDERED EATING

Please rate by circling each of the following criteria from 1 to 5 in terms of helpfulness to you (excellent = 5, good = 4, average = 3, fair = 2, poor = 1). Your honest evaluation is critical to the future direction of this program.

1. Nutritional assessment and counseling offered by Mary Pat
   a. overall helpfulness
   b. availability of Mary Pat
   c. convenience of appointments
   d. adequate number of meetings
   e. topics covered
   f. sharing of personal experiences by Mary Pat.

   1 2 3 4 5

2. Individual therapy offered by Lydia Marek
   a. overall helpfulness
   b. availability of Lydia Marek
   c. convenience of appointments
   d. adequate number of meetings
   e. topics covered

   1 2 3 4 5

3. Weekly group therapy meetings
   a. overall helpfulness
   b. convenience of meetings
   c. adequate number of meetings
   d. topics covered

   1 2 3 4 5

4. Overall integrated program (emotional-individual therapy, physical-nutritional counseling, support-group therapy)

   1 2 3 4 5

5. Was the program clearly explained to you? Yes  No

6. Would you recommend this program to others? Yes  No

7. A number of topics were discussed either in group or in individual meetings with Mary Pat or Lydia Marek. Could you please circle how helpful they were for your own recovery? (extremely helpful = 5, helpful = 4, somewhat helpful = 3, not very helpful = 2, not helpful at all = 1)

   History and rationale for Integrated Program 1 2 3 4 5 N/A
   Setting personal goals 1 2 3 4 5 N/A
<table>
<thead>
<tr>
<th>Topic</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing letter to your Eating Disorder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Pros and cons of disordered eating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Visualization of food</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Behaviors of conflict avoidance &amp; people pleasing</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Continuum of Eating Disorder</td>
<td></td>
<td></td>
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<td>N/A</td>
</tr>
<tr>
<td>Visualization of Body Talk</td>
<td></td>
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<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Looking at personal strengths</td>
<td></td>
<td></td>
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<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Needs for recovery</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Coping strategies and skills</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Identifying and addressing self care</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Barriers and strategies for Thanksgiving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>&quot;Fork in the Road&quot; visualization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Ending ceremony</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Family themes</td>
<td></td>
<td></td>
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<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Concept of physical versus emotional hunger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Reflections on past week</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Evaluating and changing food behaviors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Social support issues</td>
<td></td>
<td></td>
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<td></td>
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<td>N/A</td>
</tr>
</tbody>
</table>

8. If you had not become involved in the integrated program, how many of your goals do you believe you would have met on your own?

1. none
2. a few
3. some
4. most
5. all
APPENDIX T

(Participant's Name)

I have listed below the goals that you have discussed wanted to reach. Could you please read them and assign a value to each of these goals in terms of how you feel you are doing in reaching them. A 1 indicates that you have not reached this goal at all while a 10 indicates that this goal is fully met. Please put a value from 1 to 10 next to each goal.

____ 1. Less binge eating
____ 2. Asking for what you need
____ 3. Daily self care/nurturance/rewards
____ 4. More social eating

Are there other goals that you feel you are meeting that are not stated above? If so, please write them and assign them a value.

What do you think has been most helpful in meeting your goals?
INTEGRATED TREATMENT PROGRAM FOR DISORDERED EATING

Your last session with Lydia Marek will be audio-taped. These tapes and any written transcripts of your interviews and written or oral reports of the research will only use a pseudonym. If a research assistant is hired to transcribe the tapes, they will sign a pledge of confidentiality and agree to withdraw from transcribing tapes of anyone who is known to the assistant.

I agree to the above.

Participant____________________Lydia I. Marek, M.S.

Date___________________________Date___________________________
APPENDIX V

Research Assistant's Confidentiality Statement

Title of Study: An Integrated Treatment Program for Problem Eating: An Impact Assessment

Primary Researcher: Lydia Marek

Confidentiality Pledge:

I understand that the information being collected in this study is sensitive, personal, and is strictly confidential. I hereby pledge that I will keep all such information confidential. I also pledge to withdraw immediately from further involvement with a particular interview if I discover that the participant whose interview I am transcribing is an acquaintance of mine or known by me in any way.

Signature ___________________________ Date ______________
II. FOOD DEPENDENCE - TREATMENT

A. FOUR GENERAL STAGES OF RECOVERY:

1. Stage I - Admission that weight problem is eating disorder. Addressing solutions that focus on recovery versus weight loss.

2. Stage II - Height gain stage - may read recovery material, once individual starts recovery, take workshops, Vor dieting becomes normal or it.

3. Stage III - Crossroads point - when underlying issues are clear - now actions need to be taken.

4. Stage IV - Recovery, individual is able to translate and cope, food or weight is the issue that needs addressing. Individual takes appropriate self-care action, often resulting in many life changes.

B. LENGTH OF TIME FROM STAGE 1 TO 4?

Varies greatly with severity of eating disorder and from individual to individual. Average for my practice is minimum of 6 months and often between 2-5 years of some form of individual or group therapy. The challenge for most individuals is to STAY in treatment versus quitting due to the fact that immediate weight loss is not usually part of the early or even middle periods of treatment. Weight loss often occurs nearer the end stages of treatment for many people. Other criteria besides weight loss is critical to measure recovery progress.
APPENDIX X

SIX PRINCIPLES OF THE NON-DIET APPROACH
(from Breaking Free by Geneen Roth)

1. EAT ONLY WHEN YOU ARE PHYSICALLY HUNGRY.
2. STOP EATING WHEN YOU ARE PHYSICALLY SATISFIED.
3. EAT ONLY WHAT YOU WANT.
4. EAT WITHOUT DISTRACTION.
5. EAT IN FULL VIEW OF OTHERS.
6. EAT WITH ENJOYMENT, GUSTO, AND PLEASURE.
VITA

Lydia I. Marek

Home Address
507 Floyd Street
Blacksburg, Virginia  24060
(703) 552-3711

Personal Data
Date of Birth:  January 16, 1957
Place of Birth:  New York
Married with two daughters

EDUCATIONAL EXPERIENCE

Degree  Year  University and Program
Ph.D.  May 1995  Family and Child Development
Marriage and Family Therapy
Virginia Tech

Dissertation Title:  A Multi-Modal Evaluation of an
Integrated Treatment Program for College Women
with Eating Problems

M.S.  1990  Family and Child Development
Family Studies
Virginia Tech

Thesis Title:  Patterns of support and relationship
quality:  Older mothers’ views on their daughters
and sons

B.S.  1987  Family and Child Development
Graduated Magna Cum Laude
Virginia Tech

Certificate  1981  Paralegal Program
Adelphi University, New York

PROFESSIONAL EXPERIENCE

1994  Conference Coordinator, International Year of the
Family Conference:  Building Family Friendly
Environments, Richmond, Virginia.  Coordinated and
assisted in the implementation and program development
of a state-wide conference connecting university
departments, state agencies, and the private sector in

255
Virginia.


1993–1995  Program Coordinator, Eating Disorders Project, Center for Family Services, Virginia Tech. Implemented and currently coordinating services for self-identified students experiencing disordered eating. This is an interdisciplinary program involving the Department of Human Nutrition and Foods, Department of Family and Child Development, and Student Health Services at Virginia Tech. Providing on-going evaluation services for this project as well as weekly group therapy and bi-weekly individual therapy for these students.

1993  Counselor, Family Services of the Roanoke Valley, Roanoke, Virginia. Provide therapy for individuals, children, adolescents, and families. Many of these families were considered high risk for family violence, sexual abuse, and substance abuse. Other presenting issues included: parent-child conflicts, depression, anxiety, eating disorders, relationship and marital difficulties.


1991–1992  Therapist, Center for Family Services, Blacksburg, Virginia. Provided therapy for children, adolescents, adults, couples, and/or families. Presenting issues included differentiation issues, depression, anxiety, substance abuse, sexual abuse, parent-child conflicts, sibling issues, roommate difficulties, adolescent and young adult issues, career counseling, relationship stressors and problems, life transition problems, marital and couple issues and premarital counseling. Determined need for, co-developed, implemented, and provided a weekly women’s group focusing on individuation, growth, and autonomy issues.

256
1989-1990 Research Assistant to the Department Head, Department of Family and Child Development, Virginia Tech. Participated in a variety of research projects and assisted in the development of a graduate student manual for the department.

1988 Mental Health Services of the New River Valley, Blacksburg, Virginia. Practicum providing therapy for children, adolescents, adults, couples and/or families with family violence, substance abuse, sexual abuse, differentiation issues, parent-child conflicts, depression, relationship and marital problems.

1987-1988 Psychosocial Rehabilitation Counselor/Intern, Substance Abuse Services of the New River Valley, Christiansburg, Virginia. Assisted in implementing a psychosocial rehabilitation night treatment intensive outpatient program for substance abusers (Stepping Stones). Provided therapy for individual clients referred from this group treatment. Assisted in examining the needs and the subsequent development/implementation of an extended care program for members of the Stepping Stones program.

1982-1985 Paralegal and Office Manager, Edward Jasie, Attorney at Law, Blacksburg, Virginia Performed diverse tasks in a varied law practice in a small community setting. Specialized in domestic cases including separation, divorce, child custody, and other related issues. Provided research in various areas and performed necessary functions for operation of law office.

1981-1982 Domestic Paralegal, Legal Aid Society of the New River Valley, Christiansburg, Virginia. Performed all functions necessary in relation to domestic relation cases. Conducted interviews, initiated and prepared legal pleadings, and provided research to attorneys in the area of domestic relations. Worked primarily with children and families at risk.

TEACHING EXPERIENCE

1994 Adjunct Lecturer, Department of Family and Child Development, Virginia Tech. Human Sexuality.
Evaluation scores of 3.6/4.0


1990-1994 Guest Speaker. Invited speaker for a variety of undergraduate groups and classes. Topics included: children and divorce, family and child development theories, gender issues, relationship development, pregnancy and childbirth, acquaintance rape, eating problems.

**OTHER PROFESSIONAL ACTIVITIES**

1995 In process of applying for Certified Family Life Educator (CFLE) status from National Council on Family Relations.

1994 Clinical Member of the American Association for Marriage and Family Therapy (AAMFT) - (applied)

1994 Approved Intent to Train as Supervisor from the American Association for Marriage and Family Therapy (AAMFT)

1994 Reviewer, Feminism and Family Studies Section for the National Council on Family Relations, abstracts for the 56th Annual Conference.

1994 Reviewer, Family Therapy Section for the National Council on Family Relations, abstracts for the 56th Annual Conference.

1993-1994 Nominating Committee of the Feminism and Family Studies Section of the National Council on Family Relations.


1984 Board Member, Dispute Settlement Services of the New River Valley. Certified as Mediator.
PUBLICATIONS

Published Refereed Journal Articles


Revising to Resubmit


Working Papers

Carolan, M. & Marek, L. I. Narrative accounts of gender identity and formation in adolescent females and males.

Dwyer, S. & Marek, L. Challenges and strategies: Combining graduate school and family.

Marek, L. & Protinsky, H. O. A model of solution-focused reflecting team.

Chapters Published


Chapters in Preparation

Marek, L. I. Operationalizing and instituting family life education for adolescents in the college setting. In S. Dwyer and M. Geasler (Eds.), Operationalizing family life education across age groups and settings.

PAPER PRESENTATIONS

Refereed Conference Papers


Refereed Conference Papers under review

Marek, L. I., Protinsky, H. O., Patsel, M. A multimodal evaluation of an integrated treatment program for college women with eating problems.

Carolan, M. & Marek, L. I. Narrative accounts of gender identity and formation in adolescent females and males. (National Council on Family Relations)

Invited Conference Papers


**HONORS AND AWARDS**

1994 Travel funds from the University Graduate Student Assembly, Virginia Tech, to present current research to a national, professional meeting ($300.00).

1994 Dissertation funding award from the University Graduate Student Assembly, Virginia Tech ($400.00).

1988, 1990, 1991, 1993 Travel fund awards from the College of Human Resources to present current research to national, professional meetings held those years (approximately $100 per meeting)

1986 Award for Contributions Made to the Department of Family and Child Development and to the Professional Development of Other Students

**MEMBERSHIPS**

National Council on Family Relations
Virginia Council on Family Relations
Southeastern Council on Family Relations
American Association for Marriage and Family Therapy
Virginia Association for Marriage and Family Therapy