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**PRETREATMENT MOTIVATIONAL ENHANCEMENT THERAPY
FOR EATING DISORDERS:
A PILOT STUDY**

By

Rachel Penny Feld

**A thesis submitted in conformity with the requirements
for the degree of Master of Science
Graduate Department of the Institute of Medical Science
University of Toronto**

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Pretreatment Motivational Enhancement Therapy for Eating Disorders: A Pilot Study.

Rachel Penny Feld

**Master of Science (1999)
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ABSTRACT

Eating disorder patients are notoriously ambivalent about treatment and often lack motivation to change. These characteristics may decrease the number of patients entering treatment and increase the number of patients dropping out of treatment prematurely. The aim of this pilot study was to develop and evaluate a motivational enhancement therapy (MET) group program for eating disorder patients. The goal of the MET intervention was to increase participants' motivation to change which might be expected to increase the success of future treatment of the eating disorder and reduce the rate of treatment drop-out. Nineteen individuals who were referred for specialized treatment took part in the study. The intervention was based on existing literature in the field of addictions and modified for eating disorders. The motivational measures suggested that the participants' motivation to change increased following the intervention. A decrease in depressive symptoms and an increase in self-esteem were also detected. The results of this study provide a rationale to conduct further investigations into the effectiveness of MET for eating disorder patients.

ACKNOWLEDGEMENTS

I would like to acknowledge the invaluable contributions of all the people around me who made the completion of this project possible and enriching.

To my supervisor Dr. Blake Woodside: I want to thank him for his support, encouragement, and ability to ensure that this project was completed within two years. I appreciate that he always made himself available whenever I needed him and always made me feel that he had the utmost confidence in me.

To Dr. Jacqueline Carter, my friend and mentor: I cannot express in words how much I appreciate all that she has done for me in the past two years. I know that without all of her help on the development of this study, the statistical analyses, and most importantly her incredible editing abilities, this project would not have become what it is today. The endless hours of time she spent helping me, encouraging me and making sure that I learned something from each experience, will never be forgotten.

To Dr. Allan Kaplan: I want to thank him for sharing an incredible clinical experience with me. I learned so much from co-leading the MET groups with him and was inspired by his clinical skills. His constant support and encouragement throughout this project were amazing, and I especially appreciate him helping me deal with the frustration I experienced when the group participant's attendance ran very low.

Dr. Marion Olmsted, the individual I luckily bumped into just when I needed a question answered: I want to thank her for challenging me to sharpen my research skills and for always providing me with a thought provoking discussion. I never left her office without more challenges to consider.

I also want to thank Jane Goad for her friendship, wisdom, assistance, and encouragement throughout these two years. The entire staff at the Toronto Hospital Program for Eating Disorders have been so warm and welcoming to me and it was really appreciated. I want to thank all of the patients for letting me into their respective lives and helping me view the world with a new perspective.

Finally, I wish to acknowledge the love and support I have received from all my family and close friends. Although I have reached the end of this path, I know they will all be with me as I begin my next journey. I look forward to it!

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CHAPTER I.

INTRODUCTION AND LITERATURE REVIEW

1.0 Introduction

Anorexia nervosa and bulimia nervosa are related syndromes that have received a great deal of attention from both researchers and the general public in recent years. The clinical features of both disorders are well defined and a general understanding of the epidemiology, course, and outcome have been determined. As these disorders are better understood, their complex nature becomes evident. A variety of approaches to treatment have been studied. However, it has frequently been observed that people with eating disorders can be difficult to treat because of their ambivalence about treatment. These clinical characteristics are associated with high rates of attrition, treatment failure, and relapse. While resistance to treatment and lack of motivation to engage in treatment is noted in most clinical accounts of eating disorder patients, there have been very few attempts to study or address this problem.

This chapter contains a review of the literature on the clinical features, outcome, and treatment of anorexia nervosa and bulimia nervosa. There is also a review of barriers to successful treatment with a specific focus on motivational issues. Due to the scarcity of literature on motivation in eating disorders, a review of the applicable literature on motivation from the addiction field will be presented as well.

1.1 Clinical Features

1.1.1 Anorexia Nervosa

Anorexia nervosa is described as “among the most disabling and lethal of psychiatric disorders” (Walsh, & Devlin, 1998, p.1387). It is a serious disease that is

characterized by: (a) refusal to maintain a weight at or above a minimally normal weight for age and height; (b) intense fear of gaining weight or becoming fat; (c) disturbance in the way one's body weight or shape is experienced, undue influence of weight or shape on self evaluation, or denial of the seriousness of the low body weight; (d) amenorrhea, the absence of at least three consecutive menstrual cycles (American Psychiatric Association, 1994).

Anorexia nervosa can be divided into two subtypes: restricting type, in which individuals are consistent dietary restrictors; and binge eating/purging type, in which individuals are underweight but engage in bulimic behaviours (see Table 1.0). With a long-term mortality rate of up to 18 percent (Theander, 1985), anorexia nervosa is arguably one of the most serious mental illnesses affecting adolescent and young adult women in Canada.

Table 1.0

DSM-IV Diagnostic Criteria for Anorexia Nervosa

- A. Refusal to maintain body weight at or above a minimally normal weight for age and height (e.g., weight loss leading to maintenance of body weight less than 85 percent of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85 percent of that expected).
- B. Intense fear of gaining weight or becoming fat, even though underweight.
- C. Disturbance in the way in which one's body weight or shape is experienced; undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current body weight.
- D. In postmenarchal females, amenorrhea (i.e., the absence of at least three consecutive menstrual cycles).

Subtypes:

Restricting type: During the episode of anorexia nervosa the person does not Regularly engage in binge eating or purging behaviour (i.e., self-induced Vomiting or the misuse of laxatives or diuretics).

Binge eating/purging type: During the episode of anorexia nervosa, the person Regularly engages in binge eating or purging behavior (i.e., self-induced Vomiting or the misuse of laxatives or diuretics).

1.1.2 *Bulimia Nervosa*

Clinical descriptions of bulimia-like syndromes have existed since the late 1800's (Casper, 1983). However, it was not identified as a separate disorder until 1979 (Russell, 1979). The diagnostic characteristics include: (a) recurrent episodes of binge eating; (b) recurrent inappropriate compensatory behaviour in order to prevent weight gain, such as self-induced vomiting, misuse of laxatives, diuretics, fasting or excessive exercise; (c) the binge eating and compensatory behaviours both occur on average, at least twice a week for 3 months; (d) self-evaluation is unduly influenced by body shape and weight; and (e) the disturbance does not occur exclusively during episodes of anorexia nervosa (American Psychiatric Association, 1994). Like anorexia nervosa, bulimia nervosa is also divided into two subtypes: purging and non-purging. The non-purging subtype does not involve the use of vomiting, laxative, or diuretic misuse but rather uses compensatory behaviours such as fasting and excessive exercise (see Table 1.1).

1.1.3 *Eating Disorder Not Otherwise Specified*

Eating Disorder Not Otherwise Specified (EDNOS) is a diagnosis given to individuals who do not meet the full criteria for either anorexia nervosa or bulimia nervosa but have a clinically significant eating disorder. Some examples of this include (a) women who meet all of the criteria for anorexia nervosa except they continue to have regular menses; (b) individuals who meet all criteria for anorexia nervosa except that, despite significant weight loss, their weight is in the statistically normal range; (c) all the criteria for bulimia nervosa are met except the behaviours occur at a frequency of less than twice a week or for a duration of less than 3 months; (d) the regular use of inappropriate

compensatory behaviours by an individual of normal weight after eating small amounts of food; (e) repeatedly chewing and spitting out, but not swallowing, large amounts of food (American Psychiatric Association, 1994) (see Table 1.2). It is important to recognize this group of partial-syndrome individuals because individuals with EDNOS are still likely to be strongly affected by their condition (Garfinkel, Kennedy, & Kaplan, 1995).

Table 1.1

DSM-IV Diagnostic Criteria for Bulimia Nervosa	
<p>A. Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:</p> <ol style="list-style-type: none"> 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). 	
<p>B. Recurrent inappropriate compensatory behaviour to prevent weight gain, such as, self-induced vomiting, misuse of laxatives, diuretics, or other medications; fasting; or excessive exercise.</p>	
<p>C. The binge eating and inappropriate compensatory behaviours both occur, on average, at least twice a week for 3 months.</p>	
<p>D. Self-evaluation is unduly influenced by body shape and weight.</p>	
<p>E. The disturbance does not occur exclusively during episodes of anorexia nervosa.</p>	
<p>Subtypes:</p>	
<p>Purging type: the person regularly engages in self-induced vomiting or the misuse of laxatives or diuretics.</p>	
<p>Nonpurging type: the person uses other inappropriate compensatory behaviours, such as fasting or excessive exercise, but does not regularly engage in self-induced vomiting or the misuse of laxatives or diuretics.</p>	

Table 1.2

DSM-IV Examples for EDNOS	
A.	For females, all of the criteria for anorexia nervosa are met except that the individual has regular menses.
B.	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.
C.	All of the criteria for bulimia nervosa are met except that the binge eating or inappropriate compensatory mechanisms occur at a frequency of less than twice a week or for a duration of less than 3 months.
D.	The regular use of inappropriate compensatory behaviour by an individual of normal body weight after eating small amounts of food (e.g., self-induced vomiting after the consumption of two cookies).
E.	Repeatedly chewing and spitting out, but not swallowing, large amounts of food.

1.1.4 Similarities and Differences Between the Diagnostic Subgroups

Within the eating disorder field there is a constant debate regarding the precise relationship between anorexia nervosa and bulimia nervosa. Some of the confusion surrounding these disorders is a result of patients shifting between the two diagnoses. Therefore, it is important to highlight some of the similarities and differences between these two disorders. Two core features are shared by the disorders. These are behaviours intended to control body weight and extreme concerns about weight and shape. In contrast to patients with anorexia nervosa, patients with bulimia nervosa are usually in the normal weight range. Individuals with anorexia nervosa, binge/purge subtype, often have more similarities to bulimic patients than anorexic patients who are pure restrictors (Garfinkel et al., 1995). The anorexic who binges and purges often has a higher weight prior to the onset of the illness and may have been obese. Their family weight history commonly includes obesity as well. They demonstrate impulsive behaviours, beyond the eating symptoms and are more likely to be involved in drugs, stealing, and self-mutilation (Garfinkel et al., 1995).

Individuals with bulimia nervosa may lose as much weight as those with anorexia nervosa although they may have started losing weight from a higher initial weight (Walsh & Garner, 1997). The diagnostic criteria can be helpful to identify the distinctions between the disorders yet many of the underlying issues are similar. It should also be emphasized that even within a single diagnostic category there can be large variations in terms of presenting symptoms, severity, associated psychopathology, and responsiveness to treatment.

1.1.5 Comorbidity

Psychiatric comorbidity is common in eating disorders and is relevant to both the understanding and treatment of these disorders. The lifetime prevalence of affective disorders in patients with anorexia nervosa and bulimia nervosa has been estimated to be as high as 70 percent (Herzog, Nussbaum, & Marmor, 1996; Råsatam, Gillberg & Gillberg, 1995; Halmi et al., 1991; Braun, Sunday & Halmi, 1994). Anxiety disorders are also common in individuals who suffer from eating disorders. Halmi and colleagues (1991) found that 65 percent of a sample of patients with anorexia nervosa had a lifetime incidence of an anxiety disorder. The two most prevalent anxiety disorders were social phobia and obsessive-compulsive disorder. Another study found a comorbid anxiety disorder in 60 percent of the anorexic patients and 57 percent of the bulimic patients (Bulik, Sullivan, Carter, & Joyce, 1996). Social phobia is more common amongst patients with bulimia nervosa and obsessive compulsive disorder is more prevalent in anorexia nervosa. Substance abuse is less common in anorexia nervosa than in bulimia nervosa. However, individuals with the binge eating/purging subtype of anorexia nervosa are more likely than the restricting anorexics to have substance abuse problems (Herzog et al., 1996). They are also more likely to have borderline, narcissistic or antisocial personality characteristics as

compared with restricting anorexics (Piran, Lerner & Garfinkel, 1988). In a study with a sample of 105 eating disorder patients, 69 percent met criteria for at least one personality disorder (Braun, Sunday & Halmi, 1994). This study also found that the patients who met criteria for a personality disorder were more likely to have an affective disorder or substance dependence than the patients without a personality disorder. Substance abuse and impulse-related problems such as stealing and promiscuity are more closely associated with bulimia nervosa than anorexia nervosa (Herzog et al, 1996). The high rate of comorbid psychiatric disorders in this patient population may contribute to making eating disorders difficult to treat.

1.2 Epidemiology

The exact prevalence of eating disorders is difficult to determine because patients often avoid presenting themselves for treatment and go to extreme lengths to conceal their symptoms (Hsu, 1996). There are also relatively few community epidemiologic studies examining the prevalence of the illnesses. It is estimated that in Ontario, anorexia nervosa affects 0.4 percent of the population (Garfinkel, Lin, Goering et al., 1995; Woodside et al., 1997). In Western cultures, anorexia nervosa affects approximately 0.5 percent of young women and bulimia nervosa affects about 1-2 percent of women (Hsu, 1996; Sullivan, Bulik, Kendler, 1998; Fairburn & Beglin, 1990). Estimates of the prevalence of bulimia nervosa are difficult to determine because people often fluctuate between being symptomatic and asymptomatic. In a survey assessing lifetime prevalence of bulimic behaviours, 1 in 20 women reported bingeing and purging behaviours. However, the diagnosis of bulimia nervosa was less common (Sullivan, Bulik, Kendler, 1998). Another

difficulty with determining the prevalence of bulimia nervosa is that only a small subgroup of people with this disorder are receiving treatment (Fairburn & Beglin, 1990).

Eating disorders are much less common in men and the prevalence is estimated to be one tenth of that of females (Hsu, 1996). A large community sample found a lifetime prevalence of bulimia nervosa to be 1.1 percent for women and 0.1 percent for men (Garfinkel et al., 1995). A study that compared the clinical features between males and females with eating disorders found that there were few or no differences between them (Woodside et al., 1997).

While eating disorders are often considered to be a problem of adolescence, the disorders tend to persist and there is a large adult population as well. Summarizing research on the age of onset of eating disorders is difficult because of methodological differences in the definition of onset used in various studies. Some have used the emergence of symptoms as the onset of the disorder while other studies have used the time of initial treatment as a measure of the age of onset. A study by Woodside and Garfinkel (1992) examined age of onset in a cohort of over 300 subjects and found that 50 percent of the subjects were over 18 at the age of onset. A large study of 827 patients with anorexia nervosa found that the mean age of onset was 17.4 years with the peak being 15 years (Hindler, Crisp, McGuigan & Joughin, 1994). The mean age of onset for bulimia nervosa is approximately 21 years (Kendler et al., 1991).

1.3 Etiology

The exact cause of eating disorders has not been determined. However, the general consensus among experts in the field is that the etiology can be explained using a multidimensional perspective that includes a biopsychosocial model (Garfinkel & Garner,

1982). According to this model, a combination of biological, psychological, and social factors all contribute to an individual's susceptibility to developing an eating disorder. Predisposing factors include a family history of eating disorders or affective disorders, a family or personal history of obesity, low self-esteem, perfectionism, psychological trauma, and disturbances in family functioning (Garfinkel & Garner, 1982; Fairburn, Cooper, Doll, Welch, 1999). Once the eating disorder develops, there are many factors that sustain the illness such as the physical and psychological effects of starvation, cognitive distortions, interpersonal factors, and a cultural emphasis on slimness (Garfinkel & Garner, 1982).

Individuals often begin dieting with the goal of increasing self-esteem and gaining a sense of self-control. At the initial stages of dieting, people frequently receive positive reinforcement for weight loss and changes in appearance. This additional positive attention encourages the behaviour to continue. Dieting can initially help individuals to cope with feelings of low self-esteem and to enhance feelings of self-control. However, a dangerous self-reinforcing cycle can develop and in some individuals that can result in the development of an eating disorder. An extreme focus on dietary restriction can result in the development of anorexia nervosa. Sometimes the increase in food restriction will lead a person to binge eat (Polivy & Herman, 1985). As a result of the guilt of "failing" in the self-control dieting rituals, a person may compensate by using purging behaviours. These behaviours can result in the development of bulimia nervosa. In either situation, a starvation syndrome will develop, whereby the state of starvation will decrease a person's productivity and effectiveness which further decreases self-esteem and increases the need for dieting and control. The result is a positive feedback loop in which the dieting

behaviours encourage further dieting behaviours, which perpetuate the illness (Garfinkel & Garner, 1982; Woodside, 1995).

1.4 Course and Outcome of Anorexia Nervosa

Over the last forty years many outcome studies have been conducted in anorexia nervosa (for example, Steinhausen & Glanville, 1983; Steinhausen, Rauss-Mason & Seidel, 1991; Steinhausen, 1993). The findings from these studies have varied widely as a result of methodological differences in sample size, outcome criteria, drop-out rates, and duration of follow-up. Another methodological problem is that outcome studies often do not control for initial response to treatment. However, the overall findings unfortunately suggest that anorexia nervosa is often a chronic illness for many patients.

Relapse is a serious problem in anorexia nervosa. The most common diagnosis at follow-up is an eating disorder not otherwise specified, suggesting that patients continue to have some eating disorder symptoms. Therefore, patients learn to survive without giving up their anorexic attitudes to eating, weight, and body (Norrington & Sohlberg, 1993; Herpertz-Dahlmann, Wewetzer, Schultz & Remshmidt, 1996). Weight loss and restricted eating is common in patients who have just been released from an intensive in-hospital weight restoration program and patients often need to be re-hospitalized within one year of discharge. One study found that 42 percent of 76 anorexic patients who participated in a hospital weight restoration program reported weight relapse within the first year after discharge and only 23.7 percent were fully recovered from their eating disorder at a 10-year follow-up (Eckert, Halmi, Marchi, Grover, & Crosby, 1995). However, such an early relapse in these patients could suggest that the patients had not fully recovered.

At follow-up, 20 to 50 percent of patients diagnosed with anorexia nervosa will report the development of bulimic symptoms subsequent to their anorexia nervosa (Kreipe, Churchill, & Strauss, 1989; Eckert et al., 1995). Weight gain should not be the sole goal of treatment because patients have reported “eating their way out of the hospital” (Kreipe et al., 1989). Patients who gain weight in order to be released from the hospital have often not dealt with the core of their eating problem. This can lead to additional methods of weight control such as vomiting or laxative misuse that may take longer to be detected and lead to other serious health problems. Anorexic patients who develop bulimia nervosa or bulimic symptoms have been reported to be the most psychologically disturbed of all eating disorder subgroups (Hsu, 1988).

Outcome studies have attempted to determine what predicts a poor outcome in anorexia nervosa patients. The research results in this area are inconsistent. A commonly reported predictor of poor outcome is a long duration of illness (Ratnasuriya, Eisler, Szmuckler, & Russell, 1991). However, the methodological variation among studies makes it difficult to state this with certainty. Not all of the outcome studies have found this result and some studies use first admission as the time of onset while other studies report when the symptoms first appear (Schoemaker, 1997). Another predictor of poor outcome is an older age at onset. Some studies have reported this finding (Ratnasuriya et al., 1991; Theander, 1996). However, other studies did not replicate this result (Sunday, Reeman, Eckert, & Halmi, 1996). Other predictors of poor outcome include poor social relationships, disturbed family relationships, history of previous hospitalizations, the presence of bulimic symptoms, and lower weight at presentation (Hsu & Crisp, 1979, Hsu, 1987; Rosenvinge &

Mouland, 1990; Theander, 1985; Herzog, Schulberg, & Deter, 1997; Herpertz-Dahlmann, Wewetzer, Hennighausen & Remschmidt, 1996).

Chronicity appears to be strongly related to the mortality rates in anorexia nervosa. The mortality rate in anorexia nervosa is significantly higher than the mortality rate in other psychiatric disorders and in the normal population (Sullivan, 1995). Mortality is usually caused by starvation, suicide or electrolyte imbalance (American Psychiatric Association, 1994). Studies report varying mortality rates because the severity of illness among the patients in the samples differ. However, as the length of follow-up increases so does the mortality rate. At five-year follow-up the mortality rate is 5 percent (Morgan & Russell, 1975) and at 12-year follow-up it is 16 percent (Herzog, Rathner, & Vandereycken, 1993). At a 20-year follow-up the mortality rate is reportedly as high as 18 percent (Theander, 1985). The longest follow-up study, that of Theander (1985), suggests an ultimate recovery rate of 65 percent. The implications of this finding are that the two most common outcomes for anorexia nervosa are recovery or death.

1.5 Course and Outcome of Bulimia Nervosa

Very little is known about the outcome of bulimia nervosa which is not surprising considering it was only first described in 1979 (Russell, 1979). The DSM-IV acknowledges this fact and states that “The long-term outcome of Bulimia Nervosa is not known.” (American Psychiatric Association, 1994). A recent article by Keel and Mitchell (1997) reviewed the existing literature on the long-term outcome of this illness. Their findings concluded that at five to ten year follow-up, approximately 50 percent of women initially diagnosed with bulimia nervosa are fully recovered and 20 percent continue to meet diagnostic criteria. Relapse is common in this population and about one third of women

who improve have a recurrence of their bulimic symptoms. The reported mortality rates are between 0 percent and 3 percent, however, this may be an underestimation because the follow-up period in most studies is relatively short. A study by Fichter and Quadflieg (1997) looked at the 2- and 6- year follow up of 196 females with bulimia nervosa-purging type post-treatment. They found that at 6-year follow-up, based on a composite global outcome score, 59.9 percent had a good outcome, 29.4 percent had an intermediate outcome, 9.6 percent had a poor outcome and 1.1 percent had died. Another study that was aimed at providing an estimate of the rate of relapse in patients with bulimia nervosa over a two year period found a relapse rate of 31 percent (Olmsted, Kaplan, & Rockert, 1994). The majority of these relapses occurred within the first six months following treatment. Overall, when comparing the outcome for these two eating disorders, it appears that the prognosis is better for bulimia nervosa than anorexia nervosa.

1.6 Treatment of Eating Disorders

Individuals with an eating disorder often practice extreme methods of weight control such as self-induced vomiting, laxative misuse, fasting, and over-exercising. These practices can lead to severe medical complications including gastrointestinal problems, cardiovascular abnormalities, kidney damage, osteoporosis, and disturbance in neurological function (Kaplan & Garfinkel, 1993; Mitchell, Pomeroy, & Adson, 1997). Due to these medical complications, treatment must focus on both the psychological and medical problems, which makes eating disorders unique among psychiatric illnesses. Another difficulty with treating eating disorders is the associated psychiatric comorbidity (see Section 1.1.5).

It is important that treatment for eating disorders is multidimensional since the etiology of the disorders is multidetermined. Treatment should have two foci, one on eating and nutritional rehabilitation, and the other on relevant psychological issues. Both aspects of treatment are important for a successful recovery. Different intensities of treatment have been developed ranging from self-help programs to intensive in-hospital treatment programs.

1.6.1 *Pharmacological Treatment*

After many years of investigation, some general conclusions have been drawn about the role of medication in treating eating disorder patients. Drug therapies are much better understood for bulimia nervosa than for anorexia nervosa. Antidepressant medications have been shown to produce statistically significant decreases in bingeing and purging in patients with bulimia nervosa but these changes are not maintained once the medication is discontinued (Garfinkel & Walsh, 1997). A study that compared cognitive-behavioural therapy to antidepressant medication and their combination found that cognitive-behavioural therapy alone was more effective than medication alone but the best results were from the combination of the two therapies (Agras et al., 1992). In contrast to most psychiatric illnesses, anorexia nervosa has not been shown to be significantly affected by pharmacological treatment (Garfinkel & Walsh, 1997). However, almost all of the studies have examined the value of medication while patients are underweight and there are reasons to believe that the effects of starvation might interfere with the actions of the drugs.

1.6.2 Brief Psychoeducation

Brief psychoeducation is aimed at providing accurate information to patients about eating disorders and methods are presented on how to overcome the disorder through attitudinal and behavioural changes (Olmsted & Kaplan, 1995). Psychoeducational material is presented in a group format where the group is large enough to avoid intimate interactions between participants. Brief psychoeducation is a useful first stage of treatment for patients with eating disorders because it is cost effective, easy to deliver, and provides accurate information to a patient who can then make an informed decision about her* own treatment and care.

A study by Davis and colleagues (1997) compared a brief group psychoeducation treatment with a psychoeducational group that included additional group psychotherapy in patients with bulimia nervosa. They found that the two treatments were equivalent in terms of changes on measures of specific and general psychopathology. The study investigators concluded that although patients value the opportunity to have group psychotherapy, no therapeutic benefit was detected with the addition of seven sessions of psychotherapy to five sessions of group psychoeducation. This study highlights the efficacy of this type of brief treatment especially the benefit of its cost effectiveness.

1.6.3 Psychotherapeutic Treatment

Cognitive-behavioural therapy is widely regarded as the treatment of choice for eating disorders. It is administered to individuals with bulimia nervosa either in group

* The use of female pronouns is done in accordance with the majority of eating disorder sufferers being women.

therapy or on an individual basis (Garner & Needleman; 1997; Kennedy & Garfinkel, 1992). Interpersonal psychotherapy has also been studied in the treatment of bulimia nervosa (Fairburn, 1997). A study by Fairburn and colleagues (1991) compared cognitive-behavioural therapy, interpersonal psychotherapy, and behavioural therapy in the treatment of bulimia nervosa. The study concluded that all three treatments were successful in treating bulimia nervosa, with cognitive-behavioural therapy being the most effective. However, at 12-month and 6-year follow-up the interpersonal therapy was shown to be slightly more effective than the cognitive-behaviour therapy (Fairburn, 1997).

Although, cognitive-behavioural therapy has been shown to be effective for bulimia nervosa and is considered the treatment of choice for eating disorders, its effectiveness for anorexia nervosa has not been examined to the same extent. Approximately 30 controlled treatment studies have researched the use of cognitive-behavioural therapy for bulimia nervosa in contrast to only four studies for its use in anorexia nervosa. Treatment for anorexia nervosa often has a different focus than treatment for bulimia nervosa. A diagnostic distinction between these disorders is that anorexics need to address weight gain which is a less dominant focus in bulimia nervosa. The recommended duration of cognitive-behavioural therapy for bulimia nervosa is usually 4 months. However, for anorexia nervosa treatment is usually longer, partly due to the emphasis on weight restoration. A controlled study comparing cognitive-behavioural therapy and behavioural therapy for anorexia nervosa found no difference in the effectiveness of these two therapies (Channon, de Silva, Hemsley & Perkins, 1989).

Family therapy is widely recommended for individuals with anorexia nervosa under the age of 18 and living at home (Garner & Needleman, 1997). Eating disorders have been

associated with dysfunctional roles and family interactions (Minuchin, 1978; Selvini Palazzoli, 1974). A study evaluating the effectiveness of family therapy for anorexia nervosa and bulimia nervosa concluded that the therapy was most effective for individuals whose illness was not chronic and were under the age of 19 years old (Russell, Szmukler, Dare, Eisler, 1987). Family therapy is often used concurrently with other forms of therapy.

1.6.4 Self-Help Treatment

Self-help treatment approaches have been shown to be helpful for some patients with bulimia nervosa (Treasure et al., 1994; Cooper, Coker & Fleming, 1994). When effective, this can be a cost effective way to treat bulimia nervosa on an out-patient basis (Fairburn & Carter, 1997). Self-help treatment would likely be less effective for patients with anorexia nervosa because they have to deal with their state of starvation before addressing the factors perpetuating the illness. Therefore, intensive treatment is often required for anorexia nervosa because weight restoration is a necessary first step and clinical experience suggests that this is difficult to achieve on an out-patient basis.

1.6.5 Hospital-based and Partial Hospitalization

It is recommended that patients with anorexia nervosa be admitted to intensive treatment for the following reasons: (a) severe or rapid self-induced weight loss; (b) lack of response to outpatient treatment; (c) the existence of significant psychiatric comorbid psychiatric disorders; and (d) the existence of significant medical complications (Andersen, Bowers, & Evans, 1997). Such treatments focus on psychological approaches such as family, psychodynamic, behavioural, and cognitive-behavioural therapies in addition to nutritional rehabilitation. Most of the literature on treatment of anorexia nervosa suggests

that weight restoration and nutritional rehabilitation can be accomplished through intensive hospital programs by using a behaviour modification paradigm (Kaplan, Kerr & Maddocks, 1992; Andersen et al., 1997). Intensive treatment programs often have a strict and restrictive program. However, recent research suggests that these traditional programs may be unnecessarily rigid and that flexible programs can achieve equivalent results (Toyez et al., 1984; Dalle-Grave, Bartorir, Todisco, 1996).

Patients with bulimia nervosa can be treated on an out-patient basis or in an intensive day hospital treatment program. Since bulimia nervosa is usually less life-threatening than anorexia nervosa, patients can receive treatment without the need for twenty-four hour supervision. A day hospital program can provide an environment that will interrupt the binge purge symptoms, provide nutritional rehabilitation through adequate caloric intake, and can provide the psychotherapy required to recover from an eating disorder (Kaplan & Olmsted, 1997). Treatment in this environment reduces the dependency that patients in intensive treatment often develop from remaining in hospital for months at a time. It provides a safe environment for recovery but does not isolate the patients from dealing with the pressures of daily living.

1.7 Barriers to Successful Treatment

A difficult problem with patients with anorexia nervosa is treatment refusal and ambivalence about treatment. Little research has investigated these issues. However, most papers describing the illness or treatment from a clinical perspective report the existence of these problems directly or obliquely. Treatment is often undertaken reluctantly in response to appeals and demands by family, friends, or physicians (Vitousek et al., 1998). Therefore,

patients who are in treatment because of external pressures often resist treatment and do not comply with the norms of the treatment program (Goldner, Birmingham, & Smye, 1997).

Treatment may be refused by patients with anorexia nervosa because of severe depression (Goldner et al., 1997). However, it is most commonly refused because of the conscious attempts to preserve ego-syntonic symptomatology (Vitousek et al., 1998; Hamburg, Herzog, Brotman & Stasior, 1989). Behaviours such as food restriction and excessive exercise are compatible with the ultimate goal of thinness and self-control. Therefore, it must be understood by clinicians that appeals to an anorexic patient to cooperate with treatment by eating and gaining weight goes against all that she is fighting for. The disorder is often viewed as an accomplishment rather than an affliction (Vitousek et al., 1998). This explains why people suffering from anorexia nervosa are more reluctant to participate in components of treatment that involve increased food intake, weight gain, and reduced physical activity as compared with components focused on individual and family psychotherapy. Even when patients appear to be actively participating in the nutritional rehabilitation aspects of treatment they often manipulate their apparent weight and dispose of food secretly (Vitousek et al., 1998). However, after completing treatment, some patients identify treatment refusal as an element of the disorder (Goldner et al., 1997). Individuals who initially refuse to enter into treatment often will change their mind about treatment after a period of time. The anorexic patient gradually acknowledges the negative aspects of the disorder and may wish to recover from her eating disorder (Goldner, 1989).

Patients with bulimia nervosa are sometimes initially reluctant to seek treatment because they are embarrassed to disclose their bulimic symptoms (Vitousek et al., 1998; Hamburg et al, 1989), but they are much more likely than anorexics to enter treatment on

their own initiative (Johnson, 1985). In contrast to individuals with anorexia nervosa, bulimics are not necessarily obtaining their desired goal of weight loss and instead are alternating between the distressing symptoms of fasting, bingeing, and purging. Although patients with bulimia nervosa rarely regard their symptoms as an accomplishment, as anorexics might, they do report positive aspects of their symptoms such as a “euphoric” state after purging. These positively reinforcing qualities of some bulimic symptoms may cause people with bulimia nervosa to be ambivalent about changing (Vitousek et al, 1998). However, even if the bulimic symptoms are distressing to individuals, the thought of not dieting and gaining weight may be viewed as more difficult to deal with than the bulimic symptoms.

1.7.1 Treatment Drop-out

A major area of concern in the treatment of eating disorder patients is the extremely high treatment drop-out rate. Since this patient population is considered to be extremely ambivalent about treatment it is not surprising that treatment drop-out is a problem. While much of the opinion regarding treatment drop-out is anecdotal, a small body of literature addresses this topic. One study by Vandereycken and Pierloot (1983) examined predictors of treatment drop-out in a group of patients with anorexia nervosa participating in an in-patient treatment program. The drop-out rate was about 50 percent. Predictors of drop-out included an older age at treatment admission, older age at onset of illness, lower education level, lower social class, and a more lenient and patient-driven treatment approach.

Another study reported a treatment drop-out rate of 38 percent (Norrington & Sohlberg, 1993). Drop-outs were compared to the those subjects who remained in treatment with whatever data were available. One significant difference was found. Patients who were

given a double diagnosis of anorexia nervosa and bulimia nervosa were more likely to drop out of treatment. A study by Rosenvinge and Mouland (1990) identified poor motivation and non-compliance with treatment as predictors of drop-out.

A study by Clinton (1996) compared a group of 38 eating disorder patients who completed psychotherapy to 22 patients who dropped out. This study was specifically focused on trying to determine why eating disorder patients drop out of treatment. They found that treatment drop-out was associated with discrepancies between the patient and therapist in terms of expectations of the efficacy of potential treatment interventions. There were no differences in terms of measures of eating disorder symptoms, general psychopathology, or background information. This study also found that patients tended to drop out before the fifth session of therapy and did not drop out after participating in eight sessions. Research often focuses on the success of a treatment trial as opposed to highlighting the less positive results of attrition. However, since treatment drop-out is a serious problem in this patient population, more research needs to be focused on why these patients drop out of treatment in order to try to make treatment more effective.

1.7.2 Comparison of Eating Disorder Patients to Substance Abusers

Eating disorder patients are often compared to patients with substance abuse problems. Both patient populations are commonly described as unmotivated and they are both reluctant to present for treatment on their own initiative (Vitousek et al., 1998). As well, both groups are unpopular with clinicians because there is the perception that the patients are working against the staff as opposed to with the staff. Therapists often find these patients to have the characteristics of denial, deception and rationalization in order to preserve their symptoms (Vitousek et al., 1998).

An important distinction between these patient groups is that eating disorder patients often view their symptoms with pride. An alcoholic may deny that he is an alcoholic but would be unlikely to claim that alcoholism is a virtuous quality towards which to aspire (Vitousek et al., 1998). This distinction between these patient populations is important to recognize. However, it may be useful to use the similarities between these groups to attempt to apply some of the motivational approaches studied for years in the field of addictions to help patients with eating disorder.

1.8 A Review of Motivational Research from the Addiction Field

1.8.1 The Trans-theoretical Model of Change - Stages of Change

The 'Trans-theoretical Model of Change' by Prochaska and DiClemente (1992) was developed to try to understand how people change unwanted behaviours. The model describes a series of stages through which people pass while trying to change. The stages are *precontemplation*, *contemplation*, *preparation*, *action*, and *maintenance* (see Table 1.3). Each stage represents a motivational level of change.

The *precontemplation* stage is the entry point into the change process. At this point the person is not considering the possibility of change. People in this stage are either unaware or under aware of their problem. Precontemplators rarely present themselves for treatment unless pressured by others. In this phase, the individual is unlikely to make any permanent change.

The *contemplation* stage is characterized by a period of ambivalence about change. The individual is aware that there is a problem, but has not made any commitment to take action to eliminate the problem. The contemplator is seriously thinking about overcoming the problem and assesses the difficulty of changing versus the positive aspects of the

behaviour. People may remain in this stage for an extended period of time. It is common for people to seek help during the *contemplation* stage.

During the *preparation* stage, the person sounds motivated for change but can either move forward to the *action* stage or fall back to *contemplation*. The perceived benefits of changing may begin to outweigh the perceived costs of changing. The individual is intending to take action within the next month and may have unsuccessfully taken action in the last year. In addition, the person has often initiated some small changes already and may experiment with a variety of different strategies. It is important that a clear plan for action is established during this stage.

The *action* stage is characterized by the person engaging in particular actions that are intended to bring about change. The individual makes the desired behaviour change by modifying his/her behaviour, experiences or environment to stop the problem behaviour. This is the period of time that the probability of having symptoms is high and the person must work diligently at the new behaviour. This requires a significant commitment of time and energy.

It is often easier to produce changes than to maintain them. Different skills are required to maintain a change than were required to accomplish change initially. The *maintenance* stage consists of the challenge to consolidate the gains achieved in the *action* stage and prevent relapse. However, relapse is common when changing problem behaviours. If relapse does occur, it is important that the person starts to go through the change cycle again and avoids being trapped in a state of relapse.

Most individuals do not progress through the above stages in a linear progression. This model of change assumes that the stages of change are positioned in a spiral, such that

individuals often have to go through the stages more than one time before the problem behaviour is eliminated. It is possible to move from one stage to any other stage at any time during this process.

Table 1.3: Characteristics of Each Stage of Change.

Stage of Change	Characteristic of Stage
Precontemplation	● Person does not recognize the behaviour as being a problem and does not want to change
Contemplation	● Person recognizes the behaviour as a problem but is ambivalent about changing
Preparation	● Person wants to change the problem behaviour but does not know how to change or needs help to change behaviour
Action	● Person is in the process of changing the problem behaviour
Maintenance	● Person is trying to maintain the change in behaviour and avoid falling back into the problem behaviour

1.8.2 The Trans-theoretical Model of Change - Processes of Change

The Trans-theoretical model of change contains a second dimension, the “processes of change”, which explain how a person shifts from one stage of change to another (Prochaska & DiClemente, 1992). The processes of change are activities and experiences that a person will engage in while attempting to change behaviour. Prochaska and DiClemente (1985) identified ten processes of change while reviewing a wide range of problem behaviours. The ten processes include: *consciousness raising, self-reevaluation, self-liberation, counterconditioning, stimulus control, reinforcement management, helping relationships, dramatic relief, environmental reevaluation, and social liberation* (see Table 1.4).

Consciousness raising is focused on increasing awareness and information about oneself as well as the causes, consequences, and cures for the problem behaviour. Interventions that are used to increase this awareness include education, confrontation, and observations. The process of *self-reevaluation* involves the assessment of one's self-image with and without the problem behaviour. Value clarification, healthy role modeling, and using imagery are examples of suggested techniques to use with this process of change.

Self-liberation is characterized by both the belief that one can change as well as the commitment to act on that belief. Resolutions, commitment enhancing techniques, and providing choices are all interventions that correspond to the *self-liberation* process. The process of *counterconditioning* requires that the individual learn healthier behaviours that can substitute for the problem behaviour. Avoiding and removing cues that are associated with unhealthy behaviours is the focus of the *stimulus control* process of change. This is accomplished by avoiding certain environments and situations. *Reinforcement management* is geared at rewarding one's self and/or being rewarded by others for accomplishing change.

The process of *helping relationships* encourages the use of a support system by being open and trusting about the problem with someone who cares. This can involve therapeutic alliance, social support, and support or self-help groups. *Dramatic relief* is a way of expressing emotion about the problem as well as the solution. In order to increase the emotional experiences, interventions such as psychodrama, role playing, and personal testimonies are used. The assessment of how the problem behaviour affects one's social environment is accomplished in the *environmental reevaluation* process of change through the use of empathy training, documentaries, and family interventions. Finally, the *social liberation* process of change extends beyond the individual and is characterized by

increasing alternatives for non-problem behaviours in society. This involves such activities as advocacy and policy interventions (Prochaska & Velicer, 1997; Prochaska, DiClemente, & Norcross, 1992).

Specific processes of change correspond to each of the five stages of change. Individuals in precontemplation are the least likely to use any of the processes of change. Contemplators are most likely to use the processes of *consciousness raising*, *dramatic relief*, and *environmental reevaluation*. The preparation stage is connected to the process of *self-reevaluation*. A person in the action stage will use the process of *self-liberation* or willpower. In order to maintain the behaviour change in the maintenance stage, the processes of *reinforcement management*, *helping relationships*, *counterconditioning* and *stimulus control* are the most commonly used interventions (Prochaska & Velicer, 1997; Prochaska et al., 1992).

Interventions that are used to help change a problem behaviour are most effective when the intervention is tailored to the stage of change of the client. Therefore, identifying the stage of change and then focusing on the corresponding processes of change can help a therapist to determine the most appropriate intervention. If the intervention and the motivational stage do not match, a therapist will often encounter resistance and treatment failure (Miller & Rollnick, 1991; Prochaska et al., 1992).

Table 1.4: Characteristics of Each Process of Change.

Process of Change	Definitions: Interventions
Consciousness raising	Increasing information about self and problem: observations, confrontations, interpretations
Self-evaluation	Assessing how one feels and thinks about oneself with respect to a problem: value clarification, imagery, corrective emotional experience
Self-liberation	Choosing and commitment to act or belief in ability to change: decision-making therapy, New Year's resolutions, commitment enhancing techniques
Counter-conditioning	Substituting alternatives for problem behaviours: relaxation, assertion, positive self-statements
Stimulus control	Avoiding or countering stimuli that elicit problem behaviours: restructuring one's environment, avoiding high risk cues
Reinforcement management	Rewarding one's self or being rewarded by others for making changes: contingency contracts, overt and covert reinforcement, self-reward
Helping relationships	Being open and trusting about problems with someone who cares: therapeutic alliance, social support, self-help groups
Dramatic relief	Experiencing and expressing feeling about one's problems and solutions: role-playing
Environmental revelation	Assessing how one's problem affects physical environment: empathy training, documentaries
Social liberation	Increasing alternative for non-problem behaviours available in society: advocating for rights of repressed, empowering, policy interventions

1.8.3 Stages of Change Applied to Eating Disorders

Recently, some research has been conducted to determine if the Trans-theoretical model of change is applicable to people with eating disorders. One study administered two questionnaires, one measuring the Stage of Change (URICA) and one measuring the Process of Change (PCQ), to patients in an in-patient eating disorder program (Ward, Troop, Todd & Treasure, 1996). Half of the patients were assigned to the action stage. However, the therapists' clinical impression of these patients was that they were still very ambivalent. They suggested that this result may be due to the small sample size of 36 patients but may also suggest caution when assigning a single stage to a complicated problem. Their overall findings supported the use of the Trans-theoretical model in eating disorders.

Another study aimed at examining the application of the Trans-theoretical model of change to eating disorders found that there was a difference between the anorexic and bulimic patients in their stages of change prior to treatment (Blake, Turnbull, & Treasure, 1997). Of the 51 patients with anorexia nervosa, 24 percent were in the precontemplation stage, 27 percent in the contemplation stage and 49 percent in the action stage. In comparison, 3 percent of the 58 patients with bulimia nervosa were in the precontemplation stage, 14 percent were in the contemplation stage, and 83 percent were in the action stage. The investigators attributed this difference to the distinction between the clinical features of these disorders, specifically the ego-syntonic nature of anorexia nervosa as compared to the ego-dystonic nature of bulimia nervosa. They also concluded that many of the anorexic patients may have come to the eating disorder clinic as a result of pressure from others to change as opposed to a personal desire to change. The study concluded that the Trans-

theoretical model of change could be a useful approach to deal with the problems of poor compliance and high rates of treatment drop-out that decrease the efficacy of treatment for patients with eating disorders.

A study that administered URICA questionnaire to determine the stages of change for 91 patients with bulimia nervosa found that 90 percent were in the contemplation stage, 10 percent were in the action stage, and there were no patients in the precontemplation stage (Treasure, Katzman, Schmidt, Troop, Todd & de Silva, 1999). This study concluded that the Trans-theoretical model can be applied to patients with bulimia nervosa. However, it highlighted the fact that eating disorders are complex problems and the Stages of Change (URICA) questionnaire may not reach the complexity of the motivation to give up an eating disorder. For example, a patient with bulimia nervosa may be very motivated to stop bingeing and purging behaviours but may not be willing to change weight control practices with the possibility of gaining weight. This problem does not arise in populations of smokers or alcoholics because there is single dimension of behavioural change and most of the model research has been conducted on substance abusers.

1.9 Motivational Interviewing

Motivational Interviewing is a therapeutic style that was developed in the field of addictions (Miller & Rollnick, 1991). Research by Miller and colleagues (1993) found that therapeutic style could influence a person's motivation to change. Specifically, they determined that a confrontational therapeutic style is associated with a larger number of relapses than treatment that used a client-centered therapeutic style (Miller, Benefield, Tonigan, 1993). The goal of Motivational Interviewing is to help clients build commitment and reach a decision to change by increasing intrinsic motivation through the use of a client-

centred therapeutic style. This approach is helpful for people who are reluctant or ambivalent about change because the decision to change comes from them as opposed to being imposed upon them. When Motivational Interviewing is done properly, the client, rather than the therapist, will present the arguments for change. This approach can be very effective because “People are often more persuaded by what they hear themselves say than by what other people tell them” (Miller & Rollnick, 1991, p. 58). The supportive, as opposed to argumentative and authoritative, approach to Motivational Interviewing is very effective. Coercive approaches to therapy such as pressuring, threatening, and nagging do not accomplish change and often push a person further into the process of resistance and reactance which surrounds the problem behaviour (Miller, 1994). By avoiding argumentation, power struggles are removed from the therapeutic relationship because the therapist presents no direct arguments for a client to oppose. This creates a healthier therapeutic environment for both the client and the therapist.

One of the effective mechanisms of Motivational Interviewing is the ability of the therapist to enable the client to evoke and recognize his/her cognitive dissonance. By using some of the therapeutic approaches suggested by Miller and Rollnick (1991) clients begin to recognize the discrepancy between their present behaviour and their broader life goals or values. Miller (1994) suggests that the ability to make clients aware of their internal inconsistencies in a safe environment where they can address this reality is the key to the success of Motivational Interviewing. The therapist must also emphasize both the client’s personal choice and responsibility in deciding on future behaviour. By allowing the client to present this information and by using an empathic style, the therapist can be much more successful in helping a client to reach a decision to change.

Another advantage of Motivational Interviewing is that it has been shown to be very effective as a brief intervention. A study by the Project MATCH Research Group (1997), found that four sessions of a motivational intervention, based on Motivational Interviewing (Motivational Enhancement Therapy), was as effective as 12 sessions of cognitive-behavioural therapy or 12 step-facilitation therapy.

Motivational Interviewing complements the Trans-theoretical model. The Trans-theoretical model provides the framework for the therapist to determine how to use Motivational Interviewing most effectively to help a client move through the stages of change. It is especially useful for working with clients in the precontemplation and contemplation stages of change where the clients are the most ambivalent about change and the therapist is most likely to encounter resistance to change.

1.10 Motivational Enhancement Therapy with Eating Disorders

Motivational Enhancement Therapy (MET) is a model of therapy that is derived from integrating the Trans-theoretical Model of Change with the skills of Motivational Interviewing. This approach uses motivational strategies to enable clients to use their own resources in the process of change. The goal of MET is to determine which stage the client is in, and then to assist with the movement through the stages to reach the ultimate goal of sustained change. The earlier stages of change, including *precontemplation*, *contemplation*, and *preparation*, are the focus of this therapy (Miller et al., 1994).

Only one recent study has been conducted using MET for patients with eating disorders. This study compared the treatments of MET and cognitive-behavioural therapy in patients with bulimia nervosa (Treasure et al., 1999). The study randomly assigned 125 patients to one of the two treatments. The study concluded that MET is an effective first

phase of treatment since it showed an equivalent reduction in symptoms to the cognitive-behavioural therapy, which is the treatment of choice for bulimia nervosa.

1.11 Summary

A large amount of literature and research exists on eating disorders. However, almost no research has been focused on addressing the issue of motivation, which is surprising since treatment resistance and drop-out are serious problems in this patient population. A large literature on enhancing motivation exists in the addiction field as a result of the recognition of similar characteristics amongst substance abusers. Recently, some experts in the eating disorder field have recognized the need to address the issue of motivation in treatment. Therefore, there is a need for both the development and empirical testing of treatment aimed at enhancing motivation for change in eating disorders.

CHAPTER II.

OBJECTIVES AND HYPOTHESES OF THE PRESENT STUDY

2.0 Objectives

The overall objective of this study was to develop and conduct a pilot evaluation of a motivational enhancement therapy (MET) group intervention for eating disorder patients. The specific aim of the MET group was to increase participants' motivation to enter a specialized treatment program for their eating disorders. Since this was a novel intervention, a general assessment was included to determine if there were additional effects of the MET group beyond measures of motivation. However, no change in eating disorder symptoms was expected. One further objective of this study was to acquire a greater understanding of motivational issues in patients with eating disorders since very little literature currently exists.

2.1 Hypotheses

The main hypotheses were:

1. Participation in the MET group will be associated with an increase in characteristics associated with the action stage of change.
2. General motivation to change will increase during the MET group.

CHAPTER III.

METHODOLOGY

3.0. Study Design

This was a pilot intervention study, without a control group. Assessment measures were collected before and after participants took part in the MET intervention. In addition, participants were followed-up six weeks after completing the group (see Figure 3.0). The intervention was based on a treatment manual designed specifically for this study (see section 3.4).

Figure3.0: Study Design

3.0.1 Ethics

This study was approved by The Toronto Hospital Committee for Research on Human Subjects. All subjects gave informed written consent (see Appendix A). Ineligible subjects were advised to continue to wait to enter intensive treatment for their eating disorder as usual.

3.1. Subjects

Patients who were on the waiting list for treatment at the Toronto Hospital Program for Eating Disorders were recruited for this study. Eligible subjects were patients aged 17 and older who met DSM-IV criteria for anorexia nervosa, bulimia nervosa, or eating

disorder not otherwise specified (EDNOS)¹. Subjects were excluded if they had a body mass index (BMI) of greater than 27. Subjects were also excluded if they were pregnant, if they were in a state of a medical emergency caused by complications of their eating disorder, or if they participated in specialized eating disorder treatment outside the study protocol (see Table 3.0). The diagnoses were made by a qualified clinician at The Toronto Hospital Program for Eating Disorders based on a clinical interview. Forty-four patients were recruited for this study, of whom nineteen patients completed the MET protocol as described below.

Table 3.0: Study Inclusion and Exclusion Criteria.

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> • Age ≥ 17 • DSM-IV Diagnosis of AN, BN or EDNOS • Referred to treatment at The Toronto Hospital Program for Eating Disorders 	<ul style="list-style-type: none"> • BMI > 27 • Pregnancy • In state of medical emergency due to complications caused by eating disorder • In specialized treatment outside of study

3.2. Assessments

The assessments included a short interview asking about eating disorder symptomatology, the Eating Disorder Examination, and a variety of self-report questionnaires which assessed motivation for change, eating disorder symptomatology, general psychopathology, and demographic information (see Table 3.1).

All of the questionnaires were administered before and after the group except for the demographic information, which was only administered during the first assessment. The motivation scales were completed during each session of the MET group but not during the

¹ See chapter 1, pages 1-5 for the definition of these disorders.

assessments. The aim of the 6-week follow-up assessment, which was conducted in a telephone interview, was to determine if patients were participating in treatment for their eating disorder and to ask for feedback on the MET group.

Table 3.1: Questionnaires used in Assessments.

Psychometric Evaluation	
Motivational Measures:	<ul style="list-style-type: none"> • University of Rhode Island Change Assessment Scale (URICA) • Concerns about Change Scale
Eating Disorder Symptomatology:	<ul style="list-style-type: none"> • Eating Disorder Examination Questionnaire • Eating Disorder Inventory
General Psychopathology:	<ul style="list-style-type: none"> • Beck Depression Inventory • Rosenberg Self-esteem Scale

3.3. Assessment measures

1. The University of Rhode Island Change Assessment Scale (URICA). This is a questionnaire that identifies the motivational stage of a person with respect to changing unwanted behaviour (McConaughy, Prochaska, & Velicer, 1983). This 32-item version of the questionnaire specifies that the “problem” or unwanted behaviour is “problems relating to food and eating”. It provides scores on four stages of change including *precontemplation*, *contemplation*, *action* and *maintenance* (see Table 3.2). There are eight items per stage of change and the items use a 5-point Likert-type format with responses ranging from “strongly disagree” to “strongly agree”. The stage of change is determined by the highest mean subscore. However, it has been argued that the URICA is more useful to determine a stage profile (typology) of the transition between the stages as opposed to placing individuals in one of the discrete stages of

change (Rossi, Rossi, Velicer & Prochaska, 1995). The questionnaire has been used in previous studies to measure motivation for change as well as to detect changes in motivation over time in subjects with eating disorders (Ward, Troop, Todd, & Treasure, 1996; Treasure, Katzman, Schmidt, Troop, Todd, & de Silva, 1999).

Table 3.2: Sample Questions from Each Stage of Change.

Stages of Change	Sample Question
Precontemplation	<ul style="list-style-type: none"> • “As far as I’m concerned, I don’t have any problems that need changing”
Contemplation	<ul style="list-style-type: none"> • “It might be worthwhile to work on my problem”
Action	<ul style="list-style-type: none"> • “I am really working hard to change”
Maintenance	<ul style="list-style-type: none"> • “It worries me that I might slip back on a problem that I have already changed, so I am ready to continue working on my problem.”

2. **Motivation Scales.** (See Appendix B) The motivational scales are three Likert scales, from the handout titled “To Change or Not to Change?”, which assess different aspects of motivation to change. The handout was developed for the MET group (Adapted from Schmidt & Treasure, 1998). The questions include “How motivated are you to change?”, “If you decided to change how confident are you that you would succeed?”, and “How ready are you to change?”. The Likert scale ranges from 1 to 10, where one represents an answer of “not at all” and 10 represents an answer of “very”. The question “When you think about ‘change’, what are you referring to?” was included with space available to write a brief answer.
3. **Concerns About Change Scale (CCS).** The CCS is 112-item questionnaire that identifies reasons why people are reluctant to change problem behaviours (Vitousek, De

Viva, Slay, & Manke, 1996). It was designed to apply to all psychopathological groups although many of the items relate to concerns specific to an eating disorder population. Items are answered on a 5-point forced choice scale that indicates how strongly each item reflects subjects' concerns about giving up their problem. It consists of 18 subscales developed according to rational grouping of items: Unable to Change, Unworthy of Change, Fear of Risks, Fear of Maturity, Fear of Sexuality, Fear of Process of Change, Loss of Accomplishment, Hedonic Loss, Interpersonal Loss, Peer Group Loss, Loss of Identity, Disinhibition, Avoidance of Responsibility, Coping with Negative Affect, Goal Attainment, Underlying Flaw, Failure to Recognize Irrationality, and a Random subscale.

4. Eating Disorder Examination (EDE). The EDE is an investigator-based interview measure of the specific psychopathology of eating disorders (version 12; Fairburn and Cooper, 1993). It generates operationally defined eating disorder diagnoses according to DSM-IV diagnostic criteria by assessing multiple areas of eating disorder symptoms. Only the diagnostic subscales were assessed in this study which include: objective and subjective binge episodes; compensatory behaviours (self-induced vomiting, laxative misuse, diuretic misuse and excessive exercise); importance of shape and weight on self-evaluation; fear of gaining weight; feeling fat; and amenorrhea. The interview assesses the frequency and severity of these variables over a three month period.

The EDE has been used extensively in descriptive studies, epidemiological research, and in research on the treatment of eating disorders. The measure has been examined for reliability (internal consistency and interrater reliability) and validity (discriminant

validity, concurrent validity, and predictive validity) (Cooper & Fairburn, 1987; Rosen et al. 1990; Wilson & Smith, 1989; Cooper, Cooper, & Fairburn, 1989).

5. **Eating Disorder Examination Questionnaire (EDE-Q)**. The EDE-Q (Version 4) is a self-report questionnaire version of the EDE interview (Fairburn & Beglin, 1994). The EDE-Q consists of four subscales (Shape Concern, Weight Concern, Dietary Restraint, and Eating Concern) using a seven-point forced choice format. It also contains items to assess the frequency of important behaviours including binge eating and the use of extreme methods of weight control in terms of the number of days on which the behaviours occurred and the number of episodes. A study by Fairburn & Beglin (1994) supports the use of the EDE-Q in combination with the EDE since these two measures generate variant information on some of the subscales. The two measures produce similar results when assessing unambiguous behaviours such as self-induced vomiting and dieting. However, on more complex behaviours such as binge eating and concerns about shape, the EDE-Q generates higher scores than the EDE. Therefore, the use of both of these assessments ensures a more accurate report of symptomatology.
6. **Eating Disorder Inventory**. This is a widely used self-report measure that assesses a number of psychological and behavioural traits common in eating disorders (Garner & Olmsted, 1984). This measure yields eight subscales and higher scores reflect greater levels of pathology. Three of the scales address eating pathology directly, including “Drive for Thinness”, “Body Dissatisfaction”, and “Bulimia”. The other five scales address related psychological factors such as “Ineffectiveness” (general feelings of inadequacy), “Perfectionism”, “Interpersonal Distrust”, “Interoceptive Awareness” (difficulty in recognizing and responding to emotions), and “Maturity Fears” (the desire

to avoid maturity). Items are presented in a 6-point, forced choice format in which respondents rate whether the item applies “always”, “usually”, “often”, “sometimes”, “rarely”, or “never”. The reliability (internal consistency and test-retest reliability) and validity (concurrent validity and discriminant validity) of the EDI have been demonstrated (Garner, Olmsted & Polivy, 1983).

7. Beck Depression Inventory (BDI). The BDI is a self-report measure that assesses cognitive and biological symptoms of depression (Beck, Ward, & Mendelson, 1961). The BDI contains 21 items that each include four self-evaluative statements rated in severity. It has been shown to have high levels of internal consistency, test-retest reliability, discriminant validity, and convergent validity (Beck, Steer, & Garbin, 1988; Beck, 1967; Schwab, Bialow & Holzer, 1967).
8. Rosenberg Self-esteem Scale (RSES). This is a brief self-report questionnaire designed to measure self-esteem (Rosenberg, 1970). It consists of 10 items in which respondents are asked to rate the items on a 4-point Likert-type scale ranging from “strongly agree” to “strongly disagree”. Higher scores indicate greater levels of self-esteem. Acceptable levels of internal consistency, test-retest reliability, convergent and discriminant validity have all been established (Rosenberg, 1965; Byrne & Shavelson, 1986; Wylie, 1989).
9. Demographic Information: (See Appendix B) The demographic information obtained included the following: age, marital status, current living arrangements, education, employment status, and financial support.
10. Six-Week Follow-up. (See Appendix B) The six-week follow-up is a brief telephone interview to determine if the participants entered treatment following the MET group. If the participant did enter treatment questions about the type of treatment, the frequency

of treatment, the effectiveness of treatment, and the intention of plans for future treatment were asked. Participants were asked for feedback on the effectiveness of the MET group. They were asked which components of the group were helpful and if they had any suggestions on how to improve the MET group.

3.4. Intervention

3.4.1 *General Development and Background of the Intervention*

The MET group was a novel intervention based on work done in the area of motivation for change in the eating disorder and addiction fields. The intervention underwent a number of revisions. A first draft of the treatment manual was developed based on the Stages of Change model, Motivational Interviewing techniques and ideas from experts in the eating disorder field including M. Katzman, J. Treasure, K. Vitousek and colleagues. It was distributed to experts in the field (M. Katzman, J. Carter, B. Woodside, A. Kaplan, & M. Olmsted) in order to obtain feedback and suggestions for improvements. The final version of the intervention is outlined in detail below. Appendix C contains the original version of the intervention.

The MET group consisted of four sessions and took place over four consecutive weeks. Each session lasted approximately one hour. The group consisted of only four sessions to ensure that participants would be able to attend all four sessions without delaying their entry into specialized treatment at The Toronto Hospital Program for Eating Disorders. The use of four sessions was supported by research in the addictions field which found that four sessions of MET was as effective as 12 sessions of cognitive-behavioural therapy or a 12-step facilitation therapy approach to treatment (Project MATCH, 1997). The brief nature of the group was also designed in accordance with increasing participants'

motivation to take action and change behaviour as opposed to stalling at the level of *discussing* motivation to change (Vitousek, Watson, & Wilson, 1998). Vitousek and colleagues (1998) have argued that ambivalence can be best resolved through direct experience so that when a participant decides to attempt changing behaviours this resolution should be immediately put into practice. The MET group was a closed group because the sessions were arranged in a chronological order that were designed to address specific topics as the participants' motivation was presumably increasing across the groups (Katzman, personal communication). As well, having a closed group created a "safe" and therapeutic environment for participants to disclose personal information.

3.4.2 Overview of Group Therapy Sessions

While conducting the group therapy sessions, a conscious effort was made to provide options and choice for the participants of the MET group and to avoid the perception of therapist control. This is important for creating an empowering therapeutic environment because when an individual has the option to choose they are more invested in the process (Vitousek et al., 1998; Miller and Rollnick, 1991). Providing choices has been shown to increase intrinsic motivation (Deci & Ryan, 1987; Miller & Rollnick, 1991).

The MET group used in this study was designed to address concepts from the earlier stages of change and aimed to help participants move from the *precontemplation*, *contemplation* and *preparation* stages towards the *action* stage. The earlier motivational stages use the processes of change with a cognitive focus while the later stages, *action* and *maintenance*, are predominantly focused on the processes of behaviour change (Prochaska, DiClemente & Norcross, 1992). Since the MET group focused on the first three stages of change, the processes of change that were used in the group and correspond to these stages

include *consciousness raising*, *self-reevaluation*, and *self-liberation*. Participants were not required to make behavioural changes such as reducing their eating disorder symptoms during this group. The specific symptom being addressed in the MET group was ambivalence. Using a treatment approach that acknowledges participants' ambivalence is thought to create a healthier foundation for change for both the participant and the therapist (Treasure & Ward, 1997; Vitousek et al., 1998).

MET can be divided up into two sections, one that focuses on building a commitment to change and the other that strengthens the commitment to change. Therefore, there was a specific focus for each of the four sessions that was aimed at addressing different aspects of motivation from the Stages of Change model. The first two sessions were focused on building a commitment to change while the last two sessions were geared at strengthening this commitment. The first session established the participants' stages of change and focused on the *precontemplation* stage by determining if the participant viewed her eating disorder as a problem. The goal was to increase awareness about the impact of the problem. The second session provided information on eating disorders and determined how the eating disorder fit together with life goals and values. The goal of this session was to determine if the participants' life goals are congruent with life with an eating disorder. The process of change that corresponds with this topic is *self-reevaluation*, which is most often used between the *contemplation* and *preparation* stages of change. The third session focused on considering the possibility of change and reviewed the various options for obtaining treatment. This session was geared towards the *preparation* stage, which concentrates on building a commitment and plan to change. The final session of the group

was aimed at increasing self-efficacy by providing the opportunity to confirm that it is possible to change by observing and discussing another patient's success in recovery.

The MET sessions all had a homework assignment that was given to participants and was to be brought back completed for the next session. The participants were not required to hand any of the homework assignments in to the group leaders. This was done to further emphasize that the group was for participants to consider change and the homework was to be completed for their benefit and not for the group leaders. The homework assignments were included to extend the effect of the group between sessions so participants would be thinking about the topics discussed beyond the hour in the group. The homework was practical because group time was not spent completing the worksheets yet it provided topics for discussion during the group. Writing down responses to homework assignments and sharing them with the group is thought to be a powerful tool in affecting participants' motivation to change. Documentation is believed to be more convincing and conclusions better retained when they are one's own (Miller & Rollnick, 1991; Vitousek et al., 1998). Participants would also be able to look back at the worksheets once the MET group was over if they felt that they wanted to remind themselves why they wanted to change. At the initial assessment, participants were given a homework assignment to be completed and brought to the first session for discussion.

3.4.3 Session One

Table 3.3: Outline of Session One of MET Group.

Contents of Session One
<ul style="list-style-type: none"> • Introduction to MET group • Presentation of the Stages of Change model • Discussion of handout “What are the Benefits and Costs of My Eating Disorder?” • Motivation Scale - “To Change or Not to Change?” • Explanation of homework for Session Two

The first session began with an introduction of the group leaders and each of the participants. A brief explanation of the group was provided with an emphasis on the importance of attending each of the four sessions in order to obtain the most benefit from the group. Throughout the MET group, participants were given the rationale behind the group design which helped to “demystify” the therapy which is important for patients who are characteristically mistrustful (Vitousek et al., 1998). The Stages of Change model was explained to participants in connection with the development of the MET group. Participants were asked if the model was applicable to how they identified their readiness to change with regard to their eating disorder. After each of the stages in the model were explained, participants were asked to determine which stage of change corresponded to their present situation. Establishing what stage of change a patient is in is one of the key principles of the Stages of Change model and of the Motivational Interviewing approach so that the therapeutic interaction addresses the issues of the patient’s specific stage of change (Miller & Rollnick, 1991). Personalized discussion throughout the group was tailored to

each participant's stage of change. Three handouts were given out on the Stages of Change model that varied in the amount of detail provided so that participants had access to more information if they were interested (see Appendix D).

The homework assignment that had been given to the participants at the initial assessment was a handout titled "What are the Benefits and Costs of My Eating Disorder?" (see Appendix D). Participants were asked to complete a chart addressing the benefits and costs of their eating disorder. The handout was structured to address the benefits and costs in relation to specific areas of the participants' lives, such as, physical health, psychological health, social interactions, family life, and education or career. The handout instructed participants to rate each benefit and cost on how important it was to them on a scale from 0-5 (0=least important and 5= most important). Another option was available if participants found it too impersonal to address these issues in a chart form. They could write a letter to anorexia/bulimia as their "friend" which focused on the benefits of their eating disorder and a letter to their "enemy" which highlighted the costs of their eating disorder (Treasure & Ward, 1997). Each member of the group was asked to discuss what they had written.

Using a cost and benefit analysis intervention has been strongly recommended in the early stages of treatment for eating disorders (Pike, Loeb & Vitousek, 1996; Vitousek & Ewald, 1993). Motivation to change is enhanced when the benefits and costs are articulated by the participant and not the therapist (Treasure & Ward, 1997; Vitousek et al., 1998). This exercise can be helpful for participants to recognize their ambivalent feelings toward their eating disorder. It weighs the costs and benefits of the eating disorder and determines whether the costs outweigh the benefits. However, it is not based on the number of costs versus the number of benefits but the strength or importance of the costs and benefits

(Miller & Rollnick, 1991). If the strength of the costs outweighs the strength of the benefits, this identifies motivation to change the behaviour (Miller & Rollnick, 1991). However, this exercise does more than just identify a participant's motivation to change, it can also influence a person's motivation to change (Miller & Rollnick, 1991). A cost and benefit analysis can help the participant to recognize just how much she is losing by continuing this behaviour, which can affect her motivation to change.

By sharing their answers, the participants realized that other people suffering from an eating disorder have similar feelings. As well, hearing other responses could increase participants' awareness of additional costs or benefits that they had not considered. It is important that the group leaders do not only focus on the costs of the disorder because it can cause the participants to become defensive and clinicians need to be aware of what the disorder provides as much as what it takes away (Vitousek et al., 1998). The goal of this exercise is to produce dissonance between the participant's goals and the problem behaviour. It is therefore, to be expected that "the client's balance sheet will be full of contradictions" (Miller and Rollnick, 1991, p. 41). It is important that these inconsistencies are highlighted by the therapist in a way that does not create confrontation. The therapist has to be very careful to create the right amount of internal dissonance to help produce motivation to change without making the participants feel so vulnerable that they do not want to continue with the therapy.

At the end of each session of the MET group participants were asked to complete a measure of motivation titled "To Change or Not to Change?" (see Appendix B). This was the only handout that was collected by the group leaders throughout the four sessions.

3.4.4 Session Two

Table 3.4: Outline of Session Two of MET Group.

Contents of Session Two
<ul style="list-style-type: none"> • Discussion of handout “Life in five years with and without an eating disorder” • Psychoeducation: presentation of the “Biopsychosocial Model of Eating Disorders” and the “Starvation Syndrome Model” • Card sorting task • Motivation Scale - “To Change or Not to Change?” • Explanation of homework for Session Three

The second session began with a discussion of the homework assignment titled “Life in five years with and without an eating disorder”. This exercise has previously been used with alcoholics and eating disorder patients (Miller, 1994; Treasure & Ward, 1997; Vitousek et al., 1998). It builds on the discussion from session one by identifying additional benefits or costs and determines how these might have an impact years into the future. The notion of a continued struggle with an eating disorder five years in the future is something that many patients have not considered. This prospect can be very distressing and can therefore have a powerful impact on motivation for change (Vitousek et al., 1998). The focus on the future helps to highlight the discrepancy between a participant’s hopes and dreams, and the limitations imposed by her illness (Treasure & Ward, 1997). For example, a participant may have the desire to follow a specific career path but due to her medical condition she cannot continue with the required education to reach that goal. The focus on the daily struggles with an eating disorder can prevent people from realizing the potential impact of their illness on the possibility of achieving future goals. This realization can

create the motivation required to recognize that change has to take place now so that the goals of the future can be met.

A brief psychoeducational component is presented during session two. Popular culture presents a great deal of misinformation about diets and weight. Patients who enter treatment for their eating disorder often have misperceptions of the facts about the way in which their body responds to caloric restriction and purging. Psychoeducation serves to disentangle fact from fiction, while at the same time providing the patient with the power to make informed decisions about her treatment (Vitousek et al., 1998). Information, rather than advice, is recommended while working with people in the *precontemplation* and *contemplation* stages of change (Treasure & Ward, 1997). If the information that participants learn during this session helps them to realize the seriousness of their eating disorder, it could increase their motivation to engage in treatment. The material was presented in a respectful manner and was not aimed at scaring the participants. An important approach to increase motivation for change is to create an autonomy-supportive environment such that the participant decides for herself how she feels about this information and is not told how to feel.

The two main topics addressed in the psychoeducational component were the biopsychosocial model of eating disorders and the starvation syndrome model. Participants were presented with a handout showing a visual representation of these two models (see Appendix D). A brief explanation of the various biological, psychological and sociocultural influences that affect the predisposing, precipitating and perpetuating factors of eating disorders were presented. Participants were asked to consider if their own development of an eating disorder was consistent with the model that was presented. The model of the

starvation syndrome was presented with an explanation of some medical complications that can result from food restriction, bingeing and purging. Participants had the opportunity to ask questions about the two models.

Change arises from within when there is a recognition of the incompatibility of the current problem behaviour and things that “are more dear, more central, more valued, more important to the person” (Miller, 1994, p. 119). This incompatibility or cognitive dissonance is not to be imposed by the therapist, but rather it is brought to the participant’s awareness through motivational activities. One activity used to highlight a person’s incongruity between values and an eating disorder is the card-sorting task (Miller, 1994; Vitousek et al., 1998). Participants were asked to make a list of the ten most important things that they want in their life including values and goals. Some examples include a career, friends, family, education, travel, hobbies, health, and financial stability. Once they had listed ten items, they were asked to write them on index cards and place the cards in order of importance. After completing this, the participants were given an additional card and asked to write down what their eating disorder represented to them. Typical examples of answers included “control”, “identity”, and “thinness”. They were then instructed to place this last card amongst the other cards based on its importance. This exercise can highlight the discrepancy between life goals and the reality of life with an eating disorder. It can be an effective way of illustrating that if the eating disorder card was removed it might be possible to obtain many of the life goals and values written on the 10 other cards. The card-sorting task can have an impact on increasing motivation to change because it helps a person to realize how much value and energy is spent on continuing with the eating

disorder in contrast to what they think they want for their lives. This realization might be unacceptable to the participants once presented in this light.

At the end of session two the motivation scales on the handout “To Change or Not to Change?” were completed by participants and the homework for the next session was handed out and explained. Participants also received an article to read titled “Giving up an eating disorder: What else might you be giving up?” (see Appendix D). This article acknowledges some of the functions that an eating disorder serves in a person’s life. It encourages the exploration and identification of some of these roles as part of the recovery process and stresses the importance of finding other means to fill these roles. The article is given to the participants to acknowledge that there is an appreciation for the “benefits” of having an eating disorder. However, it highlights that these benefits have corresponding costs associated with them and that they can be replaced by more positive and healthy means of contending with difficulties.

3.4.5 Session Three

Table 3.5: Outline of Session Three of MET Group.

Contents of Session Three
<ul style="list-style-type: none"> • Discussion of handout “The Benefits and Costs of Changing” • Discussion of handout “Plans for Change” • Discussion of treatment options available at The Toronto Hospital Program for Eating Disorders • Motivation Scale - “To Change or Not to Change?” • Explanation of homework for Session Three

The previous two sessions were focused on how the eating disorder fits with the various aspects of the participant’s life and how change might be necessary in order to

achieve future goals. The third session was focused on the nature of change and strengthening a commitment to change. The group began with participants' discussion of their homework assignments. The first homework assignment was a chart on "The Benefits and Costs of Change" (see Appendix D). This worksheet had two charts to be completed, one on the benefits and costs of changing eating behaviour and the other on changing another behaviour that was a symptom of their eating disorder, for example, excessive exercising. This worksheet focused on change and how change is perceived. The costs and benefits associated with change are not necessarily the same as those associated with having an eating disorder and change may be more relevant in influencing decisions to seek or resist treatment (Vitousek et al., 1998). For example, improving health may be contrasted with gaining weight or losing an aspect of a person's identity. Before the process of change is started, participants should anticipate the benefits and costs in order to prepare themselves. This exercise can clarify the experience of the disorder and identify factors that might interfere with intentions to recover from it (Vitousek et al., 1998).

The second homework assignment was titled "Plans for Change" (Adapted from Schmidt & Treasure, 1998) (see Appendix D). This handout required participants to prepare a strategy about how to make a change. The handout addressed what changes need to be made, the importance of making these changes, the steps required to change, people who can help with the change process, ways to acknowledge successful change, and the anticipation of things that could interfere with changing. The plan could be something that did not involve changing symptoms, for example, it could be a plan to tell someone about their eating disorder. Therefore, participants at different stages could complete this handout with very different objectives. A great deal of thought was required to complete this

handout. Often people do not take the time to think about the steps and barriers involved in the process of change which may lead to an increased chance of failure.

A main portion of session three was spent explaining the various options that are offered at The Toronto Hospital Program for Eating Disorders. Participants were given a handout that outlines the stepped care model at The Toronto Hospital (see Appendix D). The outline and rationale of the stepped care model were explained to the participants. A brief description of each program was provided including which program is best suited for particular types of problems. Participants had the opportunity to ask questions about the different options and the philosophy behind the treatment program. In order to reduce some of the initial fears about treatment participants were told that it could be looked upon as an “experiment”. It can be helpful to suggest that treatment be viewed as an experiment and stress that changes that are made in treatment are reversible so there is less risk in trying the treatment (Vitousek et al., 1998). This perspective is appreciated by patients because it is honest, persuasive and portrays treatment as less threatening.

The motivation scales on the handout “To Change or Not to Change?” were completed at this point in the session. An article titled “The Toronto Hospital Eating Disorder Programme Revisited” (see Appendix D) was distributed to the participants. This article summarized the material provided on The Toronto Hospital Program for Eating Disorders. The homework for this session was a worksheet on determining which treatment, if any, was most appropriate for the participants and why they felt that way.

3.4.6 Session Four

Table 3.6: Outline of Session Four of MET Group.

Contents of Session Four
<ul style="list-style-type: none"> • Discussion with a person who recovered from an eating disorder after treatment at The Toronto Hospital Program for Eating Disorders • Discussion of handout “Which treatment is best for me?” • Motivation Scale - “To Change or Not to Change?” • Discussion of change on Motivation Scales • Feedback from participants on the MET group • Group conclusion

During the final session, a person who had recovered from an eating disorder after receiving treatment at The Toronto Hospital came to speak to the group. The recovered patient told the group about her experience with having an eating disorder, a typical day with an eating disorder, and how she decided to enter treatment. She explained her experience in treatment, her fears and anxieties prior to treatment, how she felt during treatment, and how she was able to recover. The struggles that she encountered along the road to recovery were discussed with the group along with the advantages and difficulties she experienced from recovering.

The recovered patient had already experienced the fears that the participants may be currently experiencing and could explain treatment through the eyes of a person with an eating disorder. The discussion of the participants’ anxieties with an expert doctor who runs the treatment but has not shared their experience is not as powerful as the words of a woman who has survived it. The recovered person told the participants how to make the program

work for them. The participants had the opportunity to ask the recovered patient any questions.

Discussion throughout the sessions acknowledged that the eating disorder plays an adaptive function in each participant's life. There is a goal throughout the recovery process to be able to find other coping mechanisms that are healthier and can provide similar benefits without the high costs. The recovered patient represented an example of this goal being achieved along with the confirmation that it is possible to find other coping mechanisms. Listening to and talking with the recovered patient can help to increase participants' self-efficacy that change is possible and this plays an extremely important role in motivation. One of the main principles of Motivational Interviewing is the importance of enhancing self-efficacy, hope and optimism (Miller & Rollnick, 1991). Meeting with a recovered person may help a participant to recognize that her own life goals and values are achievable after she has recovered.

After the participants had finished asking questions, the recovered patient left the group. The homework assignment "Which treatment is best for me?" (see Appendix D) was discussed at this time. This handout was useful in providing the participants with choices regarding treatment options, which can enhance motivation (Miller & Rollnick, 1991). Encouraging the group members to make an active choice about treatment may provide an increased sense of control and thus decrease anxiety about the treatment process.

After this, the participants completed the motivation scale from the handout "To Change or Not to Change?" once again. Then, each participant received a personalized sheet with the motivation scales plotted in a graph across the four MET sessions (see Appendix D). Participants were asked if the graph corresponded to their experience of how

they perceived their level of motivation across the four sessions. Plotting the graphs was useful because it provided a visual display of their changes in motivation and it provoked discussion about feedback on the MET group. Participants were encouraged to provide any feedback on the MET group to the group leaders. They also had the opportunity to ask any questions about topics discussed in the sessions. The group was concluded with the scheduling of the post intervention assessment.

3.5. Number of MET Group Cohorts

The MET group was run six times, with an average of three participants completing each series. The groups were very small in size as a result of recruitment difficulties.

3.6. Statistical Analyses

3.6.1 Data Screening

All statistical analyses were performed using SPSS for windows (version 7.5). Prior to the analysis, the data were thoroughly screened for accuracy, the presence of missing data or outliers, and to ensure normality using the data screening procedures recommended by Tabachnick & Fidell (1989). Missing data were replaced with the mean score for the specific subscale. The data were found to be normally distributed and free of outliers.

3.6.2 Statistical Tests

The aim of the data analyses was to examine changes in the dependent variables (URICA, motivation scales, CCS, BDI, RSES, EDE-Q, & EDI) over time (i.e., before the intervention versus after the intervention). Most of the data were analyzed using paired-samples t-tests. However, the data from the motivation scales were analyzed using a one-way repeated measures ANOVA since these data were collected during each session of the

group. Post hoc comparisons were done using Tukey's Honestly Significant Difference test for repeated measures. Independent sample t-tests and chi-square tests were also performed to determine if there were any significant differences between the patients who complete the MET group as compared to those that did not complete the group.

In order to minimize the chance of Type I error, a Bonferroni adjustment was used for the main outcome measure, the URICA. The Bonferroni adjustment divides alpha by the number of tests being conducted, thereby keeping a family-wise error rate at $p \leq 0.05$. In this case, if $\alpha = 0.05$ and 3 tests were conducted for the URICA, then $p \leq 0.016$. The other assessment measures are part of the standard assessment package given to eating disorder patients at The Toronto Hospital. Since this was a novel intervention, a general inquiry was included to determine if any of these additional measures revealed other possible effects of the group. In order to minimize Type I error for these tests, the significance levels was held at $p \leq 0.01$.

CHAPTER IV.

CHARACTERISTICS OF THE SAMPLE

This chapter includes a description of the recruitment results and presents data on some of the basic characteristics of the final sample including age, marital status, education level, and employment status. The body mass index and eating disorder diagnoses are also presented. The participants who completed the intervention are compared with participants who did not complete the intervention.

4.0 Recruitment of the study sample

Forty-six subjects were recruited for this study. Two subjects were excluded because they had a body mass index greater than 27. Of the 44 subjects who were eligible to take part in the study, six (14%) did not attend the initial assessment. Of the 38 subjects that were assessed, 11 (29%) did not attend the MET group. Twenty-seven subjects began the MET group; however, eight (30%) did not attend all four group sessions. Six of the eight subjects that dropped out of the group said that they were “not ready” to participate in the group at this time. The two other participants that did not complete the group did so for different reasons. In one case the group was canceled and when the next group began she had already entered intensive treatment for her eating disorder. In the other case, she was unable to switch her work schedule to accommodate the timing of the group. Thus, the final sample consisted of 19 participants (see Figure 4.0).

Figure 4.0: Recruitment of the study sample.

4.1 Sample Characteristics

4.1.1 Age

The mean ($\pm$ s.d.) age of the 19 participants was 26.5 ($\pm$ 8.7) years. The range was from a minimum of 17 years to a maximum of 43 years.

4.1.2 Marital Status

The participants' marital status is presented in Table 4.0. The majority of the participants were single at the time of the study (84.2%).

Table 4.0: Marital Status (n=19).

Marital Status	Number	Percent
Single	16	84.2%
Married	1	5.3%
Divorced	1	5.3%
Common-law	1	5.3%

4.1.3 Education Level

The participants' highest educational qualifications are presented in Table 4.1. Approximately one third of the participants had obtained a college or university degree (36.8%). Some of the participants had not completed high school (21.1%), however, this corresponded to the younger age of these participants.

Table 4.1: Highest Education Level (n=19).

Education Level	Number	Percent
Some Graduate Training (MA, Ph.D.)	2	10.5%
Completed University/College	5	26.3%
Some University/College	3	15.8%
Completed High School	5	26.3%
Some High School	4	21.1%

4.1.4 Employment Status

The participants' employment status is presented in Table 4.2. The majority of participants were unemployed (73.7%).

Table 4.2: Employment Status (n=19).

Employment Status	Number	Percent
Unemployed	14	73.7%
Employed full-time	4	21%
Employed part-time	1	5.3%

4.1.5 Cultural Background

The participants' cultural background is presented in table 4.3. The majority of the participants did not provide this information.

Table 4.3: Cultural Background (n=10).

Cultural Background	Number	Percent
Asian	2	10.5%
Canadian	4	21.0%
East African	1	5.3%
French Canadian	1	5.3%
Jewish	1	5.3%
Middle Eastern	1	5.3%
Missing	9	47.3%

4.1.6 Body Weight

The participants had a mean self-report weight of 49.3 ($\pm$ 10.9) kilograms and a mean self-report height of 1.65 ($\pm$ 0.07) meters (see Table 4.4). The average body mass index (kilograms/meters²) was 18.11 ($\pm$ 3.84).

Table 4.4: Current body weight (n=18)*.

	Mean ($\pm$s.d.)	Min	Max	Median
Weight (Kg)	49.29 ($\pm$ 10.9)	34.5	68.2	47.7
Height (m)	1.65 ($\pm$ 0.07)	1.53	1.80	1.65
Body Mass Index (Kg/m ²)	18.11($\pm$ 3.84)	13.76	26.21	17.23

* One participant would not disclose her weight.

4.1.7 Eating Disorder Diagnoses

The study sample consisted of participants with various eating disorder diagnoses (see Table 4.5). The majority of the sample met DSM-IV diagnostic criteria for anorexia nervosa [restricting or binge/purge type] (63.2%); four of the participants (21.1%) were diagnosed with bulimia nervosa [purging type]. Three of the participants (15.8%) did not meet full criteria for either anorexia nervosa or bulimia nervosa but had clinically significant anorexic type eating disorders (Eating Disorder Not Otherwise Specified).

Table 4.5: Sample Breakdown of Eating Disorder Diagnoses (n=19).

Diagnoses	Number	Percent
Anorexia Nervosa (Restricting subtype)	8	42.1%
Anorexia Nervosa (Binge/purge subtype)	4	21.1%
Bulimia Nervosa (Purge subtype)	4	21.1%
Eating Disorder Not Otherwise Specified (Sub-threshold anorexia nervosa)	3	15.8%

4.2 Comparison between Participants who Completed and did not Complete the Intervention

The participants who completed the MET group were compared to those patients who dropped out or never attended the group based on the data available. The comparison was made using independent samples t-tests in terms of the following variables: age, BMI, Global Eating Disorder Examination Questionnaire score, 3 subscales of the Eating Disorder Inventory (Drive for Thinness, Bulimia, Body Dissatisfaction), Beck Depression Inventory total scores, Rosenberg Self-Esteem Scale total scores, University of Rhode Island Change Assessment Scale stage subscores and frequency of symptoms. No statistically significant differences were found on any of these variables (see Table 4.6). However, there was a trend found on the EDI bulimia subscale, the non-completers were higher on this subscale ($t=2.49$, $df=29$, $p=0.019$). Chi-square analyses were conducted for the symptom variables to compare the prevalence between the two groups. No significant differences were found on any of the chi-square analyses. The same tests were conducted comparing the participants who completed the group and those that attended at least one MET group and then dropped out. No statistically significant differences were found.

Table 4.6: Comparison of Assessment Measures for Completers and Non-Completers.

Scale	N (C, N-C)	Mean ($\pm$ s.d.)		T	df	Sig. (2-tailed)
		Completers	Non-Completers			
Age	19, 19	26.53 ($\pm$ 8.74)	23.47 ($\pm$ 4.17)	1.37	36	0.18
BMI	18, 18	18.11 ($\pm$ 3.84)	19.37 ($\pm$ 2.97)	1.1	34	0.28
Global EDE	19, 14	3.81 ($\pm$ 1.46)	4.58 ($\pm$ 1.15)	1.64	31	0.11
EDI						
Drive for Thinness	19, 14	10.33 ($\pm$ 4.75)	13.21 ($\pm$ 3.49)	1.92	31	0.06
Bulimia	19, 12	4.47 ($\pm$ 5.15)	9.83 ($\pm$ 6.85)	2.49	29	0.019 ⁽ⁿ⁾
Body Dissatisfaction	19, 14	13.68 ($\pm$ 10.13)	19.07 ($\pm$ 8.14)	1.64	31	0.11
BDI	19, 14	31.47 ($\pm$ 10.97)	32.5 ($\pm$ 11.32)	0.26	31	0.80
RSES	19, 15	18.26($\pm$ 4.91)	19.93 ($\pm$ 4.80)	0.99	32	0.33
URICA						
Precontemplation	19, 16	1.80 ($\pm$ 0.81)	1.83 ($\pm$ 0.79)	0.12	33	0.90
Contemplation	19, 16	4.38 ($\pm$ 0.67)	4.32 ($\pm$ 0.49)	0.27	33	0.79
Action	19,16	3.72 ($\pm$ 0.80)	3.35 ($\pm$ 0.91)	1.27	33	0.22
Binge Frequency (28 days)	4, 8	38.50 ($\pm$ 9.95)	26.38 ($\pm$ 13.72)	1.56	10	0.15
Laxative Use (28 days)	4, 7	16.25 ($\pm$ 26.51)	30.57 ($\pm$ 29.59)	0.79	9	0.45
Vomiting (28 days)	8, 12	29.50 ($\pm$ 28.13)	56.75 ($\pm$ 61.87)	1.16	18	0.26
Excessive Exercise (28 days)	10, 10	19.9 ($\pm$ 8.9)	19.60 ($\pm$ 9.34)	0.07	18	0.94

⁽ⁿ⁾ Trend, but does not reach statistical significance.

Table 4.6 Continued: Comparison of Assessment Measures for Completers and Non-Completers.

Chi-Square Analyses					
Symptoms	Percent Completers	Percent Non-Completers	χ^2	df	Exact Sig. (2-sided)
Bingeing	21%	42%	1.95	1	0.295
Laxative Use	21.1%	36.8%	1.15	1	0.476
Vomiting	42%	63%	1.69	1	0.330
Excessive Exercise	52.6%	57.9%	0.11	1	1.00

The non-completers appear to differ from the completers in terms of the breakdown of eating disorder diagnoses. Forty-seven percent of the non-completers had a diagnosis of bulimia nervosa as compared to 21 percent of completers (see Table 4.7 and Figure 4.1). A chi-square analysis comparing these two groups on eating disorder diagnosis did not reveal a difference between the completers and non-completers ($\chi^2=2.9$, $df=1$, $p=0.17$).

When comparing the non-completers versus the completers on the symptom of purging, there was also an apparent difference. Seventy-nine percent of the non-completers used purging as a compensatory behaviour, as compared to 42 percent of the completers (see Table 4.8 and Figure 4.2). A chi-square analysis comparing these two groups on purging symptoms (vomiting, misuse of laxatives and diuretics all combined) revealed a significant difference between the completers and non-completers ($\chi^2=5.397$, $df=1$, $p=0.045$).

Table 4.7: Comparison of Eating Disorder Diagnoses for Completers and Non-Completers.

Eating Disorder Diagnosis	Completers N (%)	Non-Completers N (%)
Anorexia Nervosa (Restricting Subtype)	8 (42.1 %)	3 (15.7 %)
Anorexia Nervosa (Purging Subtype)	4 (21.1 %)	6 (31.6 %)
Bulimia Nervosa (Purging Subtype)	4 (21.1 %)	8 (42.1 %)
Bulimia Nervosa (Non-purging Subtype)	0	1 (5.3 %)
EDNOS (Sub-threshold Anorexia Nervosa)	3 (15.7 %)	0
EDNOS (Sub-threshold Bulimia Nervosa)	0	1 (5.3 %)

Figure 4.1: Comparison of Eating Disorder Diagnoses for Completers and Non-Completers.

Table 4.8: Comparison of Eating Disorder Symptoms for Completers and Non-Completers.

Symptom	Completers	Non-Completers
	N (%)	N (%)
Purging	8 (42.1 %)	15 (78.9 %)
Non-purging	11 (57.9 %)	4 (21.1 %)

($\chi^2=5.397$, $df=1$, $p=0.045$)

Figure 4.2: Comparison of Eating Disorder Symptoms for Completers and Non-Completers.

CHAPTER V.

RESULTS

This chapter will review the findings of the present study, as described in Chapter III. The results of the statistical analyses and the qualitative report on participants' feedback on the intervention will be included.

5.0. Results from Statistical Analyses

5.0.1 University of Rhode Island Change Assessment Scale

The University of Rhode Island Change Assessment Scale (URICA) was used to measure levels of motivation to change and has subscales corresponding to each of the Stages of Change. A statistically significant increase was detected on the mean Action Stage subscale score ($t=3.164$, $df=18$, $p=0.005$). No significant differences were found on the other subscales when comparing the scores before and after the MET group, although numerical changes were in the predicted direction (see Table 5.0 and Figure 5.0).

Table 5.0: University of Rhode Island Change Assessment Scale (URICA) stage subscores for pre-intervention and post-intervention assessments (n=19).

Stage	Mean ($\pm$ s.d.)		t	df	Sig. (2-tailed)
	Pre	Post			
Precontemplation	1.80 (± 0.81)	1.68 (± 0.73)	1.31	18	0.207
Contemplation	4.38 (± 0.67)	4.40 (± 0.72)	0.34	18	0.74
Action	3.72 (± 0.80)	4.13 (± 0.86)	3.16	18	0.005*

* Statistically significant ($p \leq 0.016$).

Figure 5.0: University of Rhode Island Change Assessment Scale (URICA) stage subscores for pre-intervention and post-intervention assessments (n=19).

A breakdown of the participants' stages of change before and after the intervention was determined by using the highest mean subscore (see Table 5.1 and Figure 5.1). However, it is considered to be more valuable to determine a stage profile by reviewing the transition between stages through a review of the changes in the mean scores that are presented in Table 5.0.

Table 5.1: Participants' Stages of Change Before and After MET (n=19).

Stage of Change	Before MET N (%)	After MET N (%)
Precontemplation	1 (5.3)	1 (5.3)
Contemplation	16 (84.2)	10 (52.6)
Action	2 (10.5)	8 (42.1)

Figure 5.1: Participants' Stages of Change Before and After MET (n=19).

5.0.2 Motivation Scales

The three motivation scales from the handout “To Change or Not to Change?” measured overall levels of motivation to change during each session of the group. Since data were collected for each session of the group, one-way repeated measures ANOVA were conducted comparing each scale across the four MET sessions. The subscale means for each session are presented in Table 5.2 and Figure 5.2. A significant difference was found on all three of the motivational scales suggesting an increase in motivation to change. The three scales include: “How motivated are you to change?” ($F=9.46$, $df=51$, $p=0.0001$), “If you decided to change how confident are you that you would succeed?” ($F=9.79$, $df=51$, $p=0.0001$), and “How ready are you to change?” ($F=7.84$, $df=51$, $p=0.0001$).

Table 5.2: Motivation Scale Means for each MET Session (n=19).

Scale	Session 1	Session 2	Session 3	Session 4.
How motivated are you to change?	6.39	6.95	7.5	8.11
If you decided to change how confident are you that you would succeed?	5.03	5.82	6.78	7.28
How ready are you to change?	5.71	6.89	7.5	7.83

Figure 5.2: Motivation Scale Means for each MET Session (n=19).

Tukey's post hoc comparisons for the Motivation to Change subscale revealed a significant increase from session one to session three ($p < 0.05$), from session one to session four ($p < 0.05$), and from session two to session four ($p < 0.05$). The post hoc comparisons for the Confidence to Succeed subscale showed a significant increase from session one to session three ($p < 0.05$), from session one to session four ($p < 0.05$), and from session two to session four ($p < 0.05$). The Readiness to Change subscale showed a significant increase in the post hoc comparisons from session one to session two ($p < 0.05$), from session one to session three ($p < 0.05$), and from session one to session four ($p < 0.05$). These results are displayed in Figure 5.3.

Figure 5.3: Significant Post Hoc Comparisons presented by Motivation Scale Subscales (Motivation, Confidence, Readiness) for each MET Session.

5.0.3 Beck Depression Inventory

A statistically significant decrease in the mean BDI score was found in the pre-intervention assessment as compared with the post-intervention assessment ($t=2.886$, $df=18$, $p=0.01$). These results are shown in Table 5.3 and Figure 5.4 and suggest a decrease in depressive symptoms, although still in the clinically depressed range.

Table 5.3: Beck Depression Inventory (BDI) total score for pre-intervention and post-intervention assessments (n=19).

Mean ($\pm$ s.d.)		t	df	Sig. (2-tailed)
Pre	Post			
31.47 ($\pm$ 11.44)	26.21 ($\pm$ 12.0)	2.89	18	0.01*

* Statistically significant ($p \leq 0.01$).

Figure 5.4: Beck Depression Inventory (BDI) total score for pre-intervention and post-intervention assessments (n=19).

5.0.4 Rosenberg Self-Esteem Scale

The Rosenberg Self-esteem Scale (RSES) score increased significantly, indicating improved self-esteem, from the pre-intervention assessment to the post-intervention assessment ($t=5.69$, $df=18$, $p=0.0001$). These results are shown in Table 5.4 and Figure 5.5.

Table 5.4: Rosenberg Self-Esteem Scale (RSES) total score for pre-intervention and post-intervention assessments (n=19).

Mean ($\pm$ s.d.)		t	df	Sig. (2-tailed)
Pre	Post			
18.17 ($\pm$ 5.04)	20.89 ($\pm$ 4.98)	5.69	18	0.000*

* Statistically significant ($p \leq 0.01$).

Figure 5.5: Rosenberg Self-Esteem Scale (RSES) total score for pre-intervention and post- intervention assessments (n=19).

5.0.5 Concerns About Change Scale

The reasons why participants are reluctant to change a problem behaviour was assessed using the Concerns About Change Scale (CCS). One of the subscales, “failure to recognize irrationality of the problem” ($t=3.25$, $df=18$, $p=0.004$), showed a significant decrease over time (before versus after the intervention). There was a trend for three other

subscales to decrease from the pre-intervention to the post-intervention assessment, although the differences were not statistically significant. The three subscales include “fear of the process of change” ($t=2.33$, $df=18$, $p=0.032$), “unable to change” ($t=1.79$, $df=18$, $p=0.09$), and a “random” subscale ($t=2.2$, $df=18$, $p=0.041$). The other subscales did not change significantly (see Table 5.5 and Figure 5.6).

Table 5.5: Concerns about Change Scale (CCS) subscale scores for pre-intervention and post-intervention assessments (n=19).

Subscales	Mean ($\pm$ s.d.)		t	df	Sig. (2-tailed)
	Pre	Post			
Fear of Personal Loss	2.68 ($\pm$ 1.08)	2.43 ($\pm$ 1.13)	1.58	18	0.13
Avoidance of Responsibility	2.63 ($\pm$ 1.08)	2.53 ($\pm$ 0.96)	0.55	18	0.59
Coping with Negative Affects	2.86 ($\pm$ 1.25)	2.84 ($\pm$ 1.10)	0.07	18	0.92
Disinhibition	2.26 ($\pm$ 1.02)	2.18 ($\pm$ 0.99)	0.51	18	0.62
Underlying Flaw	3.1 ($\pm$ 1.18)	3.13 ($\pm$ 0.91)	0.18	18	0.86
Goal Attainment	2.12 ($\pm$ 1.28)	2.05 ($\pm$ 1.00)	0.46	18	0.65
Hedonic Loss	1.79 ($\pm$ 0.95)	1.67 ($\pm$ 0.90)	0.87	18	0.39
Fear of Loss of Identity	2.68 ($\pm$ 1.03)	2.48 ($\pm$ 1.14)	1.08	18	0.29
Interpersonal Loss	2.11 ($\pm$ 1.01)	1.89 ($\pm$ 0.88)	0.89	18	0.39
Failure to Recognize Irrationality	2.05 ($\pm$ 1.13)	1.54 ($\pm$ 0.93)	3.25	18	0.004*
Fear of Maturity	2.38 ($\pm$ 1.17)	2.23 ($\pm$ 1.17)	0.91	18	0.37
Fear of Peer Group Loss	1.56 ($\pm$ 0.93)	1.31 ($\pm$ 0.51)	1.95	18	0.07
Fear of Process of Change	3.05 ($\pm$ 1.10)	2.62 ($\pm$ 1.05)	2.33	18	0.03 ^(T)
Random	2.44 ($\pm$ 0.98)	2.16 ($\pm$ 0.80)	2.20	18	0.04 ^(T)
Fear of Risks	2.32 ($\pm$ 0.87)	2.09 ($\pm$ 0.79)	1.3	18	0.21
Fear of Sexuality	1.89 ($\pm$ 0.96)	1.81 ($\pm$ 0.93)	0.57	18	0.58
Unable to Change	2.57 ($\pm$ 1.08)	2.18 ($\pm$ 1.04)	1.79	18	0.09 ^(T)
Unworthy of Change	2.66 ($\pm$ 1.08)	2.39 ($\pm$ 0.88)	1.18	18	0.25

* Statistically significant ($p \leq 0.01$). ^(T) Trend, but does not reach statistical significance.

Figure 5.6: Concerns about Change Scale (CCS) mean subscale scores for pre-intervention and post-intervention assessments (n=19).

5.0.6 Eating Disorder Examination

The self-report version of the Eating Disorder Examination (EDE-Q) was used to assess eating disorder features. There were no significant differences found on any of the four EDE-Q subscales before versus after the MET intervention (see Table 5.6 and Figure 5.7).

Table 5.6: Eating Disorder Examination Questionnaire (EDE-Q) subscale scores for pre-intervention and post-intervention assessments (n=19).

EDE-Q Subscale	Mean ($\pm$ s.d.)		t	df	Sig. (2-tailed)
	Pre	Post			
Restraint	3.67 ($\pm$ 1.59)	3.62 ($\pm$ 2.19)	0.11	18	0.91
Eating Concern	3.62 ($\pm$ 1.25)	3.25 ($\pm$ 1.61)	1.37	18	0.18
Weight Concern	3.74 ($\pm$ 1.91)	3.57 ($\pm$ 1.89)	0.48	18	0.64
Shape Concern	4.21 ($\pm$ 1.94)	3.94 ($\pm$ 1.87)	0.80	18	0.43

Figure 5.7: Eating Disorder Examination Questionnaire (EDE-Q) subscale scores for pre-intervention and post-intervention assessments (n=19).

5.0.7 Eating Disorder Inventory

The Eating Disorder Inventory (EDI) was used to assess psychological and behavioural traits that are common in eating disorders. One significant difference was found on the EDI subscales before versus after the MET intervention (see Table 5.7 and Figure 5.8). There was a significant decrease on the Interpersonal Distrust subscale ($t=2.97$, $df=18$, $p=0.008$). A decrease was also observed on the Ineffectiveness subscale scores, although this difference did not achieve statistical significance ($t=2.24$, $df=18$, $p=0.038$). No other statistically significant differences were found for the EDI subscales.

Table 5.7: Eating Disorder Inventory (EDI) subscale scores for pre-intervention and post-intervention assessments (n=19).

EDI Subscale	Mean ($\pm$ s.d.)		t	df	Sig. (2-tailed)
	Pre	Post			
Drive for Thinness	10.33 (± 4.75)	11.06 (± 5.47)	1.05	18	0.31
Bulimia	4.47 (± 5.15)	5.52 (± 6.48)	1.54	18	0.14
Body Dissatisfaction	13.68 (± 10.13)	14.68 (± 9.78)	0.83	18	0.42
Ineffectiveness	18.05 (± 6.42)	15.33 (± 7.72)	2.24	18	0.038 ^(T)
Perfectionism	9.94 (± 6.01)	10.72 (± 5.28)	0.76	18	0.46
Interpersonal Distrust	9.79 (± 4.99)	8.11 (± 5.38)	2.97	18	0.008*
Interceptive Awareness	14.35 (± 8.43)	11.84 (± 7.45)	1.39	18	0.18
Maturity Fears	7.42 (± 6.17)	6.84 (± 6.04)	0.86	18	0.40

* Statistically significant ($p \leq 0.01$). ^(T) Trend, but does not reach statistical significance.

Table 5.8: Eating Disorder Inventory (EDI) mean subscale scores for pre-intervention and post-intervention assessments (n=19).

5.1. Results of Follow-up Assessment

5.1.1 Participation in Treatment

Six weeks after completing the MET group, participants were followed-up in a telephone interview to determine if they had entered treatment for their eating disorder (see Table 5.8 and Figure 5.9). Of the nineteen participants, seven entered intensive treatment (In-patient Program or Day Hospital Program) and three were on the waiting list to enter

intensive treatment as soon as space became available. Four of the participants entered less intensive treatment for their eating disorder including either a Psychoeducation group or a Nutrition group. Following the MET group, three of the participants were receiving individualized counselling from a therapist specializing in eating disorders. One group member was no longer symptomatic following the group and decided that treatment was not necessary. Another participant decided that she was not ready to enter treatment at this time.

Table 5.8: Treatment obtained by participants following the MET group (n=19).

Type of Treatment	Number of Participants
Intensive Treatment (In-patient or Day hospital Program)	7 (36.8 %)
Waiting List for Intensive Treatment	3 (15.8 %)
Less Intensive Treatment (Psychoeducation or Nutrition Group)	4 (21.1 %)
Individual Counselling with Eating Disorder Specialist	3 (15.8 %)
No Treatment	2 (10.5 %)

Figure 5.9: Treatment obtained by participants following the MET group (n=19).

5.1.2 Participants' Evaluation of MET Intervention

Since the MET group was a novel intervention, the participants were asked for feedback on the group in a follow-up telephone interview. The assessment was aimed at determining which elements of the group were helpful and which elements of the group were not helpful. The participants were encouraged to provide both positive and negative feedback in order to improve the effectiveness of the group. The following information is qualitative and no statistical analysis was conducted.

The participants reported that the following aspects of the MET intervention were helpful. The group therapy format was commended for providing a positive environment which enabled participants to realize that others were experiencing similar problems. They found the positive and optimistic approach of the group was useful because it enabled them to view previous failures in recovering from their eating disorder as part of the recovery process and not just as failure. They appreciated the Stages of Change model and found it reflected a greater understanding of the difficulty of changing. All of the participants reported that the homework assignments that were completed throughout the intervention were extremely valuable because they helped the participants to put things in perspective as well as encouraged them to address the issues, acknowledge the benefits and costs of changing, and take ownership of the problem. In addition, the worksheets enabled the effect of the group to last throughout the weeks and participants reported reviewing their worksheets after completing the group in order to maintain their motivation to change. Participants found the information provided on eating disorders and the treatment program helped them to have a greater understanding of their situation and the seriousness of their disorder. As a result, they felt more able to play an active role in determining the appropriate treatment for themselves. Participants reported that the discussion with the recovered patient provided them with encouragement that it is possible to recover and this gave them the extra push to move forward into a treatment program. Overall, the feedback from the participants on the usefulness of the MET was extremely encouraging.

The feedback about which components of the group were not helpful was invaluable in order to gain from the pilot evaluation of this intervention and improve the overall effectiveness of the group. Many of the participants did not have any suggestions for

improvement and did not find any of the group components to be unhelpful. The most common response to this question was that the group was too short in both the number of sessions and the length of the sessions. One of the participants reported that it was difficult to be in a mixed group of eating disorder patients because she was the only one in the group that did not purge and she found she could not relate to some of the other participants or the recovered patient that spoke with the group. She added that she still found the group useful but a more mixed group would have enhanced the effectiveness of the group. Some of the participants found it difficult to listen to other participants discuss negative aspects of their situation and they found the group to be depressing at times. These were all of the comments provided on components of the group that were not helpful.

Participants were asked if the MET group had an impact on their entry into treatment. Some of the participants reported that the group made them realize that although they said they wanted to get better they were not actively doing anything about it. Therefore, the group encouraged them to take an active role in the treatment process. The information provided about the treatment program helped some of the participants to get an introduction to The Toronto Hospital Program for Eating Disorders and they were able to approach treatment with an open mind. Some participants said that they realized that they needed help but they needed the push of the group because they would not have entered treatment on their own and would have only started treatment after they got much sicker. One participant stated that the group helped her to realize that she did actually have a problem and other participants said that listening to others helped them to recognize that their problems were similar to others. A couple of the participants said that the group was too short to have an impact on their entry into treatment. One participant reported that the

group made her aware that she was not ready to enter treatment and she realized that she had to want to get better for herself and not for others, which she was not ready to do at this time. This information is very valuable in the evaluation of the effectiveness of the intervention and provides insight for future research.

5.2 Summary of Statistically Significant Study Results

Table 5.9: Summary of statistically significant results.

Assessment Measure (<i>Subscale</i>)	Statistical Test	Statistical Result
URICA: (<i>Action Stage</i>)	t-test	Significant increase
Motivation Scales: (<i>Motivation</i>) (<i>Confidence</i>) (<i>Readiness</i>)	ANOVA	Significant increase
Beck Depression Inventory	t-test	Significant decrease
Rosenberg Self-esteem Scale	t-test	Significant increase
Concerns About Change Scale: (<i>Irrationality</i>)	t-test	Significant decrease
Eating Disorder Inventory (<i>Interpersonal Distrust</i>)	t-test	Significant decrease

CHAPTER VI.

DISCUSSION

6.0. Overview of the Study

A review of the eating disorder literature highlights that this patient population tends to avoid treatment and that there is a high rate of treatment drop-out. These characteristics have been attributed to a lack of motivation to change. The aim of this study was to develop a pretreatment motivational enhancement therapy (MET) group intervention for eating disorders and conduct a pilot evaluation of its effectiveness at increasing participants' motivation to change. The goal of the MET intervention was to increase participants' motivation to change which might be expected to increase the success of future treatment of the eating disorder and reduce the rate of treatment drop-out. The MET treatment manual combined different aspects of the Trans-theoretical Model of Change and Motivational Interviewing, both of which were developed to enhance motivation to change in substance abusers. By combining these approaches with clinical recommendations on enhancing motivation from experts in the eating disorder field, a new MET intervention was developed. It was designed to be a brief intervention that would help participants to move through the Stages of Change. The development of the MET treatment manual was a core aspect of this thesis. It was also necessary to put theory into practice and determine if the intervention was clinically useful. This was done by conducting a pilot study of the intervention with no control group.

6.1. Discussion of Study Findings

6.1.1 Discussion of Results from Motivational Measures

The Trans-theoretical Model predicts that treatment is most successful when the patient's stage of change matches the treatment approach. The group was developed based on the assumption that the avoidance of treatment, the high drop-out rate, treatment failure, and relapse in eating disorder patients may be a result of the patients not being in the *action* stage of change. This stage is characterized by a person who is actively changing the problem behaviour. Since most eating disorder treatment involves actively changing eating behaviours and addressing psychological issues surrounding the eating disorder, both of which are considered to be action oriented activities, the patient should be in the action stage of change. Thus, the MET group was aimed at moving participants from the earlier stages of change to the action stage. The results of this study, based on the URICA, suggest that the greatest increase occurred in the action stage of change. The results from this study revealed the hypothesized changes in the stages of change subscales and based on the Trans-theoretical Model these results support the conclusion that the group intervention positively influenced participants' motivation to change.

The other measure of motivation to change was based on the handout "To Change or Not to Change?" that was completed during each session of the MET group. The hypothesized change in this measure was that the motivation to change would increase from the first session to the last session of the intervention. Again, the anticipated results were obtained which support that the MET intervention may have enhanced motivation to change. This measure included a question that addressed self-efficacy, confidence in one's ability to change, which is considered to be an important element for motivational change in

both the Stages of Change Model and Motivational Interviewing (Prochaska & DeClemente, 1992; Miller & Rollnick, 1991). Self-efficacy is important to the treatment process. If a person wants to change but does not feel that change is possible then that person is less likely to put the effort into the treatment process since the final goal does not seem obtainable. Therefore, it is important that the participants not only have the motivation to change but also have the belief in themselves and the treatment program that change is possible. The inclusion of the recovered patient as a motivational component of the MET group was aimed at enhancing the participants' self-efficacy by using a role model to exemplify that recovery is possible. The results from this measure of self-efficacy suggest that it did increase from the first session to the last session of the MET intervention.

One of the discussion topics in the MET group was determining the benefits and costs of changing. The Concerns about Change Scale was not used as one of the main measures of motivation to change, but was used to gain an understanding about why participants may be reluctant to change. Therefore, it addressed the costs of changing and it revealed some interesting findings. This scale has many subscales but the one significant finding correlates to the stages of change model. This measure showed that participants viewed their behaviour as more of a problem after participating in the MET intervention. This finding suggests a shift away from the earlier precontemplation stage of change, which is characterized by the behaviour not being recognized as a problem. This result corresponds to the decrease that occurred on the URICA in the precontemplation stage subscale after participating in the MET group. Other findings from the Concerns About Change Scale include a shift towards less of a fear in the process of change and a reduction in the feeling that the participants were unable to change. Another assessment measure

suggested a reduction in feelings of ineffectiveness as well. These results are encouraging because they were also topics of specific focus during the intervention. The focus on enhancing self-efficacy likely reduced some of the fear about the process of change, the fear of the inability to change, and general feelings of ineffectiveness. This modification in the participants' outlook on both their problem behaviour and the process of changing is promising and supports the interpretation that treatment may be more successful because the patients may approach it with less resistance.

6.1.2 Discussion of Results from General Assessment Measures

Since the MET intervention was new, a general assessment package was also included to assess additional changes that may have occurred through the participation in this group, such as changes in levels of depression, self-esteem, and eating disorder symptomatology. Three interesting findings emerged. There was a decrease in depressive symptoms, an increase in overall self-esteem, and a decrease in interpersonal distrust. These results support the conclusion that the MET intervention may have additional effects that go beyond influencing motivation. People suffering from eating disorders commonly report feelings of isolation and these feelings may enhance symptoms of depression. The group may have provided a support system that enabled the participants to recognize they were not alone in their struggle with an eating disorder or in their ambivalence about change. As well, the group was focused on enhancing self-efficacy that change was possible. Self-efficacy is closely linked to self-esteem because both are related to aspects of personal confidence in oneself. These findings are encouraging as well because they support the long-term aim of the group, which was to increase the success of intensive treatment for an eating disorder. Depression, low self-esteem, and difficulties in trusting

others are all problems that can negatively impact on a therapeutic experience. The reduction of these problems in the patients could remove a barrier and increase the chance of more successful treatment.

There was no change in eating disorder symptomatology; however, this was expected because the group was not aimed at reducing symptoms. Participants were not asked to discuss or reduce their eating symptoms because the symptom that was addressed in the group was ambivalence about change.

6.1.3 Discussion of Results from Follow-up Assessment

The six-week follow-up assessment completed after the intervention also yielded some interesting results. The purpose of this assessment was to determine if participants had entered into a treatment program and to obtain feedback about the MET intervention. The interpretation of the number of participants who entered treatment after completing the intervention is very limited as there was no control group for comparison. Seventy-four percent of the group members entered a treatment program offered at The Toronto Hospital Program for Eating Disorders after participating in the group. However, it is not possible to determine how many would have entered into treatment without participating in the group. In addition, one participant was no longer symptomatic following the group and therefore did not enter treatment. Most of the participants reported that the group had a substantial influence on their decision to enter into treatment but some stated that they would have entered treatment regardless of their participation in the group. One participant determined that she was not ready to enter treatment after completing the group. This could be interpreted as a failure of the group but it could also be viewed as a strength. The participant realized that she was not ready to enter treatment and this is important to

recognize. If she had entered treatment without feeling ready to change, she might be more likely to drop-out prematurely.

The results from the follow-up assessment regarding the participants' evaluation of the intervention are qualitative but still provide important information. If results from an intervention study reveal significant quantitative results but the participants have a negative evaluation of the intervention then this influences the interpretation of the quantitative results. Therefore, the assessment of the MET intervention by the participants is essential information in the analysis of the results of this pilot evaluation. The overall results from the follow-up were very encouraging. Participant feedback indicated that many of the goals of the intervention were achieved. This feedback confirmed the clinical impression that the group leaders had while leading the intervention. It is very important to acknowledge that the follow-up assessment was conducted by one of the group leaders and this likely had an influence on the participants' responses. There was, however, a conscious effort made to encourage constructive feedback in order to improve the group. The constructive feedback that was most frequently given was that the group could have been longer. This is valuable information and is an adjustment that is easy to implement. For example, extending the intervention by two more sessions would allow more time for discussion, would enable the group to remain as a brief intervention, and treatment would not be delayed. The intervention was four sessions long based on previous research results. However, if the addition of two sessions could enhance the group experience without producing negative consequences then it would be a valuable modification.

6.1.4 Discussion of Recruitment and Attrition of Sample

One of the major difficulties in conducting the study was the problem in recruiting patients to participate in the intervention. Some of the recruitment problems might be attributable to changes in the waiting list to enter The Toronto Hospital Program for Eating Disorders. Typically, there is a long waiting list of patients who are waiting to enter treatment. However, during the recruitment period for this study there were very few patients who had to wait to enter treatment. Therefore, there was a smaller sample of potential participants. Of the 44 eligible patients that were asked to participate in this study, only 27 entered the intervention. Although the loss of 39 percent of the eligible patients seems like a substantial number, clinical experience shows that this is characteristic of the patient population. It is common for these patients to schedule appointments and then they often call to cancel or just do not show up at the scheduled time. Of the original 44 potential participants, six did not even attend the initial assessment. Some of the recruited participants did not attend the group because they were unable to come to the group at the scheduled time and some were offered a position in the treatment programs and chose to enter treatment immediately. However, 11 of the original 44 attended the initial assessment and then did not come to the first session of the MET intervention. Some of these people may not have been motivated enough to even attend the group. These difficulties in recruitment highlight the ambivalence and lack of motivation that exists in this patient population. This problem further identifies that there is a real need to address issues of motivation in the treatment of eating disorders.

The final sample size in this study was 19 and an additional eight people dropped out of the MET intervention. This high drop-out rate also identifies the difficulty of

engaging this population of patients into treatment. The drop-out rate from the previous MET study was 33 percent (Treasure, et al., 1999), so that the 30 percent drop out rate found in this study is comparable. A comparison was conducted to determine if there were any difference between the patients who did not complete the MET group and the patients who completed the group in order to determine if the study consisted of a biased sample. The group of non-completers included both the patients who had an initial assessment for the study but did not attend the group as well as the patients who dropped out of the group. There was a noticeable distinction in the diagnoses and symptoms of the two groups. Of the 19 patients that did not complete the group, 47 percent had a diagnosis of bulimia nervosa as compared to 21 percent of the group who completed the intervention. The patients who did not complete the group were also more likely to have purging symptoms. Seventy-nine percent of the non-completers had purging symptoms as compared to 42 percent of the participants who completed the intervention. Other than the distinction between the purging symptoms, no other differences were detected on any of the other measures.

This distinction in eating disorder symptoms is interesting. Articles that discuss eating disorders and motivation often present patients with bulimia nervosa as being more motivated to change than patients with anorexia nervosa (Vitousek et al, 1998; Hamburg, 1989). However, the shame associated with bulimia is often identified as the obstacle to engaging these patients in treatment (Fairburn & Cooper, 1984; Hamberg et al., 1989; Vitousek et al., 1998). The differences found between these two groups could be explained by the shame associated with purging behaviour or by the impulsive nature that is commonly associated with purging behaviour. As well, the fear of having to give up the

reinforcing qualities of the bulimic behaviour could have affected these patients' attendance in the group.

6.2. Discussion of the Strengths of the Study

An important strength of this study is that it is only the second study, to our knowledge, that assesses the use of a MET for eating disorder patients. Issues of motivation have been identified as a problem in the treatment of eating disorders for decades, yet almost no research has been conducted on this topic. Therefore, this study is a progressive step toward gaining more of an understanding about how to apply techniques aimed at enhancing motivation for patients with eating disorders. In addition, the attainment of the positive results in this preliminary study provides justification to conduct further research in this area.

Another strength of this study is that it followed a specified treatment manual. The manual provided a structured account of what occurred during each session of the group along with the rationale for the content of each session. The manual can be a useful resource for future studies and it makes the results of future studies easy to compare with this study. Since the pilot study of the treatment manual was conducted in a clinical setting for which the manual was designed, it could be considered a field study. The participants were all patients who were referred for treatment at The Toronto Hospital Program for Eating Disorder and are therefore representatives of the clinical population that are treated here. The inclusion of a mixed sample of patients with anorexia and bulimia nervosa, of patients who were both new to treatment and who had previously been through a treatment program, as well as the voluntary nature of participation in the group, all make the findings more generalizable to a clinical treatment setting similar to The Toronto Hospital Program

for Eating Disorder. Since the manual was designed based on an identified need to address the ambivalence observed in this clinical treatment centre, the use of this mixed sample can be considered a strength of the study as well.

6.3 Discussion of the Limitations of the Study

Although positive results were obtained it is important to recognize the limitations of the study. Since the study did not include a control condition, it is not certain that the observed changes can be attributed to the effect of the MET intervention. Unfortunately, the previous study on MET and eating disorders (Treasure, et al., 1999) did not include a control condition either. It is possible that the changes in the outcome measures occurred for other reasons. The observed changes could simply be the result of completing the assessment measures for a second time. When participants completed the assessment after the intervention they were familiar with the assessment measures and this could have influenced their response. The results could also be attributed to participating in group therapy or receiving attention as opposed to being a result of the specific motivational content of the intervention. The changes in motivation could also be due to demand characteristics, which are characteristics of the experimental environment that influence the participants' performance. The participants were aware that the group was aimed at enhancing their motivation to enter treatment and this knowledge could have influenced the way they completed the outcome measures such that they would fulfill their expected role in the experiment. Another explanation for the results could be due to a novelty effect. This effect is a result of the intervention being presented as innovative or "new and improved" which could influence the results because there is often an expectation that a new type of treatment will be more successful. During the group, the treatment was presented as a new

treatment approach and participants even commented that this “new” approach was more realistic and supportive.

The inclusion of a control condition would have allowed the results to be attributed to the MET intervention. However, an effective control condition is difficult to develop. The most common and easiest type of control group to use is a waiting list control. A waiting list control involves including some patients who do not participate in the intervention and they remain on the waiting list but they complete the assessment measures at the same time as the MET group participants. If none of the motivational changes occurred in the control group then it would rule out the possibility that completing the assessment measures twice was the cause of the differences found. The inclusion of a waiting list control is useful but it does not determine if the results are due to issues of attention or the participation in a group therapy program as opposed to the specific intervention. In order to eliminate these issues an “attention-placebo” control group could be used. This type of control group is very difficult to develop because it is hard to create a simulated group therapy that does not provide some form of therapy. In order to reduce some of the demand characteristics, the aim of the group and the rationale of the group could not be revealed to the participants but this could present some ethical problems.

Another limitation of this study is the small sample size. Sample size is related to statistical power and the power of this study was decreased as a result of the relatively small sample size. As a result of the small sample size, the inclusion of so many statistical analyses is a further limitation of the study. However, in order to reduce this problem and increase statistical conclusion validity by reducing the risk of type I error, a Bonferonni adjustment was used. This adjustment controls the overall error rate such that alpha is

adjusted to the number of comparisons that are conducted. The inclusion of this adjustment made the statistical analysis more stringent.

Addressing issues of motivation is a new area of research in the eating disorder field. Although there is a very limited literature on this topic the problem of measuring motivation has been identified by experts in the eating disorder field (Vitousek et al., 1998; Treasure et al., 1999; Blake et al., 1997; Ward et al., 1996). Due to the complex nature of eating disorders, it is difficult to be certain that the measures aimed at determining motivation to change adequately captured all of the elements of this concept. There are both positive and negative aspects involved in changing eating disorder behaviour. It is difficult to determine if the patients want to remove all of the elements of the behaviour in order to reach a state of recovery or if they are only interested in removing the elements which are distressing to them. For example, change could involve improving physically without including the desire to lose aspects of weight control or the positive attention received from family members. Therefore, measuring motivation to change in an eating disorder population is complex. The measures that currently exist to measure motivation to change in eating disorder patients may fall short of being able to address many of the issues involved in change. For example, the motivational measure used in this study asked about changing “the problems related to food and eating” but this is very general and may not incorporate many of the issues at hand. When participants completed the motivational scales, a space was provided for them to state explicitly what changes they were referring to in an effort to understanding what they meant by “change”. The Stages of Change measure has been used in previous studies with eating disorder, however, the Likert motivation scales that were used have not been tested for reliability and validity which is a definite limitation.

Currently, research is being done to develop a measure that is aimed specifically at measuring motivation to change in eating disorders (Rieger, 1998). Although, this study used the most current measures that exist to assess motivation to change it is necessary to acknowledge that these measures do have shortcomings that may limit the findings of this study.

6.4 Discussion of Study in Comparison to Previous Research

The previous MET study by Treasure and colleagues (1999) provides a good basis of comparison for this study. One of the similarities between these studies is the shifts that occurred on the URICA stages of change measure. In fact, the stages of change pre- and post-treatment mean subscale scores in this previous MET study are almost the same as the mean scores of this study. However, one of the differences between these studies is the change in eating disorder symptoms. The study by Treasure and colleagues reported a decrease in eating disorder symptoms that was not detected in this study. Although the previous study claims that the MET was focused on motivation rather than symptom reduction, their version of MET had more of an active focus on symptom reduction than the present study. For example, the workbook for their MET group included worksheets to determine the participants target weight and daily energy expenditure (Schmidt & Treasure, 1998). The reduction in symptoms is a positive finding. However, this version of MET was aimed at providing the greatest emphasis on motivation because treatments that reduce eating disorder symptoms have already been established. Another distinction between these studies is that this study included patients with both anorexia nervosa and bulimia nervosa and the previous study only included patients with bulimia nervosa. The intervention was conducive to this combination of patients because many of the motivational issues that

should be addressed before entering treatment are similar between these groups of patients. As well, since the group did not focus on eating disorder symptoms the major differences between these patients were not emphasized. Instead, the intervention provided the environment and the tools required to explore many issues but the conclusions made are based on an individual review of the participant's own situation.

6.5 Implications of the Study and Directions for Future Research

This study accomplished both the development and the initial evaluation of the MET intervention. The study was designed as a pilot study in order to determine if the treatment manual appeared to have clinical value for increasing participants' motivation to change. Since the results did suggest that the intervention might have enhanced motivation in the participants, more extensive research is necessary to determine if the intervention does affect treatment outcome. In order to determine more conclusively that the MET group is able to enhance motivation to change a study with a control condition is necessary. The MET intervention was developed based on the assumption that enhancing patients motivation to change would increase the number of patients that would enter treatment and would decrease the number of patients that drop-out of treatment prematurely. Therefore, a study that includes a long-term follow-up and a control condition is necessary to determine if after completing the MET intervention more participants enter and remain in treatment as compared to the participants in the control condition. If this follow-up study supports the use of this MET pretreatment program then there would be justification to include MET as part of standard treatment for eating disorders.

Some of the goals of MET are to enhance motivation to change, increase self-efficacy, help the patients to determine why change is necessary, and ensure that they are in

the action stage of change before entering intensive treatment. If these goals are attainable by including a brief pretreatment MET group then specialized eating disorder treatment programs could potentially be more successful. Therefore, this intervention could be very useful as the first step in a stepped care treatment program. If it does enhance motivation to change then it would be valuable for a wide range of patients including those that require the least intensive treatment to those that require an intensive inpatient program for their eating disorder. If a patient is already in the action stage, participation in this group could still be valuable as it could strengthen the commitment to change. The MET would be useful as the first step because a patient may not require additional treatment, as seen with one of the participants in this study, or it could help to make the subsequent treatment more effective. It could also have the benefit of being cost effective because the least intensive treatment is provided first and if the goals of this intervention are met then the rest of the treatment should be more effective which makes the best use of treatment resources.

The intervention is valuable for patients to determine if they are ready to enter treatment so that treatment resources are used on patients whose goals are congruent with the goals of treatment. Many patients enter treatment without thinking about whether they are ready to change, whether they want to change, and what the implications of change involve. Considering that the treatment required to recover from an eating disorder is often a very long and difficult process it seems essential that these issues be addressed prior to entering treatment. The treatment process will still be difficult for patients after completing the MET intervention but if they recognize that they do want to change then some of treatment barriers will be decreased. Since ambivalence about change and treatment resistance are so common in this population of patients, anything that can reduce these

problems is likely to result in treatment that is more successful. If a patient decides that she does not want to change and will go to extremes to resist treatment then treatment will most likely fail and resources are wasted. Treatment failure is difficult for both the patient and the staff. If a participant realized from the MET intervention that she is not ready to enter a treatment program then this provides the advantage of removing the frustrations from the patient, the staff, and reduces the wasted resources as well. However, if the patient decides at a later point that she is ready for treatment then one of the benefits of the MET intervention is that it recognizes previous failure at changing as part of the process of change. Therefore, this intervention could be of value for people who have been unsuccessful at changing and help them to determine why change might be necessary which could provide the push to succeed at changing.

Since this study is only the second study on MET for eating disorder, it is valuable for increasing our understanding of how to motivate these patients. The results suggest that it may have an impact on enhancing motivation and provides the justification to continue to research this topic. Ideally, future research in this area will reveal that this form of treatment can increase the success rate of eating disorder treatment programs by being able to improve the outcome of patients who are often resistant to treatment.

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APPENDIX A: Consent Form

Study Consent Form

Consent Form

Pretreatment Motivation Group for Eating Disorders

You have been invited to take part in a study being conducted by researchers from The Eating Disorder Program of The Toronto Hospital. The aim of the study is to find out if a pretreatment group focused on preparing patients for treatment helps patients to feel more motivated to participate in treatment for their eating disorder.

To find out how helpful the motivation group is, we will need to ask you some questions about your eating problem *before* you begin the group, after completing the group, as well as six weeks into any further treatment you may have at The Toronto Hospital. In addition, we will ask you to fill in some questionnaires at these times. Each assessment will last approximately one and one half hours.

Any information learned about you during this study will be confidential and neither your name nor any identifying information will be made available to anyone apart from the study investigators. If you decide to take part, your participation in the study is entirely voluntary and you may withdraw from the study at any time. Your decision to take part or to withdraw will have no effect on your treatment in the Eating Disorders Program at The Toronto Hospital.

I have read and understood all the above information. I have had the opportunity to discuss this study and my questions have been answered to my satisfaction. If I have further questions, I may call Dr. Kaplan at (416) 340-3041. I may also call Dr. G. Hardacre at (416) 603-5618 who is not involved in this study but who will answer any questions about participating in a research study. I may have a copy of this form if I wish.

I consent to participate in this study.

Name (please print)

Signature

Date (month/date/year)

Witness' Signature

APPENDIX B: Assessment Measures

Motivation Scales

Demographic Information

Six-Week Follow-up

Name: _____

Session: 1 2 3 4

To Change or Not to Change?

How motivated are you to change?

1	2	3	4	5	6	7	8	9	10
Not at all									Very

If you decided to change how confident are you that you would succeed?

1	2	3	4	5	6	7	8	9	10
Not at all									Very

How ready are you to change?

1	2	3	4	5	6	7	8	9	10
Not at all									Very

When you think about “change” what are you referring to?

Motivation Group Follow-up

(Follow-up 6 weeks after Motivation group ends)

1. Are you receiving any type of treatment for your eating disorder now? ☐ Yes ☐ No
2. What type of treatment are you receiving? (1=Psychoeducation, 2=Nutrition Group, 3=Day Hospital, 4=Inpatient Program, 5=Individual counselling, 6= symptom interruption, 7=Other (specify))
3. What impact did the motivation group have on you entering this treatment?
4. What components of the motivation group were particularly helpful?
5. What components of the motivation group were not helpful?
6. Do you think the group affected your motivation to change?
7. What “stage of change” do you think you are in? (1=precontemplation, 2=contemplation, 3=preparation, 4=action, 5=maintenance)
8. Is your “stage of change” different from what it was when you began the group?

If yes, specify:

9. When did you start treatment?
10. Date patient dropped out (if applicable):
11. How often are you involved in this treatment (frequency)?
12. Is the treatment helpful?
(1=Treatment is not helpful at all, 2=Treatment is not very helpful, 3=Treatment is somewhat helpful, 4=Treatment is helpful, 5=Treatment is very helpful, 6=Treatment is extremely helpful)
13. Do you think you will complete this treatment? (Are you thinking about dropping out)
14. Do you have plans to continue on with more treatment after the current treatment program finishes?
15. Have you been successful in making any changes with your eating so far?

I.D.#: _____
Date: _____

DEMOGRAPHIC INFORMATION

What is your race, ethnic or cultural background? (e.g. East Indian, Italian, Japanese etc.)

Marital Status

- 1 Single
- 2 Married
- 3 Separated
- 4 Divorced
- 5 Common-Law

Current Living Arrangements

- 1 Alone
- 2 With parents or relatives
- 3 Dorm or shared apartment with friend
- 4 Conjugal (intimate relationship with one other person, including spouse, boyfriend etc.)
- 5 Other (please specify) _____

Please indicate your present employment status:

- 1 unemployed
- 2 employed full-time
- 3 employed part-time

Are you currently working toward a degree or diploma?

- 1 no
- 2 yes, I am a full-time student
- 3 yes, I am a part-time student

Please turn over ➡

What is your status as a wage earner?

- 1 completely self-supporting through employment
2 partially dependent on: (please circle all that apply)

- 1 family/partner
2 student loan
3 unemployment insurance
4 welfare
5 disability
6 other (please specify)
-

- 3 completely dependent on: (please circle all that apply)

- 1 family/partner
2 student loan
3 unemployment insurance
4 welfare
5 disability
6 other (please specify)
-

Current Occupation: _____

Father's Occupation: _____

Mother's Occupation: _____

Spouse's Occupation (if applicable) _____

Highest Level of Education

Circle one for each person

	Self	Father	Mother	Spouse
Completed graduate training (MA, PhD)	1	1	1	1
Some graduate school (MA, PhD)	2	2	2	2
Completed University/College	3	3	3	3
Some University/College	4	4	4	4
Completed High School; may have attended or completed trade school or other non- academic training	5	5	5	5
Some High School	6	6	6	6
Completed Grammar School (8 th grade)	7	7	7	7
Some Grammar School	8	8	8	8
No schooling	9	9	9	9

My High School grades were generally:

- 1 Excellent (80+)
- 2 Above Average (70+)
- 3 Average
- 4 Below Average

APPENDIX C: Original Version of MET Intervention

Original Version of MET Intervention

ORIGINAL VERSION

MOTIVATIONAL ENHANCEMENT THERAPY

SESSION ONE:

Introduction to MET

- Explain structure of MET (stress importance of coming to all four sessions)
- Explain aim of MET (to help prepare patients' for treatment)
- Comment on how patients' have common fears and anxieties about treatment

Introduction to The Toronto Hospital

- Explain the inpatient and day hospital treatment programs
- Review schedule of treatment program with brief rationale of the program
- Propose that treatment can be viewed as an "experiment"

SESSION TWO:

Psychoeducation

- Participants will have read a copy of "The Road to Recovery"
- Information being presented will include:
 - features of eating disorders
 - attitudes toward weight and shape
 - the drive for perfection
 - effects of dieting and binge eating
 - medical complications
 - use of the disorder as a means of coping
- starvation symptoms and the Minnesota study of semi-starvation
- predisposing factors to an eating disorder

SESSION THREE:

Cost and Benefit Analysis

- Participants will fill out cost/benefit work sheets
- Focus on the cost/benefit of having an eating disorder
- Focus on the cost/benefit of participating in treatment and recovery
- Focus on the cost/benefit of change
- Participants will share their results

SESSION FOUR:

Recovered Patient

- A recovered ex-patient from TTH program will speak to group (or Video)
- She will discuss fears and anxieties she experienced prior to treatment
- She will discuss how treatment helped her and some of the difficulties she experienced
- She will discuss the advantages of recovering from an eating disorder

MET Conclusion

- Participants can visit the eating disorder unit and meet some staff
- Participants can ask questions about treatment or issues discussed during MET

APPENDIX D: MET Handouts

Stages of Change

The Stages of Change

What are the Benefits and Costs of my Eating Disorder?

Life in 5 Years With /Without an Eating Disorder

Biopsychosocial Model of Pathophysiology Anorexia and Bulimia Nervosa

Starvation Syndrome

Giving Up An Eating Disorder: What Else Might You Be Giving Up?

The Benefits and Costs of Change

Plans For Change

The Toronto Hospital Treatment Program for Eating Disorders: An Integrated Comprehensive Stepped Care Model

The Toronto Hospital Eating Disorder Programme Revisited

Which Treatment Is Best For Me?

Sample of Participants' Graphed Motivation Scale

Stages of Change

Precontemplators: are not interested in considering change and indeed fail to acknowledge that they have a behaviour which needs to be changed. At this stage information rather than advice on action is appropriate.

Contemplation: individuals are willing to examine the problems associated with their eating disorder and consider the implications of change, but are unlikely to take action. At this stage they are more open to education. However they need to resolve the ambivalence they have about wanting to change. This means identifying the positive aspects of their present behaviour and making sure that they are willing to give them up.

Preparation: there is readiness to change, a desire for help but often difficulty in knowing what to do.

Action: the individual has made a commitment to change and may have begun to modify their behaviour. This is a time of great stress and there is a need for support and encouragement from professionals and from their social network.

Maintenance: relapse prevention techniques are useful (Prochaska & Di Clemente 1992).

The Stages of Change

Sometimes making behaviour changes goes smoothly and at other times it seems fraught with difficulties. Recent evidence suggests that there are definite stages people go through when dealing with changing of problem health behaviour. Those who are successful go through five stages:

Precontemplation, Contemplation, Preparation, Action and Maintenance.

However, people do not always move forward from one stage to the next. The process of change often involves moving three steps forward and one step back. This model of change assumes that the Stages of Change are positioned in a spiral, such that individuals often have to go through the stages more than one time before the problem behaviour is completely out of their lives.

In the first stage, **precontemplation**, there is no intention to change the problem behavior. People in this stage are either unaware or underaware of their problem. Their families, friends and employers may be quite aware of the problem while the "patient" is completely unaware of the problem. Precontemplators rarely present themselves for treatment unless pressured by others. In this phase the individual is unlikely to make any permanent change.

In the **contemplation** phase, the individual is aware that there is a problem, but has not made any commitment to take action to eliminate the problem. The contemplator is seriously thinking about overcoming the problem and assesses the difficulty of changing versus the positive aspects of the behaviour. The individual's ambiguous feelings about change (wanting to change, but not wanting to change) are characteristic of this stage. People may remain in this phase for an extended period of time.

The **preparation** stage combines intent and behavioural criteria. The perceived benefits of changing begin to outweigh the perceived costs of changing. They are intending to take action within the next month and have unsuccessfully taken action in the last year. In addition, they have often initiated some small change already and may experiment with a variety of different strategies flipping from one to the next.

In the **action** stage the individual takes the plunge and makes the desired behaviour change by modifying his/her behaviour, experiences or environment to stop the problem behaviour. This is the period of time that the probability of relapse is high and he/she needs to work diligently at the new behaviour. This requires considerable commitment of time and energy.

The last stage, **maintenance**, is the phase in which the individual works to prevent relapse and consolidate the gains achieved in the action stage. This stage can last for six months to an indeterminate period past the initial action phase. This stage is not as demanding as the Action stage but there is a need to continue to consciously work at the new behaviour.

Traditionally, change has been thought of as only involving the Action Stage (stopping bingeing and purging, weight restoration, etc.). Professional programming has typically been developed for

individuals at this stage (despite the fact that only about 20% of individuals are at this stage¹²⁷ with the other 80% being at earlier stages). This has led to a great deal of frustration. People can become discouraged and give up if we do not realize that the work they are doing at the precontemplation, contemplation and preparation stages is valuable and important (in fact without it they will not get to action). As helpers we may try to push the individual to take action when they have not yet done the work necessary in the earlier stages. We will be most effective in helping others if we identify the stage those attempting change are at and then work with the individual at that stage. In fact working with the individual at the wrong stage of change is 93% predictive of treatment drop-out.

What are the Benefits and Costs of my Eating Disorder?

This exercise will help you look at both the benefits and the costs that you are experiencing from your eating disorder. In the charts below write down both the benefits and costs that your eating disorder has in relation to the bolded sentence “with regard to...”. After you have written down both the benefits and the costs think about how important each benefit and cost is in relation to each other. In the value box place a number from 0-5 (0=the least important and 5=the most important).

[illegible][illegible][illegible]

Life In 5 Years <u>With</u> An Eating Disorder	Life In 5 Years <u>Without</u> An Eating Disorder

Biopsychosocial Model of Pathophysiology Anorexia and Bulimia Nervosa

National Eating Disorder Information Centre

BULLETIN

Vol. 13, No. 1

ISSN 08366845

February 1998

Giving Up An Eating Disorder: What Else Might You Be Giving Up?

Joanne Dolhanty M.A.

Once the initial tasks of recovery from an eating disorder are undertaken—that is, when the process of normalizing eating, controlling symptoms, and stabilizing weight is underway—it may feel as though some obstacle has lodged itself in the road ahead. The individual may feel that she knows what she has to do, and yet feel confused, frustrated, and discouraged by her inability to “just do it.” Significant others and professional helpers may share her sense of frustration with this seeming stalemate in the recovery process.

It can be helpful at this point to explore what it is that the individual would be giving up if she were to recover. In other words, the eating disorder has come to serve some purpose in her life. Letting go

of the eating disorder may represent a significant loss, and the individual may fear that recovery will come at too high a price. If she can articulate what purpose the eating disorder is serving, what its “positive” aspects are, it will help her to move forward with her recovery.

Self-Soothing

Binge-eating is often described as a means of soothing or nurturing oneself. Bingeing may relieve stress, and may in fact be the only way that an individual feels she can “get a break.” She may know of no other way to take time out or to relax. She may feel that bingeing is her only means of receiving pleasure, and that food is her only friend. She may therefore be reluctant to give the bingeing

up, despite the distress and self-loathing that follows.

Social Reinforcement

The response one receives from others can be a powerful reinforcer for an eating disorder. Others who are unaware that there is a problem may admire the individual and lavish her with praise for her ability to eat little, to stay thin, or to go to the gym every day. Others who are aware of the problem may respond with caring and support. She may end up fearing that the caring and support will be withdrawn if she recovers, and that she will have no way of communicating her distress other than through the eating disorder. Even if she receives “negative” attention, for example having others argue with her to eat, “police” her eating, or follow

her to the bathroom, the thought of giving this up can be frightening if she feels that this is the only way others will notice her at all.

Preservation of the Family Unit

The eating disorder can divert attention from other problems in a relationship or in a family. If the family is focused on the eating disorder, they can ignore other difficulties, for example, strife in the parental relationship. The individual can come to sense that the eating disorder is the glue that keeps the family together, and to fear that recovery will cause it to fall apart.

In the case of a couple, the relationship may have come to revolve around the eating disorder. The two may have little in common, to do or to talk about, outside of managing her illness. The partner may have assumed a caretaker role, and may feel not needed as the individual becomes well and more independent. She may come to sense that to stay ill is the only means of saving her relationship.

Safeguard Against Failure

Often someone with an eating disorder will feel that her life has been "on hold." She may have ceased to pursue school or work goals, may not have started a family, or may still be living in her parents'

home. She may initially have been waiting to be at an ideal weight before taking on these roles, but increasingly she experiences an inability to carry on with these things as the eating disorder consumes more of her time, energy, and health. The eating disorder can thus become a cushion or a buffer between herself and her life. Through lack of "practice" at managing everyday challenges, she may fear that recovery will bring with it an overwhelming set of roles and responsibilities. Remaining ill thereby becomes a means of maintaining the status quo, and not having to face the possibility that she will fail at the various tasks she will be expected to perform once she is well.

Avoidance of Sexuality

Having an eating disorder often results in a decrease or cessation of sexual activity. This may be due to the effects of the illness. It can also be associated with a history of abuse. The eating disorder then becomes a way of protecting oneself from contact and intimacy that represent vulnerability to harm. When a woman becomes accustomed to little or no sexual contact, she may fear that with recovery there will be renewed expectations for sexual responsiveness. She may fear that with weight gain she will ap-

The Functions an Eating Disorder Can Serve:

- * Self-soothing
- * Praise, admiration, support, and attention from others
- * Keeping the family or relationship together
- * Safeguard against failure
- * Avoidance of sexuality
- * Avoidance of memories or feelings
- * Maintenance of a sense of control

pear more feminine and sexually attractive, resume menstruating, and face challenges that she associates with the potential for relationships and possibility of child-bearing. All of these may be associated for her with loss of control over her body, not only in terms of weight gain, but also in terms of how, when, and by whom she will be touched. Similarly, a person may binge eat to gain unnecessary pounds that make her feel protected from having to be sexual.

Avoidance of Memories or Feelings

An eating disorder can be an effective means of avoiding painful memories or feelings in a number of ways. Low weight itself keeps feelings or memories at a safe distance by making the individual

feel "numb." Also, the cycle and the complications of bingeing and purging can be a powerful distraction from other concerns. Finally, vomiting is for some individuals a way of "purging" feelings and relieving intense emotion.

The individual who has experienced abuse may have managed to keep the memories at a safe distance while preoccupied with food and weight.

As she reaches a healthy weight, eats normally, or stops bingeing and purging, memories can surface or intensify, or flashbacks occur. If these memories feel unmanageable, this can be a powerful deterrent to recovery. When abuse is not the issue, negative feelings can still be extremely painful, and even frightening, when one is unaccustomed to dealing with them. Individuals may describe a stage in the recovery process where they feel worse rather than better, because they are more familiar with the struggles of an eating disorder than they are with the despair of unfamiliar negative feelings.

Maintaining Control

Although a woman with an eating disorder generally feels very out of control of her body and of her life, she will often have a sense that the eating disorder is her one chance at control, or she may fear that to give it

up will render her more out of control than ever. The cycle of starvation and of eating disorder symptoms can be experienced as something that is hers and that only she can control. The cycle of starvation and symptoms comes out of her own goal of achieving a particular body type, and the fact that the behaviours that it entails are hers and hers alone. She may feel that this is *all* that is truly her own. Hanging on to the eating disorder can therefore come to represent the only means she can find of maintaining her self-determination. Although the cycle may fail miserably at providing her with a sense of self-efficacy, giving it up may represent giving up the quest for self-efficacy. She may have the sense that in illness she is controlled by her own will, while in recovery she has to relinquish her will, to be controlled by the demands and expectations of others. She may also fear that if she gives up her eating disorder, her own needs and feelings, even hunger itself, will skyrocket out of control. Having the eating disorder may feel like the only means of denying and thereby controlling her own bodily and emotional needs, which she abhors. Finally, another way that she feels in control while she has the eating disorder is that she feels her life is familiar and pre-

dictable. It is, so to speak, the enemy she knows. While others, and she herself at times, may extol the virtue of regaining her health and thereby "getting her life back," this prospect can be very frightening. She cannot predict what the future will hold without her eating disorder. What if she fails at these unfamiliar life tasks? Better the illness she knows than the unknown territory of recovery.

Self-Concept

Achieving a thin body can give an individual a sense of pride and accomplishment, a source of self-esteem, a feeling of being special and unique, and indeed even an identity or sense of self. Because her self-evaluation has been disproportionately or exclusively tied to body image, being thin or striving for thinness may be her only way to feel good about herself. She may feel special, either in her ability to maintain her thin body or even in her status as a patient or someone with an illness. She may in fact have come to define herself through her illness. Having an eating disorder may be her only iden-

While Merryl Bear takes a year's leave of absence from 31 March, Margaret Beck M.Div.; M.S.W. will be Acting Programme Coordinator. We wish both an enjoyable and successful year.

The Bulletin is published five times per year by the National Eating Disorder Information Centre. For more information, please contact us at: National Eating Disorder Information Centre 200 Elizabeth Street, CW1-211 Toronto, Ontario M5G 2C4 Tel: (416) 340-4156 Fax: (416) 340-4736

Date of Issue February 1998

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tity, and she may believe that she will face a dissolution of her very self if she were to give it up.

Moving Forward

All this said, what is someone with an eating disorder to conclude? That the eating disorder performs a number of important purposes, and serves a number of vital needs, and so one should hang onto it and not proceed with the recovery process? *By no means.* The eating disorder has been a means of coping, but it does not deal with or resolve the issues, and it comes at the high price of failed health and inability to live the life one chooses. If the individual can articulate the needs that the eating disorder may be filling, she can begin to pursue other means of filling these needs.

Strategies to achieve this would include:

1. Actively practice other means of relaxation and self-soothing. These will not come easily or automatically, and must be learned. Examples would include taking a hot bath or listening to music.
2. Practice communicating directly to others about needs you want met.
3. Set a realistic pace for pursuing other goals after recovery. In fact, set *only* the goal of recovery at first. Be explicit, with yourself and others, that you may not return to school or get married—not right after recovery or maybe not ever. Allow yourself the time to find what it

truly is that you want rather than trying to live up to some expectation.

4. Separate sexuality from recovery: tell yourself, and your partner, that you need space to recover first, with no expectation of change in sexual activity. This issue can be dealt with separately when and if you become ready to manage it.

5. Learn to sit with feelings rather than trying to "get rid" of them. Then look at ways of relieving or resolving them. These would include talking to someone, distracting from them in a healthy way, or soothing yourself.

6. Look for ways to define and feel good about yourself other than through your body.

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The Benefits and Costs of Change

[illegible][illegible]

Name: _____

Plans for Change

The changes I want to make are:

The most important reasons why I want to make these changes are:

The steps I plan to take in changing are:

The ways other people can help me are:

Person	Possible ways to help

I know that my plan works if:

Some things that could interfere with my plan are:

The Toronto Hospital Treatment Program for Eating Disorders

An Integrated Comprehensive Stepped Care Model

TEC=Treatment and Evaluation Coordinator

Insight-Oriented Treatments

National Eating Disorder Information Centre

BULLETIN

Vol. 10, No. 3

ISSN 08366845

July 1995

THE TORONTO HOSPITAL EATING DISORDER PROGRAMME REVISITED

Access to the Eating Disorder Programme at The Toronto Hospital is initiated by referral from the individual's family physician or primary therapist to the office of Dr Allan Kaplan, head of the programme (tel. 416-340-3041). The referring professional continues to provide care for the individual while she waits for her consultation assessment within the Eating Disorder Programme. Consultations are conducted by a psychiatrist or a psychologist and represent the individual's first contact with the programme. The consultation includes taking a history, assessing the individual's current functioning and formulating a treatment plan with the individual. The consultant may direct the individual toward ambulatory care and/or inpatient treatment. Treatment is offered to women and men of all sizes, 17 years and older. None of the treatments advocate weight-loss.

Ambulatory Care For Eating Disorders

Marion Olmsted, Ph.D., C.Psych.: Director

In July of 1994, the day hospital programme and the outpatient clinic of The Toronto Hospital Eating Disorder Programme were combined into one Ambulatory Care Programme. The mandate for the new programme was to provide a more comprehensive, integrated and cost-effective range of treatments with the fixed resources available. The focus is on specialised interventions which are not readily available elsewhere in the community. The revised programme is a product of the efforts of the entire Ambulatory Care Programme staff team, which is multidisciplinary and includes members from psychology, psychiatry, social work, occupational therapy, nutrition and nursing.

Following the consultation assessment each individual referred to the Ambulatory Care Programme is assigned a *treatment co-ordinator*. The co-ordinator meets with the individual before and after each component of ambulatory care treatment to assess any change in functioning and to coordinate the next stage in the treatment process. Individuals who take a break from treatment

Cont. on pg. 2

Inpatient Treatment for Eating Disorders

D. Blake Woodside, M.D.: Director

The inpatient treatment programme at the Toronto Hospital has undergone significant change over the last two years. The changes have altered both the outward appearance of the programme and the basic philosophy of the treatment.

Why a change?

Two forces dictated a change in the nature of the inpatient programme. The first was budgetary: reductions in the hospital budget for psychiatry eroded the base of expert nurses required to run such a resource intensive programme. The second force was the experience of the Day Hospital Programme, where less emaciated individuals had been treated for 10 years with reasonable success. These less severely ill clients appeared to be able to make progress with less external structure, using the support of their co-clients to tolerate the stresses associated with eating and gaining weight.

Structure and philosophy of the current programme

The current programme philosophy aims to provide the minimal amount of containment

Cont. on pg. 3

within the Eating Disorder Programme at The Toronto Hospital have easy return access by contacting their co-ordinator directly to discuss additional treatment.

Treatment Components

Outpatient Symptom Interruption

Step 1: Group Psychoeducation or Beyond Dieting Group

Group Psychoeducation consists of 6 weekly sessions which follow a lecture format. Information about eating disorders and strategies for change are presented. Research has shown that a small subgroup of individuals with bulimia nervosa make significant reductions in their symptom frequencies through participation in this group. For others Group Psychoeducation serves as a non-threatening introduction to treatment and establishes a shared information base.

Beyond Dieting is a 12 week group therapy programme designed for heavier women who are willing to consider the merits of normal eating (i.e., not dieting). It includes the didactic information presented in Group Psychoeducation and provides an opportunity for group interaction around issues such as weight prejudice, body-image and normal eating.

Step 2: Symptom Interruption Group and/or Nutrition Group

Symptom Interruption Group consists of 10 weekly cognitive-behaviour therapy sessions. Over the first 3 weeks, individuals are encouraged to enter a contemplation stage by imagining what life would be like without eating disorder symptoms and thinking about their priorities for the immediate future. Those who are not ready to make symptom control a high priority are asked to withdraw

from the current group but return when they feel ready. The remaining 7 sessions focus on symptom control.

Nutrition Group is designed for the subgroup of individuals who lack the information required to choose well-balanced meals and/or want the certainty provided by a structured meal plan.

Intense Symptom Interruption

The Day Hospital Programme now runs 4 days weekly, 7-8 hours per day. Participants are expected to be consistently present during programme hours and follow a schedule of group therapy experiences and supervised meals. Participants choose their food from a limited number of options, including some vegetarian, but are required to consume balanced meals which include items from all food groups. The programme goals are to promote immediate normalization of eating and weight restoration when appropriate and to begin to address the psychological, social and familial issues which pull the individual toward disordered eating. The psychotherapy groups include a focus on body-image, interpersonal relationships and strategies for controlling symptoms outside of the programme. All participants are encouraged to invite family members or significant others to family therapy sessions. Pharmacotherapy is available as needed. Length of stay is individually determined but averages 7 - 9 weeks for individuals with bulimia nervosa and extends to 14 weeks for individuals with anorexia nervosa who need to gain significant weight.

The Transition Programme provides follow-up care for individuals who have just completed the Day Hospital or

Inpatient programme. The goal is to help the individual maintain improvements in her eating as she or he resumes normal daily activities related to work, school, leisure and self-care. The Transition Programme is available to participants for up to 6 months. Up to 3 groups weekly are initially available, tapering to once weekly with transfer to community supports if necessary.

Lifestyle Integration

The Support Group offers a time-unlimited once weekly meeting for individuals with chronic eating disorders. The goals are to improve the individuals' quality of life in the context of having a chronic illness and to provide some interpersonal support.

Body-Image Group consists of 12 weekly sessions intended to help participants feel more comfortable and satisfied with their bodies. This group is designed for women who have a well established pattern of normalised eating and are not suppressing their weight. It is offered periodically.

Family Interventions

Family Psychoeducation Group consists of 6 weekly sessions offered to family members, close friends and significant others of individuals with eating disorders. Occasionally, this intervention is offered in an all-day format, either on a weekday or a Saturday. The sessions are didactic and include extensive information about eating disorders and emotional and behavioural issues with which family members may need help coping.

Family Therapy is available to participants in the ambulatory care programme to address family issues connected to the eating disorder and /or to help family members cope with

required for clients to normalise their eating and gain weight. Clients all participate in the same programme - one where there is very little external restriction on activities. The underlying philosophy is that the programme and attached staff can provide a flexible amount of containment for the client, as required by the client, but that the basic drive for recovery must be lodged inside the client, and cannot be externally imposed. The staff continue to provide a consistent base level of containment that is thought to be needed to run a cohesive programme, which amounts to a requirement that all meals be completed, that clients attend all programme activities, and refrain from using alcohol or drugs, or from harming themselves. Clients are asked to stay in hospital for the first two weeks of the programme, and thereafter are required to be away from the hospital on weekends. There is no period of enforced bedrest, and clients are at no time cut off from their friends or families.

In such a programme, the client has a very high level of responsibility. With the assistance of expert staff and co-clients, clients must identify troublesome symptoms and behaviours and devise strategies to overcome them. For example, it may be identified, whether by the client, co-client or staff, that the client is being too active on the weekends while away from the hospital. The programme's approach to such an issue would be to challenge the client to use the resources available to her in a fashion which would assist her in regaining control over an out-of-control behaviour, rather than to impose a period of bedrest on the client, or otherwise restrict her activity.

This approach does not amount to an abrogation of responsibility by the programme staff. The progress of each client is reviewed continuously, and

issues that staff identify as possibly problematic are raised as necessary. Staff provide suggestions, alternatives and support as required. Staff come from various disciplines, including nursing, psychology, occupational therapy, nutrition, social work and psychiatry.

The current programme is structured as a group therapy programme. The six spaces are reserved for patients with severe anorexia nervosa, with or without bulimia nervosa. The core programme does not treat individuals with bulimia at a normal weight. The programme continues to offer individual and family/marital assessment and therapy, but the overriding therapeutic modality is now group therapy, and clients are expected to bring issues discussed individually or in family meetings to the whole group.

Groups focus on many issues. Food related groups include menu marking, nutrition group, and weekend planning. Meal supervision is designed not simply to ensure completion of meals, but as an opportunity for clients to be coached in more normal eating habits. Several groups focus on both familial and interpersonal relationships in general. A weekly body-image group, supplemented by individual treatment from nursing staff, assists clients in coping with the changes in their weight and shape. A weekly cognitive therapy group addresses the cognitive impairments experienced by many clients with serious and chronic anorexia nervosa. Clients complete a food diary on a weekly basis, which is reviewed by staff, and feedback is provided in a weekly group. Leisure, vocational and education counselling is provided. Information about eating disorders is provided in a weekly education group. Finally, the group of clients and various staff

meet for one hour each morning to discuss a variety of issues related both to the programme as a whole and to each client as required.

We have not experienced any significant difficulties in having underweight clients with anorexia nervosa engage in group treatments. Very underweight clients occasionally require a few weeks to overcome significant cognitive impairments, but such clients are treated with respect by co-clients and staff and the duration of severe cognitive impairment is usually brief. Nor have we found it difficult to engage such clients in group treatment by virtue of their personality - almost all clients are happy to have found others who are suffering from similar severity of illness from whom they can receive empathy and understanding.

Summary

The changes that we have implemented represent a profound shift in the way in which severe anorexia nervosa is treated. Clients report that they enjoy the much reduced restrictions of the new programme, but find the programme more challenging because of the increased personal responsibility. At present, roughly 60% of clients who are admitted to the programme complete it, most with good outcome. We do not as yet have any information available about the longer-term outcome of our clients. We believe that the treatment we are offering represents a humane, respectful approach to individuals with serious, life-threatening illness. We hope that the requirements for clients to take more responsibility for their treatment will translate into better long-term outcome compared to traditional treatments.

*Written as a collaborative effort by
inpatient programme staff*

The Bulletin is published five times per year by the National Eating Disorder Information Centre. For more information, please contact us at: National Eating Disorder Information Centre
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Date of Issue June 1993

the situation. As for Family Psychoeducation Group, "family" includes the most significant people in the individual's life regardless of their actual relationship to the individual.

Insight-Oriented Treatments

Individual Psychodynamic Therapy focuses on helping patients achieve an understanding of themselves and their problems.

Interpersonal Group Therapy provides members with an opportunity to work on interpersonal issues such as self-esteem, body-image and relationships using a psychodynamic model.

To participate in either treatment, individuals must have stabilised their eating symptoms and be medically and psychologically stable enough to engage in psychological work.

Sequencing of Treatment Components

The symptom interruption treatment components follow a sequence of increasing intensity. Psychoeducation Group or Beyond Dieting (Step 1) is followed by Symptom interruption and/or Nutrition groups (Step 2). Some individuals might subsequently receive more intense treatment in the Day Hospital or Outpatient Unit, followed by the Transition Programme. The length of the treatment sequence varies for different individuals as some will either not need or not want to continue with the next step. Similarly, some individuals may come directly to the Day Hospital or Inpatient unit, especially if they have had extensive treatment elsewhere or are from out of town.

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All families are encouraged to attend Family Psychoeducation Group, while subsequent Family Therapy is available on an as-needed basis. An exception is made for individuals attending the Day Hospital Programme or Inpatient Unit, all of whom are strongly encouraged to have family therapy sessions concurrent with their participation in the intense treatment.

Individual Psychodynamic Therapy, Interpersonal Group Therapy and the Support Group are not components of the symptom interruption sequence. They are available to meet specific needs at a time that is appropriate for the individual.

Programme Evaluation

Individuals are assessed before receiving treatment in the Ambulatory Care programme and after each component of treatment. Changes in individual functioning and measures of consumer satisfaction are used to evaluate the efficacy of the treatment components and to modify the treatments. The treatments currently available are supported by the empirical work in this area.

BULLETIN SURVEY

Thanks to those readers who completed and returned the questionnaire on the Bulletin which was included with the last mail-out. We are currently in the process of collating the information. We will report back on your perceptions of the Bulletin as soon as the results are analysed.

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Which Treatment Is Best For Me?

After hearing about the different treatment options that The Toronto Hospital Eating Disorder Program has which do you think would be the most useful for you right now?

No Treatment
Psychoeducation
Nutrition Group
Symptom Interruption Group
Day Hospital
In-patient Program

Why do you think that this type of treatment is the most useful for you?

Questions you have about this treatment:

Do you feel ready to enter this treatment? Why or why not?

If you selected no treatment, explain why.

How motivated are you to change?

Confidence to Succeed

How ready are you to change?

When you think about “change” what are you referring to?

Session One:

- Freeing myself from the obsessive behaviours

Session Two:

- Getting rid of my eating disorder so I can live a normal life.

Session Three:

- Stop laxatives