SYSTEMIC CHANGE PROCESSES: A FRAMEWORK FOR EXPLORING WEIGHT LOSS AND WEIGHT LOSS MAINTENANCE PROCESSES WITHIN THE INDIVIDUAL AND FAMILY CONTEXT

by

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B.S., University of California, Santa Barbara, 1989 M.A., Northern Baptist Theological Seminary, 1992 M.S., Friends University, 1999

AN ABSTRACT OF A DISSERTATION

Submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Family Studies and Human Services College of Human Ecology

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ABSTRACT

Despite multiple interventions and the increase of consumer spending on weight management, weight loss maintenance continues to allude most people. This study explores women's narratives and the ways they made meaning of their weight loss and weight loss maintenance experiences. Examining the processes occurring within the individual and the family context, this study investigated the potential differences between weight loss and weight loss maintenance processes. A grounded theory approach guided the study design, transcription coding, and data analysis. The results revealed four categories (cycles and patterns, fluctuations and thresholds, defining self, and contextual connections) emerging from the research participants' narratives describing their weight loss and weight loss maintenance experiences. An analytical framework, consisting of the examination of clustered categories using a multifocal lens and a toggling procedure, facilitated the development of multidimensional descriptions of the women's experiences and guided the process of analysis. The process of analysis was isomorphic to the process the women used to formulate their narratives. The women incorporated multiple dimensions of their experiences to create narratives that described and informed their weight loss and weight loss maintenance efforts. The analysis also revealed that weight loss and weight loss maintenance are multi-dimensional processes. The dimensions reflect both similarities and differences between the processes. Some women used *heroic* while others used *integrative* efforts to lose weight. Their efforts impacted the amount of overlap they experienced between the weight loss and weight loss maintenance processes. Implications for further studies are presented for using the analytical framework to understand the meaningmaking processes occurring with weight loss and weight loss maintenance. Potential clinical

implications for addressing weight loss and weight loss maintenance within family and relational
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Approved by:

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CHAPTER 1 - INTRODUCTION

Problem of Overweight and Obesity

Obesity remains a significant and growing health concern for the United States and for the world. It is generally understood that the prevalence of obesity worldwide has become an epidemic. Since the mid 1970s, obesity has been a growing trend in the United States.

Currently, 65% of adults in the United States are considered overweight or obese and approximately 15% of all children and adolescents under the age of 19 are overweight or obese. The most common measure used to describe a person's condition is a Body Mass Index (BMI) calculated using a person's height and weight. Those adults considered overweight have a BMI over 25, those considered obese have a BMI that is above 30, and morbid obesity is determined for those with a BMI of over 40 (National Center for Health Statistics, 2002).

The National Institutes of Health (1998) has determined through epidemiological studies that obesity is a leading cause of preventable death in the United States, second only to smoking. The medical profession has also discovered direct links between overweight and obesity with comorbid medical conditions (e.g., high cholesterol, high blood pressure and cardiovascular disease, type 2 diabetes). Through further studies they have determined that these comorbid health conditions can be significantly improved with a modest weight reduction of approximately 10% of initial body weight (Thomas, 1995).

Defining Obesity

Obesity is often addressed as a homogenous issue with corresponding treatments designed primarily to adjust a person's physical condition. Generally speaking, obesity is conceptualized as a physiological condition and, therefore, resident in the individual.

Furthermore, this condition becomes understood as largely related to that individual's predisposed genetic and biological makeup and/or behavioral factors reflected in choices associated with food intake and physical activity. A basic equation factoring calories consumed with calories expended results in weight loss, weight gain or, when the factors are balanced, weight maintenance.

Current popular strategies designed to treat overweight and obesity incorporate a broader understanding of the cognitive, social, cultural, and environmental factors that impact weight gain and weight loss. Despite incorporating these multiple factors, defining obesity continues to reflect a singular conceptualization of obesity. Evaluation measures and treatment strategies typically assume the use of uniform treatment strategies designed for application with all patients.

Multiple Factors Related to Obesity

Researchers in the health and psychotherapy-related fields are attempting to describe and explain the various factors associated with a person's experience and treatment of overweight and obesity. The factors can be divided into individual and interpersonal factors. Different theories describe each of the factors as primarily responsible for or directly related to a person's weight. The individual factors include physical and psychological/emotional factors.

Interpersonal factors influencing a person's weight include social/relational, the health care industry, the media, and cultural perceptions of overweight and obesity. These factors are present as a person gains and sustains excess weight, and are associated with a person's attempts to lose and maintain weight loss.

Individual Factors. Theories associated with physical factors describe a person's basal metabolic rate, endocrine regulatory mechanisms, weight set-point, genetic predisposition to

heavier weight and the physiological issues associated with obesity (Wadden & Stunkard, 2002). Each theory examines the etiology of obesity and situates the causes within a physiological framework. Additional theories suggest psychological and emotional factors are associated with a variety of people's experiences with overweight and obesity (Wadden, Womble, Stunkard, & Anderson, 2002).

Interpersonal Factors. Obesity has become an increasingly contentious issue in our society. Media, advertising, and the general public's attitudes toward those who are obese have reflected bias, discrimination, and often overt expressions of disdain. Research focused on weight loss has repeatedly determined that a person's weight loss maintenance success is positively associated with ongoing programmatic support as well as natural social supports (Perri & Corsica, 2002; Perri, Nezu, & Viegener, 1992).

Government Responses to the Obesity Epidemic

The United States federal government has increased the priority for developing treatment options addressing the obesity issue. In response to the continued increasing trends of overweight and obesity, the Center for Disease Control (CDC) (2004) has developed clinical guidelines detailing the current effective treatments available to clinicians and patients. The CDC has also noted the potential preventability of this condition associated with moderate weight loss. The most profound influence the CDC has had on approaches to the obesity issue, however, is in its definitional shift of obesity from acute to chronic status.

Until recently, the current approaches to weight loss have been predominantly guided by an acute disease model. Consequently, medical professionals, the media, and weight loss service providers promoting weight loss strategies tend to address overweight and obesity as a condition to be "treated" or "fixed." Furthermore, strategies have focused on temporary measures that

assist a person in reducing weight but neglect the enduring problems associated with overweight and obesity.

Recently, the CDC (2004; National Heart Lung and Blood Institute & North American Association for the Study of Obesity, 2000) designated overweight and obesity as a chronic disease. This designation offered a shift in understanding of this issue as well as the treatment implications assuming that it is a persistent, unremitting condition. Designating this condition as *chronic* suggests that the goal of treatment is not *cure* but rather directed at providing specific guidelines and strategies for *management*. Furthermore, treatment approaches must be designed to equip the person with the understanding, skills, resources, and strategies for maintaining a level of motivation needed to sustain the continued attention and effort.

A chronic view of overweight and obesity has shifted attention away from temporary treatment strategies toward a management approach. This shift has provided a vital opportunity to address the broader issues associated with the initial weight gain. A patient's management of weight loss can be viewed in the broader context of factors that contributed to the patient's weight gain as well as the systemic influences of managing that new weight level.

The National Heart Lung and Blood Institute (1998) reviewed the outcomes research focused on obesity and have compiled a list of clinical guidelines for the treatment of overweight and obesity that suggest increasing interest in the interpersonal context of weight management. Issues identified for clinical attention and treatment development include: social support, relapse prevention, contingency management, nutrition and physical activity education, self-monitoring, stimulus control, cognitive restructuring, and stress management.

The NIH Obesity Research Task Force, sponsored by the Department of Health and Human Services (2004), published a strategic plan detailing research priorities in the upcoming years. The report sets priorities for:

preventing and treating obesity through lifestyle modification, pharmacological, surgical, or other medical approaches; research towards breaking the link between obesity and its associated health conditions; and cross-cutting research topics, including health disparities, technology, fostering of interdisciplinary research teams, investigator training, translation research and education/outreach efforts. (pp. 4-5)

Major Treatment Approaches to Weight Management

The research approaches to-date addressing obesity examine a number of contributing factors—behavioral (i.e., dietary therapies and physical activity), psychosocial and social support, contextual treatment interventions, and weight loss maintenance/relapse (Bjorvell & Rossner, 1992; Bouton, 2000; Cooper & Fairburn, 2001; Fremoux & Zitter, 1980; Johnson, 2002; Perri & Corsica, 2002; Perri et al., 1987; Sperry, 1985).

Dietary therapies concentrate on a patient's knowledge and ability to develop plans that balance calorie intake with the amount of naturally occurring physical activity. Developing physical activity plans that increase a person's energy expenditure are focused on either naturally-occurring situations (e.g., parking further from the front door of a store or choosing to take the stairs instead of using an elevator) or exercise regimens that include, for example, aerobic activities, weight–lifting to increase muscle mass and increasing basal metabolism, and Pilates or yoga that concentrate on strengthening core muscles.

Behavior therapies maximize a person's recognized connection between the antecedent and consequent events associated with her or his food and physical activity plans and choices.

The classic behavioral approach assumes that the person's negative consequences will motivate change to preferred results. Conversely, the positive consequences will motivate the patient's further exploration, development, and continuation of behaviors leading to preferred consequences. Cognitive therapies address the cognitive processes associated with a person's weight control by attempting to identify and alter cognitive schemas that influence a person's thoughts about and choices regarding foods and eating behavior. Combined therapies consist of a dietary therapy of a low calorie diet, increased physical activity and behavior therapy. A combined therapy is purported to provide the most effective treatment approach (National Heart Lung and Blood Institute & North American Association for the Study of Obesity, 2000). They suggest that continued weight management support is necessary for long-term weight loss maintenance.

Intense research is underway focused on developing appropriate pharmacotherapies that will assist patients in regulating their body weight. While this approach holds promise for weight loss, patients and health advocates generally consider the implications of taking a medication long-term to be undesirable.

Bariatric surgery has been available since the late 1970s; there has recently been a dramatic rise in the number of patients choosing this option. Bariatric surgery is an invasive procedure requiring surgery and general anesthesia. This procedure involves reducing a patient's stomach to the size in which it holds merely one ounce of food. According to the Institute of Medicine (Thomas, 1995), the extreme nature of this surgery is appropriate when treating the morbidly or super-morbidly obese patient resulting in reducing or delaying the effects of comorbidities. The immediacy of this change, however, has the potential of catching the patient ill-prepared to respond to the radical adjustment of her or his association with foods.

Treatments developed utilizing cognitive-behavioral approaches remain the most well researched treatment options to-date. The inherent ability to measure the effectiveness of cognitive-behavioral approaches has solidified the position of these approaches as the primary vehicles for treatment development, patient assessment, treatment planning, and patient and program evaluation. Though more classic behavioral treatments still exist and continue to be widely studied, addressing the additional cognitive component in a patient's treatment remains the preferred method.

Unfortunately, even with the addition of cognitive components to behavioral treatment approaches, simply shifting a person's focus from weight loss to weight management does not resolve the issues associated with her weight stabilization. The statistics reflecting successful weight loss maintenance suggest that, on average, people experiencing weight loss through non-surgical treatments, at four to six months, experience a reduction in the rate of weight loss and a reduction in the motivation necessary to continue behaviors leading to further weight reduction. As Wadden and Osei (2002) write, "Weight regain remains the Achilles heel of both behavioral and pharmacological interventions" (p. 244).

Wing and Hill (2001) defined successful long-term weight loss maintenance as "intentionally losing at least 10% of initial body weight and keeping it off for at least 1 year" (p. 323). In a recent analysis of several studies, Wing and Phelan (2005) stated that "approximately 20% of overweight individuals [in the general population] are successful at long-term weight loss" (p. 222S).

The federal government has recognized the challenges associated with weight management and, subsequently, has made suggestions for future research. Grants currently available through the NIH are requesting research that focuses on treatments that utilize family

relationships and extended social support systems (National Institutes of Health, 2003, 2004, 2005).

Research on Systemic Approaches to Weight Management

If weight maintenance were as simple as balancing calorie intake and expenditure, a strictly behavioral approach to weight maintenance would be satisfactory. However, a person's struggle to maintain the balance between intake and output is influenced by a number of intra-and interpersonal as well as environmental and contextual factors. A number of researchers have explored the connections between a person's biological and psychosocial experience and the relational and contextual components that are associated with weight-related conditions (Adams, 1997; Barbarin & Tirado, 1985; Doherty & Harkaway, 1990; Fisk, 2001; Ganley, 1986, 1992; Grilo, 2000; Harkaway, 1982, 1983, 2000; Kinston, Miller, Loader, & Wolff, 1990; Minuchin & Fishman, 1981).

These systemic approaches to overweight and obesity were divided into different descriptive categories, each with different assumptions about the issue of obesity and each suggesting different therapeutic priorities. Approaches ranged from conceptualizing weight as a functional component of a relational system, weight as a symptom of problematic relational dynamics and processes, weight as an expression of the relational processes, or weight as a result of an addiction to food-related choices used as a compensatory measure to cope with one's involvement in family dysfunctions. Each of these approaches to understanding obesity noted the relational context of the individual's experience of overweight and weight control. The excess weight occurs within the context of family processes. The person's attempt to lose and then maintain weight loss is understood as influencing and being influenced by the relationships within those contexts.

In this study, I will review those articles that propose various conceptualizations for understanding the contextual features of overweight and obesity, weight management, and associated treatment strategies. To broaden my focus on contextual factors I must begin by revisioning and redefining the terms overweight and obesity.

Overweight and Obesity Reenvisioned and Redefined

Harkaway (2000; 2005) challenged the assumptions of obesity definition singularity and treatment uniformity. She explained that heterogeneity more accurately reflects people's experiences of living with and treating obesity. Furthermore, she noted that obesity would be better understood as a heterogeneous condition that is embedded in diverse, relational contexts.

Consider the many differences between two hypothetical women. The first woman had been normal weight all of her life until she became pregnant. During her pregnancy she gained several pounds more than the expected amount necessary for carrying a baby to term. She recognizes that, while waiting to deliver, she was excited and bored at the same time. She was excited to deliver her first child but also experienced a boredom associated with reducing her involvement in responsibilities and activities she was involved in prior to her pregnancy. Following her pregnancy, this woman's efforts are primarily focused on reestablishing her prior routines, which supported a lower weight.

The second woman gradually gains her weight over the course of her life. She cannot remember a time when she was not overweight. As she considers her other family members, she recognizes that overweight and obesity are prevalent throughout her family of origin. As this woman considers losing weight, many factors are involved in her weight loss: physiological and biological tasks, but also issues of a possible genetic predisposition, an enduring overweight devoid of a normal weight experience, and relational family contexts that involve food as a

primary mechanism for socializing and affiliating with one another. Once this woman has worked to overcome the physical, emotional, and psychological factors associated with losing her weight, maintaining that weight loss within an unchanged personal and relational context will present her with substantial challenges.

A uniform conceptualization of overweight and obesity and subsequent treatment protocol for weight loss and maintenance for these two women would be unwise and likely unsuccessful. The first woman, making adjustments to a temporary experience, has the former experience available in her memory and those around her. The second woman embarks on a change process of weight loss that stands in contrast to the lifelong experience of weight gain.

Broadening definitions of obesity includes an appreciation of the systemic contexts associated with weight gain, loss and maintenance. It is necessary to revision overweight and obesity as a polylithic issue. Instead of a singular issue consisting of many forms, the term *polylithic* suggests that overweight and obesity are actually many disparate issues that reflect people's multiple, complex, and distinct experiences. Establishing a polylithic conceptualization offers a constant reminder to examine and seek understanding of those experiences without the expectation of reducing them to broad, meaningless categories.

Gap in Current Approaches

Currently the process of weight loss maintenance is most often defined as an extension of the weight loss process or *more of the same* efforts. Watzlawick, Weakland, and Fisch (1974) suggested that first order change is reflected in a person's efforts to change the content of her or his experience. A person engaging in weight loss utilizes first order change efforts when she changes the type, amount and frequency of food intake and physical activity. However, sustainable change must consist of second order change that focuses efforts on changing the very

processes that sustain the initial weight. A person utilizing second order change strategies for losing and eventually maintaining weight loss would place her efforts on changing her process of decision-making, her understanding of and engagement in environmental and relational contexts, and her development of goals that extend far beyond weight to encompass a more comprehensive view of her personhood and her abilities.

Current weight loss strategies are focused primarily on first order change efforts associated with energy intake and expenditure. Moving toward a process-oriented focus, a number of researchers have implicitly suggested that weight loss and weight loss maintenance actually reflect two distinct processes (Adams, 1997; Allan, 1989; Rothman, 2000; White, 1984). I intend to build upon the current literature suggesting the possible differences. Using the responses of the women in my sample, I hope to be able to document these two processes in their lives. These data could provide a base for future exploration of the treatment and prevention of obesity.

Wing (2000) and Rothman (2000) explicitly suggest that there appear to be differing processes people use for losing weight and for maintaining weight loss. My study attempts to examine and better understand the possible differences associated with weight loss and weight loss maintenance. My interviews will be focused on exploring participants' experiences of weight loss and weight loss maintenance.

I conducted a pilot study to aid in developing a conceptual model used for designing this study and providing a basis upon which to focus my analysis of the interviews. I began by examining researchers' attempts to pinpoint the salient factors associated with obesity that could also suggest areas of focus for this study and future research. In that paper (Macchi, 2005) I designed and described a conceptual model that illustrates my current assumptions. This model

focused the basic structure of the pilot study. Through a series of in-depth interviews, I recorded and analyzed women's responses to questions examining their personal experiences with weight loss and weight loss maintenance while noting the potential patterns connecting them. The results suggested the women employed certain strategies for losing weight and other strategies for maintaining the weight loss. The women described shifting their focus of attention from dieting behaviors' contributing to their weight loss toward broader lifestyle goals and interests that facilitated their weight loss maintenance.

While talking about a problem that affects so many people nationally and internationally, we can lose sight of the individual lives that are affected. The proposed study is designed to examine specific accounts offered by women who have experienced overweight, weight loss and weight management. I expect that as I pursue an understanding of the multiple issues associated with each experience, I will see patterns arising that will provide a better understanding of the differences between losing and maintaining weight.

I have designed this study to focus exclusively on women's experiences for three reasons: methodological, developmental, and contextual. First, as will be apparent in the literature review, previous studies of weight loss and weight loss maintenance have focused primarily on women. Since I am interested in comparing the ways this study expands the current understanding of the weight loss and weight loss maintenance processes, I designed this study to focus on a similar sample. I am interested in exploring research participants' experiences indepth and to compare those findings with the existing literature. Therefore, in an attempt to adjust for the relatively small sample size, I will be limiting a number of variables, including gender. Second, I will limit various development issues by tightly defining the age range of eligible participants. Third, I have reviewed the literature, observed the social messages about

health and beauty, and heard personal accounts of the multiple pressures associated with body image, weight and eating behaviors. Each has revealed the unique struggles women face as they explore and construct their personal identities within the social context.

Despite the contextual factors associated with overweight and obesity, individuals' experiences and attempts to manage and/or make change remain within the purview of a person's own efforts. While I am committed to exploring the interpersonal dimensions of those experiences, I will do so through the lens of a systemic view of the whole self.

I will use an integrated lens that locates an individual within a specific environment and relational context. The General Systems (von Bertalanffy, 1968) concepts and framework will provide the lens necessary to conceptualize the dimensions of personal and relational experiences. Components from Chaos Theory (Mishel, 1990; Visscher & Rip, 2003; Ward, 1995) and Hoffman's (1981) conceptualization of discontinuous change will inform the development of a conceptual model designed to illustrate the substantial changes experienced when a person discovers a new homeostatic balance. Finally, an adapted Internal Family Systems (IFS) model (Schwartz, 1995) will provide a framework necessary for understanding how an individual finds meaning in her experiences.

The study is designed to elicit an understanding of the ways that participants engage in meaning-making processes that are reciprocally integrated into each of the weight loss and weight loss maintenance processes. As each woman describes her experiences, I will explore her meaning-making process and the beliefs resulting from that process. I am interested in discovering the ways she moves from an experience, toward understanding, and finally, defining beliefs about the experience that inform her understanding of herself and the reciprocal impacts of her roles within relationships and within other contextual environments.

Research Questions

This study is designed to explore the following research questions:

- I. Do women utilize different processes for weight loss versus weight loss maintenance?
- II. How does meaning-making within the individual inform our understanding of the potential differences between weight loss and weight loss maintenance processes?
- III. How does meaning-making occurring within relationships inform our understanding of the potential differences between weight loss and weight loss maintenance processes?

Glossary of Terms

This glossary is intended to assist the reader in understanding terms and definitions as they are reflected in the literature and reveal my intention in using them to develop my case. As the reader will note, I have intentionally decided not to alphabetize the list in favor of juxtaposing words of complementary meaning.

first order change – a basic change within a system that leaves the system itself unchanged second order change – a change in the functioning and structure of the system

homeostasis – the tendency of a system to remain at some steady, average, or mean state; the system includes self-correcting mechanisms that bring the system back to the steady state after an adjustment

- fluctuation the tendency of a system to move away from the mean state; fluctuations moving far beyond the mean constitute a crisis state that propels the system to a new homeostasis, or steady state
- meaning-making the process by which a person establishes beliefs' defining various aspects of self and the reciprocal experiences with her environment; the part of a person's personal experiences that compel her to continue the processes of defining self, her abilities, her relationships with others, and the personal and relational changes and adaptations occurring at various stages of experience
- beliefs the thoughts, feelings, and conceptualizations people have of self, relationships with others, the environments in which they live and the meaning assigned to the dynamic, adaptational, and transformational experiences occurring with each
- entropic system a diminishing system that has closed boundaries preventing it from exchanging resources with its environment

negentropic system – an enduring system that has open boundaries allowing it to exchange resources with its environment

triangulation – a methodological strategy intentionally incorporating data from varied sources that, when factored together, provide a multifaceted and complex analysis while preserving the studies' internal validity

CHAPTER 2 - LITERATURE REVIEW

Thinking about weight management in new ways must begin with an understanding of the health behavior change literature. After reviewing the major theories used in the profession of health behavior, I will focus on the adaptation and application of these theories to weight management. I propose a conceptual model that illustrates the focus of current theories addressing weight loss followed by a critique of the current approaches. Next, I review the systemic models that have attempted to broaden the clinical scope to include contextual factors associated with obesity. I reference the literature that suggests shifting to more process-oriented strategies for sustaining weight loss. Finally, I will propose the use of a narrative approach for developing a broader, contextually rich understanding of the patients' weight loss and weight loss maintenance experiences.

Challenges of the Weight Loss Process

The challenges associated with weight loss are compounded by several factors noted by Goodrick & Foreyt (1991) and Wadden (2002). They included contradicting information from medical research findings, the diet industry, and various media sources, short-term strategies resulting in temporary weight loss, and patients' experiences of weight cycling.

Consumers receive conflicting information about nutrition and dieting from television, the print media, and the Internet. Each source reports studies, advertises new diets, or markets food products supported with testimonials. These multiple, competing views about the risk factors associated with weight and remedies for weight loss impact consumer confidence in information and impair a person's ability to make informed choices (Levine & Harrison, 2004).

Since most weight loss strategies offer temporary regimens for weight loss, this prescription leads to *temporary* results. Most treatment options, when held up to a standard

suggested by the question, "Can I do this for a lifetime?," reveal that they are built upon temporary behavioral and/or pharmacological strategies focused on weight loss. Once the weight has been lost, contextual factors that lead to the weight gain have not been adequately addressed. For most people, the weight lost is regained in subsequent years (Cooper & Fairburn, 2001).

The risks associated with weight regain feed a complex and harmful phenomenon referred to as weight cycling. Weight cycling occurs when a person who has lost weight engages in former choices and behaviors that lead to weight regain. The psychological and emotional impact of regaining weight has many negative effects on the person's self-image, self-confidence, perceived self-efficacy, and body image (Ganley, 1989). Repeated weight cycling has a cumulative effect (Connors & Melcher, 1993). Feelings of failure and disempowerment associated with weight cycling compound the person's negative assessment of self (Grilo, 2000).

Harkaway (1982) offered an insightful observation about current weight loss strategies that focus on food. She noted,

the paradoxical nature of treatment programs for obesity...encourage the patient to become even more preoccupied with food and eating; there is much talking about food, both what should and should not be eaten, thinking about food, planning food, all of which is very stimulating for someone who is trying to avoid eating. Rather than solving the problem, such an approach would seem to maintain a constant level of stimulation and preoccupation with food... In order to lose weight she must become focused and obsessed with food, a solution which contributes to the maintenance of the problem. (p. 295)

Developing innovative approaches to weight loss and weight loss maintenance require alternative strategies enabling the person to identify alternative areas of focus that support weight management.

Theories Informing Health Behavior Change Processes

The major theories informing health behavior change efforts address ways to define the health issue and the individual and interpersonal processes necessary for addressing that issue (Bartholomew, Parcel, Kok, & Gottlieb, 2001). The individual processes interacting with a person's efforts to change include an increased awareness and perceived timing for the need to change, the levels of motivation, the decision-making and engagement processes necessary to convert that awareness into specific steps of action, perceived beliefs about the health issues that influence change-making efforts, perceived abilities and resources, and the internalization of the change processes necessary to sustain changes. Influences associated with interpersonal processes include the awareness of the relational contexts impacting a person's ability to change, the various types of social support, and the multiple levels of environmental contexts impacting the ability to change and eventual sustainability.

The theories that guide descriptions of health issues are generally social ecologically informed (Bronfenbrenner, 1979). The focus is on the population with a specific health behavior issue and needing interventions designed to influence specific health behavior changes. The issue is conceptualized through a multilevel framework that ranges between the individual and society. The interaction between levels reflects the influences of the various environments on the individual's functioning and continued development. Conceptualizations of the environmental impacts on the individual and the development of subsequent interventions are rooted in a linear epistemology focusing on one-way causal relationships. Studies using an

ecological approach develop process and outcome measures that explore the ways that environmental factors influence individual or aggregated group health behaviors.

Prochaska and DiClemente (DiClemente & Prochaska, 1982; 1982) studied people's attempts to change addictive behaviors and determined that, despite the diversity of strategies and circumstances, the subjects utilized many common change processes including verbal processes involving consciousness raising, catharsis, and commitment; and behavioral processes entailing conditional stimuli and contingency management. Their review of therapeutic models designed to assist clients making change revealed that the models tend to emphasize those same change processes. Prochaska's (1999; Prochaska & Norcross, 1999) Transtheoretical Model describes how those change processes occur at varying stages of change including precontemplation, contemplation, preparation, action, maintenance, and termination.

Studies examining the interaction between the processes and stages of change have revealed significant results for those engaged with smoking cessation and weight loss (Norcross, Prochaska, & DiClemente, 1995; Prochaska, Norcross, Fowler, Follick, & Abrams, 1992). They noted that the interaction between processes and stages of change reinforced the model's claim that matching treatment strategies to a person's readiness to change improves treatment outcomes. However, results from the smoking cessation study (DiClemente & Prochaska, 1982) revealed "no significant differences between the maintainers and recidivists on any of the change processes" (p. 141). In other words, both groups of people used similar processes to make change that had no influence on their overall maintenance success. DiClemente and Prochaska explain that "the most direct interpretation suggests that there may be no intrinsic relationship between processes involved in short-term cessation and the processes of long-term maintenance" (p. 141).

Current Intervention Theories Utilized for Weight Management

Currently the most popular and extensively studied weight management intervention models are behavioral and cognitive-behavioral. The addictions model of treating obesity is an additional model that is often used but lacks support in representative efficacy study findings (Stein, O'Byrne, Suminski, & Haddock, 1999). Each provides patients with strategies effective in helping them lose weight. Behavioral weight loss is a learning approach that provides patients the skills and understanding for addressing the antecedents and consequences of eating patterns and health-related activities. Focused primarily on food choice, physical activity, social support, contingency contracts, and relapse prevention, the patient learns skills that will contribute to ongoing weight loss. Implicit in behavioral approaches are strategies designed to produce change through the use of reinforcements (Brownell, 1997; Epstein, Valoski, Wing, & McCurley, 1994; Wing, 2002).

Cognitive-behavioral approaches take the behavioral strategies and factor in cognitive schemas and distortions that effect weight-related behaviors. Schemas encompass the thoughts and feelings defining a person's view of self, her abilities, and the potential obstacles to the change. A person's schemas also incorporate societal conceptions about overweight, body image, and weight loss issues. Therefore, the schemas that supported weight gain must be adapted to support the person's efforts to lose weight. Cognitive-behavioral approaches change overarching schemas through the identification and adjustment of cognitive distortions hampering weight loss efforts (Byrne, 2004; Cooper, Fairburn, & Hawker, 2003).

Finally, an addictions perspective describes a person's compensatory behaviors focused on food-related activities to relieve distress in other areas of her life. The assumption of this framework is that a person is powerless to control her eating behavior within certain limits.

Overeaters Anonymous (OA) is the most common example of the nondieting approaches using the addictions model. The treatments designed with this framework focus on the person's abstinence from specific problematic foods that most contribute to the overweight or obesity. According to Stein et al. (1999) the focus on restrictive food intake tends to be most applicable to those who have a binge eating disorder and who often feel out-of-control when they eat. They further note, "Controlled trials of the nondieting approach have found it to be an unsuccessful method to achieve weight management" (p. 115).

Researchers using individual approaches to weight management have examined the implications of various types of social support on an individual's ability to lose and maintain weight loss. Studies have examined the family as a context of change (Epstein, Koeske, Wing, & Valoski, 1986), the direct involvement of peers and/or family members who may be participating or non-participating in family-based treatment (Epstein, Nudelman, & Wing, 1987; Levine, Ringham, Kalarchian, Wisniewski, & Marcus, 2001; Perri et al., 1987; Perri et al., 1992), and the therapist role supporting the patients' weight loss and maintenance efforts through continued phone and mail contacts (Perri et al., 1992). Findings of these studies suggest that treatment approaches are most effective when they train patients to use weight loss maintenance strategies that include assessing the quality of family and peer support. Support that is determined to be positive can provide the encouragement necessary for the person to continue the efforts necessary for continued weight loss maintenance. Epstein et al. (1986) examined various family contextual factors impacting a child's weight change, such as family size, number of obese family members, and parental weight. Each of these factors further influenced the home as an environment for weight change including: food availability, parental modeling of health behaviors, and parental use of food to motivate and reinforce child behaviors. Perri et al.

(1992) noted that a multicomponent program of weight loss and maintenance comprised of a combination of social support, self-monitoring, patient-therapist contacts, and social influence strategies offers the most benefit for extended weight loss maintenance.

These individual-based approaches explain the impact of the various types of support and involvement in weight management. They, more specifically, explain families' roles as a resource or challenge to the individual person's change process. However, they do not address the role of the relational dynamics experienced by patient and family members alike and the reciprocal contributions and impact of each member on the other. Despite advances in treatment approaches, the graphs of weight change extended beyond treatment into maintenance reflect a gradual regain over time (Perri et al., 1992). I now offer a description of a conceptual model that reflects the factors associated with weight loss and maintenance processes suggested in the existing literature.

Conceptual Model for Addressing Weight Loss Process

A person engaged in weight loss experiences a number of changes throughout that process. The conceptual model of the diminishing triangle (see Figure 2.1) illustrates the diminishing factors associated with weight loss addressed in the existing theories, including (a) decreasing motivation, (b) decreasing evidence of social support, and (c) decreasing rate of weight change matched by diminished rewards associated with slower weight loss. Additionally, the prominence of the goal of weight loss diminishes as the person approaches her/his goal weight—once the goal is met it becomes irrelevant.

It has been reported that a person's motivation is directly correlated with several factors associated with the weight loss process such as treatment length, engagement in physical activity, decrease in positive reactions to weight loss, negative reactions to the efforts required

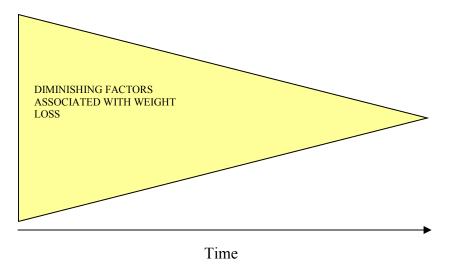


Figure 2.1 - Factors Associated with the Process of Weight Loss

for weight loss, and "decreased strength of the beliefs that the weight loss was worth the effort" (Jeffery et al., 2000; Jeffery, Kelly, Rothman, Sherwood, & Boutelle, 2004, p. 100; Wing, 2000). Figure 2.1 illustrates the factors associated with a person's changes in motivation during the weight loss process. Following the timeline, several factors diminish throughout the weight loss process such as the person's investment of the time, physical effort and financial resources needed to lose weight, the rate of weight loss, positive responses from others, and medications for comorbid issues that are withdrawn. As the rate of change with each of these factors diminishes, so also does the person's motivation to continue the behaviors needed for continued weight management and subsequent weight stabilization.

Many researchers have implied that losing weight is a very different experience than maintaining weight loss (Orleans, 2000; Rothman, 2000; Wing, 2000). Rather than focusing on the processes involved in weight loss and weight loss maintenance, these researchers have embedded implications of the different processes in studies focused on various areas of weight control without directly studying the weight loss and weight loss maintenance differences.

Generally, the differences are referenced in a cursory way suggesting that a person's experiences change when she moves into a weight maintenance phase of treatment.

Currently, a major treatment approach that addresses a patient's waning motivation is Cooper, Fairburn, and Hawker's (2003) cognitive-behavioral approach. They note,

The most distinctive feature of this treatment is the priority it gives to weight maintenance. [Weight management] is raised as an issue from the outset, and potential barriers to weight maintenance are identified and addressed at many different points as weight is lost – for example, when addressing unrealistic weight goals, primary goals, and body image dissatisfaction. (p. 157)

Their approach attempts to address issues that reach beyond the focus of weight loss to factor in issues about the person's views of the physical self (i.e., improved physical appearance, increased choice of clothes, more self-respect and self-confidence) and primary goals that are not weight loss-dependent such as improving relationships and to make other lifestyle changes. While these primary goals provide a broader focus for ongoing weight management, the treatment approach overlooks the systemic context necessary for comprehensive second order change.

Often overweight and obese patients report using food to meet more than nutritional needs. Psychological and emotional needs are often described as relating to a person's assessment of their own self-esteem, body image, or feelings of isolation from others. Weight loss has a definable end point at the goal weight. However, weight loss alone serves to remove the food that addressed those other needs without replacing the food with another mechanism. When food has played a compensatory role in a person's life such as eating when depressed, distressed, anxious, or during conflict with others, simply removing that food through dieting does not address the issues that precipitated overeating. Weight management emphasizing long-term maintenance, on the other hand, suggests an ongoing process that looks beyond weight and

food to examine the other mechanisms that mutually impact the patient's issues associated with food and eating.

While the conceptual model above depicts the multiple experiences of a person's losing weight, it does not describe the experience of a person who must maintain that weight loss over time. If each of the motivating factors associated with loss have diminished, what factors will that person utilize to maintain the weight loss over time? It is to this question that I now turn.

While weight loss maintenance appears to be an obvious next step after weight loss, unfortunately, simply shifting one's focus from loss to maintenance does not resolve the issues associated with weight stabilization. Wing and Hill (2001) defined successful weight maintainers as those who "intentionally [lose] at least 10% of initial body weight and [keep] it off for at least one year" (p. 323). Wing and Phelan (2005) described the rationale for each criteria in the definition: weight loss must be *intentional* to rule out weight loss associated with other factors such as illness or other conditions, the threshold of 10% is associated with improvements in health risk factors, and the *one year duration* mirrors the criteria of the Institute of Medicine (IOM) (Thomas, 1995). Through the tracking mechanism of the National Weight Control Registry (NWCR), it has been determined that approximately 20% of people successfully maintain their weight loss (Wing & Hill, 2001).

The statistics reflecting successful weight loss maintenance suggest that people, on average, experiencing weight loss through non-surgical treatments at four to six months, experience a reduction in the amount of weight lost and the motivation necessary to continue behaviors leading to further weight reduction. Current treatment strategies are focused on cognitive-behavioral and/or pharmacotherapeutic strategies. While both of these treatments

reflect significant impact on weight loss, weight loss maintenance remains elusive (Cooper & Fairburn, 2002).

Researchers acknowledge that there are gaps in obesity treatments using learning and cognitive-based approaches expressing that treatments simply do not offer ways to sustain weight change over time. Some suggest that we need to look for changes to occur through nondieting approaches to weight management that challenges the social milieu that effects people's perceptions of overweight and obesity (Garner & Wooley, 1991; Goodrick & Foreyt, 1991) They suggest challenging these socially-determined norms and individual expectations while developing alternative views of weight and people's approaches to weight management. Furthermore, simply suggesting that a person is non-compliant or losing the motivation necessary for continued weight loss maintenance shifts the blame of weight regain onto the individual instead of examining the possible fallacies of the strategies that assisted them to lose the weight in the first place (Harkaway, 1983, 2005; Harkaway & Madsen, 1989).

Expanding the Conceptual Model to Include the Maintenance of Weight Loss

Many studies examining the process of losing weight implicitly suggest that there are significant differences in the factors required to maintain the weight lost. In other words, many agree that engaging in the same efforts associated with weight loss will not provide the person with the elements necessary to manage weight over time. Though much study has examined the weight loss process, very little has explored the unique features associated with weight loss maintenance as a distinct process.

The National Heart, Lung, and Blood Institute (NHLBI) convened a conference entitled, "Maintenance of Behavior Change in Cardiorespiratory Risk Reduction." A supplementary issue of *Health Psychology* (2000) included four reports from that conference. Conferees developed

research recommendations for further exploration of the maintenance processes associated with health behavior changes. I focus my comments on two articles: one describes a summary of the themes of the conference (Wing, 2000) and the other notes the need for theory to describe the change processes associated with weight control and maintenance (Rothman, 2000).

Wing (2000) wrote, "To date, researchers have considered behavior change as a process, with maintenance as the last step. However, throughout this meeting, there was the recognition that maintenance is itself a process" (p. 84). The implication of Wing's statement is that the process needed for weight loss is not adequate when extended to accomplish weight loss maintenance. Furthermore, her statement suggests that maintenance is best conceptualized as requiring a person's ongoing effort rather than as a final destination. Agreeing with Wing's revisioning of maintenance, Orleans (2000) called for, "a broader view of maintenance as a dynamic process rather than a static state or result" (p. 82).

Rothman (2000) explicitly suggested that different processes are associated with the initiation of weight loss and maintenance. He focused his examination on the different psychological processes involved in *decision-making*. He notes, "Dominant theoretical approaches to the study of health behavior offer little guidance as to how the processes that govern the initiation and the maintenance of behavior change might differ" (p. 65). Despite numerous behavioral strategies designed to motivate continued maintenance and prevent relapse, Rothman (2000) stated: "These strategies, by definition, are relevant only after someone has adopted a new pattern of behavior. However, none of these investigative approaches can account for the observed dissociation between rates of successful initiation and maintenance" (p. 65). Utilizing a behavioral framework, Rothman explained that favorable expectations and satisfaction reinforce a person's corresponding behavioral initiation and behavioral maintenance

efforts. He further notes that continued study is necessary to explain the differences between the two processes of decision-making. As I suggested above, a behavioral examination, by definition, limits an understanding of the processes to a linear view of the antecedents and consequences. This view is devoid of the person's contextual and multilayered meaning and experience associated with those two processes.

Another study focused primarily on women's decisions to seek treatment for obesity (White, 1984). Using a grounded theory approach, White asked 89 women who had begun a formal weight control program to describe their perceptions associated with "choosing to embark on a weight control program." Women's responses revealed a five-stage process that reflected their attempts to adapt to society's sex role norms. Prior to entering a weight loss program the women: 1) perceived a loss of physical attractiveness, self-esteem or femininity associated with her weight gain and 2) had isolated from others due to the repeated experiences of uncomfortable situations, avoiding other similar situations, and eventually becoming comfortable with the continued avoiding behaviors. After the third stage of embarking on weight loss, the women described 4) recouping the loss by reclaiming that which was lost during her weight gain and 5) integrating or incorporating one's self into a larger unit defined as "a peer group, a family, a work situation, or society as a whole" (p.88). This study provides an explanation of the women's decision-making process leading to weight loss but stopped short of explaining how that process influenced weight loss maintenance.

Allan (1986) initially conducted an ethnographic study of 37 white, middle and working class women to examine their patterns and processes of weight management efforts. Then, Allan analyzed subsets of women from the initial study. She (1988) examined a subset of 21 women's self-appraisals used to determine personal weight and perceived need for weight loss. She noted,

"These norms and criteria represent self-care tactics devised without professional assistance in weight management and without regard for the cultural pressure to be thin" (p. 47). Allan's subjects were successful at maintaining their weight over a one year period. Allan described that the appraisal process was most successful when motivated by self-focused reasons to lose weight related to a woman's appraisal of her appearance and physical feelings associated with her current weight. Allan concluded by suggesting the need for "community-based qualitative studies that attempt to understand the cultural and physical milieus in which women conduct their lives" (p. 59).

Allan (1989) reexamined her data and found that each "woman's reasons for losing weight may provide one prediction of long-term success" (p. 667). Health concerns were less important to the women in her study than concerns of personal appearance and how they physically felt. Allan further discovered the methods the women used to manage their weight were divided into two main components: dieting activities and "changing one's whole life" (p. 662). The new eating patterns involved short-term strategies focused on activities such as "skipping meals, reducing intake of high-calorie foods, and exercise" (p. 662). "Changing one's whole life" involved long-term strategies usually beginning with new eating patterns and self-focused strategies determined and motivated by one's self. The strategies incorporated increased exercise, reduced or quit smoking, reduced alcohol intake, eating routines, and changes in the woman's interactions with others that reflected a greater sense of self-efficacy and self-determination.

Allan (1991) described the process that the women in her study used to lose and maintain weight loss. She noted that her subjects used a process involving five stages (i.e., appraising, deemphasizing, mobilizing, enacting, and maintaining) to prepare to lose weight, develop strategies

for continued weight loss and then maintain that weight over time. Allan further explained that women, who had reached the point that they had completed weight loss, only engaged in three of the five stages (appraising, enacting and maintaining) as they responded to their weight fluctuation over time. She highlighted that the women's maintaining weight loss continued to cycle through these three stages. Allan did not describe her understanding of why the women who maintained their weight loss ceased to engage in the de-emphasizing and mobilizing stages. However, one may only speculate that the absence of these two stages suggests a difference between weight loss and weight maintenance. While Allan provided a process-oriented context for maintaining weight loss, she did not adequately elaborate on her understanding of the maintaining stage. Furthermore, it is apparent that she viewed maintenance as a stage of weight loss rather than a distinct process.

Adams (1997) examined the process that contributed to the weight management success for 14 obese, postmenopausal women engaged in a formal weight loss program. Using a grounded theory approach, Adams developed a model entitled, "Taking Charge of One's Life" describing three phases of weight management: 1) engaging, 2) internalizing, and 3) keeping one's commitment. The *engaging* phase reflects the women's perceptions of declining health, not meeting societal body type norms, followed by identifying potential sources of help for weight loss. The *internalizing* phase reflected the women's development of weight loss outcome expectations, strengthening self-efficacy beliefs, and making a commitment to lose weight. Finally, the *keeping one's commitment* phase involved utilizing strategies for making lifestyle changes necessary for supporting the loss of weight through acquiring knowledge, negotiating support, overcoming temptations to eat, protecting oneself, and evaluating progress.

While Adams' model has a cognitive-behavioral foundation, Adams explained that her emphasis on the need for social support diverges from that theory. She suggests that weight loss and maintenance success depends heavily on emphasizing the need for naturally–occurring support systems amidst external pressures. While a cognitive-behavioral approach primarily emphasizes self-management, Adams suggested that the development of social support during weight loss will provide the support needed long after the weight loss treatment ends.

While analyses of weight loss and weight loss maintenance have provided numerous suggestions regarding eating patterns and physical activity, most neglect the contextual issues that impact and are impacted by those processes. Minuchin (1978) made the comparison between linear and systems approaches to anorexia nervosa. He stated, "Diagnosis, and therefore therapy, have tended to zero in on the individual, to the exclusion of the contextual components of the anorexia syndrome" (p. 10). He contrasted the linear approach with a systemic one noting:

The systems model analyzes the behavior and psychological makeup of the individual by emphasizing the continuity of the influences that family members have on each other... The systems model thus has a wider lens than the linear. It looks at the individual, but also the individual in context. (p. 10)

Therefore, an expanded scope of analysis of the broader issues of weight and obesity should include the contextual issues of relationships and environment, interacting with a person's efforts to lose and maintain her weight.

General Systems Framework for Understanding Weight and Obesity

Systemic approaches to obesity and weight management broaden the context for understanding these issues and for change processes occurring in a person's attempts to lose

weight or maintain weight loss in the context of her family relationships. As the previous articles suggested, the change processes are typically considered to be an individual endeavor that may involve social support, but that do not consider the ongoing relational processes that are mutually impacting the person's efforts.

General systems theory (von Bertalanffy, 1968) applied to a theory of change (Watzlawick, Beavin, & Jackson, 1967; Watzlawick et al., 1974) provides another framework for understanding weight and obesity and weight loss and maintenance. Key concepts include organized wholes consisting of mutually influencing parts, systemic homeostatic tendency, and using first and second order change processes.

General systems theory notes, when examining the whole person, that whole is comprised of various smaller parts and is a part within a larger whole. Understanding the interrelationships between parts and wholes was captured by Blaise Pascal (1966) in his 1662 writing: "I consider it impossible to know the parts without knowing the whole as to know the whole without knowing the individual parts" (p. 93). von Bertalanffy (1968) captured the description of organizing wholes noting that it is impossible to understand the whole by simply knowing the individual parts. It is necessary to conceptualize the parts in relation to one another – "The whole is more than the sum of the parts." von Bertalanffy was describing the *interrelationships* between the individual parts that contribute to our understanding of the part and toward explaining the organization of the whole. The implications of the concept of organizing wholes for understanding weight loss and maintenance suggests that weight must be understood in two directions: one direction focuses on weight as a component in the context of the whole person including thoughts, feelings, and behaviors. The other, broader direction, focuses on the whole

person as one part of a larger whole consisting of the context of her relationships and environment

Systems theory provides a framework for thinking about the ways that individuals and relational systems function to determine and maintain some steady state of existence referred to as homeostasis. Feedback mechanisms influence the navigation of a system to orient responses that tend toward this average or mean state. Homeostasis also reflects the self-corrective properties of a system that tend toward that state. The definition of homeostasis continues to be a valuable concept for describing the ways in which a variety of systems such as biological, physiological, environmental, and relational are maintained in constant balance over time. Despite the complexity of the interactions between the parts of each of these systems, homeostasis is maintained despite changes that continue to occur.

Homeostatic mechanisms regulate a system's ability to maintain some definition and integrity while also reflecting the inevitability of change taking place. The kind of change that takes place will either reinforce the properties of the existing system or change the system itself. This refers to first and second order change processes (Watzlawick et al., 1974) respectively. Watzlawick et al. noted that, when the members of a system attempt to make change, they may choose to make simple adjustments that inevitably lead to first order change that leaves the system unchallenged.

A woman's attempting to lose weight using first order change efforts simply changes the problem defined by what she eats and the kinds of physical activities in which she engages. The homeostatic mechanisms preserve the larger system that has contributed to her weight gain in the first place. The internal contextual features that influenced her choices of foods and physical activity remain the same. The woman's responses to relational and environmental factors also

influence her choices. The contribution of both those unchanged internal and external systemic factors have the potential for providing negative feedback that reestablishes the existing system at the original weight.

Watzlawick et al. (1974) described second order change as reflecting efforts applied to changing the system rather than the problem. Through a series of examples, they note that efforts aimed at changing the system that supports the problem reflect a meta-level of change, or second order change. Applied to the woman faced with weight or obesity issues, the second order change efforts would be directed toward the systems that support the current weight. An example would be reflected when a woman alters the process by which she makes health decisions. Rather than simply changing the type and amount of food consumed, she would explore the role that food plays in her life. Watzlawick et al. (1974) note that efforts that simply address the problem can eventually become the problem. This focus on the weight problem is evident in those who have repeatedly tried to change their weight and are caught in the increasingly detrimental weight cycling pattern. The woman who engages in second order change develops strategies that will examine and change the existing internal and external systems that support the current weight. The focus remains on the system not the weight.

Family Systems Conceptualizations of Health Conditions

Numerous studies have attempted to explain a person's experiences with weight and obesity using a family systems framework. Weight and obesity have been conceptualized in relational contexts from three perspectives: serving a function within the family system; symptomatic of dynamics of the relational system; and metaphorically reflecting a shared experience among members and viewed as a shared identity with and loyalty to the family system. Each of these views suggests that weight and obesity are reflexively connected to the

relational context. The contextual assumption suggests that there are components of the person's experience that reside beyond eating and physical activity.

Those describing weight and obesity from a functional or symptom-related perspective (Ganley, 1986; Harkaway, 1982, 1986; Minuchin et al., 1978) have suggested that families referred to as "psychosomatic families" exhibit certain, predictable interactional patterns that are mutually supported by the physical condition of one of its members. Minuchin et al. (1978) described their research observations of psychosomatic families: "The unit of study... was the transactional pattern. What we were observing and evaluating were cyclical or sequential patterns of behavior in these families, patterns which both maintained and were maintained by the psychosomatic behavior of the child" (p. 50). Individual development of symptomatology was believed to be an expression of the functionality of the broader relational processes.

Minuchin and his team observed families with an anorectic member and observed the following four common family characteristics: enmeshment, overprotectiveness, rigidity, and lack of conflict resolution. The team's other studies of families with a member's having diabetes and asthma also exhibited similar family dynamics.

In each family, the symptomatic member can be thought of as serving the function of stabilizing the homeostasis of the family system. The other members' attention on the management of the illness provides a detour of the emotional intensity associated with other conflictual relationships within the family—most often the parental conflict—and provides the family a focus for their attention and efforts. Additionally, researchers have described the member with the illness as literally embodying the symptom of the family dynamics expressed as the illness. An example: A child that exhibits physical symptoms can have an attenuating effect on parental conflict. When the parents repeatedly turn from arguing with each other to attend to

the child's illness, a pattern of reprieve from the persistent parental conflict emerges over time.

Recognizing the psychological and emotional aspect of physical conditions, the symptomatic member experiences a relief from the direct or indirect influences of family conflict and emotional reactivity when she exhibits somatic symptoms. This relief reinforces the persistence of the illness.

Functional analysis of family member illness suggests a linear one-way conception of causality (Ganley, 1986). The function and the symptom of a physiological condition are really two sides of the same coin and, taken together, reflect a systemic approach. The function of an illness serves to stabilize the family system by diverting attention from more fundamental anxiety to one member who has the condition. Conceptualized this way, individual symptoms point to the existence of a family condition that may be more difficult for family members to address. Understanding obesity as both serving a function within and symptomatic of the family processes provides a way of understanding relational dynamics as the "holding" environment for ongoing relationships and symptoms.

Ganley (1986; 1989) examined the connection of a person's emotional eating within the context of family patterns. He described a family systems model of obesity that is closely associated with Minuchin's model described above. He noted that a family with an obese member's experiencing conflict tended to engage in emotional eating to regulate emotional arousal states such as avoidance of conflict with other family members, anxiousness, depression, or boredom. The emotional eating serves a compensatory function and most often results in a temporary, perceived relief from the relational distress.

Ganley (1992) studied married women who were involved in a weight control program and discovered that some families differed from the characteristics described by Minuchin.

Instead of enmeshment, the examination of couples with one obese partner revealed that the partners experienced more isolation and disconnection from one another. Comparing the family systems and restraint, or cognitive control, models of obesity, Ganley discovered that there was no significant difference in weight stability between normal weight or obese people who engaged in restrained eating efforts. On the other hand, there was a significant difference between those who engaged in emotional eating and those who did not. He concluded by suggesting that future studies are needed to discriminate between various obesity subgroups based upon the presence of emotional eating.

Campbell (1986) acknowledged the mutual impacts between a family and the health of its members. Through a review of the literature, Campbell challenged the medical perspective that assumes a linear explanation of health-related illness effects based on psychosocial factors.

Although he adopts a systemic, "bi-directional," explanation for the relationship between family and health, he focused his review on the lesser-studied issue of a family's impact on health. He noted, "As the family affects the illness, the illness may be changing the family simultaneously" (p. 140). Campbell suggested that while the mutual impacts are occurring, research that attempts to elucidate each direction and examine the respective impacts is vital to furthering the empirical evidence necessary for extending systemic approaches in the health field. Among his conclusions, he stressed that families provide both a source of support and stress on the physical health of family members. Family support in general, and spousal support in particular, potentially serve as protective health factors and foster better medical compliance. He stressed the development of improved methodologies that enable studies from a systems approach including "techniques that allow multidirectional interactions to be studied over time" (p. 191).

Based on a series of studies, Kinston, Loader, and Miller (1990) examined three dimensions of families: family emotional health, family attitudes toward and experiences with the management of obesity, and family interactional patterns. They discovered a constellation of family characteristics similar to Minuchin's "psychosomatic family." However, as a result of their attention to emotional health, they refer to the "family syndrome" as manifested in the psychosocial identity of the individual obese member. They explain, "This syndrome may be the basis for obesity in later life... Adults with this form of obesity have poorly differentiated emotions, body-image disturbances, a diffuse sense of self, and other identity problems" (p. 372). Their description explores and describes the interiority of the individual family member interacting with the larger family context and the associated individual development that occurs for that member.

Another systemic explanation of weight and obesity looks to the shared experiences within the family. The shared experiences involve repeated series of events and circumstances that define the relationships through time. The development of meaning that defines the members' perceptions of the relationship has been described by Madanes (1981). She noted that family members develop metaphorical representations of their own perceptions and experiences of the family dynamics and their participation within those dynamics. The members attempt to understand and, in some cases, adjust the power structures of those relationships. Members create metaphors that represent the experience of the power differentials and that influence the members' interactions within those structures. Similar to the concept of a cognitive schema, the metaphor influences a person's perceptions and responses within the relational context. A metaphor differs from a schema through its broader scope of reference. Furthermore, the

influencing relational processes. The metaphor guides the person's perceptions and actual engagement in those relationships as well.

Madanes suggested that the symptomatic member experiences a symptom as a metaphorical representation of the relational dynamic that is not resolved but allows the symptom bearer a certain degree of power within the relationship. She provides an example of a person experiencing a degree of powerlessness who regains some power through exhibiting a symptom while the other partner orients his/her daily living to accommodate to that symptom or condition.

Systemic Approaches to Weight Management Efforts

Studies have been conducted to determine the role of family relationships in the definition of and impact upon a member's weight and obesity. Using the systemic concepts described above, these studies examined ways that models help to explain the relational dynamics that support the change or maintenance of a family member's specific weight.

Harkaway (1982) conducted a study interviewing five families with an obese daughter between the ages of 11 and 14 who was involved in a formal weight control program. The interviews occurred at three time periods: prior to treatment, two-weeks following treatment, and at a one-month follow-up. Harkaway used Minuchin et al.'s (1978) structural framework for exploring the families' structure and interactional patterns. The study was designed to examine the families' experiences of a member's obesity and the protective function the obesity served within that family.

Harkaway discovered that her findings were consistent with Minuchin's description of the relational patterns between members of psychosomatic families. The weight in those families served a homeostatic function maintaining family interaction patterns. Over the course of the three in-depth interviews, Harkaway discovered that the member's obesity functioned to distract the families from more serious relational problems, reinforced the obese child's loyalty to the obese parent, and maintained the homeostasis at the families' earlier stage of development. She summarized, "The child's weight had come to be a regulator of the system" (p. 285).

The treatment implications of the structural conceptualization of family dynamics reflect the need for broadening the scope of strategies addressing obesity. One member's individual weight changes will have wider implications for the family that sustains the current weight and the relational dynamics which are, in part, dependent upon that weight. The family homeostatic forces that have functioned to maintain the member's weight and, reciprocally, the member's weight that has contributed to family homeostasis remain in place despite the individual's efforts to lose weight. Those homeostatic forces, left unattended to, influence the success of the member's weight loss and maintenance efforts. The family may interpret the member's efforts as unsettling to the family homeostasis even to the point of jeopardizing family loyalties.

Doherty and Harkaway (1990) developed another model proposing a systemic treatment of obesity. They use the Family FIRO model for assessing family interaction patterns and developing treatment priorities. Doherty and Colangelo (1984) developed the Family FIRO model based upon Schutz's (1958) Fundamental Interpersonal Relations Orientation (FIRO) theory. The Family FIRO is a framework that addresses common areas of individual interpersonal needs and family members' efforts to meet those needs. The framework consists of three domains: inclusion, control, and intimacy. The inclusion domain represents members' sense of belonging to the family balanced with the experience of personal identity. The control domain reflects members' experiences of balanced influences between one another. The intimacy domain reflects members' abilities to openly and deeply share their lives and

experiences with one another. Doherty and Colangelo further described the epigenetic quality of these three domains explaining that inclusion must be established before balanced control can be experienced. Furthermore, inclusion and control serve as the foundation for members' experience of intimacy with one another.

Doherty and Harkaway (1990) used the Family FIRO as "a model for conceptualizing how families organize themselves in response to obesity" (p. 288). Beyond the assessment of family functioning, the model offers family treatment priorities elucidating family members' involvement in the weight loss and maintenance of one of its members. The inclusion domain focuses the assessment of the role of obesity within family: loyalties, alliances, boundaries, protecting the marriage, and shared identity. The control domain suggests that weight control may serve as a metaphor for relationship control, incongruous hierarchies, and the need for collaborative control efforts particularly during periods of change and serving a basis for weight loss maintenance later. Finally, the inclusion domain focuses attention on the possibility that obesity may have been used to regulate sexual closeness and distance. Doherty and Harkaway concluded with the explicit statement that "we do not define treatment success in terms of weight loss, but in terms of the dealing with family issues that render weight a problem for the obese person and the family" (p. 296). This statement implies that they use a family definition of the problem as the standard by which the experience of obesity is defined, measured, and treated.

Fisk (2001) addressed the impact of couple dynamics on a women's weight loss maintenance. With the intention of determining the factors that predict relapse, Fisk examined the correlations between relapse after dieting associated with women's perceptions of her marital relationship. Fisk used broad family systems and functional theoretical frameworks to analyze obesity within a family context. Fisk's sample consisted of 71 married women. Each provided

personal background information and responded to two standard measures: the Marital Adjustment Test (MAT) and the California Inventory for Family Assessment (CIFA). Fisk discovered that relapse after dieting was significantly related to women's perceptions of closeness and expressive behaviors in their marital relationships. Women who were more likely to prevent relapse were more likely to perceive their relationship with their husband as warm and spent more time together; more open, self-disclosing, and less conflict-avoidant; and reported greater marital satisfaction.

Framework for Shifting Processes: Weight Loss to Weight Loss Maintenance

Reviewing the basic concepts of a cognitive-behavioral approach to the weight loss process reveals that old thoughts and behaviors support the weight gain and the maintenance of overweight and obesity. Implementing new thoughts and behaviors support the process of losing weight. A significant dilemma arises as the person attempts to maintain that new weight. As the weight is lost and the impact of the patient's experienced benefit wanes, the motivation to sustain the new thoughts and behaviors also diminishes. Most of the factors associated with personal identity and relationships (including emotional, psychological, and spiritual dependence on old behaviors and relational identity) that supported the former weight remain in place. While other physiological factors related to genetics and metabolic rate contribute to the body's homeostatic tendency to maintain a specific weight, this study is designed to examine the broader contextual factors extending beyond the physiological mechanisms contributing to a person's homeostasis.

A systemic perspective offers an examination of the patient's change process moving through three stages: (a) the experience of overweight or obesity, (b) losing weight, and (c) stabilizing at the new weight. The first stage reflects a former bio-psycho/emotional-social homeostasis. Each aspect of personhood and relational connection was formed and mutually

influenced with the overweight as a component of that system. The second stage of deliberate change occurs as the weight loss infuses a positive feedback into the homeostatic system – personally for the patient and in his/her relational framework. The third stage reflects a new weight that is only sustainable if a new homeostasis can be established to support that new weight. Most often weight management programs place considerable emphasis on the stages of weight loss while merely mentioning weight management as the last stage of weight loss. Establishing a new homeostasis implies the need for exploring the potential existence of distinct processes of change.

Integrating Theories

The current cognitive-behavioral approaches provide guidelines for a person's attempting to lose weight. The maintenance of weight loss is generally described as an extended use of the strategies for weight loss. The change of focus is primarily on the timeframe beginning with short-term tasks focused on the necessary behaviors associated with food and physical activity. A shift toward long-term management is focused on contingency planning and relapse prevention strategies. Integrating a systemic framework provides a contextual framework explaining the mutually influencing patterns of interaction of the person and the relational changes associated with weight loss and maintenance (Barbarin & Tirado, 1984).

A process-oriented view of a systemic framework suggests that similar patterns of engagement involving internal and external contexts are different from one person to the next and will differ with varying contexts and situations. The previous systemic explanations described above have lead to preliminary suggestions that the etiology of obesity is related to the patterned family interactions that may be predictive of obesity in its members. A systemic framework suggests that a person's engagement in relationships only partially explains the ways

weight is merely one factor contributing to and influenced by a constellation of relational and personal processes.

Integrating the cognitive-behavioral and systemic theories leaves some remaining gaps that must be addressed as I explore the possible differences between weight loss and weight loss maintenance. A systemically-informed, cognitive-behavioral approach assumes that a person is a unified whole composed of interacting parts that engage in ways that are interdependent with her relationships and environment. As a result, this theory explains ways varying thoughts and behaviors contribute to or detract from her efforts to make change.

Gaps in the Current Approaches

Systemic changes take many forms. Examining the developmental changes families experience over time is one example. The complex relationships between the members within the system interact to develop and maintain a homeostasis that is reflected in the rules, roles, expectations, rituals, and traditions of the participating members. As each member changes and develops naturally through time, the family system maintains a homeostasis by gradually adapting to maintain some steady state in the midst of those changes. A family can choose to maintain a homeostatic state by becoming increasingly rigid with the purpose of maintaining old, preferred patterns despite the developmental changes of its members. An example is reflected in families with adolescents who experience the struggle between maintaining identity while changing to meet the demands of the development of its members. Despite the family's responses, members continue to grow and mature while the relationships may or may not adapt to accommodate the members' personal experiences. While homeostasis provides a framework for understanding the maintenance of a state, it does not adequately describe observed movement tendency *away from* the mean, either in an individual or a family.

Chaos Theory (Mishel, 1990; Visscher & Rip, 2003; Ward, 1995) offers a conceptual framework for explaining the tendency of systems to move away from a steady state. Furthermore, that framework accounts for discontinuity and the points where systems extend beyond the defined boundaries of positive feedback to a point of irreversible change away from that mean. At the core of Chaos Theory is the suggestion that, within apparent disorder, there is very complex order that is in constant fluctuation. When applied to family systems, this theory points to the complexity of life and relationships noting that there are many factors involved when systems move toward and away from a steady state that is often difficult to predict or guide. This theory provides a way to counterbalance the predictability of the homeostasis as well as to provide an explanation of systems' tendencies away from that steady state. Furthermore, this theory offers a useful description of systems' apparent randomness by describing the fluctuation, or movement, so far away from the mean that a new steady state is achieved. Hoffman (1981; 1988) described the family life cycle and the associated changes over time. She noted that changes often occur in discontinuous fashion (see Figure 2.2) and the system moves to a new homeostatic state. The system increasingly approaches a critical state in which the members of the family system, consciously or not, choose to reestablish the old homeostasis or "step" to a new homeostatic state. The degree to which change has occurred leading up to the critical state determines the system's choice. Hoffman notes that the period prior to the critical state entails increasing stress and disruption. The transformation, or leap, occurs in predictable stages (Hoffman, 1988): "The current patterns that have kept the system in a steady state work badly, new conditions arise for which these patterns were not designed, ad hoc solutions are tried which may work but are often abandoned, irritation grows over small persistent difficulties" (p. 93). Up to this point, Hoffman's description is suggesting the type of discontent that is arising as

a family system attempts to make sense of and respond to the changes occurring within the members and their patterned interactions with one another. This type of change may be precipitated gradually, coinciding with the individual development of each of the family members, or instantaneously, reflecting members' attempt to adjust to a sudden event such as another member's death. As Figure 2.2 illustrates, various attempts to reestablish homeostasis may be blocked when the range of options are inadequate for addressing the new circumstances. Hoffman continues by describing,

The accumulation of dissonance eventually forces the entire system over an edge, into a state of crisis, as the homeostatic tendency brings on ever-intensifying corrective sweeps that get out of control. The end point... is either that the system breaks down, that it creates a new way to monitor the same homeostasis, or that it spontaneously takes a leap to an integration that will deal better with the changed field. (pp. 93-94)

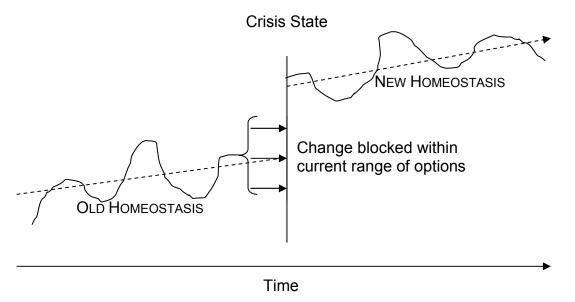


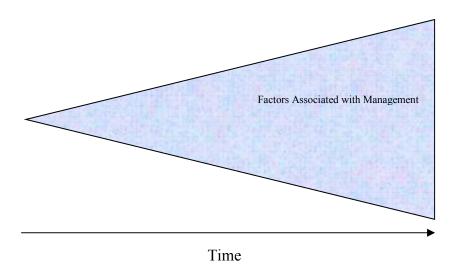
Figure 2.2 - Discontinuous Change Processes

Families that "break down" may dissolve through isolation, estrangement, or divorce. Ones that adjust within the range of previous functioning discover new ways to understand, reinforce, and

reestablish the previous homeostatic state. Finally, those families that make the "leap" to a new homeostatic state, or a new mean of fluctuation, exhibit the step-function necessary for establishing new ways of functioning. The movement to a new mean resembles the kind of second order change Watzlawick et al. (1974) described when change occurs at the level of creating a new structure of interaction. The metaprocess of making change is adjusted to establish a new homeostasis. The new homeostasis represents the tendency of the system to use the new process.

Applying the concepts of homeostasis, fluctuation, and step-function to the condition of obesity must begin first by acknowledging the difficulty of the weight loss maintenance process. Women repeatedly attempt to lose weight only to regain it again. A model that explains the weight loss maintenance process needs to account for the challenge of moving from weight loss to the weight loss maintenance process. The dramatic shift inherent in the step-function points both to the radical nature of that leap when one woman's fluctuation moves her *beyond recovery* at the former homeostatic state and toward the move to maintenance. Conversely, similar formidable homeostatic forces move another woman back to the former lifestyle and associated weight gain.

The change that occurs to a new homeostasis occurs through a step-wise leap, however, an illustration must take into consideration the changes that are occurring that illustrate the approach to the crisis state and beyond. Figure 2.1 illustrated the entropic tendency of a system closing off from the environment around it. A woman, engaging in the weight loss process, eventually experiences a diminishment of available resources and strategies necessary for continuing maintenance. Figure 2.3 illustrates the negentropic system she discovers as she steps to a new system incorporating new information and engaging with the relational context in new



old system.

Figure 2.3 - Factors Associated with the Process of Ongoing Weight Management ways. The "paradigmatic-type" shift to the new process reveals new possibilities and, therefore, new resources not originally perceived within the bounds of the homeostatic fluctuation of the

Components and Contexts of Meaning-Making and Change

Schwartz (1995) developed the Internal Family Systems (IFS) framework to describe the complex system of interacting parts contributing to the functioning of the whole person. The framework conceptualizes the whole self of a person comprised of various parts, or subsystems. The subsystems interact together with the individual's experiences and within the context of the larger family system. The IFS model suggests that the various parts participate and interact with one another through life experiences. This model provides a basis for explaining the ways that individuals internally think, feel, and behave in complex ways and reciprocally with varying external relational systems. My adapted IFS lenses will enable me to examine the multiple domains of self that interact, contribute to, and challenge a person's multilayered, multidimensional experiences.

The parts represent various roles each contributes to the functioning of the whole self.

Given a person's varied experiences, IFS explains the myriad of ways the parts influence the

potential meanings and responses. Each part can provide resources or present formidable challenges to the other parts, the functioning of the whole, and the person's interaction with external contexts. A modified version of the IFS framework offers a way to observe the multiple domains of the interior context functioning prior to, through and beyond the crisis state described above.

With an emphasis on a woman's points of view and her engagement in varied experiences, I will now describe the interacting domains of self illustrated in Figure 2.4. Gergen (1971) noted that the definition of a person's self can encompass both structural and process qualities. Applying Gergen's language to this model, structural dimensions may reflect the more static descriptive aspects of the role or function of each domain, while process-oriented qualities reflect the ongoing dynamic "principles of operation or forces at play" (p. 18-19) between the various domains. The domains reflect a person's thoughts and feelings, behaviors, involvement in various relationships, and perceptions of her role within the sociocultural environment.

Note that relationships and environment represent two domains of the whole self. These two domains are integrated into the model to illustrate the social constructionist assumption that

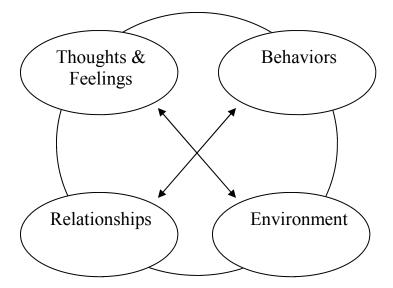


Figure 2.4 - Behavioral Engagements of the Whole Self

external experiences are assimilated into a person's views of self and others creating filters of interpretation. Therefore, a person, observing her interactions with others and the environment, makes sense of those interactions using those filters. Gergen (1971), referencing Cooley's (1922) "Looking-Glass Self," described how a person's perception of self is powerfully influenced by her understanding of the ways *others* perceive her. This perception becomes internalized and is integrated into that person's view of self. The interactions with others and the sociocultural environment influence the person's perceptions and subsequent functioning of the whole self. Freedman and Coombs (1996) pointed to Weingarten (1991) who noted, "In the social constructionist view, the experience of self exists in the ongoing interchange with others... the self continually creates itself through narratives that include other people who are reciprocally woven into these narratives" (p. 289). The process of engaging with others and the sociocultural environment becomes integrated into the whole self and subsequently influences the person's perceptions of all experiences.

The model captures the dialectical process occurring between the defining process and behavioral expressions of a woman's whole self. Each domain of the whole self reflects a component of the meaning she develops and the systemic experiences occurring at varying levels. The meanings associated with the thinking and feeling, acting, relating and interpreting her environment will provide opportunities to capture the multidimensional experiences. The overall framework of the whole self will provide me ways to observe and describe the roles of each domain and the interactions between them. The individual domains of that framework will provide guidance for the interview by focusing questions and follow-up questions to capture the various ways that each woman develops meaning and formulates responses.

Cognitive-behavioral approaches typically focus on the individual in context and the systemic approaches concentrate attention on the family system of which the individual plays a mutually influencing role. The model above provides a way to attend to the various domains of the whole self engaging and impacting simultaneously with one another while embedded in and interacting with the relational and environmental contexts.

Harkaway and Madsen (1989) explored the impact of a person's beliefs and subsequent interactions influencing involvement in medical care. They noted that beliefs form through varied experiences. Transcending the details of experiences are the meanings associated with a person's personal connections with those experiences. Moreover, Harkaway and Madsen described the potential interactions between the person's, family members', and healthcare professionals' ascribed meanings concerning the medical condition and the influence those meanings had on the interactions between them. Beliefs encompass the following: whether the person defines the condition as a problem or not, the expectations of treatment, the role of the healthcare professional in treatment, the role of the family in treatment, and the impact that the condition has on the broader issues and understanding of her life.

Meaning-making is the process by which those beliefs are developed and adapted through a person's experiences. This study will attempt to explore the ways women engage in a meaning-making process at each stage of change. I am interested in the ways that she makes sense of her experiences at each stage and the ways that the meaning-making process shaped her beliefs as she experienced varying degrees of change (Russell et al., 2006). Questions will explore the potential ways in which women's beliefs evolved and adapted between weight loss and weight loss maintenance.

Process Displacement

A final display of the completed conceptual model (see Figure 2.5) describes a woman's shift between the different processes. The complete model (an overlay of the two previous Figures 2.1 and 2.3) represents an integrated understanding of the internal and external processes of change progressing beyond the crisis state toward the new homeostasis represented in ongoing weight management. The new processes occurring at the new homeostatic state "displace" old behaviors in favor of new ones.

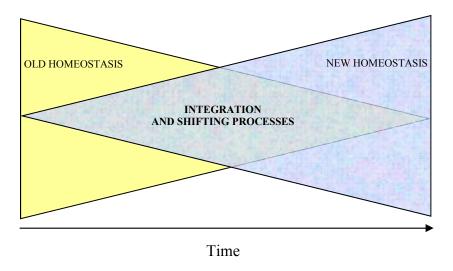


Figure 2.5 - Shifting Processes Conceptual Model

While the fluctuation to a new state described in chaos theory appears to imply a leap, Hoffman's (1988) description of discontinuous change suggests a gradual progression that propels people, at differing rates, toward a new homeostasis.

The left triangle illustrates both the diminishing factors associated with weight loss as well as the diminishment of the former homeostasis that depended upon those factors. The overlay of the increasing triangle illustrates the existence of potential alternative factors for both components of change. The two triangles represent the different processes guiding maintenance of a new state that is gradually experienced and eventually displaces the old state. This study

will examine the two processes while noting the personal and relational conditions occurring when the women shifted to the new steady state of ongoing maintenance.

CHAPTER 3 - METHODOLOGY

Rationale for Using a Qualitative Methodology

Selecting a methodology began with an examination of the questions the study is intended to address. My questions were focused on developing an understanding of the multiple dimensions of women's experiences associated with weight loss and weight loss maintenance processes. I will compare quantitative and qualitative methods to explain my choice in using a qualitative methodology (Creswell, 2003; Patton, 2002).

Quantitative methods involve a deductive analytical process starting with a theory and attempting to test specific variables and the relationships between them. A researcher using a quantitative approach assumes that successive studies will potentially verify, discredit, or transform the role of variables included in an existing theory. This method provides a useful framework for describing the relationships between variables and devising appropriate treatment approaches that influence those relationships. Analysis of the numerical data derived from a quantitative approach applies some controls to the variability between subjects through random selection or assignment. These controls enable the researcher to statistically assume that change occurring through the study resulted from the treatments given. Researchers use quantitative studies to refine a generalizable theoretical framework that can be used to explain those phenomena in the broader population. An important limitation inherent in quantitative approaches, however, is the difficulty in capturing complex human interactions in a series of cause and effect relationships. When a researcher is interested in exploring and identifying complex processes and layers of meaning and developing explanatory theories, a qualitative methodology is needed.

My research questions were designed to examine the meaning-making processes associated with weight loss and weight loss maintenance processes. I chose to use a qualitative method because I was interested to explore the processes of meaning-making associated with weight loss and weight loss maintenance that reach beyond the explanatory power of current theories and models. I believe that the maintenance of weight loss remains elusive because current theories and models of treatment neglect important elements of those processes.

Qualitative methods provide guidance to explore dynamic processes and layers of meaning and to construct meaningful models describing such processes. A qualitative methodology provided the guidance necessary for an in-depth exploration of the research participants' experiences while discovering the variability between them. I recognized that exploring the complexity of the internal and relational systems described in chapter 2 required a methodology enabling me to approach research participants asking open-ended questions and performing data analyses that informed the research process.

Design

Pursuing a study of health behavior change quickly reveals a tremendous amount of research and subsequent literature in this area. Exploring the literature related to obesity and weight management is no exception. This area of health behavior change is extensively studied in medicine, psychology, sociology, and many other fields. Generally, a researcher uses a grounded theory approach when there is little or no available literature in the area of inquiry. I designed this study knowing that, despite the numerous studies and subsequent findings, the problem of weight loss *maintenance* remains elusive and presents a gap in the current literature. My methodology was designed to explore that gap by examining the differences between the weight loss and weight loss maintenance processes.

As I suggested in the literature review, despite extensive studies on weight loss and maintenance strategies, maintaining weight loss continues to challenge patients and the clinicians attempting to assist them. My conceptual model suggests that the process of weight loss differs from the process of weight loss maintenance. The two processes appear to involve different factors and require different strategies engaging each of the domains of the whole self as described in chapter 2. Though research in the health field is dominated by quantitative research methods. I primarily used a qualitative approach to explore health behavior change specifically associated with weight management. I believed that this method would more adequately access the contextual factors and layers of meaning associated with patients' weight-related issues. Therefore, I designed this study utilizing in-depth interviews to compare and contrast the processes involved with weight loss and weight loss maintenance. Utilizing the current literature, my conceptual model illustrating shifting processes, and the study participants' responses, I used multiple data sources attempting to triangulate the themes that emerge in this study (Rafuls & Moon, 1996). This method enabled me to improve the internal validity of my findings, gain a greater clarity of the factors that facilitated my subjects' maintenance of their weight loss, and elucidate the complex interactions between those factors.

Exploring weight loss and weight loss maintenance processes, and meaning-making associated with those processes, required a methodology that defined and conceptualized the factors associated with people's experiences. I ruled out the use of a survey method because I was interested to explore nuanced and layered meanings that are limited by a survey design, which assumes certain variable definitions that I currently did not have and was interested to discover. Furthermore, I also ruled out the use of a focus group methodology because I wanted

to examine the depth of each person's experience and focus groups would provide variety but limit the depth of exploration with each person.

A grounded theory methodology enabled me to gather information through in-depth interviews and build a detailed conceptualization of the potential differences between weight loss and weight loss maintenance processes. Grounded theory was developed by Anselm Strauss and Juliet Corbin (1994; 1998) to build "theory derived from data, systematically gathered and analyzed through the research process. In this method, data collection, analysis, and eventual theory stand in close relationship to one another" (p. 12). Grounded theory enables a researcher to examine complex relationships and multilayered meanings and construct a theory that emerges from the iterative process occurring between data collection and analysis (LaRossa, 2005). This inductive approach enabled me to take the current literature and couple it together with an analysis of my subjects' responses, producing a better understanding of the potential differences between the weight loss and weight loss maintenance processes. My conceptual model uses the current literature as a conceptual framework for exploring women's experiences with those processes. Grounded theory provided an appropriate methodology for further developing that model illustrating dynamic processes to be tested and refined in subsequent studies.

Limitations of the Study

All studies entail certain limitations inherent to the focus, design, and interpretations of results. Throughout the development of this study I had to make methodological decisions to improve my chances of obtaining rich, layered descriptions of my research participants' experiences of weight loss and weight loss maintenance processes. The limitations of this study included the small sample size entailing interviews of only women, the use of a conceptual

model to guide the development and process of the study, my outsider status as a male interviewer not having lost weight, and the retrospective nature of the interviews.

The decision to limit the sample to interviewing only women limited my ability to examine the gendered dimensions of the processes. However, this focus enabled me to sufficiently connect this study with the existing literature and focus on the gap in that literature that neglects systemic change processes. The small sample size precluded any ability to generalize the results of this study to the broader population, however, that limitation was offset by the degree of depth of the responses I obtained during the interviews.

The integration of theory and the resulting *Shifting Processes Conceptual Model* I proposed in chapter 2 influenced my interpretations and suggested implications of the research participants' responses as described in the discussion section in chapter 6. The model provided a framework for integrating findings from the current literature while proposing a way to conceptualize how that same literature explicitly suggests the presence of two distinct processes between weight loss and weight loss maintenance. The use of the model presents a necessary tension between guiding the processes of my inquiry while remaining open to the discoveries of that inquiry that may change or completely discredit the model.

As a male interviewer who has not lost weight, interviewing women describing those processes suggests my "outsider" status on both accounts (Merton, 1972; Naples, 2004). I anticipated that the women might hesitate to describe their experiences to a male, especially if they sensed that I was imputing meaning and drawing conclusions that they did not experience or intend to communicate as they described their experiences. My interest in understanding the women's experiences, matched by my commitment to ask follow-up questions rather than assuming I understand aided me in overcoming this limitation. Additionally, I asked explicit

questions at the end of my study eliciting the women's observation of and responses to being interviewed by a male (DeVault, 2004). Each appeared to respond willingly and expressed experiencing no hesitations during the interview process. My outsider status, as a male, offered a potential asset to the interview process since I was less likely to filter the female research participants' responses through my own experiences. Though it is impossible for me to operate independent from my gender, I was able to minimize referencing similar experiences. Also, the women appeared to take greater care to explain their experiences rather than making assumptions of shared understanding that might otherwise occur with a female interviewer.

Finally, the retrospective perspective of the interviews recalling past experiences suggested that the accuracy of actual events might be compromised. However, I was interested in the meaning that the women imputed to those experiences. The elapsed time may have provided the time and distance from the experiences needed to develop layered and complex interpretations.

Role of the Interviewer

I am a Marriage and Family Therapist who has practiced family therapy since 1999. In that work, I have explored people's engagement in change processes prior to, throughout, and following family therapy treatment. The field of psychotherapy is embroiled in studies addressing the question, "What works in therapy?" My interests continually address the broader question, "What contributes to and sustains any kind of change?"

I have varied training and experiences addressing the dilemmas facing the care of those who are attempting to manage their weight. Using my systemic training, my work with therapy clients or weight management patients has been focused on helping both to examine and understand the interdependent relationships they have with their partners, family, and

community. I work to increase a patient's awareness of her or his role in mutually influential relational processes. Information about the systemic nature of weight management prepares patients to understand the varied ways their weight loss process will impact those relationships and how those relationships will reciprocally impact their efforts. I have developed curricula for weight management and trained health educators on ways to access the resources of a patient's whole self and relationships to be utilized throughout the weight management process. The design and purpose of therapy or health education is to empower participants to make the changes necessary for relieving personal and relational distress, thus enabling the client to experience sustained healthy functioning relationships.

Finally, on a personal note, I recognize my interest in studying this area arises from my role as a husband whose wife lost significant weight and has maintained it for well over a decade. Observing her changes and the role of our relationship through those changes further intrigues me and motivates me to understand how she accomplished an incredible feat despite the statistical odds against sustaining such a loss.

Sample

After gaining approval from the Institutional Review Board of my institution, I conducted interviews obtained through a purposive, snowball sampling of 10 women ranging in ages from 30 to 45 during their weight loss and maintenance and who fit the criteria for successful weight loss maintenance (Wing & Phelan, 2005). The criteria encompassed those women who had intentionally lost at least 10% of initial body weight without undergoing bariatric surgery and maintained that weight loss for at least one year. Those who had lost more than 10% of initial body weight must have maintained at least 10% lost from the initial weight. My focus on

women's experiences occurred within fairly diverse family contexts, therefore, I did not limit my inquiry to specific types of family contexts.

I had chosen to focus on *women's* experiences of weight loss and weight loss maintenance for methodological, developmental, and contextual reasons. The methodological considerations were based upon previous studies examining weight loss and weight loss maintenance focusing exclusively upon women. Additionally, this study was designed to explore the depth, rather than the breadth, of my research participants' experiences. Focusing this study on one gender within a fairly limited age range enabled me to focus more attention on each woman and make comparisons between their experiences.

Selecting women between 30 and 45 years of age enabled me to focus on specific considerations of their physical, psychological, and social experiences. There was a risk of making broad generalizing statements about women within this age range. Listening to an individual woman's experiences quickly reminds the listener that her stories are unique and idiosyncratic in many ways. However, there are some common experiences and decisions women face through these years. Women experience many physical changes associated with hormones, menstrual cycles, childbearing, the development of illnesses or other conditions, as well as the aging process. With the changes come adjustments in weight, body fat distribution, and body composition. A woman in this age range continues to explore and define her self-identity, roles, and personal voice through her experiences with intimate relationships, a career, parenting, or avocations. Family, friends, community, and the workplace present her with role demands. A common example is evident when a woman's education or career aspirations are disrupted as she gives birth and raises children or, conversely, chooses to establish her career and have children later. Societal expectations are explicitly expressed through media, television

shows, and product marketing targeting women in this age category. Health and beauty images, products, and messages instill dissatisfaction and generate perceived needs especially related to body image.

I was initially interested to recruit two equal groups of women who have engaged in different types of weight loss efforts: one group who used a formal weight loss program and another who used informal means. These additional criteria may have enabled me to explore the potential similarities and differences between the women's experiences associated with different weight loss strategies and support options. However, despite having three women who engaged in a formal weight loss program and seven who did not, I decided that the sample size limited my ability to make meaningful comparisons between the women's experiences.

I began my interviews with a purposive sampling of one woman in my community who I had already identified and who matched the criteria described above. This friend inquired about my study and expressed a willingness to participate. Through a snowball approach, I asked her to refer others to be interviewed for the study. In addition, I contacted the director of a commercial weight management program in Kansas City, Missouri; a physician directing a medically-based weight loss program in Topeka, Kansas; as well as the directors of health clubs in Manhattan and Topeka, Kansas. I provided the directors and other participants with referral fliers (see Appendix A) describing the nature of the study, information concerning criteria necessary for participation, and my contact information. These fliers were given to people directly or posted on a bulletin boards at each organization. The flier instructed those who were interested in participating in the study to contact me by phone or email to set an appointment for an interview. One additional woman was a family member who expressed her willingness to participate.

When including my friend and my family member in the study, I made the considerations necessary to insure the validity of their contributions. An ongoing relationship could compromise the extent to which a woman is willing to disclose personal issues. As with the other participants, I emphasized with these women that they only needed to answer those questions with which they were comfortable and that they were invited to redirect the conversation if they experienced distress at any time during the interview. However, after carefully examining their responses, I discovered that they had revealed rich descriptions of personal issues congruent with level of disclosure and with the themes present in the other women's narratives.

When a prospective woman contacted me by phone or email, I confirmed that she met all of the criteria necessary to be included in the study. I asked her to respond to questions from a brief screening questionnaire (see Appendix B). This questionnaire enabled me to gather basic demographic information and to verify that she fit the criteria listed above. At the time of the call, I asked the women to think of others who fit the same criteria. At the conclusion of each interview, I provided referral fliers for the woman to give to friends and relatives extending the offer for them to participate in the study. This process was repeated with 10 women until the themes contained in their responses exceeded a reasonable point of saturation. Saturation is determined when no new information arises from the interviews and analyses (Strauss & Corbin, 1994). I concurrently conducted interviews and coded using a constant comparative method. This iterative process used data collection and analysis to inform each other. As I coded the interviews, emerging themes influenced subsequent interview questions and the interviews further influenced my analyses (Patton, 2002). While I continued to use the questions as written on the interview guide, at various points I asked additional questions requesting clarification and

elaboration. I also adjusted the ways I handled the transitions and bridges between questions. I offered summative remarks to be sure I had understood the women's descriptions accurately. Before proceeding to the next question, I provided a comment signaling the focus of the following question directed at either the period while deciding to lose weight, the weight loss period, or the weight loss maintenance period.

Interview Procedure

I met with each woman for an average of 76 minutes (length of interviews ranged from 54 to 110 minutes), audio-taping each interview. Each woman began by signing an informed consent authorizing the interview, audio-taping and publishing of any research results. During the interviews, I paid particular attention to the women's words, phrases, verbal and non-verbal cues. I recorded my observations and impressions in my field notes. Using additional probes, I asked follow-up questions seeking further explanations, clarifications, or elaborations of her previous comments.

During the data collection and analysis processes, I also recorded two sets of notes in a research journal. The first set contained my impressions about the content of the interviews and emerging from the analyses of the transcripts. In the second set, I recorded my impressions about the research process as it progressed. The research journal facilitated my ability to continually move from the specific information contained within the interviews to the overarching exploration of the research process and back again. The journal provided me with a way to move continuously between the parts and the wholes and, therefore, enabled me to see the interconnections between them.

I used a semi-structured interview comprised of three main sets of open-ended questions: the first set was focused on the person's weight loss experience, the second set addressed her

weight loss maintenance experience, and the third set asked her to share her own observations comparing and contrasting the two processes of weight loss and weight loss maintenance (see Appendix C). The questions were designed to provide the research participants opportunities to incrementally reflect on the two experiences. The questions explored the women's experiences following a time series of events prior to and during weight loss and finally ongoing weight loss maintenance. The first set was divided into factors around decision-making, personal motivations, perceived changes occurring within each time period, and contextual factors, including relationships with others or corresponding events and circumstances occurring throughout the weight loss experience. The second set of questions was intentionally broad, inviting each woman to suggest any or all factors that were involved in her weight loss maintenance efforts. The additional questions asked the respondents to explore any similarities and differences between the experiences she noticed during that period of weight management as well as any current perceptions after reviewing her experiences during the interview. The final question provided an opportunity for the woman to step back from the interview process and to reflect broadly on the story of her experiences or to focus on one specific experience of her choice. After the interview, I produced a verbatim transcript of each interview, in preparation for subsequent analyses.

In my pilot study I designed the interview questions to explore the women's experiences in a fairly linear fashion. I had adjusted the sequencing and tone of the questioning to more adequately access the dynamic systemic processes occurring at each stage of change. The Milan systemic therapy approach to circular questioning (Gelcer, McCabe, & Smith-Resnick, 1990; Harkaway & Madsen, 1989) informed the revision of those questions. Since my interest is in determining the systemic nature of women's experiences, the questions were designed to

successively determine the recursive relationship between each response. With this approach, I elicited more information about the dialectical relationships between domains of the whole self and the dynamic interplay of those domains with the external relationships.

Following each interview, I provided each woman with a sheet debriefing her about the study and of her interview experience (see Appendix D). The debriefing sheet briefly provided an explanation of the ways her participation had contributed to the study of weight loss and weight loss maintenance processes, my hope of improving future research in this area, my offer to provide her with the final report of this study, and an additional offer for a referral if she decided it was necessary to follow up our discussion with a licensed therapist. At the conclusion of the interview, I gave each woman a note of appreciation for participating and included a \$25 gift certificate of her choice to a sporting goods store or a bookstore.

Data Analysis Procedure

I imported the transcripts into NVivo 7.0, a qualitative data analysis program used for coding transcript materials and recording my impressions throughout the coding process. I used Strauss and Corbin's (1998) coding procedure comprised of open, axial, and selective coding to guide the process of coding and constant comparison. Weiss' (1994) description of those steps suggests questions to guide the phases of the coding process: What does it say? What does it mean? How do the themes go together to produce a storyline? Each successive coding step attempts to suggest connections between the themes identified in the interviews. Beginning with apparent randomness and discontinuity between the research participants' responses, the coding processes are designed to provide a balance between elucidating common themes while preserving variety and uniquenesses of those responses. I recorded my thoughts, considerations, and efforts to discover this balance in my research journal.

I began coding each interview by question. This provided me with the opportunity to compare the participants' responses to each question. Through open and en vivo coding, I reviewed each transcript and coded the women's exact words and phrases. I gathered the initial codes together under the appropriate categories reflecting similarities among the varieties of meaning contained within each text unit. As each woman's responses revolved around similar themes, I grouped codes together under similar headings. When a woman's response differed from the others, I created and coded the responses under new subheadings, then reexamined the other transcripts to either confirm the existing coding or change the coding of units reflecting the new themes. Once I coded all units of each interview, I reviewed reports of the coded transcripts under each heading and developed the axial coding reflecting emerging themes. The final selective coding process enabled me to examine the relationships between the themes to construct an understanding of the ways they fit together to suggest plausible storylines.

Validity and Reliability

The challenges of ensuring the validity and reliability of research results vary from one methodology to the next. Quantitative and qualitative methods have differing priorities that determine the tradeoffs made in the corresponding designs (Creswell, 2003; Patton, 2002). Generally designed to test and refine theory, quantitative studies often include large sample sizes and employ subject selection techniques that distribute variability throughout the study sample. These two methods enable the results to be generalized to a broader population of people matching the characteristics of the sample. A limitation of this approach is associated with the researcher's initial attempts to limit the focus and defined variables prior to collecting the data. As a result, the data collected is limited by the questions and scope of the study design.

Qualitative approaches, attempting to explore and develop theory, are designed to investigate the depth of research participants' experiences. Qualitative methods focusing on smaller sample sizes relinquish the ability to generalize results beyond the sample. This limitation is offset by the opportunity to explore in-depth each research participant's experiences and the potential, nuanced differences between them. Instead of limiting the scope of the study to predetermined variables, a grounded theory method facilitates the emergence of a theory from the data gathered in the interviews.

Interviewing women to elucidate their weight loss and maintenance processes, I attempted to understand those processes that have not already been captured in existing models or theories. An additional limitation was the potential for subject biases arising from the retrospective perspective of the interview questions. While this limitation is difficult to control, the time distance each woman had experienced from the processes may have provided her the opportunity to contribute more than a recounting of the details of the experiences to include additional reflections, observations, and evaluations of those processes that she has generated over time. I designed additional procedures for ensuring the validity of the results including using independent coders, member checks, and triangulation of sources.

During the coding process, a colleague who agreed to be a second coder examined the interview transcripts and confirmed and occasionally challenged my coding. I asked the coder to intentionally use a skeptical approach to my coding. The rigorous examination of the codes challenged my rationale and the frameworks used to interpret the interviews. After a discussion of the rationale for each of the codes that differed, we sought agreement on the appropriate coding. If we were unable to agree, I was prepared to recruit the help of another colleague as a third coder who would have analyzed and resolved the differences. I did not need this final step.

During the analysis process I contacted the participants, who all agreed to provide member checks (Creswell, 2003). Research participants had an opportunity to engage in this role in the study when they signified their agreement by signing the last section of the informed consent. I asked participants to review a brief summary of their statements made throughout the interviews and to verify or correct my descriptions of those experiences. Each woman was sent a written summary of her interview. Following the summary, she was asked to rate the accuracy of that summary compared with her actual experiences. She was then instructed to express her level of agreement by selecting a point on a five-point Likert scale ranging from "strongly disagree" to "strongly agree" (see Appendix E). There was space provided below the summary giving her the option of submitting additional written comments or requesting an additional interview to provide clarification. Each woman returned her member check and rated the summaries by placing a check at or near the "strongly agree" rating. Following the ratings, two women added additional comments I will review in chapter 4.

To increase the validity and reliability of the data analyses, I triangulated the interviewees' responses and member-checks, field notes, research journal, and the available literature with the conceptual models described in the literature review section. Triangulation is the methodological strategy of using multiple data sources to improve internal validity of the findings. Multiple sources provided opportunities to explore a phenomenon from varying points of view using different approaches (Denzin & Lincoln, 2003; Esterberg, 2002). The studies employing grounded theory approaches offer methodological comparisons of participant responses and subsequent analyses. Linking the data analyses with the conceptual models informed the analyses while challenging the power of the models to explain the women's varied experiences.

CHAPTER 4 - RESULTS

After reviewing the research questions serving as the foundation for this study, this chapter provides a description of the demographics of the interview participants. I describe the initial steps of the analysis that revealed emerging themes and my deliberate efforts to increase the level of validity of the results emerging from each iteration of coding, leading to the final categories of themes describing the women's experiences in broader, more abstract terms. I will describe how peer coder checks concurrently provided valuable feedback through three separate stages of checks. I continued to refine the categories and themes while developing detailed descriptions for each throughout my analysis of the participants' interviews.

I initially intended to provide my participants with a member check that simply summarized the descriptions of the participants' experiences expressed during the interview. However, through the initial phases of the interview coding I determined that the member checks would be substantially more meaningful to the participants and to me if they reflected the emerging categories and themes (see Appendix E). The revised member checks provided the participants an opportunity to observe the variation of themes across the sample of participants' experiences, to communicate my interpretations of their interview, and finally for them to return comments of their impressions about the explanatory power of the categories and themes to describe their own experiences. The member check revision garnered the kind of feedback necessary to further improve the validity of those categories and themes.

I begin by reviewing the research questions that served as the foundation of this study.

Review of Research Questions

I developed a methodology to explore the participants' experiences with weight loss and weight loss maintenance processes. This methodology emerged from research questions posed

in chapter one. The first research question explores potential differences between the two processes. The second and third research questions explore how meaning-making, that occurs throughout the women's experiences, may inform my understanding of the women's definitions of self in the context of their relationships.

I recognize the tension between an informed pursuit of understanding and the open, unbiased exploration that allows the participants to speak for themselves. The literature review developed in chapter 2 reflects my exploration of the relevant literature in the area of weight loss and weight loss maintenance. The crucial task throughout the analysis process was for me to attempt to listen and understand the experiences of each of the research participants. Reflecting on the interview process from a social constructionist perspective reminds me that my framing of the interview schedule and follow-up remarks or probes inevitably influenced and shaped the participants' responses to some degree.

In an effort to further separate the participants' descriptions and my interpretations, I have divided the results section into two separate chapters. This current chapter reflects the multi-phase coding procedure, coding checks, and member checks exploring the categories and subthemes that emerged throughout the analysis. In the following chapter, I will explore the apparent relationships among the categories and the clusters of themes that emerged during the final coding process. That chapter will explore the relationships and suggest possible interpretations of those clusters. The analysis procedure and the division of the results section represent my best attempts to manage the degree that my biases, assumptions, and expectations influence the analysis. In the final discussion section I will make comparisons and contrasts between the findings and the models and literature I presented in chapter 2. I will also suggest implications of those findings for further studies.

Description of Participants

The participants in my study consisted of ten white women ranging in age from 33 to 63 residing in Midwestern towns in Kansas, Iowa, and Missouri (see Table 4.1). Each had lost at least 10% of her body weight during the time that she was 30-45 year age. The period of time for the women's weight loss was, on an average, eight and a half months. The length of time the women had maintained their weight ranged from one to seventeen years, with an average of approximately four and half years. At the time of the interview, the four women who had regained their weight did so after maintaining for a range of 24 to 32 months. During their weight loss, all of the women were married for an average of approximately twelve and half years.

The interviews occurred at locations of the woman's choice: in the city library conference room or in the woman's office or conference room at her workplace. The interviews ranged in length from 54 to 110 minutes with an average of 76 minutes. Generally, the atmosphere felt relaxed and all of the women appeared willing to participate. They readily agreed to sign the informed consent and to be further contacted for additional information through the member checks. At the end of the interviews, I gave the women a \$25 gift certificate in appreciation of their participation and a flier about my study to give to someone else who might be interested. A few of the women provided referrals to others friends and family, who then participated in the study.

As I interviewed the women, I increasingly noticed the importance of signaling transitions in the interview questions. I made broad statements that concluded one section and then proceeded to the next segment of the interview. An example: "We have considered your

decision to lose weight. Now, we will shift to consider your weight loss experience." Since many of the questions asked the women to look back at their experiences, this technique

	N	Minimum	Maximum	Mean	Std. Deviation
Current age (years)	10	33	63	47.0	7.93
Initial weight (lbs)	10	132	235	190.2	34.57
Average weight maintained (lbs)	10	106	190	149.6	28.48
Weight loss (lbs)	10	24	85	40.6	17.20
% loss maintained	10	11	36	21.1	6.35
Weight loss duration (months)	10	2	12	8.5	3.89
Interval of recall since WL (years)	10	1	18	8.3	6.94
Weight maintenance duration (months)	10	12	204	56.3	62.10
Relationship length during weight loss (years)	10	2	26	12.6	7.21

Table 4.1 - Study Participant Demographics

appeared to help them shift their thinking between the varying time periods. The interviews shifted from a focus on the woman's decision to lose; to her weight loss experiences; to an examination of her weight loss maintenance experiences; and finally, we "took a step back" to explore the similarities and differences between those experiences.

At the end of each interview, I asked the woman to reflect on and offer comments about her impressions about the interview process and the effects of me being a male interviewer on her responses to the questions. Some women said that my gender simply did not matter, while others noted that they are used to discussing personal details with men since most of their medical doctors have been males. One woman said that, since she knew I was a therapist, she assumed that I must be compassionate and understanding of others. Another woman noted that

although my gender had not influenced her responses, as a male, I may not fully understand women's experiences of the societal pressures associated with weight issues.

Coding Check Procedure

To improve the validity of the emerging categories and themes, I utilized a peer code checker. This was an independent coder who had no exposure to my literature review or proposed models and had no previous knowledge or experience studying health behavior change processes in general or weight loss and weight loss maintenance in particular. The code checker is a master's student in family therapy, a graduate research assistant, and is designing a qualitative study for his master's thesis. Based on these experiences and interests, he brought a valuable systemic perspective to the coding analyses of this study.

Throughout the coding process, the code checker reviewed the themes at various stages: the simple groups of open, in vivo coding; the initial categories and subthemes; after partial coding of transcripts; and finally, when transcripts were fully coded. The coder reviewed the coding labels, the conceptual definitions describing each code, and verified each theme representing discrete aspects of the women's experiences.

Description of Coding and Analysis Procedures

I began the coding procedure with an initial coding of each interview by interview question. This enabled me to separate the participants' responses based upon the context and timing of the interview. At that point I consulted with my major professor and another qualitative researcher who suggested that diverging from the interview questions and staying as close to the actual words of the transcripts would ensure that the emerging themes would more closely approximate the participants' experiences.

During the following coding step, I employed open and in vivo coding while examining the similar use of words and phrases representing nuanced differences of meaning and experiences. Using a simple search, I grouped codes that appeared to describe similar experiences. Next, I examined each of the selections from the transcripts to identify the implications of the context of the statements and to more fully understand the meaning of each. Through this process of verification and confirmation of each theme, I discarded those statements that diverged from the definition of the emerging theme. I identified at least one statement from each participant representing each theme and supporting the emerging assumption about the robustness of that theme. Seeing the multiple examples of each theme within the transcripts, it became increasingly evident that I was reaching saturation within the first five to six interviews. Next, however, I tested that assumption as I examined the emerging categories of the themes.

Stepping back from the "micro approach" to theme development, I examined the overarching categories that were suggested as I grouped themes together. The categories and initial conceptual definitions for each were then available for a reexamination of the interviews identifying multiple evidences of those categories in each interview. Throughout this coding process, I refined the definitions while coding each interview. My assumption of saturation was repeatedly confirmed with each the analyses of additional interviews. I discovered that the categories and themes adequately represented the variety and depth of the women's experiences throughout the transcripts. In the following section I will describe the themes under each category, providing representative examples from the transcripts. I will also describe the decisions I made during the coding refinement process.

Categories and Themes

Four major categories of themes emerged from the women's descriptions of their experiences revealing descriptions of: cycles and patterns, thresholds and fluctuations, defining self, and contextual connections (see Table 4.2). Each category encompasses four discrete themes that were presented on the member checks using brief descriptions (see Appendix E). In the following sections, I will examine the categories and themes in greater depth and illustrate each with actual segments from the women's transcripts. I have used pseudonyms to protect the confidentiality of the participants. Each quote begins with a reference number in parentheses specifying the location of the segment within the transcript.

Categories	Themes	Codes	Brief Definitions
Cycles and patterns	Attempt to break a prior cycle	PRIOR	Use of WL to adjust a prior-existing cycle
	Cycle transcending weight loss (WL) & weight maintenance (WM)	TRANS	Other life patterns and cycles present before, during, and after weight loss
	Cycles within WL or WM	WL or WM	Patterns specific to or developed during WL or WM
	Repeated cycle of gaining and losing weight	YOYO	Weight cycling experiences
Thresholds and fluctuations	Monitoring	M	Primary indicators used to monitor weight gain, loss, and/or maintenance
	Range of routines and structure	RRS	From periodic to consistent use of routines and structures
	Range of control	RC	From feeling out of control to feeling in control
	Range of intentionality	RI	From unintentional to intentional use of choices
Defining self	Self AND other	AND	Descriptions of self comparing with the experiences of others
	Self SUB other	SUB	Descriptions of self when her weight- related needs became secondary to others' needs or interests
	Self NOT other	NOT	Descriptions of self without reference to or contrasting with the experiences of others
	Self VERSUS other	VERSUS	Descriptions of self including jealousy, envy, competition, or intolerance experienced toward or received from others

Categories	Themes	Codes	Brief Definitions
Contextual connections	Relationship pressures	RP	Relationship interactions countering WL/WM efforts
	Relationship facilitations	RF	Relationship interactions supporting WL/WM efforts
	Environmental pressures	EP	Environmental factors countering WL/WM efforts
	Environmental facilitations	EF	Environmental factors supporting WL/WM efforts

Table 4.2 - Categories and Themes Related to Women's Weight Loss (WL) and Weight Loss Management (WM)

Cycles and Patterns

The category encompassing cycles and patterns captures the women's descriptions of experiencing or engaging in specific patterned activities prior to beginning weight loss or during weight loss and weight maintenance. Each woman described the nature and timing of recurrent or cyclical experiences that are either related to or differentiated from her efforts to lose and maintain weight loss. The women's experiences captured under this category reflect women's use of weight loss to influence other arenas of their lives, descriptions of simultaneous issues related to personal development and the family life cycle, cycles and patterns specifically related to weight loss and/or weight loss maintenance experiences, and the repeated experiences of weight gain and weight loss.

I use extended excerpts from the transcripts for illustrating the themes of this category.

The descriptions of the cyclical and patterned nature of the women's experiences offer details about the dynamic and recursive relationships occurring within and between the various cycles.

Attempt to break a prior cycle

Occasionally the women described their deliberate attempts to use weight loss to change another unrelated existing pattern or cycle. Examples of statements revealed apparent expectations that her weight loss efforts would result in reestablishing a former self, impacting

her abilities to achieve success in other areas of her life, or improving the quality of a relationship.

Dorothy reviewed her current situation and realized that she had changed in ways that she had not intended or anticipated. Weight loss became a means to reestablish the prior self that she preferred.

DOROTHY: (84) I never thought of myself as a heavy person prior to..* I'd never been, other than that one little college weight gain, I'd never been a heavy person. It seemed really weird.

CRM: So with your thoughts and feelings during weight loss was it somehow associated with regaining what you envisioned yourself to be?

DOROTHY: Correct, to get back to the real me.

Fay engaged in weight loss as a way to increase others' level of trust in her abilities at work and church in order to be given more responsibilities. She appeared to believe that others' acceptance of her and their assumptions about her abilities were inversely related to her weight.

FAY: (237) I felt if I was thin and decent looking, they would look to me more. That they would accept me more. That they would give me more responsibility... (359) I guess I was looking for approval and when I didn't get approval from some of the people in the church that was [discouraging]... (154) (at work) I think they responded to me better as I was thinner than if I had been heavier.

Changes brought about by weight loss revealed Cindy's effort to improve her relationship with her husband and to avert a potential breakup. She expected that her deliberate efforts might also result in her husband's increasing commitment to their relationship.

CRM: (1) What were the most powerful reasons for your decision to lose weight? CINDY: I found out my husband was having an affair. My youngest child.. I have three.. was eight months old at the time. You know, to have an eight month old and a two-and-a-half year old and a five year old, it's pretty scary to think about being a single mother because that was what I was looking at. (38) ... we were both unhappy. Of course, after three kids.. with each subsequent child it's just not quite as easy to get back to where you were before. I was fortunate with my daughter, I didn't gain as much weight as I did with the first two pregnancies. So

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^{*} The women often paused while describing their experiences. At those moments when they paused they either continued on with the previous thought or shifted to another topic. I have denoted those pauses using the double dots (..).

I didn't have as far to go. (52) ...just deciding I was miserable about the marriage situation. I knew my husband was miserable so it was just time to kind of take it into my own hands.

Cycle Transcending Weight Loss (WL) and Weight Maintenance (WM)

Descriptions of the patterned experiences unrelated to weight loss but influencing the weight loss and weight loss maintenance processes are referred to as a transcending theme. The women's descriptions of these experiences reflect ongoing cycles and patterns that are substantially more life-encompassing and tend to have a significant impact on her efforts to lose and maintain weight. Transcending experiences would have occurred regardless of whether or not a woman engaged in weight loss. Comments ranged from women's existential pursuit of the meaning of her life and individual development to more intergenerational and relational perspectives encompassing family life cycle events and relational patterns of affiliation and conflict. Some women noted that personal or partner well-being endured prior to and throughout weight loss and maintenance without any adjustments directly corresponding with weight loss or maintenance efforts.

Sally came to a point in which she explored the meaning of her life in an existential quest to review her life expectations. She explored who she was, her relationships with others, and the efforts she needed to take to accomplish her purpose. Weight loss facilitated her search and reestablishing the priorities for her life.

- SALLY: (123) So it was all three sides that I started working on.. the spiritual, emotional, mental, and physical.
- CRM: For you, as you define spiritual, how did that adjust and what did you see as the difference there?
- SALLY: I just became more attuned to people. Like this job that I was in. I've done the same thing all my life. Not all my life. Twenty-five years now. It got to the point that I was hating it. I was pulled every direction, people needing this, needing that, "Can you tell me how to do this? Can you tell me how to do this?" But after I started losing the weight and I thought like I was.. I started tuning in, more spiritually praying more, and tuning into more people's needs realizing this

was my.. um.. my vocabulary is horrible.. way of helping people. And when I reversed my thinking then to where this was something I could do for society before I die.. [chuckle] You know you get to that question, "What am I here for? What am I.." So I turned that back into helping others. Then when I changed that philosophy in my on my mind my life got a lot better. I didn't hate it anymore. I found some reason for doing this. Never thought that in the first ten years that I did this that I was actually helping people themselves have a better life. Didn't dawn on me until that point when I was trying to pull it all together... (329) The other part too at that age for some reason I started thinking, "This isn't how I saw my life when I was twenty. I didn't envision being extremely.. not extremely overweight, but pretty much overweight, quite a bit overweight for me anyway."

Margaret and Darla, too, experienced a point when they reviewed their lives in the context of their aging and development. The women reflected upon the physical and emotional impacts of aging and made decisions to deliberately select a different life course.

MARGARET: (255) So I have a couple of years with my husband, in the early years we were together in which I was a small individual. Maybe even smaller than I am now kind of thing. And wishing for that to come back kind of thing. You know and you're getting older and I don't want to be old and heavy. I don't want to be old. If I'm not heavy maybe I look younger. Maybe I feel younger kind of thing. And just absolutely do not want to be mistaken for my son's grandmother.

Darla described experiencing "an emotional rollercoaster" while she was losing her weight.

CRM: (819) What do you attribute to your own sense of the rollercoaster during loss and then some evening out during maintenance?

DARLA: Age. [chuckle] As you get older you level out. To me at least, you're a little more even-keeled. Things that used to bother me when I was younger don't bother me. That kind of thing.

Each of these women acknowledged the inevitable effects of aging. Margaret expressed her struggle with aging, noting ways she had discovered to make changes within the scope of that process. Darla acknowledged the emotional stability that she experienced accompanying her aging.

Another transcending pattern is reflected in Lori's efforts to comfort herself when she was under stress. Though this pattern has tended to be associated with food and weight, she

noted that the scope of the pattern extends beyond her weight and will have to be managed with something other than food.

LORI: (710) I strongly believe it needs to be a lifestyle change. It can't just be, "Well, I'm going to do this for six months and lose fifty pounds and then I can go back to my old eating habits." 'Cause it won't work. You can't do that. And so I approached it from the very beginning, "This is going to be the way my life is." And that was hard. I mean its harder for me now that I'm in maintenance because I feel like I've lost that.. I mean 'cause food was always a vice. It was always my comfort item. Now I feel I can't.. I don't have that comfort item so I try to find other comfort items.

As a number of women reviewed their lives, they broadened the scope to include their relationships with family members and the intergenerational health issues. When they reviewed family health history and noted the health problems other family members were experiencing, some women realized the potential health issues that they might experience if they did not make changes.

- DOROTHY: (665) So I guess I don't want to take the risk of gaining a bunch of weight and having. We have family that are diabetic. We have family members that have heart issues. High blood pressure pills. I see all of that [and] I don't want to go there. And I'm the only person on my side of the family who doesn't have high blood pressure.
- LORI: (4) My family history, medical history, a lot of hereditary.. let's say my DNA is not going to be very helpful to me when I get older. Lots of diabetes and heart disease and lupus and just a lot of other things. I thought, "Well, if I can just get this under control maybe that will help as I get older."
- MARGARET: (77) And you know the reality of stepping into.. My father is a diabetic. My father has heart conditions and I am within six or seven years of the age he began to have major medical problems.. (84) So it was, "I have to.. I can see the path here where he has been and I've got to back [away]." The first key is getting my weight under control.

Women often described their weight loss and weight loss maintenance experiences, noting the family life cycle changes occurring at the same time. The descriptions of the life

cycle changes were often focused on the ages and development of their children and the women's relationships with and responsibilities for them.

- DARLA: (65) Again, I am home. I wasn't working at the time. I was with three small children. All my job is to take care of these three small kids and to have dinner on the table when my husband gets home. And half the time I couldn't get that done. It's just that daily grind.
- MARTHA: (88) I guess I wanted to do things that I wasn't able to do. My son was getting older and, in a sense, I was losing time with him because he was getting older and I felt I am getting older and missing out on all of this stuff. And it's because of the weight and I thought, "That's kind of silly that you're not going to go to the pool and have a good time because you don't want to put a swim suit on" or making excuses for things that I should be doing.
- FAY: (706) There was so much going on at that time during that maintenance period. 'Cause [our oldest – a son] got married and moved away. [Our next - a daughter] got married and moved away.

Fay and Mimi described struggles in the relationships with their husbands. Fay described the increasing stress associated with her husband's progressive depression. She described their changing roles and her changing expectations of him and of her abilities. On the other hand, Mimi described the attempts she and her husband made to change the interaction patterns only to change back to previous patterns after a short period of time.

- FAY: (262) You know [my husband] was sick and very into himself. I don't think he really cared what I did... (645) The stress of him having such terrible depression.
- CRM: And associated with that stress, was it the unpredictability of what the next day might hold?
- FAY: Yeh. You know I'm six years younger than [my husband]. I was married when I was eighteen. He's always been my rock. He's always been the wisdom in my life. He's always been the leader. And then when he got so sick, I couldn't depend upon that anymore. I had to start making decisions. I had to stand on my own two feet. Which was good for me in a way but it was also stressful.
- MIMI: (719) Sometimes I do think if he would just do more then I would have more time for myself which I don't.
- CRM: Is this something you've asked for?
- MIMI: Uh huh. Yeh. It works for a couple of weeks then he falls into his old patterns and his habits too.

Finally, some women described schedules and responsibilities outside of the family. The occurrence of holidays, the change of the seasons, and return to work suggested additional cycles that were clearly independent of their weight loss and weight maintenance but affect their continued progress.

- DARLA: (158) One of things that would happen, I was doing an aerobics class that would follow the same schedule as the school district. So when there was a school break. You know like Christmas break they take two weeks off at Christmas time. So I wouldn't have aerobics class and that would kind of throw me off. "What's the exercise routine supposed to be now?" And at that point I really didn't have an alternative because I was using babysitting where I was going to aerobics. So the kids would go to that. So when I didn't have that option, there was no routine and no place for the kids so there was no exercise program for me.
- MARTHA: (185) And being off work because of the summer time, I was getting more rest and I could sleep better. I was moving around more. The job I used to have, I would sit a lot. But being off in the summer, I was out more doing more. I took up fishing. I love fishing. So I was wearing a swim suit. I wasn't covered up as much because I was losing the weight. I was more outgoing. A lot happier though...
- ANN: (19) Ahh.. you always contemplate it I think [chuckle] I think its always a necessity but then that just gave me the tools for which to do it. I'm not sure I would have started it to the degree I did if I hadn't lost my job. (673) Then going back to work kind of threw me into a maintenance, whether I wanted to or not. Time changed, abilities changed. Those are the two biggest...

Cycles Within WL or WM

Often, a woman identified cycles that she developed during her weight loss or weight loss maintenance. The strategies she identified, developed, and utilized to lose and maintain weight and to manage related accomplishments and struggles are coded as occurring within these processes.

Some women offered general descriptions of their weight loss experiences. Darla, Dorothy, and Martha included assessments of their progress of losing weight and their thoughts accompanying the process.

DARLA: (137) I think that middle is probably where that most depression, sadness, and struggle because you've got the excitement in the beginning and your doing something new and all that. It's the same thing we see. Then you are almost to where your goal is and people are complimenting you and all that. I think that's toward the end.

CRM: So the middle tends to be, in your experience, the middle tends to be the..

DARLA: ..struggle..

CRM: ...not new but not done?

DARLA: Yeh!

DOROTHY: (95) It was a slow process and it seemed like the.. I was trying to do it very healthy manner, I wasn't able to exercise as much as I would have liked to because of the situation... (109) It's very slow and tedious and gradual.

MARTHA: (903) Yeh, because it was a long road. When I first started I thought, "What if this doesn't work? What if this doesn't work?" Now I don't have to think about if it is going to work. It's working. So my mindset is a little different but I'm still strong-minded about it. But I think when I first started I was in the back of my head kind of scared that it wasn't going to work. Like, "This is going to work. This is going to work. I know this is going to work." In the back of your head you have those doubts.

Fay and Ann described the impact of weight loss as they experienced feeling better about themselves while losing. They each described that the subsequent experiences of losing lead to recursive cycles of losing and improved self perceptions.

- FAY: (41) I wanted to continue. I wanted to keep losing weight. As I began to lose weight, I began to feel better about myself.
- ANN: (48) The more I was successful in losing the weight the better I felt about myself which gave me the more motivation to keep going. This is the right thing. I feel good... (64) You can't feel good about yourself.. when your in a program.. in a process.. on a diet, if you lose weight you feel good about yourself, which in turn gives you better feelings and thoughts and feelings toward yourself or others. It's kind of a circular.. it's all related.

Margaret offered her perspective on moving from weight loss to weight loss maintenance. She described this shift as a meta-perspective of moving between the two cycles that entailed an assessment of her progress, an evaluation of current weight status and associated

routines, and a generation of questions exploring what she needed to do to maintain her weight loss.

MARGARET: (1308) In the beginning it was, "Get some success. Show yourself that you can do this." As I got toward the end of my goal.. reaching my goal... it was. "OK, now what are you going to do? Because you've reached your goal and if you go back to your old habits, you're going to put that weight back on." It was becoming comfortable with.. it took me months to perfect the routine and to make the habit.. of not compulsively eating when there was something in front of me. During the maintenance, I've done more.. my focus, of course, has not been on weight loss. It's been, "OK, you've done it. Now how are you going to keep it there?" More evaluation of why I eat, what I eat, what provokes me to eat too much. I'm more.. situations I will gain a few pounds and so then I want to analyze it, "Why did you gain that weight? Is it because you just went off the program? Or is it because you weren't watching your portions? Or you skipped some meals? What has caused this?" So I think the six or seven months after I'd actually lost the weight, it became more of a self-analysis. In the beginning it was routine. "This is the routine. This is what you set out for yourself and, low and behold, you're making successes." Then it became, in my mind, an analysis of why it was successful and how to keep it going.

All of the women reviewed the similarities and differences between their weight loss and weight loss maintenance experiences. The cycles and patterns that were prevalent in each description reflected the vacillations occurring with their motivations, their focus and perceptions regarding the degree of difficulty associated with their efforts, and their use of defined goals.

CINDY: (854) I do remember thinking, "This is boring." Because it's exciting when your losing weight. You know?... Because people notice it. "Oh my gosh look at you! You look so cute. You've lost so much weight." There's attention there.. there's positive attention. Especially for somebody that.. well I was pretty shy for a long time. So it's like somebody's noticing me. So then you get to maintenance and it's all over and it's like status quo. It's just, "Well, here I am in my size ten. I've been this size ten for several months and this is boring." I hadn't thought about that.

CINDY: (998) When you're in the weight loss process you really, at least for me, I am focused. I guess and it is a twenty-four hour a day job. [chuckle] Whereas.. I guess this is why I am not a good maintainer is because once I got to the point I felt where I had lost enough then I'm like, "OK! I'm done!"... And so differences are the excitement of losing the weight. The excitement of putting on a pair of slacks that are two sizes smaller than the ones you just took off. The excitement of finding a new food that isn't very caloric but that you real enjoy it.

The excitement of being able to bend over and tie your shoe laces. [chuckle] And that all happens during the weight loss process. Whereas, when you get to maintenance it's just kind of like status quo. That stuff all stays the same.

- MIMI: (867) To lose the weight it takes extreme amounts of self-discipline, determination. I believe you have to have something that's motivating you to do it. Something. Whether that's physical pain. Whether that's a prom. Yeh. To lose the weight you've got to have those things. To maintain it, to me it's whole different mindset. It's a life-long choice or decision you have to make not to resort back to old habits. And we are creatures of habit. So, to me, maintaining is very hard. Maintaining, to me, is ten times harder than losing weight. Ten times harder.
- MIMI: (898) That you always have to have some form of exercise with weight loss and weight maintenance. Always! Has to be some form of physical activity. To me, a similarity would be.. and I would probably do better if there were goals. I mean usually there's a goal when you're losing weight. To me probably, there should be a goal when you're maintaining and that might be where I get off the bandwagon. I don't know... (940) It's in my head! It's the game I play with myself in my head. I'm determined when I'm losing weight to lose it. When I'm maintaining, I think I can cheat and just do this and that and then I'll take a few pounds off if I have to. It's all here [pointing to her head]. [chuckle] It's always about the head game you play when you're losing weight.. always!.. whether you're losing it or maintaining it.
- SALLY: (664) You're more goal driven. You want to get that forty pounds or what have you. You lose that focus after you have lost the weight. And maintenance is like you let up on yourself quite a bit. You're not as driven. So it's a little harder to maintain.
- LORI: (142) I think during the six months that I lost, I really didn't get tempted. I was really focused on the event and what I needed to do to get to my goal. Since then, in the maintenance issue, I find myself getting tempted because I know I can lose it, and it is not as easy when you're not as focused. I get tempted..

Repeated Cycles of Gaining and Losing Weight

A number of women described accounts of weight cycling, or yoyo dieting, involving repeated experiences of gaining weight followed by attempts to lose the weight. These descriptions differed from those in the previous section that focused on the experiences within weight loss and weight loss maintenance. The descriptions of repeated cycles focused globally on the repeated cycles.

- CINDY: (65) For me, when I lose weight, I'm a yo-yo dieter. I have done this since I was in high school. Some people can just cut down here and cut down there. But with me, for some reason, it needs to be pretty drastic for the diet to be successful... (427) It was one of those things that, "How can I ever go back to being fat again? How could I ever do that?" And somehow it always manages to happen... (441) It's just that when I get to a point where I have reached a goal, then it's like I can slack off a little bit. Then those habits that.. they say, what does it take—six months—to make a new habit? I've done it three or four times now. I think that I have created new habits and will never go back. Somehow I always slide back into those old habits and turn around and gain the weight back.
- FAY: (24) I was hoping that.. this was not my first time with Weight Watchers. I've done that before. I had pretty good success so I thought that I would have success again.
- ANN: (612) Uh huh. I have had numerous successful weight losses in my past and it seems like each one changed because of a lifestyle change. The first one was having a baby and the second one was moving to town and creating a new lifestyle here. And then I didn't do anything for ten years and that was a big negative.
- MIMI: (49) All the other times I lost weight.. when I was an eighth grader it was about being athletic. I was always athletic but it was about being able to play high school sports and be a cheerleader. Which I dropped 50 pounds. between my.. in three months... (53) Between eighth grade and my freshman year I dropped 50 pounds. Made the cheerleading squad. Was active in all sports in high school. So managed to keep the weight off all through high school just because I played volleyball, basketball, track, you name it. Then of course, went to college on a scholarship. So the first couple of years I gained the typical fifteen pounds probably but kept most of those off. But after I transferred to [another university] and was not playing sports and that. Then again just slowly gained it and took it off. You know as a college kid you gain it and take off, gain it and take it off. So then the next significant event that I remember losing a lot of weight for was my wedding. And after that was a cruise. After that it was three babies.

Summary of Cycles and Patterns

This category of cycles and patterns provides a description of the dynamics and interrelationships of the women's varied experiences. Their descriptions revealed the many parallel and intervening experiences occurring during their weight loss and weight loss maintenance. The themes within this category capture the women's expectations, challenges, and the complexities entailed in their weight change and weight maintenance efforts. The

existence of multiple, interacting cycles and patterns suggests that they mutually depend upon and influence one other

Thresholds and Fluctuations

The category of thresholds and fluctuations captures the dynamics occurring at the limits of each woman's varying experiences. Thresholds are the boundary-lands between the various cycles the woman acknowledges as interacting with her thoughts, feelings, and behaviors. A threshold is often referred to as a "light bulb" moment, a sudden realization, or an "epiphany". The three women below experienced such a moment just prior to beginning weight loss.

MIMI: (94) Prior to that light bulb going off. You know prior..

CRM: ..leading up?

MIMI: ..leading up to that. But I remember just thinking.. And my co-workers will tell you. I get something in my head, that's all it takes. Well, as you know, weight loss is a head game. So you ain't going to lose any weight until your ready for it.. until your head's in it. And you might not know that.. [chuckle] people who struggle their whole life. If you're not ready for it.. but yeh, the minute I decide I am going to do it then that's it.

SALLY: (365) And I looked at myself and I'm like, "Here I am! I am exactly what I didn't want to be!" That was real powerful.

CRM: Did that come as a flash to you or did you recognize that as it was occurring?

SALLY: That was a flash.

CRM: Was that part of the decision then?

SALLY: Uh huh.

CRM: What caused that connection? Can you think of anything that really thrust that into your...

SALLY: I must have just looked at myself and seen myself at how I looked and it flashed. Another impact was so stupid and it's not even worth mentioning. For some reason it hit me and it was that Titanic movie came out about then. You know how often you've seen the Titanic movie and they're all about the same. It wasn't about the people dying as much as I grasped from it that this is not how I want to die. "I want to be in good shape. I want to have a good life. I want control over my life. I want this. I want this. I want that before I die." For some reason that hit me.

CRM: So really the Titanic movie and the impact it had on you, if I understand you, is really about what's life about and what...

SALLY: Uh huh. Kind of a mid-life crisis I think at that stage.

CINDY: (482) And that time I woke up that morning and said, "This is stupid. I'm an adult. I can control what I put into my mouth." That one took no preparation. It was just like.. it was an epiphany from the night before and I thought, "I'm never going to find myself in this situation again." Being afraid to have fun because of my size.

The thresholds are those places or moments in time when she considers shifting to engage in new thoughts, feelings, and/or behaviors. Fluctuations represent the women's descriptions of movements toward or away from the thresholds. Each woman described the ways she monitored her movements toward or away from the thresholds. She provided examples of the degree of control and intentionality she experienced while she used specific routines and structures for losing or maintaining her weight loss.

Monitoring

The women monitored their weight fluctuations through observations of a variety of indicators.

The list of those indicators is reflected on the member check report (see Appendix E) and the frequencies of the indicators in the transcripts are summarized in the table below (see Table 4.3).

Indicators	Specific examples from transcripts	Number of occurrences
Clothes	way clothes fit, buying new clothes, clothing sizes, clothing availability and variety	34
Body shape and sizes	 waist, hips, thighs, fingers 	7
Physical feelings	stomach bloated, tired or lethargic, quality of sleep, pain, degree of movement, double chin, general discomfort, hunger, water retention	31
Health issues	 lower blood pressure, lower cholesterol, better management of irritable bowel syndrome 	10
Activity level	 walking, exercising at the gym 	11
Food intake	 keeping track, portion control, awareness of calories 	8
Psychological and emotional feelings	energetic, depressed, anxiety level, general well-being and health, attentiveness to own needs, determined, pride, confidence, excitement, fears, embarrassment and covering up	38
Goals	 moving toward or away from goals 	12
External sources	scale showing weight stabilization or change, picture of self, image in mirror, others' comments	41

Table 4.3 – Occurrences of Indictors Used to Monitor Weight Across the Sample

Some monitoring techniques pointed to internal states such as: attributes of physical and mental health, changing medical conditions, or alignment with personal goals. Others reflected external states involving both personal and relational components such as: availability, sizes, and fit of her clothing; body shape attributes; activity level and approaches to food consumption; scale readings; and images represented in the mirror and photographs; or the comments of others that reminded her of her fluctuations. Examples of the statements women made referring to the indicators of monitoring activities include the following:

MARGARET: (680) Because I did get rid of the very largest of the clothes. The twelves and fourteens have been put away. I have an array of tens and eights and one pair of sixes. [chuckle] That's the six [that] fits. As I was losing weight, I'd buy that would get me to that level kind of thing.

CRM: Did you buy in anticipation or as you got there?

MARGARET: No, as I got there. As I got there. (clothes)

MARTHA: (145) You know I kind of had little goals in my head I think that when I walked I got it in. It was like, "OK, I got my exercise in." (goals and activity level)

MIMI: (478) When I get ready to lose it's a steady 1200 calorie diet, exercise. It's just what I do. (food intake and activity level)

DARLA: (953) Probably back at that stage I was keeping track of everything that went into my mouth. Now I just kind of know... I just kind of do it naturally in my head. (food intake)

Range of Routines and Structure

Engagement in food and physical activity varied at different points throughout weight loss and weight loss maintenance for many of the women. Those describing their movement toward or away from the goals and objectives related to weight issues often employed routines and structures ranging from periodic to consistent. The member checks provided proximal degrees of difference along a continuum between the two ends of the range. The women's use of routines and structure was divided between those used in weight loss and in weight loss

maintenance. The continua were defined by broad ranges, consisting of four segments, based upon the women's descriptions: from the periodic range (intermittent use, periodic use) to the consistent range (less consistent use, consistent use) (see Table 4.4).

Comparing use of routines and structures during WL & WM	Examples from the transcripts	Number of Participants
WL ↑ - Consistent range WM ↓ - Periodic range	Cindy WL (67) "For me it needs to be pretty drastic for the successful." Cindy WM (1000) "Once I get to a point I felt where I had then I'm like, "OK! I'm done!" Fay WL (485) "I had to be very, very careful about what I was out I had it all planned out." (552) "I was exercising more." Fay WM (763) "There were times that I would binge and times I could go back on the routine" (777) "More free-flowing" (1057) "It didn't seem like there was any plan."	lost enough t I ate when 4 I there were
WL↑ - Consistent Range WM↑ - Consistent Range	Darla WL (404) "Taking three kids and trying to do a rest learned how to do it and to eat wisely." Darla WM (741) "Exercise now happens five days a week days a week. Ideally seven." (918) "The exercise is critical." Margaret WL (238) "If the diet routine does not fit your every routine, you're not going to stop and make time (1086) "I was extremely regimented to the prog Margaret WM (1019) "I have my routine and I'm not upset wiroutine. I'm not annoyed by the routine." (1178) "The program never impacted the eveni ['family'] meal." (1297) "I relaxed a little bit but I did not alter the program."	or seven yday e for it." gram." th the

Table 4.4 - Comparing Use of Routines and Structures During WL & WM

Four of the women described using routines and structures consistently during weight loss but as they transitioned to weight loss maintenance they decreased to periodic use. Mimi provides a description of the difficulties she experienced trying to make meal plans during her weight loss maintenance.

MIMI: (741) When I'm on maintenance I don't well.. I don't do well planning. I just run through the store three, four nights a week.. whatever I need.. whatever I pick up for dinner this.. The planning goes away. For me, when I get to that maintenance point I just.. I don't know.. I just truly go from being very

disciplined [chuckle] "Oh my God you can't force food down me," to "OK, well I've lost it now so here it goes."

Similarly, Cindy (see Table 4.4) described the most extreme contrast between weight loss that is "drastic" and weight loss maintenance that signaled she was "done." Her descriptions suggest that she experiences the differences between weight loss and weight loss maintenance as being either "on" or "off"—her use of a rigid structure and routine or devoid of any structure or routine. Ann's description of the same shift was less pronounced, however, the freedom she described lead to her eventual periodic use of routines and structures.

ANN: (583) In the weight loss, I think there's no room for exceptions... Where in maintenance I think there is a level of, "Well OK, maybe this time and I'll get back to it tomorrow." There is a little bit more freedom in the maintenance than there is in the loss.

Each of these women moved from the consistent range to the periodic range of the use of routines and structures.

The other six women described some variations in their use of routines and structures to reinforce their weight loss and weight loss maintenance, however, they each remained fairly consistent or increased over time. Margaret provided unique descriptions of her development of a regimen that accommodated other daily routines such as work responsibilities and a family meal

MARGARET: (1172) I chose a program that fits into my daily schedule... (1178) And because this program never impacted the evening meal which is the family meal, even program ...

CRM: Even during loss?

MARGARET: That meal was never changed, never altered and that probably did more to insure my success because the evening meal is family time... (1197) With any other type of a program I would not have been successful I think.

Though Margaret had an established routine that enabled her to lose weight and maintain that weight loss, she deliberately developed a routine incorporating "convenience meals" that

enabled her to work through lunch and a structure that eventually allowed for her to share the evening meal with her family.

Range of Control

A woman's range of control represents her descriptions of her ability to manage the fluctuations that occur between threshold levels. This range represents the upper and lower limits of a woman's range of experienced control spanning from feeling out of control to feeling in control. The women's feelings of control were divided between those experienced in weight loss and others experienced in weight loss maintenance. The women's responses along each continua encompassed two broad ranges consisting of four segments from the low control range (predominantly feeling out of control and somewhat feeling out of control) to the high control range (somewhat feeling in control, and predominantly feeling in control) (see Table 4.5).

Comparing experienced levels of control during WL & WM	Examples fr	Number of Participants	
WL ↑ - High control range WM ↓ - Low control range	Ann WL Ann WM Cindy WL Cindy WM	(576) "Requires a level of willpower" (673) "Going back to work threw me into maintenance whether I wanted to or not" (152) "I felt very in control. I felt like, 'Yes, I'm finally doing something right."" (812) "But that middle ground (maintenance), I don't know which, for most people, that's life. But for me gaining and losing is life."	4
WL↑ - High control range WM↑ - High control range	Dorothy WL Dorothy WM Sally WL Sally WM	. , .	6

Table 4.5 - Comparing Experienced Levels of Control During WL & WM

Four women moved from the high control range to the low control range as they shifted from weight loss to weight loss maintenance. Each woman described experiencing fairly high

degrees of control as they strictly adhered to their weight loss efforts. However, when they moved into weight loss maintenance, the levels of experienced control diminished. For Ann, she noted that she never intentionally chose to end weight loss and begin maintenance. Her return to work impacted her perceived control of her continued efforts to lose. Ann's description of her shift to maintenance appeared to result from her decision to return to work, which overrode the control she experienced during weight loss. Conversely, Fay chose to shift to weight loss maintenance, however, but later experienced the feeling of spiraling out of control.

FAY: (807) There were times I felt out of control.

CRM: In what way?

FAY: Well, you know, eating too much, gaining too much weight. Not being able to quite get back on the routine. Having one bad day after another.

The other six women described weight loss as difficult and requiring a heightened vigilance through which they experienced a degree of control. An example is Dorothy's description of maintaining control by determining foods she wanted to include in her daily diet. Despite their shifts to weight loss maintenance, these women continued to experience a high degree of control. When they incurred a number of weight fluctuations, these women experienced a sustained control as they used their routines and structures to counter the fluctuations and reestablished their goal weight during maintenance.

Range of Intentionality

The range of intentionality reflects the degree to which each woman chose to engage in weight change efforts. The responses coded with this theme reflect her deliberate use of specific strategies to begin weight loss or in an effort to counter challenging relationship interactions or environments. Strategies generally focused on food and activity planning and her subsequent choices resulting in weight loss or weight loss maintenance. The women's intentional choices were divided between those demonstrated during weight loss and the others during weight loss

maintenance. The women's descriptions of their choices were divided into two broad ranges of four segments, from the low range (predominantly unintentional choices, somewhat unintentional choices) to the high range (somewhat intentional choices, and predominantly intentional choices) (see Table 4.6).

Comparing experienced levels of intentionality during WL & WM	Examples from the transcripts		Number of Participants
WL ↑ - High intentional range WM ↓ - Low intentional range	Ann WL Ann WM Mimi WL Mimi WM	(592) "Your choices have to be very regimented. Very strict." (355) "I just eased into it. It was never a conscious decision. It just happened." (594) "You have little bit more leeway what you can do and the choices you have" (586) "Little bit more freedom" (101) "Weight loss is a head game." (104) "The moment I decide I'm going to do it then that's it." (745) "Very disciplined" (742) "I don't do well planning The planning goes away." (746) "OK, well I've lost it now so here it goes."	4
WL↑ - High intentional range WM↑ - High intentional range	Martha WL Martha WM Lori WL Lori WM	(57) "I think in my mind I made the choice of this is the right time." (790) I get a visual on this and see. I think in my head, 'I'm full now. Stop."" (798) "And now it's, 'What am I eating here? Is this healthy? Do I want to eat this? What's in this stuff?'" (497) "I was so focused on the goal and that was my whole existence for six months." (498) "I have had to weave it into my daily life and I'm not as obsessed about it."	6

Table 4.6 - Comparing Experienced Levels of Intentionality During WL & WM

Four of the women described the ways they made intentional choices during weight loss. Each of them offered global descriptions of their choices. Mimi and Ann described the strict nature of weight loss that requires complete focus and intentionality. Ann noted: "Your choices have to be very regimented. Very strict." She further described the implications of her strict, intentional decisions as she noted the ways she responded to family members who asked her to choose to eat food that was not part of her structured meal plan.

ANN: (469) When I was in full weight loss mode I had my walls up and said, "No. No, no, no." I was very strict. But in maintenance, I'm not in a loss mode so my walls weren't as high and my resolve wasn't as strong to say, "No." My willpower wasn't as strong.

When these women moved into weight maintenance, they resorted to choices that lacked intentionality and deliberateness. Described by a greater degree of freedom or resignation, the women reduced or even discontinued making the intentional choices that had lead them to lose the weight. Mimi describes the way that she tires through the efforts to lose her weight. Subsequently, she relaxes her planning and decision-making during weight loss maintenance. Though she continued to monitor weight fluctuations, she responded to her discovery of some weight gain by appearing to reduce her efforts and the types of intentional choices that resulted in her weight loss.

MIMI: (650) Well eventually, if you aren't rigid, rigid, rigid constantly, it comes back and it starts creeping back on. And then it creeps back on and you think, "Oh God, instead of two pounds now I've got to lose five." It's a whole mental thing and it's easier at times to not have to play that game.

The other six women described continued use of intentional choices as they moved from weight loss to weight loss maintenance. Both Martha and Lori described the ways that they, too, intentionally approached weight loss and engaged in the process using a high degree of intentional choices. However, these women noted that intentionality continued as they moved into weight loss maintenance. Despite fluctuations in their weight, these women continued to "plan ahead" for meals and exercise, monitor their body signals such as "stopping eating when full," "choosing the right foods and exercising," or responding quickly and decisively when they noticed weight gains.

Summary of Thresholds and Fluctuations

Each of the women described ways that they monitored the fluctuations of their weight

and their weight-related activities throughout weight loss and weight loss maintenance. As they approached predetermined weight limits they often responded to these thresholds through further monitoring. Depending upon the women's varying degrees of perceived control, the women responded through the use of varying routines and structures and a range of intentional choices.

The same four of the women described the ways they moved to the periodic, low control, and low intentional ranges during weight loss maintenance. Each of these women eventually regained their weight and had not relost it at the time of the interviews. The other six women described relaxing their efforts to some degree as they shifted from weight loss to weight loss maintenance, however, they each remained at the high levels of each range. Lori's explanation of the intentional choice she made as she shifted to weight loss maintenance provides a representative sample of the shift each of the six women described.

LORI: (496) I felt like I was more driven so it was almost a little easier to lose it because I was so focused on the goal and that was my whole existence for six months and now I have to weave it into my daily life and I'm not as obsessed about it. So it's not as forefront in my mind I have to be more conscious about thinking about it. I think in some aspects it is harder to maintain than it is to do the initial loss.

She described the way she wove the elements associated with weight loss into her daily life. Her description of her intentional choice was addressed at the meta-process level, incorporating her weight loss monitoring, routines, and experience of control into other aspects of her daily life.

Defining Self

Throughout the transcripts, the women's descriptions and definitions of self were often connected to their descriptions of others. The "other" may be an actual person or a "personified other" representing her construction of another through a composite of general descriptions of others and their relevance to her experience. Gender appears to be a factor contributing to the predominantly affiliative descriptions and definitions of self throughout these interviews.

Women are more likely to compare and contrast their own views and experiences with those of others (Knudson-Martin, 1997). As a guide for differentiating women's views of self, I use the definition of self provided by Gergen (1971) that describes self as both a process and as a structure. As a process, self develops and is shaped throughout a woman's experiences and interactions with others. As a structure that defines who she is, the self organizes her personal experiences into definable characteristics of her self that are compared and contrasted with the characteristics of others.

The four themes under this category of defining self are further differentiated from one another with my use of capital letters to accentuate the operative word for each theme. The themes are: self AND other, self SUB other, self NOT other, and self VERSUS other. *Self AND other*

The theme of *self AND other* captures the women's descriptions of experiences describing affiliations and connections with others. When a woman described herself and her efforts to lose or maintain weight loss, she often made comments that incorporated and connected her experiences to those of others. Mimi described her own exercise experiences, noting ways that her personal experience was similar to and even shared with a friend.

MIMI: (210) I don't enjoy exercising. I don't enjoy anything about it because I've got to do it... unless I'm walking with a friend and talking which I like to do... (785) Bitch sessions with my walking partner. But nothing memorable. Just an ongoing you know like when you're out walking and we're talking it's like, "Oh my God, I've gained five pounds of the fifty that I've lost."

Through a woman's association of shared experiences, some women described the emergence of a greater degree of empathy for others. Some described making deliberate efforts to offer encouragement and support to another person. Darla described the transformation in her

own thinking that resulted from her weight loss experience. She noted that she experienced increased empathy for others and a better understanding of their experiences.

CRM: (469) How have your thoughts and feelings about yourself and others changed? DARLA: That's a hard one because I deal with this every day. I think I was one of those people that was guilty of thinking that people that are very large are lazy and they can lose weight. If they would just stick to it they could lose weight. I think my whole feeling and thought about that has probably changed because I've gone through it and can understand it a little bit better.

Ann described the correlation of her weight loss experience with her improved thoughts and feelings about herself and others. Her changing descriptions of self incorporated others into those descriptions. She noted, "(27) The more weight I lost the better I felt about myself and others. I was more.. willing to go socialize." As she began feeling better about herself she noticed a simultaneous improvement in the ways she felt about the others around her and tended to increase the frequency of interactions with others. She also described the ways in which she not only shared similar goals with the other women at work, but she also supported their common efforts to lose and maintain their weight loss: "I was a big cheerleader and proponent of, 'Let's keep doing this.""

Self SUB Other

A woman's comments were coded as *self SUB other* when her definition of self exemplified ways she subordinated her personal judgments, goals, choices, or other values to those of another or personified other. Demonstrations of this theme are contrasted, in part, with the following theme (*Self NOT other*). Instead of determining her course of action strictly based upon her personal decisions and priorities, she subordinated her weight loss and weight maintenance efforts in response to the comparative value she placed on the requests or expectations of another or her desire to affiliate with the other. Martha described the ways she

postponed or abandoned her own plans to exercise and adhere to her meal plan when her husband came home with snacks and movies

MARTHA: (227) Like the last two days he was off work and he rented movies. So instead of going to exercise we watched movies and yesterday he bought food I don't eat which put me off track because I don't usually do that. And I didn't get my exercise in and ate the wrong choices last night but I thought "That's OK. I don't go off track too much." But that does set me back when he is off work.

Instead of incorporating a plan that accommodated the times when her husband is home and spending time together, she went off her routine and adjusted later.

Where Martha subordinated her plans to those of her husband, Fay subordinated her own perceptions of herself to the perceptions others had of her. She described her efforts to lose weight as her attempt to gain acceptance from others. She stated, "(237) And if I felt I was thin and decent looking, they would look to me more. That they would accept me more."

Two women described the ways their interests were secondary to those of their partner or family. As each made efforts to lose weight they reflected on the ways they depended on the family members' views over their own to support the continuation of their efforts.

CINDY: (288) But I do remember several times.. we were pretty active socially for a while at a point in our marriage. We would go to a party and he would go, "You know, you were the thinnest one there." And so that kept me going for a while. And then it was like, "You know, I'm dying here. I can't eat anything. I have to exercise two hours a day. I don't have the time to do that... (341) I remember one time we were in the car going somewhere and.. I don't know how it came up.. something about the clothes I had on or something. And I said, "I'm sorry. I'm trying. Does what I've done not make any difference at this point?" And he says, "I don't know. Just keep on doing it." There was no.. there wasn't a "So far you've done great. I'm really proud of where you've come." It's, "Keep doing it." And to me I saw it as, "Or else." There was kind of that implied 'or else' underneath it.

Cindy interpreted her husband's comments as threatening to her and to their relationship. His insistence on continuing her weight loss efforts eclipsed her own judgment about whether or not she should continue the effort and its effect on her personally and physically.

For Margaret, her perceived family support was an implied necessity for engaging weight loss and weight loss maintenance without which she would never have begun losing weight.

MARAGARET: (1197) With any other type of a program I would not have been successful I think. And this is just me personally because of the way our family I set up and etc. Anything that would have made the family change or alter that evening meal would have been regarded as inconvenient and "Don't do that. Stay heavy."

Self NOT Other

Evidences of the theme *self NOT other* reflect ways that women described themselves, noting how self is different from or differentiated from the other. Statements included examples of the other coupled by contrasting statements describing her personal characteristics and experiences. One example is illustrated by Ann's statement comparing her involvement in exercise routines with those of her friends such as, "I wasn't as extreme as she, but I can see where people may have thought that." Another contrasting example is represented in Cindy's statement about her experiences of weight-related issues. She described how different her experience is from the experiences of most people. She uses this contrast to accentuate the degree of difficulty that weight maintenance presents to her.

CINDY: (810) My thoughts are definitely one way when I'm thin and another way when I'm heavy. But that middle ground, I don't know.

CRM: So maintenance would be the middle ground?

CINDY: Yeh. Which, for most people, that's life. But for me gaining and losing is life.

When faced with others' comments or overt efforts to challenge her views of herself, this theme represents those instances when the woman defined a boundary between herself and the other. When she established the boundary she either explicitly contrasted herself from the other or limited her description of self to herself. Dorothy provided an excellent example of establishing a boundary as she described her husband's impatience with her weight loss efforts.

She provided a clear boundary between her actions and his responses by attributing his responses to him and not reflective of her.

- DOROTHY: (127) I would say if anything that my husband wasn't as patient with me being heavy. So I guess my perspective with him was like....you know because he could lose easily.. I guess I was talking about his feelings.. just not enough patience or understanding on well you know what's the deal here.
- CRM: (138) I mean for you. Did you become frustrated about that? What was your response to that?
- DOROTHY: I just thought he was impatient.. [laughter] ... (154) and I kind of tend to be like that cuz if it's somebody's problem it's their problem and not mine, so I'm sorry. (160) So I guess I think he was just being a jerk.

Some women described differences in themselves from those in their families of origin.

They described the prevalent family histories of medical conditions and family histories associated with food consumption and physical activity practices. They noted ways they were going to attempt to be different from other members of their families. Lori described her mother's diabetes and her intention to reduce her weight and determine a different future for herself

LORI: (20) my mom's family has always been kind of overweight. And I knew about the diabetes and some of that is genetic but some is also weight-related and just kind of thought "Well, if I lost some weight maybe that wouldn't happen.

Occasionally a woman described her thoughts, feelings, behaviors or personal goals while offering no reference to another. Statements described feelings of self-worth, self-discovery, and self-efficacy. Representative examples include: Darla said, (490) "I just feel really good about myself I guess. I'm proud of myself for what I have accomplished. Proud of myself for keeping it off." Fay's description, (70) "I felt because I was successful at losing weight, I could be successful at my new job." Lori said, (634) "The donut called me and I hung up."

Statements coded with this theme also reflect a woman's focused description of her own qualities and abilities without an explicit connection to others. Occasionally, the reference to the other was an image of her former self. The woman wanted to reestablish that former self through weight loss and weight loss maintenance.

CRM: (666) OK. How have your thoughts and feelings specifically impacted your weight loss maintenance?

MARTHA: I don't want to be that same person. I'm kind of scared to be that same person again. I don't want to lay around. I don't want to feel bad. I want to be able to sleep like I have been doing. I think that's a big impact. To keep looking back on that other per.. I call her the other person but that's what it reminds me of because I just feel like a different person. I'm not sitting around watching TV. I don't watch TV hardly at all any more. I'm constantly going.

CRM: When you compare yourself now with that other person...

MARTHA: Uh huh.

CRM: ...that other person and yourself, there's difference in terms of activities. What else?

MARTHA: I'm constantly going. It seemed like the other person, I don't know, physically I didn't have enough stamina to do things. Now I do. I have all of this energy and [husband] sometimes like, "Where do you want to go now? What now?" I just feel like I have all of this energy to do stuff. And the other person, I didn't have energy like that. I'd come home and sit around more. Now it's like I have all of these thing to do and not enough time to do them.

Self VERSUS Other

Many of the women described a view of self incorporating competitive and even adversarial conceptions of another person. *Self VERSUS other* captures statements describing jealousy, envy, frustrations or intolerance experienced toward or perceived from others regarding weight-related issues.

DARLA: (280) I think they were all proud of me. Maybe a little jealous.

CRM: (288) I see. And when you say proud, how did you know?

DARLA: The compliments, the, "You did a really good job." That kind of thing. I have a sister-in-law that is my husband's sister that struggled with her weight a lot about the time that I lost most of it she kept asking, "How are you doing it?" so you can tell there is that envy but that type of thing.

MIMI: (116) I would look at them and think, "How can you eat all that food and drink all that food and.. you know, be little." Cause there are just so many women who

can do that stuff. So I suppose there is a little bit of jealousy there. I don't know it's just that's always hard. The feeling of, "Here I go again. Why do I let myself get to this point again and now I have to struggle to get it off again.

Mimi's comment described the way her jealousy of other thinner women arose when she considered the difficulties she experienced losing and maintaining her weight. Her jealousy appeared to focus more on the difference in effort than the comparative size of the women.

Sally's following description of herself contrasted with another ostensibly suggests the code *Self NOT other*, however, the main point of her contrast captured her experience of envy toward other thinner women

SALLY: (22) Frequent thoughts of others? I can tell you about myself. It was just pure disgust. You know I think of others.. at that point, yeh, I remember thinking just like most women, "She's thin. She's happy. She must have the world by the tail because she's thin and looks good and I don't care how even flabby I am, I'd rather be thin [chuckle] and flabby than big and muscular. Yeh, I think there was a little bit of envious.. envy on my part of women that were thin. Pure disgust with myself.

Summary of Defining Self

The women described varying definitions of themselves that they developed while comparing and contrasting self with others or their perceptions of others' views of self. The women revealed that their thoughts and feelings about self and others were mutually influenced by their decision-making and behaviors. The interplay between their interactions with others and their personal characteristics influenced the ways they perceived the meanings of those experiences.

Contextual Connections

The current category of "contextual connections" reflects various factors of the women's embeddedness in relational and environmental contexts. Each woman described various contexts that are relevant to and impact her experiences and the meanings she derives from those

experiences. The impacts are divided between passive and active factors, depending upon the degree of deliberateness of the factors to support or counter the women's weight loss and weight loss maintenance efforts. Themes labeled *relationship facilitations* and *environmental facilitations* represent those experiences with factors actively or passively supporting a woman's weight loss and weight loss maintenance efforts. The deliberate or passive undermining or sabotaging effects of relationship interactions or environmental factors are represented under *relationship pressures* and *environmental pressures*[†].

I make a definitional distinction between relational and environmental factors. Relational factors encompass descriptions of specific interactions affect the women's ongoing relationships with another person. Environmental factors are focused on the contexts of home, work, church, and other social environments. Women's statements often described a general milieu or specific encounters with a person contributing to the milieu or culture of the environment.

Relationship Pressures

Women described periodic or ongoing interactions with others that she perceived as frustrating, intrusive, hurtful, or confusing. These relationship pressures often entailed descriptions of a degree of distrust and sometimes included conflictual or adversarial exchanges.

Mimi described her conflict with her husband around couple division of responsibility issues around the home. She noted that the conflict had eventually influenced her weight loss maintenance

[†] Since designing the Member Check, I renamed three of the categories to improve the clarity and consistency of those categories. Relationship *struggles* was changed to relationship *pressures* to more clearly align with the experience of pressures in the environment and to properly place the emphasis on the differences between the relationships and environments. Relationship *building* and Environmental *coordinations* were each changed to include *facilitations* which denotes less deliberate and intentional processes but still supportive of women's WL & WM efforts.

CRM: (701) In terms of your husband or other family or friends, how are they involved in this maintenance period? How is he impacted? How does he impact your maintenance?

MIMI: I don't think that he does. If he would step up to the mark to do more to allow me not to have to be in the kitchen.. to allow me exercise.. I guess when you ask it that way sometimes I don't feel like. I feel like he could do more to help support that..

CRM: I see.

MIMI: And so then again if he's not willing to help cook dinner or if he's not willing to pick up some of the slack around the house so that I feel like I can be gone for an hour exercising, then it's almost like, "Forget it! It's not worth it. You don't care what I look like. I should care what I look like but, you know what, I'm tired of fighting it.." So, as far as the maintenance goes, there are times that I think that but.. does that impact?.. Yeh it probably does I guess!

Fay described the combination of her husband's and others' passive sabotaging of her weight loss efforts. She did not suggest that the others' confusing comments were intentionally expected to sabotage her, rather her perception of the lack of support had potential sabotaging effects on her weight loss.

FAY: (88) As I lost the weight, people at church began to say, "Now, don't lose too much weight. You want to be very careful. We don't want to see you looking too thin." And [my husband] was not terribly supportive because he liked full meals. And I needed to cook full meals for him. And why was I not eating very much? So I finally confronted him. [laughter] He was trying to sabotage my weight loss... (107) One of them said, "We knew you were losing weight but we didn't expect you to become so pretty." Which I thought was, "What do you mean?...

CRM: Yeh!

FAY: ...What is that statement?" CRM: How did that strike you... FAY: I thought it was really crazy!

Occasionally the women's decision and subsequent efforts to lose weight was met with a partner's anger and overt sabotaging of those efforts. Sally described her husband's response to her decision to stop drinking as a way to reduce her calories.

SALLY: (469) I quit drinking.. my husband drank. That probably was the only impact or difference because I had always tried to cook healthy. I had always tried to have the right foods at home. I don't think I changed that necessarily. I quit drinking to help the weight loss and he didn't care for that. So yeh, that would be

- a big factor there 'cause he didn't have a buddy to drink with anymore. Yeh. I'm sure he didn't care for that so he might have had a little grudge actually, because of the fact that I was going all out to do this.
- CRM: Did he do things or say things that gave you the impression that it was a problem for him?
- SALLY: Yeh. What were they?.. He would bring.. knowing I was trying to lose weight.. he would bring home candy which he didn't normally do. Or he'd buy instead of a pint of vodka, he'd buy a fifth of vodka. Or he never tried to help me in those.. he never kept it out of sight. He put it in plain view.

Each woman described the ways that the relationships she experienced ran counter to the efforts she was exerting to lose or maintain her weight loss. This theme captures the lack of support a woman experienced that countered her efforts to lose and maintain weight loss. The following theme provides examples of a direct contrast with supportive relationships.

Relationship Facilitations

There are descriptions when a woman experienced relationship interactions with others as enhancing her weight loss and weight loss maintenance efforts while simultaneously building that relationship. The *relationship facilitations* theme also captures the descriptions of the ways those interactions informed and influenced her perceptions of herself while building trust with the other person. The women's reflections tended to focus less on evaluating or assessing the relationships and more on the ways those relationships facilitated her involvement in weight loss and weight loss maintenance.

In an effort to foster her relationship with her husband and her son, Martha decided to lose weight. She saw the weight loss as both enabling her to do things she wanted to do while fostering the relationship she valued with members of her family.

MARTHA: (273) My [husband] didn't say, "I think you're heavy. You need to lose weight." I think I made the decision on my own. In a sense they were my decision because I couldn't do things with them.

CRM: So they didn't have an active part but they were a good reason?

MARTHA: Right. They were kind of the decision because I wanted to do things with them. But then I made the decision to do it.

At the outset, the woman in the following example may appear to lack support from her husband. However, her full description recognizes their cooperative effort to determine the extent of their conversations and the boundaries that each would support with one another.

MIMI: (295) He's always supportive of [my weight loss] but never says one word one way or another. If I lose weight he doesn't say one word about it or compliment me. If I gain weight, he doesn't say one word about it like, "You need to lose weight." It's something he's always known has been a struggle for me and has been an off-limit subject [chuckle] for him.

CRM: Did he learn that at some point or..?

MIMI: He learned.. yes! He learned that at some point because right after we were married and I was gaining.. I'd lost all this weight for the wedding and then after we were married I was gaining weight and for my birthday one year he gave me a card to.. a membership to some workout place in Manhattan when we lived in Manhattan and it just pissed me off... (315) That one argument early on and he said, "This is the way it will be from now on. I love you no matter what. I love you for who you are. I don't care what you look like. And I am never going down that road again."

CRM: Got you.

MIMI: He goes, "You lose weight. Good for you. You're not going to hear it from me. You gain weight, whatever." And it's truly been that way ever since.

Ann described a relationship she had with a friend who was also losing weight. She underscored how that relationship supported her weight loss success as well as offering emotional support to one another.

CRM: (653)Why was a partner so important for success?

ANN: Because we challenged each other.

CRM: How did you do that?

ANN: We did it through exercise. Even though we were on separate machines, we challenged each other to run the furthest or burn those calories or if we walked outside it was "Let's take the hard route" rather than the easy route. If you were by yourself you would just take the easy route. She was important. We also shared a lot of frustrations together as far as our family life so it was therapeutic when we were exercising. That was a huge part of the success.

Environmental Pressures

The category "environmental pressures" captures the multiple pressures a woman experiences within the home, workplace, or elsewhere. These pressures encompass the physical

as well as the temporal environments impacting her thoughts, feelings, and behaviors. Her perceptions of the prevailing social expectations about weight issues, food availability, and time constraints are examples of factors contributing to her experiences of various pressures.

Mimi referred to the pressures of finding the time to exercise as the context in which she struggled to lose her weight. She explained that pressures of multiple responsibilities for the family lead to her resentment of the time she spent exercising.

MIMI: (124) I remember thinking finding the time was another real issue. In 2000 the kids would have been, I don't know, ten, eight, and six maybe. Eight, six, and four. So finding the time to do that kind of stuff. I guess I felt a little cheated. I didn't feel like I had time for myself. That might be a good feeling there. You know, you got [inaudible], you've got kids, I've got full-time.. I work here. I'm a full-time.. put in a lot of hours here. Kids get into things more when they start getting older and it was just crazy running all.. it still is. Anyway, so probably cheated a little bit... (174) The timing issue.. the feeling cheated and always having to find time for me, I guess didn't get me off track but probably pissed me off a little bit because I had to exercise at nine o'clock at night. I mean I had to go to the Y and swim laps at nine o'clock at night because that was the only time I could find time for me.

Countering the societal pressures on girls, Lori described the pressures she faced while growing up and the pressures to be thin that her young daughter apparently experiences. She described how she counters those pressures with specific comments. By implication, Lori experienced those same pressures countering her weight loss efforts.

LORI: (427) I think just being an overweight girl and knowing what that's like. And I just feel like if I give them both the healthy basis I think girls fall more to peer pressure when it comes to eating disorders—the societal demands that are put on them. And I can even tell that at six years old. You know. The other day she didn't want to eat something because she thought it was going to make her fat. I was like, "Why would you say that?" It just blew me away. It was like, "Your six years old and in first grade! Where do you hear this stuff?" But, so I don't use the word, I try not to use the word "diet" and I just say, "This is how we eat healthy. Do you want to be healthy? Well, what do you think we should have to be healthy?" I try to give her the tools and then kind of, I guess, test her to see what she might think to be healthy.

Environmental Facilitations

The women described engaging with the environments or contexts throughout their weight loss and weight loss maintenance. Often they took cues from the environment and incorporated those cues into their thoughts, feelings, and behaviors. They used the information to inform their forecasting and decisions or to simply reinforce their planning and further engagements with those environments. Descriptions of *environmental facilitations* refer to women's encounters with environments supporting their efforts.

Some women took an active role in adjusting the environments around them to support their weight loss and weight loss maintenance efforts. Lori provided a prime example of the ways she impacted both her work and home environments.

CRM: (318) How did your environments: home, workplace, community, neighborhood, wherever, impact your weight loss?

LORI: My work environment, I was a lot more conscientious about what was around me as far as food and things like that. I kind of got rid of all of the temptations that I could control and if we were having a food day or something I would always try to bring something healthy that I could eat. It encouraged other people to eat it too. I never.. always conscientious to not call it a diet because A) I don't want.. I just think that is bad word to use especially around my daughter. You know girls are so weight conscious that I don't want her to think, "Mommy's on a diet you know and I need to be on a diet." I just always look at it as a lifestyle change. And my home environment, I took the temptations out of the way and just said, "We don't need these things. We need to eat healthy" or "We need to be more active." ..things like that.

CRM: So you took a very active role making sure that the environments will be supportive.

LORI: Uh huh.

In contrast to Lori's description of the environments, Fay described an example of the passive experiences and the types of comments the women received during encounters with others at their workplaces.

FAY: (411) I think it was one with an emergency room doctor. I hadn't seen him for a long time and he was ecstatic when he saw me and very, very encouraging and enthusiastic. "How are you doing this? Maybe this is something I want to tell

people about." That kind of thing. "You're having such great success. Maybe this is something that could help somebody else." I thought that was a great conversation coming from a doctor that I didn't really know all that well but..

CRM: So when these people were making comments, they were really out of the blue...

FAY: Yeh.

Summary of Contextual Connections

The women described the interactions and environments that interacted with their weight loss and weight loss maintenance efforts. The separate themes under this category reveal differences between the active versus passive influences related to women's ongoing relational patterns of interaction and the encounters that occurred in broader social contexts.

Member Checks

After analyzing each of the interview transcripts and coding instances of the categories and themes above, I developed a Member Check Report. The statements were organized by the categories and themes. This report summarized the terminology and the various statements the participants used during the interviews to describe their weight loss and weight loss maintenance experiences. It was my hope that having the women see the responses from all of the participants would accomplish two purposes: validating each woman's experiences and providing an opportunity for each woman to identify themes that she may have forgotten to mention during her interview. The final section of the report included a global assessment section designed for the participant to rate the accuracy of the report in describing her actual weight loss and weight loss maintenance experiences.

I created a separate report for each participant by marking only the subthemes that pertained to that woman's statements during her interview. I sent the unique member checks to each woman, requesting that she revise, add, or delete the information under each section and provide a global rating of the accuracy of the summary describing her experiences. The results

from the Member Check Reports are summarized in the table below. (see Table 4.7) The right

Categories	Themes/ Member check statements		
Cycles and patterns	Attempt to break a prior cycle	"weight loss enabled you to change another pattern not related to weight"	8
	Cycle transcending weight loss (WL) & weight maintenance (WM)	"you described other life patterns and cycles present before, during, and after weight loss"	9
Cy	Cycles within WL or	❖ "you described patterns that were specific to weight loss or weight maintenance" (10)	10
	WM	"you described patterns that developed as a result of weight loss and maintenance" (8)	10
	Repeated cycle of gaining and losing weight	"you have experienced a repeated cycle of gaining and losing weight"	6
Thresholds and fluctuations	Monitoring		10
	Clothes	"clothes – way clothes fit, buying new clothes, clothing sizes, clothing availability and variety"	8
	Body shape and sizes	❖ "body shape and sizes – waist, hips, thighs, fingers"	3
	Physical feelings	"your physical feelings –stomach bloated, tired or lethargic, quality of sleep, pain, degree of movement, double chin, general discomfort, hunger, water retention"	10
	Health issues	* "health issues – medical conditions changed"	3
	Activity level	"activity level – level and amount of activity or exercise"	6
	Food intake	"food intake – keeping track, portion control, awareness of calories"	8
	Psychological and emotional feelings	"psychological and emotional feelings – energetic, depressed, anxiety level, general well-being and health, attentiveness to own needs, determined, pride, confidence, excitement, fears, embarrassment and covering up"	10
	Goals	❖ "goals – moving toward or away from goals"	3
	External sources	"external sources – scale showing weight stabilization or change, picture of self, image in mirror, others' comments"	9

Categories	Themes/ Member cho	eck statements			Number of participants
Thresholds and					
fluctuations	"During weight loss, you used <u>routines and structure</u> "				
	Periodic range		Consistent range		10
	Periodically 0	0	1	Consistently 9	
	"During weight maintenance, you used <u>routines and structure</u> "				
	Periodic range		Co.	nsistent range	10
	Periodically 2	2	2	Consistently 4	
	Range of control				
	"During w	eight loss, the <u>l</u>	evel of control yo	u experienced"	
	Low range		High range		10
	felt out of control	0	3	felt in control	
	"During weight maintenance, the <u>level of control</u> you experienced"				
	Low range		High range		10
	felt out of control	3	2	felt in control	
	Range of intentionality				
	"During weight loss		<i>entionality</i> of you was"	r weight-related choices	
	Low rang	re	1	High range	10
	unintentional choices	0	i 0	intentional choices	
	"During weight maintenance, the <u>level of intentionality</u> of your weight-related choices was"				
	Low range			High range	10
	unintentional choices	1	0	intentional choices	

Categories	Themes/ Member check statements		
Defining self	Self AND other	❖ "your experiences were similar to others"	8
	Self SUB other	"your weight-related needs became secondary to others' needs or interests"	8
	Self NOT other		
		* "your experiences contrasted with others" (8)	
		* "your unique experiences were without references to others" (9)	9
		"your abilities to use skills and accomplishments, relating to weight loss and maintenance, in other areas of your life" (4)	
	Self VERSUS other	"your experiences of jealousy, envy, competition, or intolerance while relating to others"	7
Contextual connections	Relationship pressures	(changed from Relationship struggles)	
		* "adversarial, conflictual interactions" (6)	
		 "imbalanced roles and responsibilities – relating to couple or parenting areas" (2) 	
		 "compromised boundaries – others' inappropriate comments of or expectations for you" (5) 	
		 "others' expressions of no support, sabotaging influences, manipulativeness" (9) 	10
		❖ "your experiencing of compromised trust" (1)	
		"others' hurtful, disrespectful, or confusing messages" (7)	
		"your avoidance of time together with others"(4)	
	Relationship facilitation	ns (changed from Relationship building)	
		* "common goals and struggles were shared" (8)	
		 "communication about goals and struggles were shared" (7) 	
		"challenges to continue efforts were shared"(5)	10
		* "trust was shared" (2)	
		"responsive, respectful, open messages were offered" (9)	
		❖ "you enjoyed time together" (7)	

Categories	Themes/ Member check statements	
	Environmental pressures	
	❖ "limited food choices" (5)	
	* "time constraints" (4)	
	❖ "your perceptions of social expectations" (8)	
	❖ "financial constraints" (1)	
	* "a general climate that undermined your weight loss and weight maintenance goals" (9)	
	Environmental facilitations (changed from Environmental coordinations)	•
	"your forecasting and planning prior to involvement" (5)	
	* "others' validating your efforts" (10)	10
	* "others' accommodations for your needs" (4)	
	* "a general climate that supported your weight loss and weight maintenance goals" (9)	
	Global assessment of results	
()		10
Stro Disa		

Table 4.7 - Summary of Participant Responses on Member Checks

column lists the number of participants who described experiences illustrating each category and subtheme (in bold) during the interviews. The results of the tabulations show that the categories and themes are robust. A closer look at the interviews reveals that most themes are repeatedly present throughout each interview.

Many of the women offered comments of gratitude for including them in the study and a few offered well-wishes to me on my progress with the project. Two women offered more

elaborate feedback. Ann suggested adding two more primary indicators used to monitor her weight: health issues and activity level. In the comments section she wrote, "Great job. It was amazing how accurately you captured my feelings and emotions."

And finally, Margaret offered the following final comments on her returned report:

MARGARET: Update – I have gone through a tough medical condition recently that caused a gain of 20 pounds. I have lost 10 but cannot seem to loose the remaining 10. I find myself accepting the situation as okay. Mostly to avoid the routine it will take to drop the pounds. I am maintaining and for that I am grateful. I enjoyed participating in your study. I learned some new things about myself and what does and doesn't matter. Thank you.

In the following chapter, I will examine the ways in which the women's descriptions of their experiences of weight loss and weight loss maintenance often entailed clustering the themes to more fully elaborate on the details of those experiences. The clustering of the categories and themes suggests that an understanding of the meaning of the women's actual experiences is dependent upon understanding their connections to the various contexts in which those experiences occurred.

CHAPTER 5 – RELATIONSHIPS AMONG CATEGORIES: MAKING SYSTEMS VISIBLE

The presence of categories is evident throughout each of the women's interviews. Their descriptions of their experiences include references to the cycles and patterns, thresholds and fluctuations, definitions of self, and contextual connections illustrated in the last chapter. In this chapter, I will examine one segment from each of three interviews (approximately thirty percent of the total participant sample) where clusters of categories and subthemes are present in a woman's description of her experiences. I will explore the interactions between the categories and themes occurring within those clusters. As I provide a description of each cluster, I will elucidate the ways the woman generated meaning from the interacting categories and themes.

At this point I am reminded to adhere to my grounded theory approach of moving from the data toward plausible explanations of the relationships among the categories. However, if I make the jump from the women's descriptions to explaining the relationships too quickly, I reduce the validity of the explanations that are dependent upon clear connections with the women's actual statements. Therefore, I will use the following five stages of inquiry to explore and describe each interview segment:

- 1) What is the main point the woman appears to be communicating?
- 2) How do the various parts of her statement support, clarify, and elaborate on what she is saying?
- 3) How do the parts relate to the categories and themes?
- 4) What might she be saying in her description that meta-communicates about the ways the parts of her statement fit together?
- 5) How does that meta-communication suggest a narrative describing the relationships between the categories?

In the final section of this chapter I will compare and contrast the three narratives noting the possible elements of a general, overarching narrative describing the relationships between the categories and themes. Three narratives come from my conversations with Ann, Dorothy, and Mimi.

Ann

- CRM: (437) How has [husband] and the rest of your family impacted your weight loss maintenance?
- ANN: They are always effecting it particularly for the bad. [chuckle] But the maintenance end of it.. well they are always saying, "Let's go get an ice cream" or "Let's go out to eat." and I'm the one that has to say, "No, we have to stay home. Let's find a healthy snack or something." Sometimes its just hard to say "No." It's easier to just say "Yes, let's go." So when they knew I wasn't in my "loss mode" they were more willing to suggest it and knowing that I would be more willing to say, "Yes."
- CRM: What is it that signaled to them that you were not in the "loss mode" but in a "maintenance mode"?
- ANN: My guess would be some of the things that I was purchasing and bringing home some snacks. "Mom you haven't done that in a while." "Oh, it's just a treat." And just my lack of resolve to say, "No."
- CRM: How did your weight loss maintenance impact them? ...[husband] and other family members?
- ANN: I probably wasn't as strict as I was in my loss and we have a lot of family fun time that revolves around food so that might have affected them because I was more willing to prepare things that were a little more fun for them. That's off the top of my head. I'd have to think about that more.
- CRM: You mentioned a word and so I wonder if you could unwrap it a little bit. You mentioned resolve. That they saw a lessening of your resolve. How did they interpret that? Again you can only guess.
- ANN: Yes. When I was in full weight loss mode I had walls up and said, "No. No, no, no." I was very strict. But in maintenance, I'm not in a loss mode so my walls weren't as high and my resolve wasn't as strong to say "No." My willpower wasn't as strong.
- CRM: What signaled to you that you had made the shift? that you had made the shift to being less strict?
- ANN: For me it was all of the lifestyle changes: going back to work, having an exchange student, someone in our family household all of the time. Financial issues. Everything was just a burden I think and it was just easier just to say, "Huh!! OK" It was just less friction.
- CRM: You mean less friction because you weren't saying, "No." "We can't do that."
- ANN: Right.

1) What is the main point the woman appears to be communicating?

Ann compared the implications of the periods when she is in or out of "loss mode." She described ways that the "loss mode" influenced her decisions, behaviors, and responses to her family members' requests.

2) How do the various parts of her statement support, clarify, and elaborate on what she is saying?

Ann described her "loss mode" as that period of time when she was losing weight and contrasted with the period when she was maintaining her weight loss. Features of her "full weight loss mode" included "having her walls up" and a level of resolve to respond, "No. No, no," being very strict, and suggesting alternative snacks when family members' requested to eat foods that she did not eat.

Conversely, when Ann was in the "maintenance end of it," she described, "I probably wasn't as strict... my walls weren't as high, my resolve wasn't as strong to say 'No,' my willpower wasn't as strong." She experienced a reduction in those personal resources necessary to respond to the same family requests to eat. She not only noted that it was "easier just to say, 'Huh!! OK,' but she also noted that "when they knew I wasn't in my 'loss mode' they were more willing to suggest 'going out for ice cream' or 'out to eat' and knowing I would be more willing to say, 'Yes.'"

3) How do the parts relate to the categories and themes?

Ann's descriptions of her weight loss and weight loss maintenance experiences reflect the *cycles and patterns* inherent to those experiences. Her broad descriptions suggest that the patterns associated with both loss and maintenance and their respective results are predictable.

Her references to the nutritional quality of various snacks, the snacks she was purchasing and bringing home, and her varying responses around the issues of snacks reflect the themes under *thresholds and fluctuations* including: her use of *routines and structures*, *monitoring*, and her levels of *intentionality* and *control*. Each of these varied in relation to her involvement in the "loss mode."

Ann's vacillation between exhibiting behaviors reflecting her "high and low walls" were coupled with the ways her responses *defined herself*. While in "loss mode," she demonstrated the *self NOT other* theme that defined self as differentiated from the requests of those around her based upon attaining other personal goals and expectations. When it became "hard to say, 'No." she exhibited the *self SUB other* theme when she subordinated her personal judgments and goals in response to the requests of her family members.

Ann made general statements concerning her global assessment of family involvement and other lifestyle changes when she said, "They are always effecting [my weight loss maintenance] particularly for the bad," her desire to participate in "family fun time that revolves around food," and "all of the lifestyle changes: going back to work, having an exchange student, someone in our family household all of the time." These statements reflect the *contextual connections* and the *environmental pressures* interacting with her weight loss maintenance efforts. She made other statements concerning individual interactions with her family members that influenced her weight-related efforts. The family members' repeated requests to go out to eat represent interactions that contributed to her experiences of *relationship pressure* countering her weight-related efforts especially as she describes the isolating experience of being "the *one* [my emphasis] that has to say, 'No.'" By contrast, the family member's response to her bringing home snacks, "Mom you haven't done that in a while," would be captured by the *relationship*

facilitation theme, reminding her of her efforts contributing to her weight loss and, therefore, supporting her weight loss maintenance efforts.

4) What might she be saying in her description that meta-communicates about the ways the parts of her statement fit together?

Ann appeared to describe her struggle of holding two important, yet competing values at the same time. She valued and, therefore, invested herself in reducing and maintaining her weight. As she switched from weight loss to weight loss maintenance she described sending signals to her family that the shift had occurred. While in weight loss, the family read specific signals that suggested she was unwilling to participate in eating-related activities.

As Ann shifted to weight maintenance, she refocused on her other important value of the time spent with her family. Her desire to engage in the "family fun time that revolves around food" presented her with a dilemma rooted in her assumption that the fun they experienced was in the types of food they enjoyed together. When she said, "No," she accomplished her personal goals around weight but missed opportunities to participate with and enjoy the time with her family. When she said, "Yes," she abandoned her goals to foster her relationship with her family.

5) How does that meta-communication suggest a narrative describing the relationships between the categories?

The *cycle* of weight loss incorporated routines and structures informing the ways Ann responded to the challenges she faced. Ann had *redefined herself* to include alternative ways to manage her weight-related issues, however, as she moved increasingly toward a *threshold* signifying a shift to the *cycle* of weight loss maintenance, she experienced an increasing pressure inherent within the *contextual connections* that remained the same during her weight loss. Ann

had not adapted her routines and structures to incorporate her immerging value for the new *cycle* reflected in her weight loss maintenance while also embracing her value for experiencing family times that still revolved around food-related activities. Subsequently, her response to her weight *fluctuations* reflected her perceptions of the dichotomy posed by competing values. She described how she eventually chose the path of least resistance and friction with others.

Dorothy

CRM: (69) What were your most frequent thoughts and feelings about yourself and others during weight loss?

DOROTHY: Uh.. I definitely did not like being heavy.

CRM: Describe that some more. What was that like for you?

DOROTHY: You know you can't get into your clothes, and you know you feel older maybe than you are and don't feel like yourself because, other than during my pregnancies, I had been at a lower weight for all my life except through college when I had had my first weight gain So I didn't feel like me being heavy. [chuckle] It didn't feel like me.

CRM: Describe that, what do you mean it didn't feel like you?

DOROTHY: I never thought of myself as a heavy person prior to.. I'd never been other than that one little college weight gain I'd never been a heavy person. It seemed really weird.

CRM: So with your thoughts and feelings during weight loss was it somehow associated with regaining what you envisioned yourself to be?

DOROTHY: Correct—to get back to the real me.

CRM: OK. Other thoughts and feelings at that time?

DOROTHY: It was a slow process and it seemed like the.. I was trying to do it in a very healthy manner, I wasn't able to exercise as much as I would have liked to because of the situation.. My son was in the hospital during the three months of that period and so basically I wasn't really able to watch what I ate and somewhat active compared to bed rest and so.. but it was more when he was home and things were going better then I had a little more time to exercise and get back into the work schedule more and do more personal time and so I would say it was fairly slow and I don't generally lose very easy. I'm more a very.. every time I've lost it seems like there's a very slow result and then toward the end.. after I've done it for six months it seems like my body will finally say, "Okay she's really gonna do it" [chuckle] "Let's go ahead and cut loose and go ahead and lose." So I'm not like someone like my husband who can maybe cut down on XYZ and lose five pounds by next week. It's not like that. It's very slow and tedious and gradual.

CRM: and that's not something intentional on your part.

DOROTHY: No, it's just my body.

CRM: Your body.

DOROTHY: That's how it responded every time.

1) What is the main point the woman appears to be communicating?

Dorothy described her weight loss as an effort to "get back to the real me" after repeated attempts to lose weight following her pregnancies.

2) How do the various parts of her statement support, clarify, and elaborate on what she is saying?

Dorothy said that she "definitely didn't like being heavy," because of the impact on the ways her clothing fit and feeling "older than you are." Though being overweight, Dorothy described, "I never thought of myself as a heavy person" and her experience with the additional weight "seemed really weird." Her weight loss efforts reflected her attempts to "get back to the real me."

She contrasted her weight loss attempts with the apparent ease of her husband's weight loss. She described her experience as "slow, tedious, and gradual." She noted that the difficulty persisted until, at some point after six months of trying to lose, her "body will finally say, 'OK she's really gonna do it. Let's go ahead and cut loose. Let's go ahead and lose."

Dorothy described how her son's hospitalization presented to her a challenge that impeded her from exercising "as much as I would have liked to," her "work schedule," and her "personal time" which were restored as they returned home.

3) How do the parts relate to the categories and themes?

Dorothy experienced two *cycles* entailing repeated pregnancies and her son's illness.

These *transcending* experiences were independent from weight loss but influenced her weight loss efforts nonetheless. She described her *repeated weight losses* as *patterned* experiences: "I

don't generally lose very easy... every time I've done it..." Her description of the course of the weight loss reflected the predictable rate of change occurring with each experience.

Dorothy describes her experiences of *thresholds and fluctuations* beginning with the ways that she *monitored* the fit of her clothing and her general feelings when she was overweight. These experiences presented the threshold which signaled her to initiate her weight loss efforts. She described the additional threshold occurring as she approached six months of weight loss when her body responded by losing additional weight. Throughout her weight loss experience, Dorothy notes her *intentional* efforts using *routines and structures* such as eating healthy foods and engaging in exercise.

Dorothy's efforts to lose weight were focused on reestablishing "the real me." Including her single comparison of her experience of weight loss efforts with those of her husband's, Dorothy's comments about herself demonstrated a *self NOT other* focus. Her comments were predominantly about herself prior to and during weight loss. Those comments consisted of contrasts between her current image of self and her prior, preferred image when she weighed less.

In this segment of Dorothy's transcript, she made only one reference to the *contextual connections* of her weight loss experiences. Pointing to her return from home after her son's hospitalization, she described "when he was home and things were going better then I had a little more time to exercise." Returning to her home environment *facilitated* her weight loss efforts and, therefore, relieved the *environmental pressures* experienced while at the hospital that undermined those efforts.

4) What might she be saying in her description that meta-communicates about the ways the parts of her statement fit together?

Despite the slow pace of Dorothy's weight loss, she appeared to remain focused on her view of herself and the behaviors necessary to attain her goal weight. Undeterred, she continually engaged in the types of activities that would lead her toward weight loss and gauged her progress by considering her proximity to her preferred "real self." Dorothy appeared to use her "body signals" as indicators that her prior efforts to that point would contribute to her future progress. Those "body signals" represented a reliable source of information confirming her thoughts, feelings, and behaviors associated with her weight loss efforts.

5) How does that meta-communication suggest a narrative describing the relationships between the categories?

The repeated *cycles* of weight gain and loss exhibited *fluctuations* away from then back toward Dorothy's real *self*. Her weight loss experience, occurring in and influenced by various *contexts*, ultimately enabled her to reestablish the continuity between her view of self and her improved physical experiences of self. Her current and future views of self informed her weight loss efforts and her progress toward the *threshold* when she shifted to maintain those efforts.

Mimi

- CRM: (616) So now we are thinking about the maintenance experience. How do your thoughts and feelings about yourself and others change?
- MIMI: I don't know if they change but I just always remember thinking, "This is hard. This is something that.. Why does it have to be so hard? Why does it have to be so hard for me? Why do I have to count calories? Why do I have to watch everything I put in my mouth? But again, a lot of friends, a lot of people I do stuff with never seem to have an issue with that. [chuckle] So, you know, I don't know how I'm feeling.
- CRM: When you have those thoughts, how does it impact your maintenance?
- MIMI: Well, sometimes it would cause me to go off. Sometimes I would think, "I'm sick and tired of this. I'm sick and tired of counting every calorie. I'm sick and tired of exercising and where does it get me? I'm just going to blow tonight. I'm just going to have this. I'm just going to..." So I suppose during maintenance.. To me maintenance is even tougher. I mean obviously, maintenance is harder to me than losing weight. Which I've never been able to do.. keeping it off for extended

periods of time. Like a lifetime change. It's obviously harder for me than getting it off.

CRM: What makes it harder.

MIMI: Habits. I love, I love, I love to cook. It's my favorite hobby. Gourmet cooking. Creating recipes. I submit recipes all of the time. I love to cook. Love to. Love to. And not necessarily that I love to eat but when you're in the kitchen you're around it all of the time. Baking. Love to do it. Love to entertain. Love to have people over. So I suppose to me the hardest part. the hardest part again probably about maintaining is the social aspect of my life. I am very involved in everything. I am in the schools. I am here at work. I am in chamber activities after work. I'm in fun Bunko and card groups. I just have a lot of friends, "Let's go to a movie. Let's go to dinner. Let's go do this." Well eventually, if you aren't rigid, rigid, rigid constantly, it comes back and it starts creeping back on. And then it creeps back on and you think, "Oh God, instead of two pounds now I've got to lose five." It's a whole mental thing and it's easier at times to not have to play that game.

1) What is the main point the woman appears to be communicating?

Mimi described the frustrating, enduring, and isolating struggle she has repeatedly experienced while engaging in the mental battle of losing and maintaining weight.

2) How do the various parts of her statement support, clarify, and elaborate on what she is saying?

Mimi posed many apparently unanswerable questions about the difficulties associated with her weight loss maintenance experiences when she asked, "Why does this have to be so hard? Why does this have to be so hard for me?" She described approaching a familiar point at which she experienced a degree of frustration and exhaustion from her constant, rigid efforts. When she stated, "I'm so sick and tired of this," she continued with "...where does it get me?" Mimi's frustration appeared to become exacerbated by her perceived lack of sustainable progress coupled with comparisons of her efforts and "a lot of friends, a lot of people I do stuff with never seem to have an issue with that."

Mimi expressed her value for the "social aspect of my life." The ways that she expressed and cultivated those relationships was through her "favorite hobby" of "gourmet cooking, and

creating and submitting recipes." She emphatically described her interest in cooking saying, "I love, I love to cook... I love to cook. Love to. Love to." She described the connections cooking had with her social interests when she continued, "Love to do it. Love to entertain. Love to have people over." Her involvement with other people entails cooking and the enjoyment of food with whom she likes spending time.

The result of Mimi's apparent duality between choosing to maintain weight loss and investing in social relationships leads to Mimi's repeated experiences of weight regain. She described her observations of her weight regain saying, "Well eventually if you aren't rigid, rigid, rigid constantly, [the weight] comes back and it starts creeping back on." She appeared to suggest that she can "get [the weight] off" but abandons her weight loss maintenance efforts as she reaches the point when she is tired and says, "I'm just going to blow tonight."

3) How do the parts relate to the categories and themes?

Mimi has experienced the repeated and predictable *cycle* entailing weight gain and weight loss. She described the conflict she experienced between her "mental" involvement in the *patterns associated with weight loss and weight loss maintenance* and her *transcending pattern* of interests in and activities associated with cooking and social relationships.

The apparent *thresholds* Mimi experienced occurred at points when she approached the shift from weight loss to weight loss maintenance and as she noted her regained weight. She *monitored* her fluctuating weight by counting the calories of the foods, through an intentional awareness of the foods she "put into [her] mouth" and observing when her weight "creeps back on." Her level of *controlled* and *intentional* responses to those indicators varied with her level of frustration associated with her weight loss maintenance efforts.

Mimi's views of *self* were reflected in her descriptions of her internal dialogues about the difficulty of the weight loss maintenance process. Her descriptions exhibited the *self NOT other* theme as she contrasted her experiences with those of others. When she was in the presence of other people with whom she compared herself. She perceived the others to have a different experience from hers. She also described herself as both "I don't know how I am feeling," and as having an apparent passion as she revealed her interest in cooking. In both of these descriptions, she described her experiences without using references to others.

Relationships and environments present Mimi with significant challenges to her weight loss maintenance. She simultaneously values her relationships while she experiences the relationship pressures reflected in her statement: "the hardest part about maintaining is the social aspect of my life." Friends appear to increase the pressure as they suggest, "Let's go to a movie. Let's go to dinner. Let's go do this." Mimi expressed enjoying her cooking hobby but also noted her experience of the environmental pressure impacting her weight loss maintenance "when you're in the kitchen you're around it all of the time."

4) What might she be saying in her description that meta-communicates about the ways the parts of her statement fit together?

Mimi described weight loss maintenance as a mental battle requiring a vigilance challenged by her interests in cooking and entertaining. The difficulty of the mental game reaches a point at which she decides to relinquish the rigid control over her weight loss maintenance efforts in favor of engaging in the social and food-related activities she loves. By implication, Mimi appears to perceive that a decision to maintain her weight loss isolates her from others while a decision to socialize with others necessarily leads to the abandonment of her weight loss maintenance efforts. Moreover, when she engages in the activities of the "schools,"

work, chamber activities, and card groups" she relaxes the rigidity associated with her weight loss efforts and experiences the weight regain. Mimi appears to be simultaneously drawn toward her social relationships while acknowledging the adverse effects they have on her ability to maintain weight loss.

5) How does that meta-communication suggest a narrative describing the relationships between the categories?

Mimi has repeatedly experienced the *cycle* of weight loss maintenance that approaches a *threshold* entailing the difficult choice between apparently dichotomous options. Her experience of the *fluctuation* toward that *threshold* was embodied in the increasing tension between continuing her efforts to maintain her weight loss or engaging in her favorite hobby and in social encounters. Her descriptions of her cooking and socializing suggested that these are central characteristics she uses to *define herself*. Through her involvement in those activities, she experienced fulfillment and success. On the other hand, her initial questions exploring her difficult experiences with weight loss maintenance indirectly suggest that those difficulties resulted from thinking she lacked the ability to succeed in the face of pressures she experienced within the *contexts*. Her regained weight further reinforced her perceived failure and the dichotomy between the two experiences.

Comparing Narratives

Taken separately, each category (cycles and patterns, thresholds and fluctuations, defining self, and contextual connections) reflects a dimension of the women's experiences. When the categories are juxtaposed and integrated, an increasingly broad and complex picture emerges. The categories provide a way to both separate out and reflect upon the various dimensions of the women's statements. Each of the women described above had unique

experiences associated with her weight loss and weight loss maintenance efforts. The categories enabled me to explain each experience while providing me with a useful framework to now suggest some comparisons and contrasts between them.

Each category interacted in a different way for each of the three women. Ann experienced a change in self as she moved through weight loss and into weight loss maintenance. Her struggles were primarily focused on the intervening impacts of the connections to her family members and living within the family milieu. Dorothy, however, described a much more individual focus of reestablishing a preferred self from her past. For Dorothy, weight loss routines and structures informed her approaches toward or away from her real self. Finally, Mimi identified the struggle she has experienced as she reaches the threshold of the end of the weight loss cycle. She appears to assume that she must choose between adhering to her weight loss routines and contextual isolation or abandoning weight loss routines in favor of contextual connections to the people and activities she enjoys. Despite the variation between the women's experiences, the descriptions of the categories illustrate the many ways each category informs and influences the others. The result is a contextually-informed description of the processes, relationships, and environments involved in each of the women's defining experiences of self.

My responses to the fifth question (How does that meta-communication suggest a narrative describing the relationships between the categories?) employed the combinations of categories each woman used to develop a narrative describing her weight loss and weight loss maintenance experiences. The descriptions provided representative examples from the total sample of this study and demonstrated how the categories clustered together in diverse arrangements. Despite the unique features of each description, the clusters of categories provide

an additional, broader frame revealing the interplay between the categories reflecting the various dimensions of the women's experiences.

Generally, the women described cycles or patterns consisting of incremental movements, or fluctuations, occurring toward and away from a threshold. When the fluctuation approached an existing threshold the women experienced a crisis state of varying intensities. They responded to the crisis by either remaining in the existing cycle through efforts focused on reestablishing the original pattern (see Figure 5.1) or by breaking the cycle and moving beyond the threshold to establish a new pattern (see Figure 5.2).

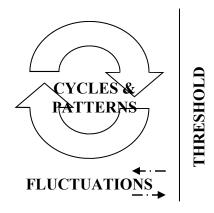


Figure 5.1 - Conceptual Relationships Among Categories - Reestablishing Old Cycles & Patterns

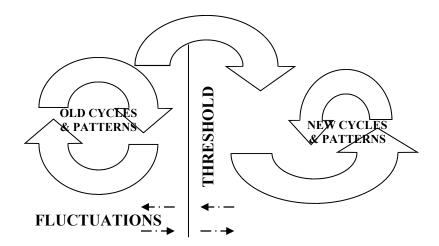


Figure 5.2 - Conceptual Relationships Among Categories - Establishing New Cycles & Patterns

At various points within each interview, a woman began her description of an experience by locating herself within a cycle or pattern. She reflected on her experiences associated with the decision to lose weight, during weight loss, during weight loss maintenance, or other transcending life issues and circumstances. She provided detailed descriptions of the experiences within those cycles, revealing ways she defined herself independently and within the contexts of relationships and various environments. Though the clustering of categories occurred in diverse combinations within and between interviews, the relationships between the categories remained consistent throughout the descriptions of the women's experiences.

When a woman identified a fluctuation, she did so in the context of its proximity to a threshold. She described the dynamic quality of approaching or moving away from that threshold. The threshold reflected a point in her experience requiring a decision and a subsequent shift. The greater the woman's perception of the difference between the current cycle and an alternative cycle, the more the woman appeared to experience an increased tension occurring around that threshold. The threshold presented a choice: 1) continue to engage in the existing patterns inherent to the existing cycle (e.g., a woman who experiences weight loss maintenance as the completion of her weight loss efforts and eventually reverts to the patterns experienced prior to the weight loss) or 2) cross the threshold to enter a new cycle (e.g., a woman who adapted broader life patterns throughout her weight loss that gradually prepared her to establish a sustainable weight loss maintenance).

When I compared the women's weight loss experiences, I noticed that the clusters of categories did not reveal any patterned differences between the two processes. However, some women suggested that their approach to the threshold marking the end of their weight loss left them ill-prepared for making the shift to weight loss maintenance. Those women were more

likely to describe feeling exhausted, tired, isolated, lacking resolve and willpower, less strict, and desiring to cheat and experience more freedom. They also appeared to be more likely to use "heroic" or "extreme" efforts to lose weight by limiting food varieties, focusing exclusively on the weight loss routine, eliminating alternative foods or other routines, and isolating from others to maintain that focus. Other women suggested that their maintenance was a continuation of the strategies used to lose weight with some minor variations. These women described the continuation of a regimen or routine, the establishment of a lifestyle, the weaving of routines into their daily lives, being strong-minded, and having resolve. These women appeared to actively create an "integrated focus" on their efforts to lose and the sustainability of those efforts beyond weight loss.

Regardless of the women's responses, they described their changing self and the multiple influences of the relationships and environments on those changes. Their descriptions of their experiences within the cycles of weight loss, weight loss maintenance, and transcending cycles incorporated details about their abilities, values, beliefs, expectations, efforts, and challenges. They refined each of their descriptions through comparisons and contrasts of self with others. Their self-defining process incorporated additional descriptions explaining the responses and mutual influences they experienced within the systems of their relationship and environmental connections.

In the next and final chapter, I will further discuss the narratives of the women's experiences illustrated through the clustering of categories. I will compare and contrast those findings with the literature review and model presented in chapter 2. I will make suggestions for future research and describe the implications of the findings of this study for clinical practice.

CHAPTER 6 - DISCUSSION

Through a grounded theory approach, I interviewed ten women and analyzed the transcripts using a series of open, axial, and selective coding. Four categories (cycles and patterns, thresholds and fluctuations, defining self, and contextual connections) and corresponding subthemes emerged from the women's diverse narratives. The narratives encompassed the women's experiences with weight loss and weight loss maintenance occurring within their systems of relationships and environments. I used a separate code checker and member checks to verify the validity of the categories and themes. Through a modified case study analysis, I analyzed selected transcripts reflecting representative samples of clusters of categories evident throughout each of the transcripts. From that analysis, I generated a tentative explanation of the relationships occurring between the categories clustered in various configurations. Throughout the analysis of the women's narratives I used a multifocal lens and a toggling procedure to explore the multiple dimensions of the women's experiences. I changed the title of this dissertation, from the one initially listed on the informed consent, to more accurately reflect the emerging categories and themes related to the women's descriptions of self.

In this discussion, I intend to explore the ways the findings of this study have addressed my research questions:

- I. Do women utilize different processes for weight loss versus weight loss maintenance?
- II. How does meaning-making within the individual inform our understanding of the potential differences between weight loss and weight loss maintenance processes?
- III. How does meaning-making occurring within relationships inform our understanding of the potential differences between weight loss and weight loss maintenance processes?

The categories emerging from this study suggest that the women developed narratives to describe the multiple, interacting dimensions of their experiences. The *Cycles and Patterns* category reflects the women's cyclical or recurrent experiences (e.g., individual development, family life cycle, conflictual relationship). These experiences either relate to or simultaneously occur and influence the women's cycles of weight loss and weight loss maintenance. *Thresholds and Fluctuations* reveal the women's ongoing awareness and monitoring of the dynamics occurring at or near the boundary-lands between the cycles of their experiences. *Defining Self* is the category representing the process and structure informing the women's development and description of self in relation to others. Finally, the *Contextual Connections* category refers to the women's relational and environmental contexts influencing their experiences and meaning-making processes. They incorporated features from multiple aspects of their experiences in an effort to make meaning within those experiences.

The clusters of categories revealed that, though the categories appeared in various combinations, the relationships between the categories were most informative. The differences between the processes of weight loss and weight loss maintenance became apparent in the interactions between the multiple dimensions of the women's experiences and the meanings they generated from those experiences.

Using a multifocal lens and a toggling procedure, I identified clusters of categories that reflect the multiple dimensions of the women's diverse and multilayered experiences. Though the use of a multifocal lens and a toggling procedure are inherent to thorough qualitative analysis (Chenail, 2006), I coined these terms to descriptively capture the processes involved. The term multifocal suggests intentionally employing a perspective to simultaneously focus on multiple dimensions within the clusters. The identification of the clusters provided a way to attend to the

content of the women's statements while acknowledging the dynamic processes through which those experiences took shape. Furthermore, the multifocal perspective enabled me to simultaneously identify the descriptions of the experiences and the defining processes that shaped the women's understanding of self. Additionally, I was able to explore the connections experienced within her relationships and her environments. The *toggling procedure* describes what I, as an outsider, did with categories of data to appreciate in more detail the experiences of my research participants. It became increasingly apparent that as I toggled between specific attributes of the women's experiences and the connections of those attributes to their broader experiences and contexts, I was performing a process isomorphic to the women's development of narratives that they used to make sense of their experiences with weight loss and weight loss maintenance.

The first research question asked if there are differences between weight loss and weight loss maintenance processes. My study revealed multiple dimensions to those processes; therefore, to answer the first research question, I must provide a qualified "yes AND no" depending upon the dimensions that are described. There were evidences of both similarities and differences between weight loss and weight loss maintenance processes. The women described using routines, structures, and monitoring throughout both weight loss and weight loss maintenance. Shifts beyond thresholds occurred from the decision to lose weight into weight loss and from weight loss into weight loss maintenance. However, some women's range of experienced control and intentionality differed between weight loss and weight loss maintenance. Also some women reported making a deliberate shift from weight loss to weight loss maintenance where others described a shift by default based upon changing circumstances unrelated to their weight (e.g., starting a new job). The women's descriptions of their

experiences relating to weight loss were consistent with those described in the existing literature reviewed in chapter 2 (e.g., focus on weight-related goals, focus on weight reduction then weight sustainment, and reduced rate of weight change as weight loss progressed) thus, distinguishing their weight loss from weight loss maintenance experiences.

The clusters of categories illustrated the weight loss and weight loss maintenance processes and addressed the first research question. The repeated presence of each of the categories through both weight loss and weight loss maintenance suggests that differing experiences were represented by the interplay of similar components rather than the emergence of new components uniquely characteristic of weight loss maintenance.

The most notable finding was the different descriptions women used to characterize their weight loss efforts and the shift just prior to shifting to weight loss maintenance. Keeping in mind that all of the women were able to maintain their weight loss for at least one year, differences emerged between the women who appeared to use *heroic* measures versus those who used *integrated* measures to lose weight. The women's differing descriptions suggested that there may be varying degrees of overlap between weight loss and weight loss maintenance processes. The women who used *heroic* efforts described the threshold dividing weight loss and weight loss maintenance as a gulf requiring a jump between the two processes instead of an anticipated, progressive transition with an *integrated* focus. The gulf could be attributable to the relative absence of consideration, preparation, and integration of sustainable routines and structures *within* the weight loss process that had prepared those with an *integrated* focus to make a smoother transition. The women's using *heroic* efforts experienced isolation from family, friends and co-workers when refraining from participating in social events where food would be present. Those women's using an *integrative* approach tended to develop ways to

continue their weight loss efforts while fostering continued engagement with others. The description of a partial overlap between the processes suggests that the more the women perceived the processes as disparate from one another, the more difficult it was for them to cross the threshold from weight loss to weight loss maintenance. On the other hand, the more overlapping and integrated the processes, the less the perceived distinction and the easier it was for the women to navigate the shift between weight loss and weight loss maintenance.

Addressing the second and third research questions, this study explored the meaning-making processes occurring within the individual and in the context of her relationships and environments. The second and third questions will be discussed conjointly because they are interconnected meaning-making processes within the women's narratives. The use of the multifocal lens and a toggling procedure enabled me to explore the women's narratives, revealing the processes by which those narratives were formed. My analysis of the clusters elucidated the interdependent relationships between the individual and relational dimensions of the women's experiences.

While the multifocal lens facilitated the development of a description, the toggling procedure guided the process of analysis and revealed a process isomorphic to the process the women used to formulate their narratives. The lens facilitated the establishment of an understanding of both the parts of a woman's experience reflected in the categories and subthemes and the larger processes and interconnections between those parts revealed in the clustering of those categories. The toggling procedure occurred as I moved back and forth between exploring the women's descriptions of the multiple aspects of the *whole* of an experience and examining the interdependent *parts* of that experience. The toggling between parts and wholes facilitated the analysis of the ways that the women constructed meaning of their

experiences within their narratives. The women's descriptions repeatedly focused on one aspect of her experience while accessing the other parts to provide a comprehensive picture of that experience. An example: A woman described herself and her thoughts and feelings during weight loss by offering comparisons or contrasts of herself with others' experiences. She noted her observations about the influences of individual and family life cycle issues and the influences of her relationships with others. She referenced each of these dimensions of her experience to describe the multiple attempts to lose weight. Descriptions included interactions between her emerging definitions of herself, her engagement in cycles and patterns, her awareness of the fluctuations around thresholds and the connections she experienced within her relationships and her broader environmental contexts. The narratives the woman constructed influenced her ability to lose weight and informed her decisions to revert back to old cycles and patterns or adapt to accommodate new cycles and patterns of weight loss maintenance.

Next, I will compare the results of this study with the existing literature and the model I proposed in chapter 2. After addressing the limitations and strengths of this study, I will offer suggestions for future research and describe the potential implications of these findings for clinical practice.

Comparisons of Findings with the Existing Literature

My initial literature review identified the ways varying disciplines conceptualize and develop treatments addressing weight loss and weight loss maintenance. The research design that emerged repeated some aspects of previous studies while addressing the apparent gaps I identified in the literature. I initially set out to determine the differences between weight loss and weight loss maintenance processes. Other research alluding to the differences in weight loss

and weight loss maintenance processes addressed a single dimension or combination of dimensions involved in those processes. My study does not attempt to negate the findings of the previous studies. Rather, I suggest that combining additional dimensions of women's narratives provides broader conceptualizations of weight loss and weight loss maintenance processes when those conceptualizations include the dimensions of the individual self *and* the system. From the analysis of this study emerged multiple categories representing the dimensions of women's experiences associated with weight loss and weight loss maintenance. In addition, the analytical framework consisted of a multifocal lens and a toggling procedure for analyzing the women's narratives describing their weight loss and weight loss maintenance experiences. To minimize the affects of the literature on my analysis, I did not look at the literature again until I began work on chapter 6.

My study revealed categories and themes that were consistent with many of the existing studies addressing intrapersonal or interpersonal processes or a combination of both. Levine and Harrison (2004) addressed the challenges associated with weight loss, noting the need for a person to make informed choices. In this study, the theme of intentional choices emerged as part of a larger category encompassing themes relating to thresholds and fluctuations. This category suggests that women made intentional choices in relation to their perceived proximity to a threshold and their readings of the fluctuations they experienced around that threshold. The women monitored their weight in various ways (e.g., scale, readings, fit of clothing, feeling lethargic). When they noticed a weight gain (e.g., some referred to gaining as "weight creeping") approaching (fluctuation) a predetermined upper limit (threshold), the women would engage in routines and structures (intentional choices) to reduce their weight, thus moving away (fluctuation) from that threshold toward a preferred weight.

My study addressed the dynamic processes inherent in the women's experiences of fluctuation, which resembled Wing's (2000) conceptualization of the dynamic behavioral processes involved in weight loss maintenance. The emerging category of cycles and patterns reflects the women's repeated, predictable experiences and provides an abstract description of the behavioral processes occurring around weight loss and weight loss maintenance. Rothman (2000) described the psychological processes involved in health-related decision-making and suggested that incorporating the larger context of existing and new patterns of behavior provides a more complete explanation of those processes. My study goes beyond behavioral and cognitive processes of weight loss and weight loss maintenance. Though the results of my study are consistent with Rothman's findings, my results describe the interplay occurring between a woman's behavioral and cognitive processes with other processes. The other processes include the ways she develops definitions of herself as she interacts with relationships and environments. The resulting clusters of categories reach beyond the women's intrapersonal experiences of cognitive schemas (Byrne, 2004; Cooper et al., 2003) to incorporate additional elements related to and impacting her weight loss and maintenance. The women's narratives reflected the interplay occurring between the intra- and inter-personal dimensions of their experiences.

The narratives of the women's experiences revealed that the relational and environmental contexts were more than locations or situations in which the weight loss occurred. The narratives described the influences the women experienced and the ways they contributed to and impacted those contexts. Epstein, et al. (1986), Perri et al. (1987), and others suggested examining combinations of the family context, peer support, and the home as the environment for weight loss. My results concur with these areas of focus; however, the clustering categories also suggest that the role of the intrapersonal aspects of the women's lives and the connections

with the systemic, relational dynamics provide additional layers to understanding the women's connections with the family and the environment of the home. The narratives extended beyond the family and home to include women's descriptions of interactions with extended family members, friends, co-workers, and additional environments such as the workplace and church. These findings are consistent with Allan's (1986) recommendation of studying the women's cultural and physical environments.

When the women in this study described the struggles they faced during weight loss or weight loss maintenance, they described difficulties associated with their cycles of weight loss or weight loss maintenance, the transcending cycles of individual or family life cycle issues, and personal assessments of their feelings of control. These findings extended the list of barriers Cooper, Fairburn, and Hawker (2003) indicated when they focused on factors affect a person's views of physical appearance, health, and non-weight-related lifestyle changes, including relationships and the cultural environment. Additionally, the women's narratives reflected in this study described the reciprocal influences between the women and their relationships and environments. The women reflected on moments when their behaviors influenced those around them and subsequently their weight loss and weight loss maintenance efforts.

The women's narratives consisted of varying combinations of categories and themes emerging within this study. The categories and themes were evidenced multiple times within each of the women's narratives, suggesting that they are robust. Furthermore, the women's indications of strong agreement with the descriptions on the member checks further supported their validity. Other studies (Adams, 1997; Allan, 1991; White, 1984) developed varying stage models to describe the elements of the participants' experiences moving sequentially through weight loss. White (1984) described two stages occurring prior to weight loss and two stages

after the decision to lose weight. Both referred to the women's perceived loss and isolation experienced in the broader context of society's sex role norms. After beginning weight loss, White suggested that the women recouped the loss and integrated self into those larger contexts. The categories from my study address similar experiences in broader terms. The following description applies the categories and themes from my study to White's findings. The women in White's sample experienced a fluctuation associated with their approach to each of the thresholds signaled when they made the decision to lose weight and moved into weight loss and, later, when they moved from weight loss into weight loss maintenance. They described the environmental context as either a facilitation or a struggle around the common thresholds of 1) beginning weight loss and 2) shifting from weight loss to weight loss maintenance. Considering the context of the women's decisions to lose weight and the ensuing process of weight loss, the women examined self and identity, which are both distinct from (self NOT other) and related to (self AND other, self SUB other, self VERSUS other) the others around them.

Though there is a degree of overlap between White's and my study, White does not address the presence and impacts of the various cycles related to weight loss and weight loss maintenance and the transcending cycles unrelated to weight-related issues. Additionally, White's study describes weight loss in broad terms. My study provides additional details of individual processes identified within the thresholds and fluctuations category (monitoring, ranges of feelings of control, intentional use of choices, and use of routines and structures).

Allan (1991) and Adams (1997) limited their scope to issues related to select themes and categories identified in my study. Allan identified five-stages encompassing women's weight loss and weight loss maintenance experiences. Within those stages, Allan focused on the routines women used to monitor and respond to weight fluctuations and the women's appraisals

of self occurring within the weight loss and maintenance cycles. Adams' study revealed three phases of women's weight management efforts. These phases focused on monitoring efforts, the use of weight management routines and structures, and modifying perceptions of self and abilities occurring within the larger context of societal pressures.

Though my study has not provided a stage process, the resulting categories encompass the themes relating to women's narratives that were dispersed throughout the other studies. These categories and themes describe the women's experiences prior to and throughout weight loss and weight loss maintenance and the interplay of their efforts to define self within the broader contexts of transcending cycles, relationships, and environments. My study identifies and draws together the multiple categories that have been independently identified in other studies. The clusters of categories provide a framework for considering the women's narratives reflected in the ways they derived meaning throughout their experiences. They described their proximity to thresholds and their responsiveness to the fluctuations they experienced. The women's narratives reflected the fluctuating experiences of perceived control and intentionality while losing and maintaining weight loss. Those experiences extended beyond weight-related issues to include assessments of emotional, psychological, and physical health, and general well-being.

My study also revealed the women's experiences with the relational and environmental contexts related to their weight loss and weight loss maintenance processes. The findings identified the systemic and process-oriented dimensions of the women's experiences. The emergence of categories and themes and the relationships between the categories captured the interactions and influences occurring among the multiple dimensions of their experiences. Historically, other studies have offered systemic perspectives on weight-related issues and

treatments for weight loss and weight loss maintenance that elucidated a person's connections with family dynamics. Many studies have developed structural and functional descriptions of the person with the weight issue functioning within family contexts. Minuchin, Rosman, & Baker (1978); Harkaway (1986; 1989), Harkaway & Madsen (1989), Ganley (1986; 1992), and Kinston, et al. (1990) each described the relational dynamics of a person with a weight-related issue who is embedded within and interacting with the larger family system. However, the dynamics within the individual appeared to be absent from the descriptions of the family interactions. My study has identified and incorporated the dynamic processes of defining self within the individual who is situated in the larger relational contexts. Consistent with other descriptions, the women in my study described experiences and negotiations of their roles and beliefs shared with partners or other family members. The clustered categories in their descriptions broadened the scope of my study to include the connections of roles to other cycles, thresholds and fluctuations, efforts to define self, and the broader environmental contexts.

The clustered categories, emerging within this study, revealed no apparent patterns that would suggest differences between weight loss and weight loss maintenance. Although they examined a health-related issue that was different from the one I addressed in my study, my finding is consistent with DiClemente & Prochaska's (1982) suggestion emerging from their smoking cessation study, "Maintenance may not be maintenance after all but may really be continued change" (p.141). However, they too, provide a both/and response when they further describe the different processes their subjects used at differing stages of change. They note that verbal processes that are used at the decision to quit stage and behavioral processes are employed at the active change and maintenance stages. DiClemente & Prochaska (1982) conclude their article with,

By integrating processes of change along a time dimension of periods of change, a more comprehensive model may be developed in which verbal and behavioral approaches both contribute to successful change. The verbal processes may be important in preparing individuals for action, while the behavioral processes become more important once individuals have committed themselves to act. (p. 141)

Further studies using the categories from my study would need to be conducted with larger samples to determine if patterns of clustering categories surface to reveal differences between weight loss and weight loss maintenance processes. Identifying potential patterns could further explore the multiple dimensions of women's experiences and the integration of the weight loss and weight loss maintenance processes.

Proposed Model Revisited

I will now address the implications of my study on the model I proposed at the beginning of the study. I thought I might discover differences between the two processes of change related to weight loss and weight loss maintenance. The inherent difference between weight loss and weight loss maintenance processes is the focus for weight reduction versus weight stabilization respectively. The clusters of categories reflected women's varying attempts to make meaning within their weight loss and weight loss maintenance experiences. Though the clusters revealed combinations of categories, no predictable patterns emerged to contribute to a description of similarities and differences between the two processes. Examining the women's descriptions comparing and contrasting their weight loss and weight loss maintenance experiences included descriptions incorporating both descriptive and process-oriented categories. Originally, I suggested that the differences between weight loss and weight loss maintenance may reflect the difference between a task focus on weight loss and a process focus on broader lifestyle issues.

The robust clusters revealed, however, that all of the women described their weight loss and weight maintenance efforts by integrating the multiple dimensions of their lives.

The original model proposed two overlapping triangles representing different processes overlapping in time and reinforcing one another throughout the women's weight-related changes. My assumption was that they represented two separate, interacting processes. As described above, the two processes have a different focus, but the results of my study did not reveal any

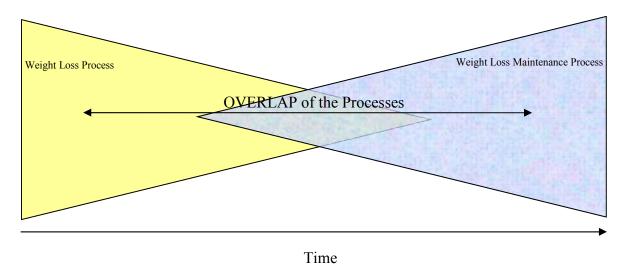


Figure 6.1 – REVISED *Shifting Processes* Conceptual Model – Overlap of Weight Loss and Weight Loss Maintenance Processes to One Another

other differences. The clusters of categories illustrated the multiple dimensions of a process that was similar as the women moved from weight loss to weight loss maintenance. The same four categories interacted together to produce the varying clusters with no obvious patterns. As the women each approached the threshold separating weight loss and weight loss maintenance, they each employed monitoring, assessment of control, and intentional use of choices to support their efforts.

I am left with the impression that any differences between the processes of weight loss and weight loss maintenance in my sample lie in the varying overlap between weight loss and weight loss maintenance (see Figure 6.1). Originally, the two triangles were stationary and

remained constant in relation to one another. I now believe that the triangles are dynamically related to each other. The triangles may actually move further away from or closer to one another depending upon the women's descriptions of her *heroic* or *integrated* efforts respectively. When the weight loss process neglects to incorporate sustainable routines and structures, feelings of control and intentional choices into daily living, the women appeared to perceive greater differences between the processes. Furthermore, it appears that the more disparate the processes are from one another, the greater the woman's experienced tension associated with the shift to weight loss maintenance. The differences become negligible the more a woman experiences the two processes as overlapping and integrated.

I examined the women in this study as one group. However, an observation I made concerning the four women, who had regained their weight at the time of the interview, revealed that the proximity of the weight loss maintenance was remote and disconnected from their experiences during weight loss. Each had, after weight loss, reduced their use of routines and structures, experienced decreases in feelings of control and reduced the intentionality associated with their weight-related choices. Those who continued to maintain at the time of the study did not describe their weight loss maintenance experiences as vastly different from their weight loss experiences. The strategies they used appeared to be somewhat similar and consistent. Future research designed to consider the groups would need to be conducted to determine the relevance of these differences between those who regain and those who maintain their weight.

Limitations and Strengths of the Study

The limitations of this study begin with the small sample size, preventing any generalization of the results beyond the experiences of those participants within the study. The retrospective nature of the women's descriptions of their weight loss and weight loss

maintenance may suggest that their recollections and memories are skewed by the intervening time and experiences prior to the interview. This study was designed as basic research to identify emerging themes and categories meaningfully capturing the broadest range of the women's experiences. The themes and categories simply reflected the dimensions of the women's experiences in the study, therefore, the proximity between processes illustrated by the *Shifting Processes Conceptual Model* remains tentative. Subsequent studies would need to test the validity and explanatory power of the categories, the differing processes, and the proposed concept of overlap as the potential dynamic occurring between the processes.

What I gave up regarding the generalizability of the findings, I gained in the depth of the analysis of my participants' responses. The procedures employing a multifocal lens and a toggling procedure enabled me to attend to the details of the women's experiences, their meaning-making processes, and their resulting narratives. I used multiple methods at each stage throughout the analysis to enhance the validity of the findings. The procedures enabled me to intentionally and incrementally examine and discover more abstract themes and categories representing the multiple dimensions of the women's experiences while remaining close to their actual narratives. The inclusion of the outside code checker and the participants' strong agreement on the member checks provided an additional measure of validity. The repetition of the presence of the themes and categories throughout each of the women's narratives also suggested that they were robust and reasonably represented the women's experiences.

Recommendations for Future Research

This study was developed to examine the women as one group, therefore, I was unable to make meaningful comparisons between subgroups of women. Further studies could be designed to compare the experiences of women who have maintained versus those who have regained

their weight. The results may provide additional ways to understand the potential meaning of the overlap between processes as it relates to diverse women's experiences. Longitudinal studies designed to follow women from the point of their decision to lose weight through weight loss into weight loss maintenance could further explore the meaning-making processes occurring through each of the processes of change. Studies applying similar methods with varying populations could provide ways to refine the categories and further explore the validity of the categories and the emerging clusters. A quantitative confirmatory study involving larger samples of research participants could explore the explanatory value of the categories, the presence of clustered categories, and the possible patterns of clusters.

Additional studies could use the categories, multifocal lens, and toggling procedure as an analytical framework for conducting a meta-analysis of previous qualitative studies focusing on specific dimensions of weight loss and weight loss maintenance processes. Further research could use the same framework for exploring other health behavior change processes. If the clustering categories were repeatedly discovered in others' narratives relating to different health issues, the framework may provide a reliable tool for developing an understanding of those processes that lead to better maintenance than others. Furthermore, with a better understanding of the multiple dimensions of the experiences of those who sustain health behavior changes, treatment protocols could be designed to replicate those experiences for clients who struggle with maintenance of weight loss. By going through treatments designed to incorporate the multiple dimensions of clients' experiences, they could see change as multidimensional and have better access to new resources for change.

Implications for Clinical Practice

Implications of a Systemic Approach to Weight Management

If there are two separate processes involved in losing weight and maintaining weight loss, then treatment strategies would need to be tailored for each process. Appropriate treatment would need to begin with the development of an assessment to be administered to the patient and help to determine the patient's degree of readiness to change in each process. Prochaska and DiClemente (1999; 1982) developed a model for considering the varying stages of readiness to change consisting of precontemplation, contemplation, preparation, action, and maintenance. Overlaying the two processes of weight loss and weight loss maintenance onto the Transtheoretical Model may serve as a useful foundation for an assessment that enables the clinician and patient to determine the most appropriate treatment strategy for continued or sustaining change efforts. Furthermore, a protocol guiding the transition between processes would also need to be developed to assist the person with that transition. The tentative implications of my conceptual model suggest that weight loss and weight loss maintenance processes need to be more integrated. Therefore, the transition between these processes may need to be a gradual displacement of an initial treatment focused on weight loss toward an ongoing management strategy focused on weight loss maintenance.

The revised *Shifting Processes Conceptual Model* can be applied to patient assessment in ongoing treatment and to determine possible correlations with the patient's ability to maintain weight loss. Furthermore, if the correlation between patients' shifting focus toward process and sustained weight loss can be established, the model could provide a framework for evaluating overall treatment and program effectiveness. A major goal of the treatment or program could be addressing the following question: How well does the program facilitate a greater integration of

the weight loss and weight loss maintenance processes? The model provides theoretical guidelines for observing sustainable change while suggesting a focus for determining factors that will lead to sustainable change.

Clinical Implications

The categories identified in my study may provide a way for clinicians and researchers to attend to the multiple factors involved in women's narratives about their efforts to manage their weight. Broadening the scope of attention could facilitate discussions that reach beyond the presenting problem. The process of the research interviews employed a Milan style interview involving circular questioning (Harkaway & Madsen, 1989). The pairs of questions asked for the participants to comment on one direction of an impact (e.g., impact of her efforts on her partner) and then the opposite direction (e.g., the impact of her partner on her). This structure enabled me to explore the multiple influences occurring within the systemic processes around weight loss and weight loss maintenance. The variety of questions focused on dynamics occurring between the multiple dimensions of each woman's experiences. A clinician using these multiple lenses could ask questions and pursue lines of thought that encourage the client to provide thick descriptions of her experiences. The emerging narratives of clustered categories could then be explored with the client to attend to the multiple, relevant aspects of the person's unique experience. Additionally, the clinician and client, together, could explore the dynamic aspects of the clustering not only shaping the client's experiences but also her responses.

The categories emerging from this study could eventually be used in clinical assessments to develop comprehensive conceptualizations of a client's experiences and meaning-making processes. The categories and themes coupled with the toggling procedure could enable the clinician to attend to the clients' complete narratives (clustered categories) and use them as

access, or entry points into their lives to understand the multiple dimensions of clients' experiences and the ways they make meaning throughout those experiences.

Clinicians could expand the scope of relational assessments using the clustered categories. While assessing the individual dimensions (i.e. psychological, emotional, and behavioral) of a client's experiences of weight-related issues, the clinician could deliberately address the ways that relational and environmental dimensions are intertwined throughout her experiences. An example: a relationship sabotaging weight management may be rooted in a shared meaning of food. Through a detailed relational assessment, a clinician may discover that the relational system has incorporated the shared experience of eating foods that correspond with the time the members share with each other. In this case, food may have become an affiliative and connecting medium that supports other aspects of the relationship connections. The members may experience an emotional connection with each other through the preparation, serving, and consumption of meals with one another, or sharing meals at restaurants, or giving candies and other food-related gifts for celebratory moments. Each of these acts incorporates food as the medium of affiliative expression between the members.

A combined cognitive-behavioral and narrative approach to therapy could potentially access and change the multiple dimensions of the members' experiences reflected in an analysis of the clustered categories of the client's narrative. A clinician aware of the client and families' emotional and relational affiliations with food, could incorporate the development of alternative narratives with the client and the family. Incorporating an understanding of the roles of family members in health behaviors and processes of change, the clinician could support cognitive, emotional, behavioral, and relational changes. Therapist and clients could develop alternative narratives that are necessary for weight loss and weight loss maintenance to occur within the

relational context. The affiliations between members and the ongoing systemic patterns of interactions could be explicitly highlighted as valuable resources for the change processes and for further strengthening the emotional ties between the members as they help one another through the change processes. The new narratives could interpret the meaning of the impact of family dynamics on change processes as relationship-preserving rather than as sabotage. The alternative interpretation could enable the therapeutic process to acknowledge the members' concerns that the weight changes may potentially change the nature of the relationship that they value. Therapy could acknowledge the perceived threat and support alternative ways for client and family to develop their subsequent responses that support the relational connections *and* the member's weight change efforts.

The findings of this study suggest potential treatment implications for individuals and their families depending upon the measures the women used to lose weight: heroic versus integrated. Subsequent studies could further explore the distinctions between weight loss efforts and potentially provide clinicians with useful information for addressing the variety of relational issues associated with weight loss. Obtained through an assessment determining the client's approach to weight loss, the clinician could examine the potential affects of those efforts on the person's relationships. A person using extreme efforts to lose weight while isolating one's self from others, may potentially sends a message to family members, friends, and coworkers that she is disconnecting from them. These heroic measures may not only suggest untenable approaches to sustaining the weight lost, these approaches also appear to produce relational dilemmas and, in some circumstances, even relational conflict. Clinicians exploring client narratives associated with weight loss could also examine implicit messages between a client and others. A clinician adding the examination of others' responses to the client's weight loss could develop a rich

description of the systemic nature of the messages and the interactional patterns between client and others.

This study tentatively suggests that those women using integrated measures to lose weight will more likely maintain their weight loss long term while maintaining important relationships. Again, upon further study, the clinical implication is that clinicians could assist clients to discover measures of losing weight that integrate an awareness and deliberate efforts to foster relational affiliations and connections. Clients can consider the dual considerations of the ways weight loss will impact their relationships and how their relationships will impact their weight loss.

Concluding Remarks

My study suggests that maintenance may not be the last, separate, stage of weight loss. Instead, it appears that the weight loss maintenance process must be integrated throughout weight loss to provide the person with a gradual transition toward the ongoing process needed for continued success. The use of the analytical framework to identify clustered categories while employing the multifocal lens and the toggling procedure could provide the tools for additional research exploring patient narratives. Furthermore, clinicians and researchers using the framework may be able to develop increasingly layered, rich, and more complex understandings of clients' narratives around weight management. Eventually, I hope we could develop a better understanding of the reasons why some people continue to sustain the changes they make while others relapse. Research aimed at developing this understanding and using the framework may lead to developing increasingly comprehensive assessments and treatments leading to increasingly sustainable changes.

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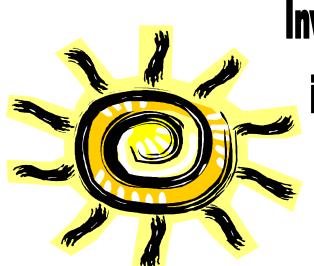
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Invitation to Participate in a Research Study on Weight Loss Maintenance

Many people find that maintaining weight loss is difficult to do.

I am conducting a research study designed to explore the ways that people have been able to maintain their weight loss.

Women between the ages of 30 and 45 are invited to participate in a research study on weight loss and weight loss maintenance.

If you have lost at least 10% of your initial body weight and

maintained that weight loss for over one year at some point in the past, this study is designed to include your story.

If you are interested in participating please contact:

C.R. Macchi

Kansas State University

by phone: (785) 532-7695 or (785) 221-0739

or by email: crmacchi@ksu.edu

to answer some brief questions to be sure you meet the criteria needed for the study

You will receive a free \$25 gift certificate to Dick's Sporting Goods

Barnes & Noble for participating

APPENDIX B – SCREENING QUESTIONNAIRE

Int	erview Code# _					
1)	What year wer	e you born? _				
2)	What was your initial body weight prior to weight loss? lbs.					
3)	What was the average weight you maintained? lbs.					
4)	Did you mainta	ain at least 10°	% of weight loss for a	t least one year?	yes	_ no
5)	Did you partici	Did you participate in a formal weight loss program to <u>lose</u> or maintain your weight?				
	yes	_ no				
6)	Did you under	go bariatric su	rgery to lose your wei	ght? yes	no	
7)	Give dates of your weight loss period: (mo/yr to mo/yr)					
8)	B) How long did you maintain at least 10% of weight loss:((mo/yr		
	to mo/yr)					
9)	What was your relationship status while losing and maintaining your weight?					
	(CIRCLE letter of all that apply)					
	a) Not in a rel	ationship				
	b) Dating		How long?	Dates	_	
	c) Engaged		How long?	Dates	_	
	d) Remarried		How long?	Dates	_	
	e) Married		How long?	Dates	_	
	f) Committed	relationship	How long?	Dates	_	
	g) Divorced/A	Annulled	How long?	Dates	_	
	h) Separated		How long?	Dates	_	
	i) Widowed		How long?	Dates		

APPENDIX C - INTERVIEW GUIDE

The following is a list of the initial questions that will provide probes for the interviews. If the research participant does not automatically offer at least one specific example, I will be asking for one to illustrate her thoughts and ideas.

The following questions are about your *weight loss* experience. [Use follow-up probes to clarify the *role of relationships* in each question below]:

- 1. What were the most powerful reasons for your decision to lose weight?
- 2. How did you know that it was the right time to begin losing weight?
- 3. What were your most frequent thoughts and feelings about yourself and others during your weight loss? In what ways did your thoughts and feelings specifically impact your weight loss? In what ways did your weight loss impact your thoughts and feelings?
- 4. What tempted you to get off track?
- 5. Was your partner or other family member(s) involved in your decision? If so, how?
- 6. How did others (i.e., family, friends, co-workers, etc.) impact your decision to lose weight? Who and how? How did your decision to lose weight impact your partner/others?
- 7. Was your partner/family involved with your weight loss? If so, how did your partner/family impact your weight loss? How did your weight loss impact your partner/family?
- 8. I am interested to hear about some conversations you had with a partner/family member.

 What was the most memorable conversation? What was the most dispiriting

 conversation? (follow-up probe What conditions made the conversations possible?)

- 9. How did your environments (i.e., your home, workplace, community) impact your weight loss? How did your weight loss impact your environment?
- 10. Other than obviously losing weight, did you experience other changes...
 - a. ...while losing weight?
 - b. ...in your relationships?

The following questions are about your *weight loss maintenance* experience. [Use follow-up probes to clarify the *role of relationships* in each question below]:

- 11. Once you stopped losing weight, what factors helped you to maintain the weight loss?
- 12. How have your thoughts and feelings about yourself and others changed? How have your thoughts and feelings specifically impacted your weight loss maintenance? How has your weight loss maintenance impacted your thoughts and feelings?
- 13. How did your weight loss maintenance impact your relationships with others (i.e., family, friends, co-workers, etc.)?
- 14. How has your partner/family impacted your weight loss maintenance? How has your weight loss maintenance impacted your partner/family?
- 15. I am interested to hear about some conversations you had with a partner/family member.

 What was the most memorable conversation? What was the most dispiriting

 conversation? (follow-up probe What conditions made the conversations possible?)
- 16. How did your environments (i.e. your home, workplace, community) impact your weight loss maintenance? How did your weight loss maintenance impact your environments?
- 17. Are there *similarities in your experiences* between losing weight and maintaining weight loss? If so, give one specific example.

- 18. Are there *differences in your experiences* between losing weight and maintaining weight loss? If so, give one specific example.
- 19. Stepping back from our conversation thus far, tell me your story about the way you moved from weight loss to weight loss maintenance.
- 20. What was it like to talk with a man about these experiences? Would you have said anything different if I was a woman?

APPENDIX D – DEBRIEFING HANDOUT

The following letter will be printed as a one-page document and given to the research participant at the conclusion of the interview:

Dear Research Participant,

Thank you for participation in my research study. I appreciate your time and willingness to share your story. The prevalence of overweight and obesity within our society continues to climb despite numerous efforts to address this issue. Most people who lose weight regain their weight within one year. Yours is an important story suggesting that weight loss *can* be maintained.

Your contribution to this study will aid in the development of a new understanding about weight loss and weight loss maintenance. In addition, your story will inform the development of a new model influencing the creation of innovative multidimensional treatment approaches.

If you are interested to read the results of this study, please fill out the bottom of this form to receive a copy.

If you feel that it is necessary to further explore something in your story and would like me to provide you with a referral to a licensed therapist, please do not hesitate to let me know.

Again, thank you for your participation!

Sincerely,

C.R. Macchi, Doctoral Candidate

Kansas State University

.....

I would like to receive a copy of the results of this study (if yes, please check and
complete your mailing information below)
Name
Address

APPENDIX E - MEMBER CHECK REPORT

I have	finally	come to	o the n	oint in 1	mv rese	arch a

Hello

I have finally come to the point in my research at which I am interested in your feedback on my preliminary findings. The following list summarizes the themes from all of the interviews I conducted. *Please review and return this form to me by August 28th*. Your feedback is very important. I will be awaiting your response to complete my study.



The Family Center

The Family Center
School of Family Studies
and Human Services
100 Justin Hall
Manhattan, KS 66506 –1406
785-532-6984
Fax: 785-532-6523
E-mail: family@humec.ksu.edu
www.ksu.edu/humec/fshs/mft/ksumft.htm

I have marked the subthemes that were present in your interview. If you would like to revise, add or delete the markings, please use the box to the left of the item to offer brief comments. I have provided additional space at the end of this form if you would like to provide an extended explanation for any of the items.

Major patterns and cycles you described:

- weight loss enabled you to change another pattern not related to weight
- you described patterns that were specific to weight loss or weight maintenance
- you described patterns that developed as a result of weight loss and maintenance
- you described other life patterns and cycles present before, during, and after weight loss
- you have experienced a repeated cycle of gaining and losing weight

The <u>primary indicators you use(d) to monitor</u> your weight gain, loss, and/or maintenance:

- clothes way clothes fit, buying new clothes, clothing sizes, clothing availability and variety
- body shape and sizes waist, hips, thighs, fingers
- your physical feelings –stomach bloated, tired or lethargic, quality of sleep, pain, degree of movement, double chin, general discomfort, hunger, water retention
- health issues medical conditions changed
- activity level level and amount of activity or exercise
- food intake keeping track, portion control, awareness of calories

- psychological and emotional feelings energetic, depressed, anxiety level, general well-being and health, attentiveness to own needs, determined, pride, confidence, excitement, fears, embarrassment and covering up
- goals moving toward or away from goals
- external sources scale showing weight stabilization or change, picture of self, image in mirror, others' comments

, 6				
During weight loss, you used <u>routines and structure</u> :				
periodically	'	consistently		
During weight maintenance, you used routines a	nd structure:			
periodically	I	consistently		
During weight loss, the <u>level of control</u> you expe				
low – felt out of control	h	nigh – felt in control		
During weight maintenance, the <u>level of control</u>	you experienced:			
low – felt out of control	h	nigh – felt in control		
During weight loss, the <u>level of intentionality</u> of				
low – unintentional choices	high –	intentional choices		
During weight maintenance, the <u>level of intentionality</u> of your weight-related choices was:				
		<u> </u>		
low – unintentional choices	•	intentional choices		

The <u>descriptions of yourself</u> during weight loss and weight loss maintenance included:

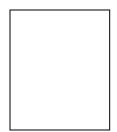
- your experiences were similar to others'
- your experiences contrasted with others'
- your unique experiences were without references to others
- your experiences of jealousy, envy, competition, or intolerance while relating to others
- your weight-related needs became secondary to others' needs or interests
- your abilities to use skills and accomplishments, relating to weight loss and maintenance, in other areas of your life

The <u>descriptions of opposing and supportive relationships</u> during weight loss and weight maintenance:

- relationships that *opposed* your weight loss and maintenance were a struggle because of:
 - o adversarial, conflictual interactions
 - imbalanced roles and responsibilities relating to couple or parenting areas
 - o compromised boundaries others' inappropriate comments of or expectations for you
 - o others' expressions of no support, sabotaging influences, manipulativeness
 - o your experiencing of compromised trust
 - o others' hurtful, disrespectful, or confusing messages
 - o your avoidance of time together with others
- relationships that *supported* your weight loss and maintenance were built because:
 - o common goals and struggles were shared
 - o communication about goals and struggles were shared
 - o challenges to continue efforts were shared
 - o trust was shared
 - o responsive, respectful, open messages were offered
 - o you enjoyed time together

The descriptions of *pressuring and supportive environments* (home, work, church) during weight loss and weight maintenance:

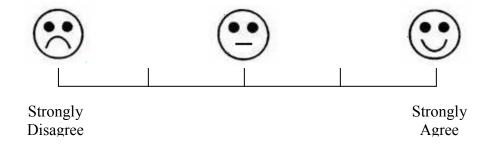
- environments were *pressuring* because of:
 - o limited food choices
 - o time constraints
 - o your perceptions of social expectations
 - o financial constraints
 - o a general climate that undermined your weight loss and weight maintenance goals



- environments were *supportive* because of:
 - o your forecasting and planning prior to involvement
 - o others' validating your efforts
 - o others' accommodations for your needs
 - o a general climate that supported your weight loss and weight maintenance goals

After reading each of the themes marked in RED above, I believe my interview has been accurately summarized.

(Please place an "X" on the following scale representing the degree of your response)



Please use the space below to clarify or correct any of the information in this summary. If you would prefer to set a time for an additional interview, please note your request below. Then place this form in the self-addressed stamped envelope and return to me.

Thank you for your time and your valuable contributions to my study.

APPENDIX F

KANSAS STATE UNIVERSITY

INFORMED CONSENT

	Systemic Change Processes: and Weight Loss Maintenanc		ring Differences Between Weight Loss	
APPROVAL DATE OF	APPROVAL DATE OF PROJECT: EXPIRATION DATE OF PROJECT:			
PRINCIPAL INVESTIG	GATOR: CO-INVESTIGATO	OR(S): Candyce R	ussell	
CONTACT AND PHO	CONTACT AND PHONE FOR ANY PROBLEMS/QUESTIONS: C.R. Macchi, 785-532-7695			
IRB CHAIR CONTACT/PHONE INFORMATION: Rick Scheidt, 785-532-3224				
SPONSOR OF PROJEC	CT:			
PURPOSE OF THE RE	ESEARCH: Dissertation	Research		
PROCEDURES OR METHODS TO BE USED: This is a semi-structured interview designed to give you are opportunity to describe your weight loss and weight loss management experiences. The interview will be audiotaped All precautions will be taken to maintain the confidentiality your responses.			your weight loss and weight loss es. The interview will be audiotaped.	
ALTERNATIVE PROCEDURES OR TREATMENTS, IF ANY, THAT MIGHT BE ADVANTAGEOUS TO SUBJECT:				
LENGTH OF STUDY:	14-16 interviews each coparticipants	nsisting of 45 minutes to	o one hour with each of the research	
RISKS ANTICIPATED	You will not be expose	ed to any known risks.		
BENEFITS ANTICIPA		opportunity to express y oss and weight manager	rour thoughts and feelings associated nent experiences.	
EXTENT OF CONFIDENTIALITY:				
IS COMPENSATION OINJURY OCCURS:	OR MEDICAL TREATMEN	Γ AVAILABLE IF	N/A	

Date: _____

PARENTAL APPROVAL FOR MINORS: N/A			
ΓΕRMS OF PARTICIPATION: I understand this project is research, and that my participation is completely voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time, and stop participating at any time without explanation, penalty, or loss of benefits, or academic standing to which I may otherwise be entitled.			
verify that my signature below indicates that I have read and understand this consent form, and willingly agree to participate in this study under the terms described, and that my signature acknowledges that I have received a signed and dated copy of this consent form.			
(Remember that it is a requirement for the P.I. to maintain a signed and dated copy of the same consent form signed and kept by the participant			
Participant Name:			
Participant Signature: Date:			
VOLUNTARY OPTION FOR ADDITIONAL SUBJECT PARTICIPATION IN THE STUDY			
VOLUNTART OF HON FOR ADDITIONAL SUBJECT FARTICIFATION IN THE STUDT			
Please place a check in the space provided IF YOU AGREE with one or both of the following statements:			
Please place a check in the space provided IF YOU AGREE with one or both of the following statements: I am voluntarily agreeing to read a written summary of my interview and agree to offer comments verifying			
Please place a check in the space provided IF YOU AGREE with one or both of the following statements: I am voluntarily agreeing to read a written summary of my interview and agree to offer comments verifying whether or not the writing accurately reflects my experiences. I am voluntarily agreeing to receive a call back at a later date requesting clarification of something from the			

Participant Signature:



University Research Compliance Office

203 Fairchild Hall Lower Mezzanine Manhattan, KS 66506-1103 785-532-3224 Fax: 785-532-3278 http://www.ksu.edu/research/comply

Proposal Number: 3771

TO: Candyce Russell

FSHS

114 Campus Creek Complex

FROM: Rick Scheidt, Chair

Committee on Research Involving Human Subjects

DATE: February 20, 2006

RE: Approval of Proposal Entitled, "Systematic Change Processes: A framework for exploring

differences between weight loss and weight loss maintenance in the family context."

The Committee on Research Involving Human Subjects has reviewed your proposal and has granted full approval. **This proposal is approved until** February 20, 2009.

In giving its approval, the Committee has determined that:

\boxtimes	There is no more than minimal risk to the subjects.
	There is greater than minimal risk to the subjects.

This approval applies only to the proposal currently on file. Any change affecting human subjects must be approved by the Committee prior to implementation. All approved proposals are subject to continuing review at least annually, which may include the examination of records connected with the project. Announced in-progress reviews will be performed during the course of this approval period by a member of the University Research Compliance Office staff. Injuries or any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Committee on Research Involving Human Subjects, the University Research Compliance Office, and if appropriate and if the subjects are KSU students, to the Director of the Student Health Center.

When deemed appropriate by the IRB and prior to involving human subjects, properly executed informed consent must be obtained from each subject or from an authorized representative, and documentation of informed consent must be kept on file for at least three years after the project ends. Each subject must be furnished with a copy of the informed consent document for his or her personal records. The identification of particular human subjects in any publication is an invasion of privacy and requires a separately executed informed consent.

It is important that your human subjects project is consistent with submissions to funding/contract entities. It is your responsibility to initiate notification procedures to any funding/contract entity of any changes in your project that affects the use of human subjects.