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Obesity and the experience of eating in adult, American, Caucasian women: A grounded theory approach

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Obesity and the Experience of Eating

in Adult, American, Caucasian Women:

A Grounded Theory Approach

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Sheryl S. Russell

August 1994

To the Graduate Council:

I am submitting herewith a dissertation written by Sheryl S. Russell entitled "Obesity and the Experience of Eating in Adult American Caucasian Women: A Grounded Theory Approach." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Ph.D., with a major in Nursing.

Inez Tuck, R.N., Ph.D., Major Professor

We have read this dissertation
and recommend its acceptance:

Accepted for the Council:

Associate Vice Chancellor
and Dean of The Graduate School

DEDICATION

This dissertation is dedicated to Carole B. Merhoff, R.N., M.S.N., friend and colleague, who's love, encouragement and support in this life and from beyond was instrumental in this accomplishment.

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I would like to express my appreciation to Dr. Inez Tuck, my major professor, for her patience and gentle guidance as I pursued not only this degree but a change in specialty. I would like to thank Dr. Sandra Thomas for her instrumental direction and mentorship. Her influence in my career brought me to this point and it is my hope and expectation that it will continue. I would also like to thank the other committee members, Dr. Kathleen deMarrais, Dr. Catherine Faver and Dr. Pamela Hinds, for their continued support and persistent feedback in guiding and shaping this research. I am grateful for the love and support of my family who have made many sacrifices to enable me to pursue these career opportunities. My parents deserve special recognition for their love and encouragement. They kept me moving when things seemed hopeless. I would like to thank Linda Dalton for her patience in typing this manuscript and for rescheduling her personal life to accommodate my many unanticipated changes. And finally but with no lesser recognition, I would like to express my appreciation and thank my friends and colleagues. Their always available open ears, strong shoulders and many hands helped motivate and stimulate my growth and development and moved this project to completion.

ABSTRACT

The search to unravel the complex phenomenon of obesity has been pursued for centuries. Theoretical postulations regarding the etiology of obesity and subsequent management strategies are numerous and complex. Despite decades of clinical application, the rising prevalence of obesity remains essentially unchanged. Clearly it is time to consider a new perspective.

In view of the continued failure of programs to effectively achieve successful long-term weight management, a re-evaluation of the phenomenon of eating is warranted. A grounded theory design provided the opportunity to explore this phenomenon in a new light. This study attempts to understand the phenomenon of eating in adult, American, Caucasian women from the perspective of the reality of the women who experience it. The resulting theory of seeking solace through eating emerged from the context of the social process in which it was embedded. Embracing this new understanding of eating and obesity, realistic strategies may be designed to promote health and reduce the associated morbidity and mortality. Nursing interfaces with people at all phases of the life cycle and, therefore, is in a unique position to influence this continued health problem.

PREFACE

This research is about the lives of eight women who shared their souls in their struggle with eating and obesity. Eating for them is about seeking solace in a culture that worships a thin female body and professes "anything is possible if you work hard enough to achieve it." Their repeated efforts to control their weight and their eating result in rejection. They seek solace through eating and the cycle continues.

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CHAPTER ONE

INTRODUCTION

The search to unravel the complex phenomenon of obesity has been pursued for centuries. Obesity has been increasingly recognized over the past several decades as a potential health problem. Researchers, health care providers, and industry have developed numerous programs and strategies to attempt to interpret and modify the preoccupation with food. Despite years of research and the subsequent rise of a multimillion dollar weight reduction/management industry, successful long-term resolution has eluded us.

The National Health and Nutrition Examination Survey (NHANES II) conducted from 1976 to 1980 by the National Center for Health Statistics [NCHS] revealed that 34 million adult Americans were overweight. Slightly more than 12% were considered severely obese. Women were found to be more obese than men across all age groups (Van Itallie, 1985). In the scientific and popular literature it is estimated that 35 to 50% of American women are overweight (Orbach, 1990; Stunkard, 1984). It is estimated that 95% of enrollees in weight-loss programs are women ("You've Come a Long Way Baby", 1993). Women have a greater life expectancy than men and "...tend to become heavier relative to their mean weights at an earlier age" (Matthews, 1991, p. 10). Orbach (1990) offers one insight regarding the prevalence of obesity in women by examining the social role of women in this society.

Fat is a social disease, and fat is a feminist issue. Fat is *not*

about lack of self-control or lack of will power. Fat *is* about

protection, sex, nurturance, strength, boundaries, mothering,

substance, assertion, and rage. It is a response to the inequality

of the sexes. Fat expresses experiences of women today in

ways that are seldom examined and even more seldom treated

(Orbach, 1990, p. 6).

Obesity in some cultures has been reported to symbolize "...plentiful nutrition

and diminished physical activity" that is associated with social status (Matthews,

1991, p. 17). An examination of art between 1500 and 1900 portrays both men and

women as visually appealing at greater body weight and volume (Matthews, 1991).

However, a full feminine figure is no longer considered "in vogue." A survey

conducted in 1984 by Glamour magazine revealed that 75% of the respondents

indicated they were "too fat." Yet, the data revealed that only 25% were actually

overweight. In fact, 45% of the respondents that indicated they were "too fat" were

actually underweight! Although limited by issues of reliability this survey reflects

confusion about weight and obesity ("Feeling Fat in a Thin Society", 1984). The

NHANES II study demonstrated a similar finding with twice as many people rating

themselves as overweight than really were. Of those who self-rated as overweight,

64% were trying to lose weight (National Center for Health Statistics, 1986).

Obesity is considered to be a major health risk for women. Coronary artery

disease, non-insulin dependent diabetes, elevated blood lipids, hypertension, and

stroke are associated with increased abdominal fat. Uterine, breast and gall bladder

cancer are also associated with obesity. Degenerative joint disease, arthritis, stress

incontinence, low back pain, sleep apnea and gout are often found to be intensified by

obesity (Bjorntrop, 1985; Garfinkel, 1985; Matthews, 1991; Perri, Nezu, &

Viegener, 1992; Pi-Sunyer, 1991; Van Itallie, 1985). Studies conducted by the

American Cancer Society, as well as the Framingham study, revealed a higher

mortality rate as the degree of obesity increased (National Institutes of Health

Concensus Development Panel on the Health Implications of Obesity, 1985).

A study conducted by Manson et al. (1990) examined the incidence of

coronary heart disease in a cohort of female nurses, prospectively over eight years.

This study included 115,000 subjects ages 30 to 55 years old who at the onset of the

study in 1976 were free of any diagnoses related to coronary heart disease, stroke or

cancer. A positive association was revealed between higher body mass index (BMI)

and the incidence of both fatal and nonfatal heart disease during the study period.

Those women with BMI's $\geq$ 29 (the heaviest category) were three times more likely

to develop coronary heart disease than the lightest category (BMI < 21). In this

study, 70% of the incidence of coronary heart disease was attributable to obesity for

women with a BMI > 29 and 40% of all coronary events were related to obesity

across all weight categories. In view of the prevalence of obesity in American

women, this study has profound implications. It is estimated that more than 25% of

American women who are 35 to 65 years old have a BMI of > 29 placing them at

greater risk of coronary heart disease. The study supports findings of the

Framingham Heart Study indicating obesity as an independent risk factor for coronary heart disease (Hubert, Feinlieb, McNamara, & Castelli, 1983).

Recent findings from the Framingham study (Lissner et al., 1991) indicate that the incidence of coronary heart disease is greater in individuals with fluctuating weight. These cycles of weight gain and weight loss are thought to adversely affect health. Unfortunately, only one of these recent Framingham reports included women. Compared to individuals with stable weight patterns, both men and women demonstrated significantly greater risk of coronary heart disease with fluctuating patterns in body weight. Researchers speculate that cholesterol levels become extremely elevated following a large weight loss/weight gain cycle. The rate of atherogenesis may be accelerated, therefore contributing to heart disease. Increased abdominal fat has also been shown to result from repeated cycles of weight loss and weight gain. The increased upper body density may have hormonal effects that influence the process (Hamm, Shekell, & Stamler, 1989; Rodin, Radke-Sharpe, Rebuffe-Scrive, & Greenwood, 1990).

In view of the continuing battle for weight management and its resulting impact on morbidity and mortality, further investigation of the phenomenon of obesity is warranted. Complex diet and health and fitness regimens have mushroomed supporting an industry that generates 30 billion dollars a year. Yet studies consistently report that "...95% of those who diet regain all the weight lost within one year" (Perri et al., 1992, p. X). Clearly, there is more to this phenomenon than the mechanics of weight loss. Despite research, the influence of societal norms and

public education, the prevalence of obesity continues to increase and demonstrates an alarming trend in incidence among children and adolescents (Matthews, 1991; National Institutes of Health Technology Assessment Conference Statement, 1992; Perri et al., 1992).

Miller (1991) points out that obesity is not necessarily considered problematic for all people. She contends that obesity may instead be a person's natural body weight. Exerting pressure for all obese people to diet may result in a level of thinness below their biological norm which could actually contribute further to obesity by setting an unmaintainable standard. Miller differentiates between obesity and compulsive overeating.

> Compulsive overeating is a process of responding to an emotional need
> or experience with an inappropriate behavior that attempts to address it
> but cannot. It is eating without regard to the biologic need of the body
> for food--eating when one is not physically hungry and continuing to
> eat after one has had enough (p. 699).

Miller further describes patterns of eating behavior that vary from a continuous "grazing" to "cycles of bingeing and restriction" (p. 701). She explains that compulsive overeating may, in fact, result in obesity.

Theoretical postulations regarding the etiology of obesity and subsequent management strategies are numerous and complex. Despite decades of clinical application, the rising prevalence of obesity remains essentially unchanged. Clearly, it is time to consider a new perspective.

PURPOSE

Traditional approaches to the study of obesity have had little impact on the prevalence of obesity and weight management. Few qualitative studies exist that examine obesity and none have been designed to investigate the eating experience. The purpose of this study was to explore the experience of eating in a sample of obese, adult, American, Caucasian, women who identify food issues as problematic. The self identification of food issues as being problematic was established to differentiate between those women who have adopted the obese status, are not actively attempting to change it, and therefore, do not define food issues as problematic.

RESEARCH QUESTION

What is the social-psychological process involved with eating in obese, adult, American, Caucasian women, ages 21 to 55, in the United States who claim food issues as problematic?

THEORETICAL FRAMEWORK

In view of the continued failure of most programs to effectively achieve successful long-term weight management, a re-evaluation of the phenomenon of eating in obese women was warranted. Grounded theory methodology provided the opportunity to explore this phenomenon in a new light, identify the relevant concepts and evaluate their relationships. According to Strauss and Corbin (1990), grounded theory is an inductive process that emerges from "...the study of the phenomena it represents" (p. 23). Grounded theory is a particularly useful methodology to explore areas where relatively little is known about a phenomenon or where existing theories

have not adequately explained it. It is for the latter purpose that grounded theory was chosen to explore the experience of obesity and eating in obese, adult, American, Caucasian women for whom food issues are problematic.

Stern, Allen and Moxley (1982) describe congruence of nursing and grounded theory methodology. Nursing, like grounded theory, occurs in a naturalistic setting as opposed to a laboratory or controlled environment. The process of nursing includes a systematic method of collecting, comparing and coding data (patient information), generating hypotheses, searching the literature for additional data and then supporting or rejecting the hypotheses. It is also interesting to note that the development of grounded theory evolved through the work of Anselm Strauss and Barney Glaser who were both on faculty at the time, at the school of nursing at the University of California, San Francisco. Their work culminated in several classic studies and the well known book, the Discovery of Grounded Theory: Strategies for Qualitative Research (Glaser & Strauss, 1967).

Grounded theory is based on the philosophy of symbolic interactionism which contends that all "human interactions are based on symbols which have associated meaning and value" (Hutchinson, 1986, p. 112). Therefore, meaning and value can be discovered through the examination of human symbols such as words, artifacts, writings and body language. The complex interweave of symbols is then unraveled to ascertain and understand the social processes contained within human interaction (Blumer, 1969). This process allows the grounded theorist to understand "reality" from the perspective of the people who interact within the group. These interactions

are transcribed as data. The data are collected and analyzed concurrently allowing the theory to be driven by the data. The data that need to be collected next as well as the source will be identified as the theory emerges from this process and, therefore, is "grounded" in or relevant to the experience of the subjects. Data are categorized on three levels utilizing a constant comparative method. Theoretical constructs emerge from the pattern of the categories identified during coding. These theoretical constructs, substantive codes, categories and their associated properties form a theory that embraces the maximum variation of the phenomenon under study. The resulting theory is grounded within the context of the phenomenon as it exists in "reality" and is supported by data and data-based examples, thereby avoiding abstract theorizing (Glaser & Strauss, 1967; Hutchinson, 1986; Strauss & Corbin, 1990).

This study attempts to understand eating in adult women from the perspective of the "reality" of the women who experience it. The resulting theory emerged from the context of the social process in which the phenomenon is embedded. It is the belief of this author that only then will we begin to truly understand this evasive phenomenon. Realistic strategies may then be designed to promote health and reduce the associated morbidity and mortality associated with obesity.

CONCEPTUAL ORIENTATION

The interactive nature of many qualitative methodologies raises issues of researcher bias and subjectivity. It is generally acknowledged that the investigator has some effect on this research process. This effect is used to the researcher's advantage in developing theoretical sensitivity. However, strategies must also be employed to

ensure that the researcher perceives reality from the perspective of the participants and not solely from his or her own. The identification of personal biases, the conduction of a bracketing interview, and ongoing memoing during data collection and analysis are ways in which to enhance objectivity (Chenitz & Swanson, 1986; Hutchinson, 1986). The following belief statements provide the conceptual orientation of this author:

1. American women view obesity as a deviation from the social norm.

2. Obesity and the eating behaviors that may contribute to it represent a female response to societal conditions or may even be a female strategy to deal with those conditions.

3. Obese women experience some degree of shame related to their obesity.

4. Eating is somehow different for obese women than for women who do not identify food issues as problematic.

5. Obesity serves a function for the individual, albeit society has labeled it as a problem.

6. Obesity affects women's health negatively both emotionally and physically.

7. Obese women experience social ostracism related to their weight.

8. Women pursue multiple methods of weight loss/control in attempting to achieve or maintain their perception of the societal ideal.

9. Helping women with problematic eating come to an understanding of their patterns will be therapeutic for them.

10. Problematic eating involves a number of contributing factors (nutritional, physiological, behavioral, emotional).

11. Identifying the contributing factors and their interrelatedness will allow a comprehensive (or whole) explanation to be developed.

12. Food and the eating of food had meaning beyond basic nutritional needs.

SIGNIFICANCE

In view of the high recidivism rates in weight reduction and the subsequent impact on health, a reexamination of the phenomenon of eating is warranted. Coupled with the mounting evidence of the impact that obesity and fluctuating weight cycles have on health, it is clear that the methodologies currently utilized are not effective, long lasting or consistent. Numerous disciplines offer their theoretical perspectives regarding obesity and eating. For instance, psychology looks at the cognitive and emotional aspects of eating behaviors. Health physiology looks at activity and metabolic processing. Nutrition looks at the caloric balance, the nutritional value of foods and the impact of eating on metabolism. Nursing has the unique position of examining this process from a holistic perspective integrating all these factors. Nursing, by virtue of this holistic integrated approach to health and human behavior, is in the position to investigate the complex phenomenon of obesity in a new light. The significance of this study is that it is the first documented qualitative study to explore the experience of eating in obese, adult, American, Caucasian women who have defined food issues as problematic. Ultimately, interventions may be designed to influence or modify the experience thereby offering

a previously unknown strategy for weight control management. Nurses have multiple

opportunities to intervene with clients in both inpatient and outpatient settings at all

stages of the life cycle.

LIMITATIONS

Limitations of this study include the issues that necessarily accompany self-

disclosure and social desirability, because the data will be collected by client

interviews. Findings represent only a specific sample of obese adult Caucasian

women ages 21 to 55 and consistent with the methodology cannot be generalized to

the larger population of obese women. This study was intentionally limited to

Caucasian women to control for variation that may reflect ethnicity and cultural

experiences. Eating that leads to or perpetuates obesity is the only type of eating

under consideration in this study. It is recognized that other types of eating exist such

as normal eating or various forms of eating disorders such as anorexia nervosa,

bulimia nervosa or compulsive overeating. The researcher's personal and professional

experience add a degree of bias which may be beyond theoretical sensitivity. That

bias will be addressed through the use of participant validation and collateral review.

SUMMARY

Despite decades of research and billions of dollars invested in the attempt to

control and manage obesity, little progress has been made towards reaching an

effective, consistent, long-term approach to this problem that affects the health of a

significant number of Americans. Perhaps this lack of progress can be attributed to

failure to explore the meaning of eating behavior itself for women who identify food

issues as problematic. Rationale for qualitative grounded theory approach was

provided in this chapter. In the next chapter, literature pertaining to obesity and

eating will be reviewed.

CHAPTER TWO

LITERATURE REVIEW

INTRODUCTION

Eating and obesity have increasingly garnered the interest of researchers for

the past three decades. The prevalence of obesity and its impact on health demand a

closer review of what is known about this phenomenon. This chapter begins with an

exploration of the neurophysiology of eating. The biological, behavioral, cognitive,

psychodynamic and sociocultural theories pertaining to the etiology of obesity will be

reviewed with a discussion of the existing research in those areas. The emotional link

in eating behavior is examined and a review of the relevant research in nursing is

presented.

NEUROPHYSIOLOGY OF EATING

Eating is a response to a complex physiological state. Ranked number one in

Maslow's hierarchy of needs, food shares the top priority with shelter for human

survival (Maslow, 1970). Coordinated by the hypothalamus, the body monitors and

regulates its internal state through neuroendocrine processes that evoke responses

within the external environment to modify or restore a homeostatic balance.

Neuroendocrine functions of the body as well as some aspects of emotional

behavior are regulated primarily by the hypothalamus. The "...hypothalamus

represents less than one percent of the brain mass nevertheless is the most important

of all the motor output pathways of the limbic system" (Guyton, 1987, p. 253).

Morley (1980) describes the hypothalamus as a "transducer" that integrates internal

sensory information and maintains homeostasis by influencing eating behaviors. The

hypothalamus has essentially two regions that influence eating behavior. The first

region, the lateral hypothalamus, is influenced by beta-adrenergic (β) stimuli and is

conceptualized as the "feeding control" or "feeding center." The primary

neurotransmitters involved in regulating the "feeding center" are dopamine (DA) and

epinephrine (EPI). These neurotransmitters are involved in feeding inhibition.

Damage to these adrenergic pathways results in hyperphagia and obesity. The second

region, the paraventricular and medial hypothalamus, is influenced by alpha-

adrenergic (α) stimuli and is conceptualized as the "satiety control" or "satiety

center." Norepinephrine (NE) is the primary neurotransmitter responsible for

initiating feeding behavior through inhibiting the satiety center. Serotonin (5HT) and

its precursor, tryptophan, act by positively stimulating the satiety center (Bray, 1990a;

Guyton, 1987; Hernandez & Hoebel, 1980). Therefore, "...drugs which block the

effect of serotonin can increase body weight and those which stimulate the release of

serotonin or inhibit its reuptake from nerve endings will result in a reduction of body

weight" (Bray, 1990a, p. 5).

Several other neurotransmitters regulate food intake. When applied to the

ventromedial or paraventricular nucleus of the hypothalamus, neuropeptide y,

neuropeptide yy, pancreatic polypeptide, beta-endorphin, dynorphin and galanin

stimulate eating behavior and food intake. Gamma-aminobutyric acid (GABA), an

amino acid, found normally in the medial hypothalamus, increases in response to

hypoglycemia and also induces eating behavior. Furthermore, "electrical stimulation of the lateral hypothalamus leads to food seeking and ingestive behavior" (Bray, 1990a, p. 6). Other neuropeptides such as bombesin, glucagon, cholecystokinin (CCK), calcitonin, neurotensin, somatostatin, corticotropin releasing factor (CRF), and thyrotropin releasing hormone inhibit eating behavior when injected into the ventromedial nucleus. Many of these neuropeptides are released from the gut with gastric filling and have led to extensive testing of CCK. The resulting "gut hormone hypothesis" examines how food ingestion terminates eating and facilitates satiety. This resulting view considers the surface of the gut as an incredible sensory system that responds "... to the chemical and physical stimuli of food" (Smith, 1984, p. 73). Openings through or receptors in the blood brain barrier may provide the mechanism for "circulating nutrients and hormones" to act directly on the brain (Smith, 1984, p. 73). For example, the concentration of amino acids (i.e. tyrosine and tryptophan) that are precursors of neurotransmitters would, therefore, influence protein intake (Bray, 1990a; Guyton, 1987; Hernandez & Hoebel, 1980; Smith, 1984; Wilbur, 1991; Woods & Gibbs, 1989).

The brain receives information regarding nutritional/energy balance from the sensory system. "The sight and smell of food are important signals for initiating food-seeking behavior and identifying potential sources of food" (Bray, 1990a, p. 3). These environmental cues along with taste and texture create two feedback loop mechanisms. The positive feedback signals continued eating. The negative feedback loop signals to slow, terminate or abort eating behavior (Bray, 1990a).

The hypothalamus may also effect hunger and satiety indirectly through insulin and glucagon secretion, subsequent nutrient removal and storage. Stimulation of liver metabolism by the lateral hypothalamus and ventromedial hypothalamus causes glucose absorption into glycogen and the conversion of glycogen into glucose respectively (energy stores). "Clearly the hypothalamus receives information about the state of the organism's energy supplies and influences their disposition, to do so efficiently, it must also be able to assure adequate resupply of energy by exercising control over feeding behavior" (Grossman, 1984, p. 8).

Meal composition has an effect on the nervous system by regulating the conversion of nutrients to neurotransmitters (particularly amino acids and choline). For instance, "a breakfast rich in carbohydrates and poor in proteins raises brain levels of the nutrient tryptophan, which accelerates the production and release of tryptophan's neurotransmitter product serotonin" (Wurtman & Wurtman, 1983, p. 854). This will result in a lunchtime choice higher in protein and lower in carbohydrate. "A protein-rich breakfast, which diminishes brain serotonin, may have the opposite effect" (Wurtman & Wurtman, 1983, p. 854). Decisions about food intake are influenced by the information the brain senses from the neurotransmitter/plasma composition and the body's metabolic state. Protein ingestion increases plasma tryptophan but it correspondingly raises the level of other large, neutral amino acids (LNAA) to a greater level because of their greater concentration in protein sources. Carbohydrate ingestion triggers insulin secretion which transports amino acids out of the bloodstream and into the cell but does not

influence tryptophan appreciably. Tryptophan must compete with the other amino acids for transport across the blood-brain barrier. When the tryptophan level is high in comparison to LNAA, tryptophan is transported across the blood-brain barrier. If the tryptophan level is comparatively low, tryptophan leaves the blood-brain barrier to enter the bloodstream. Serotonin is synthesized from the tryptophan. Serotonin appears to diminish carbohydrate intake (Wurtman & Wurtman, 1983).

Several studies have demonstrated human response to dietary selection particularly regarding snacks. In one study, baseline evaluation revealed that the subjects consumed 60% of their snacks as high-carbohydrate foods. Subjects were then asked to pre-select their snacks to include only one high-carbohydrate choice and agreed to consume them only during an identified four hour "craving time." Fenfluramine, tryptophan and a placebo were administered in a double-blind crossover schedule one hour prior to the identified snacking period. The number of consumed snacks was recorded. Fenfluramine, a drug that releases serotonin, had a significant effect in snack reduction for the group. Tryptophan, although not significant in group effect, did decrease snack intake in three out of the eleven subjects. The hypothesis was considered that some people (obese in particular) have an increased need for high-carbohydrate snacks and that this need is related to serotonin levels and accounts for the failure of these persons to lose or maintain weight (Wurtman & Wurtman, 1981).

A subsequent study was undertaken with 23 obese adults who identified themselves as high carbohydrate cravers. An assortment of isocaloric snacks, high-

carbohydrate (sweet and non-sweet) in addition to high-protein snacks were selected

and subjects were allowed 24 hour access. The study was conducted for four weeks

on an inpatient basis. Meals were identical and predetermined. Approximate daily

caloric intake was 1000 calories so subjects were encouraged to snack. Snacks were

administered via a computerized vending machine. The first two weeks were utilized

to establish baseline patterns and during the second two weeks, the effect of

fenfluramine, tryptophan or a placebo was measured. The group demonstrated a

significant difference in carbohydrate versus protein snack consumption. The craving

period was also identified and the number of snacks consumed was relatively

constant. No difference was noted in choice between sweet and non-sweet

carbohydrates. Subjects taking fenfluramine significantly decreased snack intake.

Half of the subjects receiving tryptophan also decreased snack intake. Because meals

were controlled, no evaluation was conducted to compare carbohydrate versus protein

meal choices relative to snack selection (Wurtman et al., 1981).

In a third study, choices were added at mealtime to include three

carbohydrates and three protein selections. Subjects were permitted to select and eat

as many of them as they wanted. Selection of choices and amounts were then

recorded after meals. Fenfluramine and a placebo were administered in a double

blind crossover schedule. Results demonstrated a significant difference between

choices at meal times and choices as snacks. The snack choices were consistent in

type and amount as in the previous study; however, meal choices were different.

Carbohydrate intake was considered moderate (by U.S. standards) and protein intake

was high. According to Wurtman and Wurtman (1986), these studies have demonstrated the following:

1. Caloric and nutrient consumption *is* surprisingly constant for any individual: administration of a placebo has no effect on the number (or composition) of snacks chosen per day, and mealtime caloric intake also exhibits little variation (Wurtman & Wurtman, 1984a, b).

2. The great majority of obese people who claim to be carbohydrate-cravers very clearly do exhibit such behavior when they are studied in a controlled clinical environment; many subjects who do habitually take three to six carbohydrate snacks per day never eat a protein-rich snack at all (Wurtman et al., 1985).

3. The *mealtime* consumption of calories (approximately 1,900 in one test group) and of macronutrients (87 g protein; 143 g carbohydrates) tends to be normal, and clearly cannot explain their obesity. However, they also eat, on the average, 700-1,000 or more calories per day of virtually-pure carbohydrates (i.e., protein-free), as snacks.

4. Administration of a "pure" serotoninergic drug, Isomerid (D-fenfluramine) selectively suppresses their consumption of carbohydrates (Wurtman et al., 1981, 1985) the intake of carbohydrate-rich snacks declines by about 40% (in subjects receiving 15 mg bid of the drug); mealtime carbohydrate intake declines by 20-25%; mealtime protein intake is not significantly affected. (Too few protein-rich snacks are

consumed when subjects are receiving a placebo to assess whether or

not the treatment affects snack protein intake.) (p. 102).

Serotonin release also influences behavioral phenomena such as mood,

drowsiness, sleep facilitation and pain sensitivity. Carbohydrate consumption in the

afternoon versus morning has demonstrated "...feelings of calmness and relaxation

and drowsiness" in yet another study (Wurtman, 1985, p. 150). Patients described

feelings prior to carbohydrate snacks as "restless, tense, unable to concentrate."

After snacks, they claim they were "calm, relaxed, able to concentrate" (Wurtman &

Wurtman, 1986, p. 102). Protein did not show the same effect. Therefore, mood

changes may reflect an increased release of brain serotonin following carbohydrate

intake. It is interesting that the effects of most antidepressant drugs "enhance

mediated neurotransmission (either by blocking serotonin's intracellular metabolism

by monoamine oxidase or by suppressing its reuptake into the presynaptic terminals

that release it)" (Wurtman, 1985, p. 150). The psychopharmacology of these

antidepressants is remarkably similar to the effect of dietary carbohydrate

consumption just described. This study suggests that the high-carbohydrate cravers

may eat these snacks for the psychopharmacologic effects (Wurtman, 1985; Wurtman

& Wurtman, 1984c).

In view of these studies, low-carbohydrate diets are inappropriate for treatment

with carbohydrate cravers. "... Tryptophan/LNAA plasma ratio tends to be

abnormally low in obese people (possibly as a consequence of peripheral insulin

release)" (Wurtman, 1985, p. 150). Low carbohydrate diets would only further lower

this ratio precipitating noncompliance and failure (Wurtman, 1985). The biochemical processes involved in the neurophysiology of eating are numerous and complex. One can appreciate the dilemma in attempting to understanding the dynamics involved in eating and how it relates to obesity. The next section will examine current theories in the etiology of obesity.

THEORIES OF OBESITY

Obesity is defined as "... a condition of excess body fat" (Shah & Jeffery, 1991, p. 73). The definition reflects the outcome. The etiology is not quite so simple. A complex, multidimensional phenomenon, obesity can be viewed theoretically from five different perspectives; biological, behavioral, cognitive, psychoanalytical and sociocultural. Each perspective will be discussed in greater detail with an examination of the existing research.

Biological Perspective

The biological perspective includes three major etiologies: genetic inheritability, alterations in caloric intake to energy expenditure and neuroendocrine influence in altered eating. Genetic inheritability refers to the tendency towards obesity that is passed down from generation to generation through family characteristics. Alterations in caloric balance and neuroendocrine influence are both physiologic processes affecting metabolism. In reality, they are not exclusionary, and all contribute to some extent to the biological etiology of obesity. Each of these will be discussed in greater depth.

Genetics. Studies of adoptees and twins implicate the role of genetics in the

development of obesity. Results from one group of studies indicate that obesity is

largely attributed to genetic control and that environmental influences are insignificant

(Price, Cadoret, Stunkard & Troughton, 1987; Soresnson, Price, Stundard, &

Schulsinger, 1989; Stunkard, Harris, Pedersen, & McClearn, 1990; Stunkard et al.,

1986). Other researchers disagree and point to methodological issues in the studies as

sources of confusion and variance resulting in meaningless heritability estimates

between 0 and .90. One criticism voiced by Brouchard (1991) claims that the

examination of only immediate family members does not consider within-generation

or second-generation relatives. Bouchard, Perusse, Leblanc, Tremblay, and Theriault,

(1988) utilized causal path analysis to consider the (additive) genetic and cultural

transmission contributions to body mass index (BMI). In this study, genetic effect

was calculated at 5% demonstrating a much smaller genetic impact than previously

thought. The cultural transmission effect contributed 30%. Highest correlations of

obesity were associated with degree of closeness in relatives; for example,

monozygotic twin pairs had the highest correlation of obesity. However, significant

correlations were also noted in dizygotic twins, non-twin siblings, biological parent-

child dyads as well as in adoptee parent-child dyads indicating that cultural factors

had a significant contribution. Additional criticism of the genetic studies lie in

measurement methodology. The majority of studies utilize indirect measurement of

BMI through calculating a weight/height ratio. Although correlating highly with

percentage of body fat (.6 to .8), it is generally agreed that any indirect measurement

introduces a degree of error variance. Therefore, the use of the indirect measurement of BMI is affected to some extent by varying amounts of muscle and bone mass that may contribute to BMI but not to actual percentage of body fat. Despite Brouchard's criticism, the overwhelming evidence supports the heritability of obesity through genetic transmission. Yet, the contribution of the social environment is also recognized. The prevailing outcome considers a combination "...of a genetic vulnerability and an adverse environment" (Meyer & Stundard, 1993, p. 137). Obesity is thought to develop in those individuals who are genetically predisposed and who are exposed to environmental conditions that are conducive to its development.

Caloric Intake and Expenditure. The amount of food or type of food has also been implicated in the etiology of obesity. Several studies indicate that obese subjects eat more food than normal subjects (Abramson & Wunderlich, 1972; Hill & McCutcheon, 1975; Miller, 1991; Nisbett, 1968; Policy & Herman, 1985). These studies indicate that obese people may be more sensitive to different types of foods. They may demonstrate a preference for the more calorically dense (high fat) foods and may eat more of them. Furthermore, periods of dietary restriction may be responsible for this increased sensitivity and produce a greater response to these foods both internally through physiologic cues and externally through environmental cues. This response set is termed the externality theory. Further discussion of the externality follows in the behavioral theory of obesity. This preference may predispose the obese individual to select a diet higher in fat content that could contribute significantly to obesity.

Genetic influence has been considered to impact energy expenditure differences known as thermogenesis. Inherited characteristics that influence the way that the body expends energy (burns calories) have been thought to contribute to the development of obesity. Scientists have speculated that a "...genetic defect in thermogenesis may be responsible..." (Perri et al., 1992). Thermogenesis consists of three components: resting metabolic rate (RMR), the thermic effect of food (TEF), and the thermic effect of exercise (TEE).

The resting metabolic rate (RMR) is estimated to utilize 60-80% of the daily caloric energy expenditure. It is also proportional to individual lean muscle tissue. Obese individuals normally have greater amounts of muscle mass (needed to carry and move the greater amounts of weight) and therefore have higher RMR. Gender and age are two factors that influence RMR. However, differences in activity levels and therefore energy expenditure may counteract the higher RMR. The RMR in women is generally lower than in men due to a lower proportion of muscle mass. Aging impacts RMR. As people age, they normally lose lean tissue and thereby experience a decrease in RMR which often results in weight gain. Two studies that examined differences in RMR demonstrated that in groups with a lower RMR—the lowered RMR contributed to the development and the continuation of obesity (Geissler, Miller, & Shah, 1987; Ravussin, Lillioja, Anderson, Christin, & Bogarodus, 1986).

The thermic effect of exercise (TEE) constitutes the next largest caloric demand at 15-20% TEE refers to the calories utilized for activity over and above those needed for RMR. Two studies examining TEE in obese versus nonobese

demonstrated no significant difference in energy expenditure. Instead, these studies indicated that the obese were less active than the nonobese. As percentage of overweight increased, physical activity decreased. Differences in energy expenditure in TEE were related to the decrease in physical activity, not to metabolic effect (Perusse, Tremblay, Leblanc, & Bouchard, 1989; Roberts, Savage, Coward, Chew, & Lucas, 1988).

The process of eating food requires energy expenditure and is labeled the thermic effect of food (TEF) and utilizes between 7-10% of the calories consumed in the meal. This energy is used for digestion and metabolic processing. Research suggests that the obese may, in fact, have a TEF response that is 1 - 2% lower than nonobese subjects. The cumulative effect over time may result in a significant propensity to weight gain. Furthermore, this relationship seems to be mediated inversely by insulin resistance. Decreased caloric intake and subsequent weight loss increase TEF and thereby decreases insulin resistance. This relationship provides some insight into the possible relationship of obesity in non-insulin dependent diabetes mellitus (Ravussin, Acheson, Vernet, Danforth, & Jequier, 1985).

Adaptive thermogenesis (AT) is the body's response to long-term or chronic caloric expenditure. AT adjusts the body's metabolic response to caloric fluctuations over time. During periods of prolonged caloric restriction, hormonal responses are elicited. Insulin and catecholamines are decreased. RMR decreases and is not responsive to changes in lean body weight. These changes are adaptive as an evolutionary process and protect the individual from weight loss during periods of

starvation or food scarcity. However, in response to intentional dieting, this adaptive

effect decreases energy expenditure and leads to decreased weight loss (Perri et al.,

1992).

Studies in caloric intake and expenditure indicate that the response is different

in the obese. Obese subjects have been shown to eat no more than their lean

counterparts yet the decreased utilization of those calories demonstrates a definite

difference. This difference contributes to the progression and maintenance of obesity

(Shah & Jeffery, 1991). An additional factor adding to this already perplexing

scenario is the influence of the neuroendocrine system.

Neuroendocrine Influence. The neuroendocrine influence in the etiology of

obesity has given rise to a complex and rich field of research within the last two

decades. Recent findings regarding the role of endogenous opioids in response to

eating behavior warrants further investigation. Studies indicate that obese animals,

including humans, have higher basal beta-endorphin levels than do their normal

weight counterparts. This hyperproduction of beta-endorphins has been shown to

cause an increased insulin secretion related to food intake. Insulin secretion is not

appreciably altered by this increased endorphin level as a response to circulating

glucose or amino acids. These studies suggest that hyperinsulinism in obesity is the

result of increased levels of naturally occurring endogenous opioid peptides and not

simply a response to food (Katherine, 1991; Khawaja, Bailey & Green, 1989; Ritter

et al., 1990; Vettor et al., 1989). Only one study was found that did not support the

relationship of increased endogenous opioids in the development of obesity (Cohen et al., 1984).

Injection of opioid peptides such as beta-endorphin, alpha-neo-endorphin and dynorphin into the ventromedial hypothalamus in mice induces feeding behavior and results in experimental obesity. Administration of opiate antagonists such as naloxone and naltrexone blocks endogenous opioids thereby reducing feeding behavior and preventing the associated weight gain. It is hypothesized that abnormalities in beta-endorphin secretion may cause obesity (Fava, Copeland, Schweiger, & Herzog, 1989; Hernandez & Hoebel, 1980; Khawaja, Bailey, & Green, 1989). Administration of butorphanol tartrate (an opioid agonist) in normal humans causes an increase in food intake. Administration of naloxone (an opioid antagonist) results in an anticipated decreased food intake.

Electrically induced stimulation in the medial hypothalamus inhibits feeding and in the lateral hypothalamus induces it. The lateral hypothalamus is one of the most potent sites of reward, pleasure, and self-stimulation in the brain (Hernandez & Hoebel, 1980; Morley, 1980). "This means that animals will easily learn a response that produces electrical stimulation of this area. The same electrode that provides pleasure will also induce eating" (Morley, 1980, p. 356). While induced stimulation produces this result, self-stimulation seems to have an effect as well. Self-stimulation and neural firing was recorded in studies with monkeys. When the monkey was ready to eat, neural units in the lateral hypothalamus fired. The sight or taste of pleasurable foods (bananas, peanuts) stimulated neural firing (electrical stimulation) in

the brain inducing eating behavior. It was also found that greater food deprivation resulted in a greater rate of neural firing (Hernandez & Hoebel, 1980).

Katherine (1991) speculates that ingestion of sugars, starches and fats may stimulate endorphin release in some people. This endorphin release provides comfort and good feelings. Abnormal feedback in the serotonin release system may precipitate continued eating as opposed to normal satiety. She contends "food addiction" occurs when a serotonin malfunction exists along with an imbalance of endorphins and enkephalins. Katherine claims "... we may become addicted to our own endorphins and eat to trigger release, because when our endorphins are released, we feel better" (p. 4). The powerful effects of self-stimulation in the lateral hypothalamus are thought to contribute to the "addiction theory" of eating behavior. The role of neurochemistry in the development and maintenance of obesity continues to be an area of ongoing research. Clearly, genetics, caloric intake and energy expenditure and neuroendocrine influence provide sound theoretical rationale for the etiology of obesity.

Behavioral Perspective

The second perspective examines overeating as "...a learned behavior related to environmental cues and emotional states" (Gelazis & Kempe, 1988, p. 664). Often viewed from an operant-conditioning perspective, overeating is considered to be controlled by positive reward. The positive taste of food is associated with the removal of the negative sensation associated with hunger. This stimulus-reward association strengthens the eating habit. The classical conditioning view looks beyond

this reinforcement proposition and examines the environmental circumstances that

surround eating behavior and the internal signals that are interpreted as hunger. For

example, routine mealtimes or the sight of food are environmental conditions that

often precede actual eating. When associated with the perception of hunger caused by

increased stomach motility, the act of eating strengthens that association. Further

association with

> ... a variety of noneating stimuli (e.g., negative emotional states) may
>
> elicit the perception of hunger and in turn may prompt eating. Thus,
>
> for some individuals, the combination of operant and classical
>
> conditioning can produce inappropriate stimulus control over eating,
>
> thereby resulting in faulty eating patterns, excessive food consumption,
>
> and eventual obesity (Perri et al., 1992, p. 40).

This behavioral approach to understanding obesity was first published in a

study by Ferster, Nurnberger, and Levitt in 1962. They postulated that eating

behavior in the obese was influenced by environmental stimuli. Exerting control over

these environmental stimuli was hypothesized to negatively influence those eating

behaviors. Control was achieved through restricting the location of eating and

slowing the rate of eating by putting the utensil down between bites and chewing

more slowly. This hypothesis was supported in several more recent studies

(Mahoney, 1975; Schachter, Goldman, & Gordon, 1968, Schachter & Rodin, 1974).

This approach gathered support and an "obese eating style" was identified that was

characterized by a heightened responsiveness to external (environmental) cues and was

later named the externality hypothesis (Perri et al., 1992; Rodin, 1980; Schacter,

1968, 1971a). The externality hypothesis examines responsiveness to internal versus

external food cues. This hypothesis looks at eating behavior as stimulated by

environmental (external) cues rather than physiologic (internal) cues. In numerous

studies internal versus external cues have been tested. Early studies exposed obese

persons to various external stimuli to determine their responsiveness (externality).

These early studies demonstrated a significant increase in obese subjects' responses to

emotionally distressing environmental stimuli. Rodin, Elman, and Schachter (1974)

found that obese subjects described more distress and demonstrated greater risk

interference when exposed to emotionally upsetting audiotapes. The administration of

painful shock while attempting to learn a complex task also was shown to affect obese

subjects more dramatically. Obese subjects made greater numbers of errors and

reported greater nervousness than nonobese subjects. In a study by Edelman (1984),

greater weight was associated with responsiveness to external cues than to internal

cues. The study also demonstrated a weak correlation between emotional

responsiveness and bingeing and a stronger correlation between dieting restraint and

emotional responsiveness (discussed later in eating and emotions section). Although

both studies demonstrated a relationship between obesity and external food cues,

neither study examined actual eating behavior in response to external cues; rather, the

association was made after obesity had already been established. Another limitation

was that both studies utilized small samples.

Subsequent studies have examined this dichotomy (internal versus external) more closely and now indicate that these external and internal cues are to some extent interdependent and involve both physiological processes as well as environmental cues. Rodin (1980) explains that obese individuals have been shown to have a number of endocrine and metabolic abnormalities related to adiposity. The obese individuals who were most responsive to external cues (i.e. the smell, sight and sound of a steak on the grill) also demonstrated the greatest insulin response. Over secretion of insulin in response to food cues might induce the individual to consume an increased amount of calories to achieve a metabolic balance. The excess calories would be more inclined to be stored as fat. This phenomenon has also been demonstrated in individuals of normal weight suggesting that externality is not exclusive to obesity but instead may reflect "... an underlying tendency toward hyperresponsiveness" (Rodin, 1980, p. 234). Therefore, when a person who is dieting sees, smells or even thinks about food, a complex physiological response may be set in motion that will power or self-restraint cannot control. In studies conducted with newborn infants, babies whose parents were overweight demonstrated a stronger preference for sweet taste than babies of normal weight parents. This study suggests that the risk of obesity may be present from birth and is compounded by an environment that, in American society, is full of food cues (Rodin, 1980).

Further research reveals contradictory evidence to this externality hypothesis. Subsequent studies do not support this hypothesis and, in fact, indicate that the

nonobese or normal weight subjects demonstrated as much sensitivity to external cues as the obese subjects (Rodin, 1981; Rodin, Schank, & Striegel-Moore, 1989).

Cognitive Perspective

Cognitive therapy was developed through the studies of Aaron Beck who was attempting to validate Freud's work on depression. Searching for the "anger turned inward" hypothesis, Beck discovered a "...negative bias in the cognitive processing of depressed individuals" (Dattilro & Freeman, 1992). The cognitive theory of emotional disorders grew out of Beck's (1976) research. The essential tenet of cognitive theory is that people's "...interpretations of ...experiences are hypotheses or beliefs rather than facts, and as such may be correct or incorrect to varying degrees" (Trower, Casey, & Dryden, 1988, p. 2). Agras (1987) explains that these interpretations influence behavior. Examples of these influences are "...expectations, beliefs, thoughts, perceptions of self, self-talk, and our confidence in achieving our goals" (p. 33). Persistent negative or unrealistic thoughts may give rise to an emotional disorder. Trower, Casey, and Dryden (1988) explain that "...if a person's thoughts center around danger or threat, then anxiety may be produced. If loss is the dominant theme of a person's thoughts, depression may result" (p. 2). These themes result from environmental factors that influence the core values or belief system in early childhood thus contributing to personality development. The resulting misperception, faulty learning, and inability to distinguish reality from imagination leads to psychological problems. Often these individuals set up strict rules or standards, called schemas by Beck, which become automatic even in the absence of

environmental stimuli. This preconceived schema then shapes all incoming stimuli to adhere to and reinforce the present perception. This distorted experience is called cognitive distortion and is maintained through a complex system of "...characteristic errors in information processing" (Dattilio & Freeman, 1992, p. 5).

The cognitive perspective views obesity as the consequence of irrational thought processes related to food. This approach examines "faulty thinking" as it relates to eating. Within this framework, eating or foods are often identified as "good" or "bad" or of having some meaning or interpretation associated with it. Treatment involves "reframing" or redefining food as a fuel source and eliminating the attached meanings (Agras, 1987; Burrows, 1992).

Kratina (1993) explains that diets teach people to ignore internal signals, therefore, hunger patterns become abnormal leading to cognitive distortions. Diets alter thinking around weight and food and teach people to ignore hunger. Eventually, the diet is impossible to contain. A binge is often associated with a food that is considered "bad" when in reality the binge may be initiated by emotional and physiological factors.

Cognitive therapy is found as a component of most behavioral approaches to the treatment of obesity. Despite the widespread inclusion, the effectiveness of cognitive therapy is not documented in the literature. Documentation of cognitive therapy consists mostly of clinical descriptions (Agras, 1987; Brownell & Foreyt, 1986; Burrows, 1992; Dattilio & Freeman, 1992; Guidano & Liotti, 1983; Miller, Jay, & Smith, 1987; Trower, Casey, & Dryden, 1988).

Johnson (1990) conducted a grounded theory study on the process of losing weight. She developed a theory she labeled "restructuring." She observed dieters over 21 months for a total of 200 hours, reviewed selected documents and conducted in-depth interviews with 13 women informants. A substantive theory of restructuring was developed that included three stages. Johnson (1990) defines the first stage of restructuring as "...the organization of and ongoing need for alteration of the dieter's life during and after the process of change from overweight to normal weight. An internal restructuring of self and external restructuring of environment takes place" (p. 1290). The second stage of restructuring called "changing perspective" is viewed by this author as a changing level of awareness that is consistent with cognitive restructuring, although the relationship to cognitive theory is never discussed. Johnson (1990) contends that this change in attitude begins with the thought process that alters the "...awareness in coming to terms with self." Johnson further explains, "this changing level of awareness involves an internal restructuring of self which may affect the dieter's relationship with others, necessitating further restructuring of her social and physical environment" (p. 1292). This final stage bridges the other two stages and is critical to the entire process of restructuring. One of the implications Johnson suggests is the potential use of cognitive strategies for intervention.

By far, the majority of research in the cognitive perspective has been in the area of "restrained eating" (Herman & Polivy, 1980) based on Nisbett's (1972) "set-point" theory of weight and Schacter's (1968, 1971a) "externality" theory. They questioned that if this was indeed the mechanism of the defense of weight

maintenance, then what factors were involved in those individuals who sustained weight suppression below this set-point? Socio-cultural factors that propagate the ideal of thinness as well as individual incentives such as personal goals and rewards were thought to contribute to the motivation to suppress weight gain to a level below what the weight would have been without those efforts thus, eating and eating restraint are thought to operate not only based on internal and environmental cues but can be influenced by cognitive factors, for example, self-sustained resistance or acceptance without resistance.

Herman and Mack (1975) studied this restraint hypothesis using two groups (N=114) of 57, normal weight, female subjects, matched for weight but who differed regarding their concern about weight and dieting. This concern about weight and dieting was measured in a restraint scale developed by the researchers. The scale measured a continuum of concern and behavior ranging from no thought regarding dieting and weight to constant thoughts about diet and weight. The researchers split the distribution at the median and created two groups. One group was designated "restrained" and the other group was designated "unrestrained." Subjects were then randomly assigned to three groups. All groups were instructed to taste and rate the flavor of three ice creams during a ten minute period that followed a lunch or dinner meal. The groups differed, however, in pre-tasting. One group was assigned to "taste" (actually consume) one 7.5 oz. milkshake. The second group was assigned to "taste" (consume) two milkshakes. The third group did not receive any milkshakes prior to the taste-testing of the ice cream. Results indicated that the unrestrained

eaters demonstrated a reasonable degree of consumption. However, the restrained

eaters, contrary to prediction, consumed more ice cream in direct correlation to the

amount of milkshake consumed before the taste testing. These results, the researchers

hypothesize, demonstrate a type of counter-regulation or disinhibition. Herman and

Mack suggested that the counter-regulation phenomenon was inherent in the restraint

concept. The restraint concept implies a balance of forces including internal and

external pressures to eat as well as cognitive pressures not to eat (restraint). When

restraint is removed as in the treatment procedure to consume milkshakes, the balance

is dramatically altered leading to an overwhelming force in favor of internal and

external cues. It is suggested that restrained eaters experience greater influence from

these demands due to their chronic deprivation in response to hunger cues. This

deprivation is also thought to positively influence the perception of external cues (the

attractiveness of food). Unrestrained eaters who consumed two milkshakes prior to

taste-testing regulated their intake and consumed only minimal amounts of ice cream.

Restrained eaters, however, responded to the milkshake preload by increased

consumption of ice cream. Herman and Mack (1975) postulate that this forced

preload collapsed the motivation for restraint. Realistic hopes for maintaining self-

imposed, predefined caloric limits were destroyed and the reason for dieting was

suspended.

Although searching for other explanations, subsequent studies have supported

this cognitive concept of restraint (Herman & Polivy, 1988; Hibscher & Herman,

1977; Polivy, 1976; Rogers & Hill, 1989; Ruderman & Christensen, 1983; Spencer

& Fremouw, 1979; Woody, Costanzo, Liefer, & Conger, 1981). A study conducted by Ruderman, Belzer, and Halperin (1985) indicated that beliefs about the caloric content of the preload could trigger counter-regulation further supporting the disinhibition of cognitive control construct.

Incorporating this body of research, Herman and Polivy (1984) have expanded their restraint concept into what they call the "boundary model." This model proposes a range of food intake that is determined by physiological needs. Consumption is regulated by hunger which maintains the minimum end of the range and satiety which maintains the maximum end of the range. The area within the range or boundaries is called "...the range of biological indifference" (p. 142). When consumption is maintained within this range, hunger is not stimulated. Herman and Polivy hypothesized that this "range of indifference" is different for restrained and unrestrained eaters. They contend that the range is wider for restrained eaters: The boundary for hunger is lower and the boundary for satiety is higher, which requires greater food deprivation to trigger eating. Once dieters have passed their self-imposed caloric limits, they will continue to eat until they reach their satiety boundary. This model has found support for the development of eating disorders. In recent studies that have conceptually linked this boundary model to bulimia nervosa (Greenberg & Harvey, 1986; Hawkins & Clement, 1980; Ruderman, 1985; Ruderman & Grace, 1987; Wardle, 1990; Wardle & Beinart, 1981). Several studies with patients with bulimia nervosa have demonstrated high correlations with dietary restraint (Johnson, Corrigan, Cruslo, & Schlundt, 1986; Laessle, Tuschl, Waadt, &

Pirke, 1989). Mitchell, Hatsulnami, Pyle, and Eckert (1986) discovered that 80% of

their bulimic subjects, scoring high on restraint, had indicated an attempt to diet prior

to the onset of bingeing. These studies reflect the continued utility and broadened

application of the boundary model for the regulation of eating (Herman & Polivy,

1984).

The cognitive perspective of the etiology of obesity offers yet another

approach to understanding obesity. Included as a component of most behaviorally

oriented treatment programs, little research has been conducted to validate its

effectiveness. The preponderance of research lies in the area of disinhibition of

cognitive control originally conceptualized by Herman and Polivy (1980) as restrained

eating. Continued research has expanded the restrained model to what is now known

as "the boundary model for the regulation of eating" (Herman & Polivy, 1984). This

model has continued to find utility in research with obesity and bulimia nervosa.

Psychodynamic Perspective

The psychodynamic perspective contends that obesity is the result of eating in

response to emotional states influenced by early developmental processes (Slochower,

1983). Steven Levenkron, cited by Katherine (1991), explains:

> ...our first discomfort in life is met with food. After the violent
>
> passage through the birth canal, we are given milk. And the most
>
> frequently repeated comfort given us as infants is food. The bottle is
>
> often used to stop crying regardless of the cause (p. 15).

In fact, this very action is postulated to be related to the subsequent association of emotional states with food, resulting in confusion regarding internal physiologic hunger. The inability of a parent to distinguish between infant needs for food versus other emotional needs is thought to contribute to the infant's subsequent inability to discriminate between hunger and other states such as fear, anxiety and anger. The continued lack of appropriate need fulfillment delays or retards progression through the oral stage resulting in fixation on oral gratification. These individuals may then learn to label any emotional state of arousal as hunger (Andrews & Jones, 1990; Bruch, 1961; Schachter, 1971b; Slochower, 1983). Perlow and Shrifter (1992) suggest that this pattern continues throughout childhood in family dynamics by using food for comfort and nurturing. Eating is a response to anger, frustration, anxiety, and other distress states; this behavior is referred to in the literature as "emotional eating" (Perlow & Shifter, 1992, p. 166). In adulthood, stress induces an intense emotional reaction that elicits a return to food "in an attempt to recapture the security and comfort experienced in infancy (Slochower, 1983, p. 13). Food provides a sense of being nurtured, cared for, and interconnected. This search for comfort has an even greater impact on women. One author explains,

> Shredded Wheat is not a very good substitute for Mother, but when
> Mother is no longer available we may try to replace her with food. In
> the process of growing up, girls have to do more than grow away from
> their dependence on Mother. They usually become Mothers

themselves. They move away from being nurtured into doing the

nurturing. ("Listen to the Hunger," 1987, p. 6).

Kaplan and Kaplan (1957) have identified 27 meanings of overeating that have been

proposed by psychoanalysts in previous research regarding the transformation of oral

needs, thus resulting in ambiguity in terms of generalizations and future research

direction. Cychowski (1950), cited by Kaplan and Kaplan (1957), presents the

psychoanalytic view that eating represents the "... oral incorporative introjective

mechanism, a type of unconscious cannibalism..." that serves to express hostility in

obese patients (p. 194). Woodman (1982), in a Jungian approach, proposes that

generations of young women have experienced rejection, hopelessness, bitterness and

disapproval by their mothers. Confronted with propagation of their submissive female

role, many women prayed that their unborn children would be boys. Some women

adopted masculine values and conducted their household management

> ...so the atmosphere was geared to order, to goal-oriented ideals, to
>
> success in life, success that they themselves felt they had missed. The
>
> gall of their disappointment their children drank with their mother's
>
> milk. Unrelated to their own feminine principle, these mothers could
>
> not pass on their joy in living, their faith in being, their trust in life as
>
> it is (Woodman, 1982, pp. 16-17).

Girls, therefore, experienced rejection, not only in childhood in relation to

their mothers, but their very essence of "being." Thus the maternal matrix that

represents the "Great Mother" is insufficient. Unconscious conflict is manifested in psychosomatic form. Food is viewed as

> ...neurosis that compels women toward consciousness...the creative
>
> purpose of the neurosis is to bring the woman to confront within herself
>
> the negative mother which her feminine body naturally rejects. The
>
> negative mother is a foreign substance; it is alien; it does not belong to
>
> her any more than do two pounds of chocolates before she goes to
>
> sleep. Her body is demanding that she differentiate herself out from it
>
> so that she can discover who she is as a mature woman. The task her
>
> own mother may have failed to perform, she must perform. That is the
>
> new consciousness, the giant leap, the healing in her own life which
>
> she is being called upon to incorporate (Woodman, 1982, p. 22-23).

Overeating is conceptualized as an attempt to invoke the "positive mother" associated with nurturing, security and comfort. Just as the unmet childhood need was inappropriately met by the "negative mother," so too, the binge results in a negative experience. "The eucharist begins sacred and ends demonic, thus repeating the child's experience of mother" (Woodman, 1982, p. 35). Associated with the consumed food, the negative mother is perceived as being trapped in the stomach resulting in bloating or swelling. Ritualistic vomiting is viewed as an attempt to purge the negative mother from the stomach. When a woman is ready to bring to unconscious identification of the negative mother to consciousness, she is able to understand that she, like her mother, was unable to fulfill her own needs. "Only then

will she be able to nourish herself, and therefore transform a demonic ritual into a

sacred one" (Woodman, 1982, p. 37). Eating may then lose its compulsive meaning.

As one can well envision, the abstract nature of these conceptualizations

regarding eating offer numerous methodological difficulties in attempting to conduct

research. Rand and Stunkard (1978) conducted a collaborative study involving

patients of 72 psychoanalysts; 84 obese patients and 63 normal weight who were

matched for demographics and served as a "control" group. Only 6% of the obese

group cited obesity as their chief complaint. The chief complaint for both groups was

depression, anxiety or both (60%). After 42 months of psychoanalysis, 64% of the

obese patients lost more than 4 kg with 47% losing more than 9 kg and 19% losing

more than 18 kg. Weight loss was found not to be related to either the treatment

progress or to duration of treatment. It is interesting to note in this report that despite

the inclusion of a matched control group, no reference is made to any results

regarding findings in this group. A control group usually is the group that does not

receive the "research treatment" yet both groups were active psychotherapy patients.

No reference is made to weight loss, weight gain or weight maintenance in this

group. With only 6% of the patients (obese) reporting obesity as a chief complaint,

the representativeness of the sample is questionable. No reference is made as to how

or even why these patients lost weight. Criteria for the obese group was self report

and "somebody clearly looking fat who is 20% or more overweight" (Rand &

Stunkard, 1983, p. 1140). No criteria is offered for the normal weight group.

Psychoanalysis involves several different schools of thought (for example, Freud

versus Jung). There is no mention of any attempt to understand or standardize

treatment approaches. Weight loss results were collected by patient report. Self

report methodology presents problems with validity. In view of the nature of the

psychodynamic relationship between patient and therapist even further questioning of

the validity of these self-reports is warranted. A four year follow-up study indicated

that 66% of the obese patients had lost 9.1 kg or more with 25% reporting a total loss

of 18.2 kg or more. Data were available from 70% of the obese patients in the

original study (59 out of 84). Thirty obese patients had terminated treatment.

Follow-up indicated that 40% of the obese patients maintained the weight loss post

treatment, 33% continued to lose weight and 27% had regained some weight. No

differences were found in weight loss between those who terminated treatment

prematurely and those who completed treatment. At the 4 year follow-up study, 34%

of the obese patients were still in treatment. The average duration of treatment was

84 months ranging from 53 to 120 months. Clearly, "...psychoanalysis is an

expensive way to lose weight" (Rand & Stunkard, 1983, p. 1143).

The studies conducted by Rand and Stunkard (1978, 1983) were the only

published, psychoanalytic, clinical research that was found in the literature. The

critique offered of the initial study highlights some of the concerns. Worthy also of

note is that it required a collaborative study of 72 psychiatrists to achieve a treatment

group of only 84 obese subjects indicating that psychotherapy is not a frequent choice

in treatment modality.

Most of the research in the psychodynamic perspective has been in the search for personality traits. Clinical studies with obese patients portrayed them as neurotic, psychotic, extremely dependent and orally fixated (Jordan, 1969; Kiell, 1973; Louderback, 1970; McReynolds, 1982). Studies with nonpatient samples and studies that were designed to include appropriate control groups have consistently demonstrated no significant difference in obese and nonobese on various personality traits or measures of mental health (Atkinson & Rinquette, 1967; Brownell & Foreyt, 1986; Crisp & McGuiness, 1976; Johnson, Swenson, & Gastineau, 1976; Leon, Kolotkin, & Korgeski, 1979; Shipman & Plesset, 1963). Segers and Mertens (1974) conducted a large study on 1694 men who ranged in age from 20 to 60 years. No difference in anxiety or depression scores were found among groups of 184 obese, 1271 normal weight and 239 lean subjects. A later study utilizing the Eysenck Personality Inventory revealed no significant difference among obese, normal weight and lean subjects. Furthermore, the obese subjects were found to smoke fewer cigarettes, were less neurotic and more extroverted than their normal weight or lean cohorts (Kittel, 1978).

Recent studies have focused the search for psychopathology and personality traits in persons with eating disorders. One such study of 45 women included an obese group (15 obese, 15 bulimic, and 15 normal weight). All subjects were matched on age and height and the normal and bulimic subjects were also matched on weight. Instruments included the Minnesota Multiphasic Personality Inventory (MMPI), the Symptom Checklist-90, the Beck Depression Inventory and a body

image assessment. Bulimics were found to score significantly higher in

psychopathology with no significant difference found between the obese and normal

groups. This study was the first study to include an obese group as a comparison

group with another eating disorder. The small sample size, however, limits its

generalizability (Williamson, Kelley, Davis, Ruggiero, & Blouin, 1985).

The psychodynamic perspective adds a complex and interesting dimension in

attempting to understand the etiology of obesity. Unfortunately, this perspective does

not lend itself well to research. Only one clinical study was noted in the literature.

The majority of research that has been conducted has involved the search for

psychopathology. To date, those studies have not demonstrated significance between

obese and normal weight persons.

Sociocultural Perspective

From the sociocultural perspective, familial and cultural values are thought to

"...influence the development of feelings, attitudes, and preferences about food and

eating behaviors" (Gelazis & Kempe, 1988, p. 664). Fontaine (1991) describes

sociologic theory as "...based on the premise that people do not function

independently of their society. Thus, eating behavior cannot be understood without

taking into account the intricate interplay between individuals and social norms" (p.

669). Physiological, behavioral and psychological perspectives have been discussed.

An examination of the influence of sociocultural factors follows.

Food and the amount consumed is determined not only by physiological factors

but is influenced to a great extent by cultural, social and psychological factors as

well. Artifacts indicating human obesity have been found dating back to the Stone Age. Excessive roundness and large full breasts depict the female form and were thought to reflect fertility (Bray, 1990b). Food supplies reflected social rank in the Middle Ages but regardless of class, eating patterns varied due to the "...insecurity of life in general and of food supplies in particular" (Mennell, Murcott, & Van Otterloo, 1992, p. 49). Overconsumption due to an abundant food supply was rare while food storages and irregular food supplies occupied most of the concerns related to the acquisition of food. In view of this struggle, the higher, socioeconomic class were distinguishable from the lower classes by the availability and quantity of food they consumed. By the late 17th and 18th centuries, this class differentiation had narrowed due to the increasing abundance of food supplies. To reestablish this social distinction, attention was shifted to the quality of the food and elaborate methods of preparation. By the 19th century, the search for virtue was a prevailing social theme and moderation was considered a virtue. Gluttony was increasingly held in contempt. Notable upper class social circles began to be concerned with obesity resulting from over eating. The literature published for the lower-middle class still addressed means to achieve plumpness indicating that the virtue of slimness had not yet become fashionable. Eventually, the identification of and the fear of being fat spread throughout the social strata. "Slimming" became the prevalent concern by the twentieth century in Europe (Mennell, Murcott & van Otterloo, 1992).

In western culture, the 19th century embraced a full figured female form as the ideal. Obesity, particularly in the wife, reflected a man's social status and

validated his ability to provide well for his family. The 19th century witnessed the emergence of two ideals of women's bodies. The "genteel lady" was characterized by her delicate and frail nature yet admired for moral values, appearance and social standing. The second ideal was the erotic ideal characterized as "heavy, sexy and voluptuous" (Fontaine, 1991, p. 670). Just prior to World War I, the voluptuous ideal began to fade in the upper social classes. Instead, the ideal shifted to a more slender body with a larger bust and hips. The 1920's witnessed the transformation of the female form to one with almost no visible sign of secondary sex characteristics. The "prepubertal body" of the flappers was popularized. To achieve this shape, women often had to bind their breasts, undertake severe exercise regimes and starvation diets. It was during this time that anorexia and bulimia were first reported as epidemic (Fontaine, 1991).

Following the Great Depression, the 1940's saw the return of a larger bust with a small waist. Legs were considered the erotic symbol of the time. This figure shape became more pronounced in the 1950's. The ideal woman was thin and voluptuous. The larger bust and tiny, cinch waist was still in vogue. Twiggy arrived on the media/modeling scene in 1966 and changed the ideal for women's bodies for nearly a decade. The skeleton image ideal continued through the 1970's with only a slight increase in bust and hip size. Lean was the ideal for the 1980's with small hips and buttocks. The late 1980's and 1990's have evolved into a more muscular and healthier perceived ideal (Fontaine, 1991). Although perceived as healthier, the time, energy and effort that is expended in achieving and maintaining this muscular ideal is

often as difficult as the previous ideals of "lean" or "slender." Slimness evolved as

the central characteristic of female beauty in American, Caucasian culture. Women

are "...obsessed with weight and phobic about obesity" (Fontaine, 1991, p. 671).

This obsession starts in childhood.

From very early ages, children have learned to associate obesity with negative

states. Katcher and Levin (1955) found in matriculation that three year old girls have

already learned an association between femininity and weight. With this ideal formed

at such an early age, females in later childhood measure their own bodies against the

ideals. Not measuring up to these ideals results in perceiving their bodies as flawed

and deserving criticism. In fact, a national survey indicated that most adolescent

females experienced dissatisfaction with body weight produced just by normal

development (Dornbusch et al., 1984).

Prejudice has been noted in six year olds in a study conducted by Staffieri

(1967). When kindergarten children were shown silhouettes of an overweight child

the overweight child was described as "lazy, dirty, stupid, ugly, cheats and lies" (p.

102). Studies soliciting attitudinal preference revealed that both children and adults

would choose to play with children with handicaps, missing limbs and facial

disfigurement before they would play with an obese child (Goodman, Dornbusch,

Richardson, & Hastorf, 1963; Maddox, Back & Liederman, 1968; Richardson,

Goodman, Hasdorf & Dornbusch, 1961).

DeJong (1980) studied 64 high school girls. They were given a folder with a

picture of a girl and a statement written by the girl to introduce herself. The subjects

were told to rate the new acquaintance based on their first impressions. Resulting

evaluations revealed that obese girls were rated more negatively, were less liked,

unless an "excuse" for her weight was included in the introducing statement (for

example, glandular problems). Canning and Mayer (1966) conducted a study with

graduating high school seniors which revealed a differential college matriculation rate

between obese and normal weight females (32% versus 52%). No difference was

found between the groups in IQ, achievement or in the percentage that had applied for

admission. Whereas in the male sample, no statistically significant difference was

found between the obese and normal weight males who were admitted to college

(53% versus 50%). Discriminatory admission procedures may inhibit the pursuit of

educational goals and result in a decline in social mobility.

In another study of college students, researchers asked subjects to rate selected

categories of persons as potential marriage partners. Amazingly, they chose

embezzlers, cocaine abusers, shoplifters and blind people as more suitable for

marriage partners than obese (Venes, Krupka, & Gerard, 1982).

Researchers suggest that this hatred of obesity permanently affects the obese

child as well as society as-a-whole. The attitudes learned in childhood set the stage

for a continued fear of becoming fat even in the normal weight individual (Wooley,

Wooley, & Dyrenforth, 1979). Rodin, Silberstein, and Stiegel-Moore (1984) contend

that obesity is held in contempt and results in punishment in the form of social,

psychological and economic sanctions. These sanctions are differentially attributed to

women. They postulate that "...women's fear of overweight lies in the harsh negative views of society towards obesity--particularly towards obesity in women" (p. 271).

Beauty is defined by culture and the ideals within any culture change with time. In western culture, thinness has become a predominant characteristic of beauty and there is a notable relationship between weight and attractiveness. Obesity correlates with unattractiveness and thinness is associated with attractiveness. In a study conducted with male and female undergraduates, women considered their weight and body shape to be the central determinants of their perception of their own physical attractiveness. The male students felt that weight and body shape were important but did not consider them as central characteristics of their attractiveness (Rodin, Silberstein, & Striegel-Moore, 1984). Mennel and colleagues (1992) contend that this shift towards a preference for thinness has precipitated an increasing preoccupation in women concerning weight and size. Research indicates that 80-90% of women constantly monitor their caloric intake and do not eat enough to alleviate their feelings of hunger. The majority express a desire to be thinner and "attempt to restrict their food intake in response to social pressures" (Button & Whitehouse, 1981, p. 51). A historical review of fashion magazines, playboy centerfolds, and Miss America winners from 1959-1979 revealed that the weights of women esteemed as having ideal bodies decreased approximately 15% while the weights in the actuarial tables were adjusted higher to reflect the heavier norms relative to better nutrition. Today, the average model weighs 23% less than the average American woman (Garner, Garfinkel, Schwartz, & Thompson, 1980; Wolff, 1991). Seid (1994) points

out that these ideal bodies represent only 5-10% of American women. She concludes that "...in America a statistical deviation has been normalized, leading millions of women to believe that they are abnormal" (p. 8).

Men's status has traditionally centered around quantifiable assets such as income or possessions. Women's status, however, has historically focused on beauty that served to engender men's interest. Women's status then became a reflection of the husband's social standing and her beauty served to augment her husband's status (Rodin, Silberstein, & Striegel-Moore, 1984; Rothblum, 1994; Seid, 1989).

The thinness ideal has become so enculturated in western societies that it continues essentially unchallenged. This preoccupation with weight and the effort it requires to maintain the ideal has become an accepted standard. This obsession with thinness is encouraged, rewarded and has launched a multibillion dollar industry that now has a vested interest in perpetuating the "thin ideal." Brown and Jasper (1993) contend that "women are seduced by the promises of happiness, success, and love that thinness is presumed to fulfill and risk their health in desperate attempts to achieve its rewards" (p. 16).

The rise and intent of the feminist movement conceptually was to level the playing field and provide equal opportunity for women in economic and social achievement. Feminist authors contend that the social obsession with women and weight serves to undermine women's attempts to achieve success (Faludi, 1991; Steiner-Adair, 1988; Wolff, 1991).

Telling a woman that she has the same chance for success as a man

with comparable capabilities and then adding a between-the-lines

requirement for an ideal body shape that is impossible for most women

to obtain and maintain constitutes an extremely effective form of

oppression and disempowerment (Steiner-Adair, 1994, p. 386).

Steiner-Adair (1994) points out a relationship exists between "...the current incidence

of eating disorders and the struggle for equality" (p. 386). Szekely (1988) further

explains this pressure, "...that women have to be thin to get and keep jobs, and to

attract male attention makes the pursuit of thinness not only a matter of aesthetics, but

a means of economic survival" (p. 77).

In a culture that values men and their associated status and resources, women

are expected to require little space and fewer resources. "Fat women are perceived to

violate all of the rules, including those that govern what it means to be a woman, and

are deemed to be deserving of society's contempt" (MacInnis, 1993, p. 75). Striegle-

Moore (1984) concurs and elaborates further:

In our society, therefore, obesity is met with punishment--

psychological, social, and economic--and the sanctions appear to be

more severe for females than for males. Surely one root of women's

fear of overweight lies in the harsh negative views of society towards

obesity--particularly towards obesity in women (p. 271).

Prejudice and fat intolerance has resulted in women's conscription to dieting.

For many women dieting is considered "normal" eating. Women collude with each

other about their intimate practices with food, share the language of fat and

acknowledge their respective efforts to maintain this way of life. Historically, the

sale of diet books has outranked all other books with the exception of the Bible. The

recent phenomenal success in sales of "In the Kitchen with Rosie" (Oprah Winfrey's

personal chef's new book) attests to this continued preoccupation with weight (Daley,

1994; Friedman, 1993; Kaschak, 1992; Rodin, Silberstein & Striegel-Moore, 1984;

Seid, 1989). Brown-Miller (1984) associates dieting with the history of women's self-

mutilation in the pursuit of cultural beauty ideals such as footbinding and corseting.

She suggests that dieting (internal constraint) has replaced the corset (external

constraint). Women who confess to "being bad" most often are referring to a breach

in their self imposed diet restrictions and equate this indulgence to the commission of

a sin (Kilbourne, 1994; Seid, 1989). Kilbourne (1994) informs us that "the menage a

trois a woman is made to feel guilty about is the one with Ben and Jerry (of ice cream

fame)..." (p. 411). Burgand and Lyons (1994) assert that women have internalized

the external oppression from society and blame their bodies for betraying them.

Dieting can thus be justified as "...penance for the sin of being fat" (p. 222). Ciliska

(1993) describes two predominant dieting patterns. The first is a pattern that begins

on Mondays in which women restrict their food intake all week and then "blow it" or

binge on the weekends. The second type focuses on eating only one meal a day

which is usually at night and often results in overeating. The overeating leads to a

sense of failure and continued eating since the initial restraint has been overcome.

The resulting guilt then precipitates further restriction in subsequent attempts which

makes it even more difficult to abstain. Some women combine these two patterns.

Seid (1994) points out that "the United Nations World Health Organization has

established a daily intake of 1000 calories as the border of semistarvation; modern

diets often recommend less" (p. 8). Women often express gratitude for illness

because of its contribution to weight loss and ease in dieting. Kaschak (1992) noted

that a group of postmastectomy patients agreed that weight loss was a positive

outcome of their experience.

Dieting is perceived to be democratic and fair. Wooley (1994) explains that

even "the poorest woman can 'afford' to starve and exercise. The 'ugliest' woman

can improve her looks by practicing these rituals. They seem to put power in the

hands of individual women themselves" (p. 50). Today, women equate success with

autonomy and independence. The cultural beauty ideal of thinness leads women to

believe that a slender body is empowering. At the same time, women equate a

shapely body with traditional powerless weak and dependent roles. Kilbourne (1994)

contends that "changing our bodies is the most visible way to reject the feminine

stereotype" (p. 407). Therefore, women are deceived into thinking that a fit body

symbolizes power and control, however, the status of women remains unchanged.

"An underpaid and under valued woman who is physically fit is still underpaid and

under valued" (Kilbourne, 1994, p. 405).

Research has slowly alluded to the idea that dieting instead of being the

solution to obesity, may in fact be the cause of it. Furthermore, there is mounting

evidence that dieting may also trigger eating disorders (MacInnis, 1993; Wolff,

1994). In general, eating disorders is a collective term that refers to anorexia nervosa and bulimia nervosa. Anorexia nervosa is "...characterized by an all-consuming pursuit of thinness that overrides the patient's physical and psychological well-being" (Garfinkel & Kaplan, 1986, p. 266). Bruch (1973) describes it as "...a genuine syndrome, precipitated by 'fear of fatness'" (p. 225). Bulimia nervosa is characterized by eating large amounts of food in a short period of time, the practice of compensatory behaviors to control body weight, and a judgmental preoccupation with body shape and weight (Fairburn & Wilson, 1993). The inclusion of obesity as an eating disorder is controversial yet some authors/researchers agree in support of this inclusion citing the similarities in etiology, cultural, environmental and psychological influences. Furthermore, Brownell and Foreyt (1986) contend that "...research and clinical work in each area will benefit all three" (p. 512). Brown and Zimberg (1993) explain:

> women's experiences are real and significant, regardless of where they
> appear on the weight-preoccupation continuum. Women who
> experience anorexia, bulimia, feelings of being trapped in a cycle of
> dieting, and the discrimination of living in a fat-phobic society often
> experience tremendous pain. While anorexia and bulimia are
> extensions of the common experience women have with their bodies
> and eating in a weight obsessed society, they are not merely instances
> of dieting gone crazy. Women who adopt anorexia and bulimic
> behavior are using their bodies and eating to work through a number of

often complex emotional issues and needs. They are not self-centered, narcissistic or irrational as some would have it. Rather they are speaking with and through their bodies about their pain and their needs (p. 406).

Steiner-Adair (1994) contends that women cannot recover or begin to fully heal "...until they make a connection between their eating disorder and the oppression of women" (p. 391). Wolff (1991) concludes that young girls will continue to starve until our culture embraces the value of women irrespective of beauty and body size. The preoccupation with weight will continue until true value is attributed to the person who lives inside the body.

Women adopt lifestyles that, although not entirely consistent with the psychological criteria for anorexia or bulimia, revolve around episodes of starving and bingeing. "Dieting often precedes bulimia, as food deprivation is frequently followed by binge eating if food is available" (Brown, 1993, p. 57). From a feminist perspective, eating disorders range as a continuum from obesity to anorexia (Szekely & DeFazio, 1993). For many women including anorexiics, bulimics and dieters, controlling the body is perceived as self-control and control over one's life. Bulimia is perceived by some women as the perfect solution in which they can eat what they want, maintain their weight and enjoy the social reinforcement that accompanies the ideal (Brown, 1993).

In conclusion, a delimitation of this portion of the literature review should be mentioned. The sociocultural perspective presented reflects predominatly the

Caucasian experience. Few studies were found that address multicultural issues or populations (Buchanan, 1993; Striegel-Moore, Schreiber, Pike, Wilfley, & Rodin, [in press]; Thompson, 1994). It is important to recognize that the Caucasian experience does not necessarily represent the experience of other racial and ethnic groups. For the purpose of this study, the Caucasian experience was examined.

EATING AND EMOTIONS

Several studies have been conducted examining the link of overeating and emotions but few have focused specifically on women. Stress was cited by Pudel and Oetting (1977) as the cause for obese women and restrained eaters (women who controlled their weight by monitoring their food intake) to overeat. Further results from their study showed children and normal weight adults ate less when stressed, but women were found to be more likely to overeat than men. In a more recent study of healthy, nonobese men and women, stress (operationalized by a film about accidents) resulted in markedly and significantly decreased food consumption by men but increased food consumption by women (Grunberg & Straub, 1992). Cattanach, Phil, Malley, and Rodin (1988) studied psychologic and physiologic reactivity to stressors in subjects with eating disorders and found significant effects for anger, depression, tension and dysphoria. Although differences between the eating disordered and control groups were not significant, "...eating disordered tended to report higher levels of all the negative mood states..." (p. 595). Slochower, Kaplan, and Mann (1981) investigated the relationship between the stress of final exams and eating behavior for a group of obese and nonobese students. During exam week, obese

students demonstrated increased eating (about two and one-half times more) related to anxiety and loss of control. Following the exams, anger was correlated with eating, but this correlation was not evident during the exam week. The researchers hypothesized that during exam week, the loss of control was understandably related to the ambiguous process of studying for and taking exams. Following exams, the continued loss of control related to the evaluation of those exams and the fact that the students did not have a target that was quite as understandable. The evaluation process of those exams was clearly beyond their control.

Emotional upset and negative moods were found to be antecedents for bingeing in two recent studies (Kristeller & Rodin, 1989; Schlundt et al., 1991). Grilo, Shiffman, and Wing (1989) analyzed relapse crises and coping among dieters using cluster analysis. One factor labeled "upset" characterized crises related to anger. Ninety-one percent of the crises related to anger resulted in relapse from the diet, although the findings of this study must be viewed with caution due to the small number of subjects in this cluster (N=11). A study by Leon and Chamberlain (1973) found that dieters reported instances of emotional arousal ranging from happiness to anger to boredom as likely triggers of eating. These subjects were volunteers from a local weight loss club and were primarily white, middle-aged and middle-class. Sjoberg and Persson (1979) reported strong emotional stressors as contributors to diet breakdowns in their weight loss patients. They identified both negative and positive stressors as precipitators of breakdowns. The sample size was small (N=9), and only one subject specifically identified anger as the contributory stressor. Bingeing

was shown to distract, effectively change the focus, and provide relief for subjects who experienced anxiety, disappointment or anger in a study by Loro and Orleans (1978). This study included a large number of women (N=230) referred by physicians. Obese patients, according to a study by Rand (1982), were more likely to gain weight when they were depressed, anxious or angry. Haddock and colleagues (1990) looked at the impact of obesity on the psychosocial functioning of both married partners and found that overweight females reported significantly greater anger and depression. Weight status was not related to psychological functioning in males.

From the work by Schlundt et al. (1991) one is struck by the data indicating that food is used to alter moods. If any activity or substance which alters a mood is defined as addictive, then eating to alter mood may also be an addictive behavior. Looking at women with addictive problems, Rosenfield and Stevenson (1988) explored the oral behaviors of normal alcohol users who were of normal weight, those who were overweight, and recovering alcoholic women. Their perceptions of stress were evaluated. The researchers found that overweight women ate more spicy/salty foods and they chose high calorie foods regardless of their stress levels. In contrast to the other two groups, the overweight women ate more each day and even ate more on days when stress was reduced. Data about the recovering alcoholic group showed they ate more sweet, starchy, and salty/spicy foods when stressed and also smoked more, thereby, substituting one addictive substance for another: food or smoking for alcohol. The normal weight group increased eating, smoking and alcohol intake on pleasant days with the greatest in-group variability. This pattern was not associated

with a stress response. This study suggests that some women, overweight and recovering alcoholics in this sample, increase their utilization or consumption of a substance (food and smoking) in response to stress. Stress may precipitate consumptive or addictive behaviors in vulnerable or predisposed people.

Root (1989) studied women who had repeatedly failed treatment for alcohol, substance and food abuse. These women were often labeled resistant to treatment or addictive personalities. Root's literature review revealed that 30% to 75% of the women who failed treatment had been either physically or sexually abused. Tice and colleagues (1989) substantiated those figures. These researchers reported 50% of the women admitted to an eating disorder clinic had been sexually assaulted. The subjects exhibited problems with depression, anxiety, interpersonal relationships, and anger. Frequently, the subject's inability to stay in treatment pertained to the surfacing of those feelings formerly covered or suppressed by the addictive behavior. Often these "stuffed" feelings were so painful that the women sought relief in the addictive behavior. Women who were obese and bulimic reported feeling safe and secure being overweight. Many had gained as much as 100 pounds after the abuse. She indicated that they relied on their weight to protect them against sexual advances. They described feelings of intense anger and low self-esteem. The anger was directed toward themselves and toward the abuser and frequently projected to other males as well, thus affecting their "normal" interpersonal relationships. Eating was identified as a method of denying the abuse and repressing their feelings. It also served to reduce the likelihood of reoccurrence of abuse.

Russell and Shirk (1993) looked at eating and anger expression in 452 women. Anger expression variables of anger-in and anger-out were found to contribute to A multiple regression model predicting body mass index, an obesity indicator, 13% of the variance in BMI was explained by the model (p < .001). Thus, both suppressing anger and venting it in an attacking, blaming way were associated with greater body mass index. Furthermore, significant negative correlations were found between obesity and smoking and between obesity and drinking suggesting that some women may choose to eat instead of drink or smoke. Two separate focus groups of women were conducted (total N=9) to further explore the experience of eating and emotions. Eating was identified as a response to almost any emotion.

NURSING

Nursing has entertained an episodic interest at best in obesity. A literature review indicated that publications were generally distributed among clinical/patient care topics, etiological reviews, and research. Patient care topics included a variety of clinical applications. Deering and Niziolek (1988) detailed a comprehensive approach to the continuity of care in the transition from inpatient to outpatient settings for patients with eating disorders. Kornguth (1981) and Hudelson (1992) shared practical management strategies for clinicians to utilize in caring for the obese patient. Reducing cardiac risk factors in obese clients was presented with a case study in an article by Popkess-Vawter (1982). White and Schroeder (1981) outlined detailed nursing assessment guidelines incorporating psychological, physiological and sociocultural considerations. Behavioral interventions including a nursing care plan

and treatment approaches, in the care of the obese patient were presented by White

(1986). A glossary of behavioral terms was also included. Schroeder (1981)

conceptually linked symbolic interactionism with the philosophical foundations of

nursing illustrating a unique approach to the care of obese persons. Clinical

perspectives on the nursing care of the obese patient were both varied and

enlightening.

Etiological reviews mirrored the topics that were being discussed in the

literature by other disciplines. McBride and McBride (1981) reflect on the etiology of

women's obesity from a sociocultural perspective. They contend that the food related

terms of endearment such as honey or sugar further compound the association of

women with food. They contend that the social pressure on women to achieve weight

loss may pose a more harmful health risk than the extra pounds. White (1991, 1992a,

1992b) includes obesity in her definition of eating disorders but the remainder of the

discussion revolves around anorexia and bulimia nervosa. An early article by White

(1982) provides a comprehensive overview of integration of patient care for the obese

patient in nursing education, research and practice. Schroeder (1982) points out that

nurses can encounter care of obese patients in any practice setting. The proposal of a

holistic nursing model for eating disorders is discussed by Greary (1988). A review

of several other models is also undertaken. Miller (1991) differentiates obesity from

compulsive overeating. She describes compulsive overeating from the cognitive

perspective as an inappropriate response to an emotional need or experience. These

etiological reviews and discussions lay the groundwork in nursing for the ongoing

multidisciplinary debate that was already underway.

Several nursing research studies were found which attempted to view obesity

from a different perspective and add to the body of knowledge in caring for and

understanding the obese patient. The first study looking at an adult population

attempted to solve a clinical problem of attrition in high risk patients attending an

obesity clinic (White, 1984). One hundred and one obese (weight $\geq$ 20% over the

ideal) patients participated in one of three groups. Subjects responded to an open

ended interview that was taped and then transcribed. Content analysis of the

interviews revealed two categories of motivation for attendance. Body potency/health

was the first and was the category the clinic's educational efforts had been directed

towards. The unexpected category of motivation was body image. Inclusion of

reinforcement techniques and educational sessions about the benefits of weight loss

related to body image resulted in a decrease in attrition from 50% to 10%.

Clarke (1986) conducted a correlational, Rogerian study exploring the

relationships among indicators of human field and self-actualization in 130 healthy

women. She identified a variable that was measured called Perceived Body Space

(PBS) which indicated the size of the human energy field. Other variables considered

in this relationship were conversational distance (CD)--indicating field density, and

body weight (BW) indicating field pattern. Self actualization was also measured using

the Personal Orientation Index (POI). Clarke proposed that a larger field pattern was

indicated by higher POI scores. Only one hypothesis was supported; self actualization

increased as conversational distance decreased (r=-0.17). Clarke offers several

alternate explanations for her results. Assumptions were evident that increased body

weight was a negative or undesirable variable in formulating the hypothesis. No

rationale was offered. Conceptual support was not evident linking the proposed

measures to the concepts thereby jeopardizing validity and reliability.

Mitchell (1986) utilized multiple regression and path analysis to look at

environmental factors in the development of food cravings in menstruating women.

This study included the concept of dietary restraint. Mitchell found that women with

high food cravings were more likely to have high dietary restraint, low self-esteem

and consider themselves overweight. The subjects were reported as more likely to

embrace traditional attitudes about women's roles and rights and female stereotypes.

Results indicated that cravings were not related to the length of the menstrual cycle,

the amount of perceived stress/demands or mood states.

White and Schroeder (1986) looked at obese women to determine if differences

in their perceived femininity, body image, or feminism affected their decision to seek

treatment. One hundred and twenty one women were divided into three groups.

Group one (N=40) was obese women in treatment for weight loss. Group two

(N=39) was also obese women but not currently in treatment. Group three (N=42)

was normal weight women. Three research hypotheses were tested: (1) group one

(obese/treatment) would be more pro-feminist than the other two groups; (2) group

two (obese/no treatment) would claim a greater negative body image and self image

than the other two groups; (3) group three (normal weight) would be more feminine

compared to the obese groups. None of the hypotheses were supported. The significance of this study is that it contradicted several tenets that had been reported in the literature regarding obese women. Particularly noteworthy was the finding that obese women in both the treatment and nontreatment groups demonstrated a negative body image but not a negative self image. A similar finding was noted in the study by Russell and Shirk (1993) in which self-esteem did not contribute to the model of obesity in their regression analysis. Obese women did not have lower self-esteem than nonobese women. These findings suggest a deviation from existing societal norms and may reflect women's positive self evaluation of characteristics other than physical appearance.

An ethnographic approach was utilized to study 37 women's interpretation and use of health care information in weight management self-care strategies. The results indicated that these women had developed an internalization and personalization of norms in knowing their weight parameters without professional assistance. Creative methods were identified that subjects utilized to manage their weight suggesting that women were successful in weight management (Allan, 1988; 1989).

Boyd (1989) utilized a case study approach with 20 women to explore attitudes and beliefs about being overweight. An eight week counseling program was developed to explore these issues and offer hope, help and support. Group discussion and support were utilized to dispel the myths and fantasies involved in expectations of weight loss. Improvements were noted in body image evidenced by increased self-care practices.

Hesse-Biber (1992) used a longitudinal design and examined eating problems in a group of 141 matched female college students. At time one they were sophomores, and at time two they were seniors. This study used a noncontinuous measure, EAT 26 Scale, (Garner, Olmstead, Bohr, & Garfinkle, 1982) which has been criticized for low positive, predictive value. It also utilized a continuous measure consisting of 10 questions asked by researchers (the questions were not included in the study or examples). The answers divided students into five categories and subcategories based on behaviors (i.e. dieting, bingeing, purging, fasting). Categories ranged from "Ideal Eaters" to "Problem Eaters." Results of EAT-26 revealed an increase in normal eaters from time one to time two (81.4% to 88.6%) indicating that some women identified as abnormal at time one became normal by time two although this shift was not statistically significant. Correspondingly, the abnormal eaters declined from 18.6% at time one to 11.4% at time two which was significant (p = .0005). Continuous categories provided a different picture that portrayed the extent or range of eating problem behaviors which are not captured in the noncontinuous measure. Some women engaged in some of the abnormal behaviors (i.e. weight obsession, vomiting or using laxatives) but not to the extent to be classified as abnormal. This measure indicated that the "...eating behaviors varied along a continuum of destabilized eating patterns" (p. 385). The behaviors evaluated this way indicated that the higher the eating problem category at the time, the less likely the possibility of normalizing and winding up in the nonproblem category at

time two. Thus "...being a problem eater at time one was a high risk factor for being a problem eater at time two" (p. 390).

Allan (1994) studied interviews conducted with 40 Anglo women utilizing explanatory model methodology to determine their beliefs about their weight. Four themes were prevalent: overeating, stress, lack of exercise, and genetics. Findings revealed that cognitive understanding was inconsistently related to weight management strategies. For example, women who related their weight gain to stress did not practice stress management techniques.

The interest in obesity in nursing has gathered some interest and support. Documentation including patient care, etiologic discussions and research was found in the literature. Nursing research demonstrates an increasing interest in understanding the lived experience of the obese patient as evidenced by the number of qualitative studies. Thirteen doctoral dissertations over the past 30 years were also noted to pertain to some aspect of obesity. Fontaine (1991) asserts that "...now is the time for nursing also to challenge the cultural values and ideals...and become a leader in fostering a humane approach to body size" (p. 675).

SUMMARY

The development and maintenance of obesity is a complex, multidimensional phenomenon that despite a plethora of theories and research continues to defy our understanding. Attempts to understand and examine this phenomena have been approached from biological, behavioral, cognitive, psychoanalytical and sociocultural theoretical perspectives. All have varying degrees of contribution to our

understanding of obesity to some degree. Yet, competing theories and conflicting research findings continue to cloud understanding and confound attempts to produce effective treatment methods.

The role of emotions and eating has engendered some research. Quantification of this phenomenon by the few studies that have been done has not illuminated our understanding. Nursing has demonstrated an increasing interest in obesity as evidenced by the ongoing research and the exploration in qualitative methodologies. This study will utilize the qualitative methodology of grounded theory to explore the basic social processes embedded in the phenomenon of obesity and eating in adult, American, Caucasian women in the United States.

CHAPTER THREE

METHODOLOGY

When existing theories do not enlighten or adequately explain a phenomenon, grounded theory can be utilized to reexamine that phenomenon (Hutchinson, 1986). Grounded theory is the methodology of choice in this study by virtue of the preponderance of theoretical ideologies which to date have had little impact on the occurrence of obesity, a major health problem for American women. Therefore, it is time to examine eating and obesity in adult women from a fresh perspective. The multifaceted role of eating and obesity in our society was presented in Chapter Two. Hutchinson (1986) contends that "grounded theorists search for social processes present in human interaction" (p. 111). The objective of this search is an understanding of the reality of the people involved in the phenomenon under study. This reality is constructed through analysis of their social interactions. Theory emerges from this analysis and provides a new understanding of the phenomenon that is generated from the data. The theory provides a basis from which relevant interventions may then be developed (Hutchinson, 1986).

Grounded theory is based on a philosophy of symbolic interactionism and involves specific procedures. This chapter examines the philosophical basis of symbolic interactionism, and the methodological issues of theoretical sensitivity, sample selection and theoretical sampling. In addition, issues of methodologic rigor

are discussed. The procedures utilized to conduct this study are presented along with measures selected to ensure methodologic rigor.

SYMBOLIC INTERACTIONISM

Grounded theory is based on the symbolic interactionist perspective which contends that "...human interactions are based on symbols which have associated meaning and value" (Hutchinson, 1986, p. 112). Blumer (1969) details the philosophical underpinnings and methodologic considerations in his writings and offers support for "direct examination of the empirical social world" (p. 47). He contends that the credibility of naturalistic inquiry lies in its respect of the nature of the empirical world. This method of inquiry seeks a "fit" in problem identification, study techniques, and concept and theory development to what is actually found through direct examination in the empirical world. Symbolic interactionism is based on three premises.

1. Human beings act towards things on the basis of the meanings that the things have for them.

2. The meaning of such things is derived from, or arises out of the social interaction that one has with one's fellows.

3. These meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things he encounters (Blumer, 1969, p. 2).

This philosophical approach embraces social interactions from a contextual perspective in that human beings interact in their world based on their interpretations of the

meanings that are attributed to the objects in their world. Objects can be many things: other people, institutions, ideals, situations, as well as the self. People attach meaning to these objects that have been defined by the social context in which they live and based on how they interpret that contextual meaning. One of the unique positions of symbolic interactionism is this interpretative process. The meaning that people attach to objects derives from how they and others in the world interact with that object and how that interaction is interpreted. A simple example would be chores. The meaning attached to chores is interpreted differently by adolescents than by their parents. Therefore, the action that ensues based on that interpretation is often quite different! Blumer (1969) offers the example of a tree. A tree is viewed very differently, i.e. has a different meaning, when perceived by a "...botanist, a lumberman, a poet and a home gardener..." (p. 11). This interpretative process in the context of social interaction led social scientists to search for a way to study the empirical world directly, from the inside out (inductive), as opposed to constructing a theory first and then testing it (deductive).

Grounded theory research strives to understand people by directly examining their interactions, the meaning of those interactions and the way they interpret them: in essence, how people define their reality. The methodology involves observing, describing, unraveling and dissecting those complex social processes to ascertain the meaning and the relationships of the objects in the empirical world under study. These findings are recorded as data. According to Glaser and Strauss (1967), "...grounded theory is derived from data and then illustrated by characteristic

examples of data" (p. 5). Stern, Allen and Moxley (1982) assert that the

"...emerging theory is grounded in the study data rather than being forcibly related to

some grand theory which simply does not fit" (p. 202). Blumer (1969) contends that

empirical validation in scientific inquiry lies in the congruence of the findings to the

social world under study and not through manipulation of the method.

Grounded theory was chosen to examine eating in the real world (empirical

world) of adult women who claim food issues as problematic. Conducting grounded

theory research involves methodological issues of theoretical sensitivity, sample

selection, theoretical sampling, data coding and analysis and methodologic rigor.

THEORETICAL SENSITIVITY

Strauss and Corbin (1990) define theoretical sensitivity as "... a personal

quality of the researcher...an awareness of the subtleties of meaning of data" (p. 41).

Glaser attributes theoretical sensitivity to the "... social psychology of the analyst;

that is, his (sic) skill, fatigue, maturity, cycling of motivation, life cycle interest,

insights into and ideation from the data" (Glaser, 1978, p. 2). Theoretical sensitivity

is an inherent characteristic of researchers that stems from their understanding and

perception of their own world and how that influences their understanding and

perception of the world they wish to study. Glaser (1978) contends that theoretical

sensitivity is first approached through entering the field of study with as few

preconceived ideas about the research setting as possible. This approach allows the

researcher to view the interactions objectively and remain sensitive to the events as

they unfold. Maintaining an openness to the data is the objective. Yet, Strauss and

Corbin (1990) contend that researchers' prior experiences with the research setting may in fact sensitize them to the nuances of the experience. The example they offered was experience with loss, either through death or divorce. Researchers' personal experience may provide them with a basis on which to make comparisons.

The researcher is the instrument in qualitative research. The instrument for this study was a 41 year old female nurse researcher enrolled as a doctoral student in the College of Nursing at the University of Tennessee, Knoxville. Personal and professional experience led the researcher to the study of obesity. As a critical care nurse and educator for over 12 years, she witnessed the direct impact that obesity has on health and longevity. She has worked clinically with inpatients on an eating disorders unit, outpatients through a community mental health agency and has been involved with support groups in the community for the past three years. The researcher has cared for patients with the usual cardiovascular complications one would expect to be associated with obesity as well as the extremes. One obese woman admitted postoperatively to the intensive care unit had bilateral mastectomies to relieve the weight on her chest to facilitate better respiratory effort. As a result of years of frustration and failure with weight loss attempts, this woman and her physician resorted to surgery to excise part of the weight (a combined total of approximately 30 pounds). The surgery did not solve her problem with obesity. To make matters worse, no one had even thought it worthwhile to discuss reconstructive surgery options with her. The encounter with this surgical patient was life changing for the researcher. Doctoral studies provided the opportunity to begin to explore the

research on obesity. In the process, the researcher changed her specialty and focused

on psychiatric, mental health nursing with an emphasis on eating disorders. It was

through these experiences that she came to believe that food and the eating of food

has meaning beyond basic nutritional needs. Exploring the theoretical perspectives of

the etiology of obesity revealed that despite a large body of literature and many

proposed strategies, the incidence and prevalence of obesity has continued to climb.

It was discovered that the subjects of this area of research had never been asked

directly about their experience with eating and obesity. The research question was

developed to explore their experiences. Qualitative research methodology was

selected in view of the nature of the research question.

The investigation of obesity and the experience of eating was conducted

through unstructured interviews. The interviews were conducted over a period of ten

months. They averaged an hour and thirty minutes in length and ranged from one to

two hours long. The location of the interviews was selected according to the

participants' preferences, but they were advised that the location needed to be in a

place where they could feel comfortable talking about their personal lives and where

the potential for interruptions would be minimal. The majority of interviews occurred

in the participants' homes. Other sites were chosen by the participants due to the

convenience or because they would not be comfortable or uninterrupted in their

homes. These alternative sites included an office, a classroom and a hotel room.

None of the interviews were interrupted by outside events.

Literature provides another source of developing theoretical sensitivity. Numerous publications such as books (theory and research) and documents (biographies, government publications, etc.) provide a background of information for familiarization with the phenomenon under study (Strauss & Corbin, 1990). The use of literature is interwoven in the research process. Initially, it may provide a beginning understanding of the phenomenon of interest. As the research progresses, the researcher returns to the literature for validation and further understanding of the emerging concepts. The literature provides the stimulus for further questioning and actually redirects further sampling. Descriptive materials and quotations found in the literature can be analyzed and included as secondary sources of data. The conclusions and findings of the study can be supported by the existing literature or can be contrasted if they are different (Strauss & Corbin, 1990).

Professional experience provides yet another source of theoretical sensitivity. Experience in the field can enhance interpretation when one already has an understanding of "how things work." Care must be exercised, however, with both personal and professional experience, not to assume that everyone's experience and understanding are the same as the researcher's. Hutchinson (1986) describes a bracketing technique of identifying researcher's values through the use of a daily journal or log of personal feelings and perceptions. This log can serve to heighten researcher's awareness of his or her own values. In this type of research, categories that may have been missed due to these differences in the researcher's experiences eventually emerge as differing characteristics are identified. This log, often kept in

the form of memos, is maintained from the inception of the research and continues

through to the completion and final writing. These memos serve as an ongoing

dialogue that help the researcher capture ideas and relationships that were noted at the

time. It documents those ideas and then provides later accessibility for consideration

in linking categories or defining properties (Glaser & Strauss, 1967; Strauss &

Corbin, 1990).

The process of analyzing the data provides yet another source of theoretical

sensitivity. As the researcher gathers data, categorizes it, and interacts with it,

further insight and understanding of the phenomenon under study is gained. Strauss

and Corbin (1990) emphasize that

> this sensitivity to concepts, their meanings, and
>
> relationships is why it is so important to interweave data
>
> selection with data analysis. Each feeds the other
>
> thereby increasing insight and recognition of the
>
> parameters of the evolving theory (Strauss & Corbin,
>
> 1990, p. 43).

Maintaining a balance between the creativity involved in utilizing sources of

theoretical sensitivity and to scientific process demanding an unbiased approach is

crucial. Strauss and Corbin (1990) suggest several strategies to maintain this balance:

1. Periodically, check in with the data--does what you see fit the reality of

    the data as described?

2. Practice skepticism--regard all categories, characteristics, concepts or

    hypotheses as provisional. They must always be supported by the data.

3. Adhere to the research procedures--they provide rigor to the study, help

    offset biases and ensure adequate consideration of assumptions.

For this study, a bracketing interview was conducted and analyzed in the

research group prior to the initiation of subject interviews. Themes and biases were

identified as assumptions (Chapter One). A daily log was kept following each

interview with detailed context notes and impressions about the content and the

emerging themes. These logs were later examined as theoretical notes were

developed. Interviews were read and reread both individually and collectively in the

research group thus providing fertile ground for interacting with the data and

extracting concepts and categories.

Theoretical sensitivity provides the researcher with a frame of reference in

which to approach the research setting. The advantage in grounded theory

methodology is that the resulting theory that emerges is supported by the data and

theoretically traceable. Therefore, theoretical sensitivity kept in balance can augment

the research process facilitating the development of a "...theory that is grounded,

conceptually dense and well integrated..." (Strauss & Corbin, 1990, p. 42).

SAMPLE SELECTION

Primary purposive network sample selection utilizing a snowball technique was

employed to identify potential study participants. Study participants were obese adult

American Caucasian women between the ages of 21 and 55 who identified food issues

as problematic. Theorists concerned with women's developmental stages argue that the developmental process is different for women and revolves around life transitions related to relationships and not predefined age ranges (Gilligan, 1982; Gilligan, Lyons, & Hanmer, 1990; Loevinger, 1976; Miller, 1976). Therefore, the age range was selected as generally representative of adult, American women. Obesity is defined as a BMI (body mass index) of greater than or equal to 27.3 (National Institutes of Health Consensus Development Panel on the Health Implications of Obesity, 1985). BMI was estimated by the researcher initially and validated following the interview. Validation was obtained through self-report by the subject due to the sensitive nature that such measurement sometimes entails. Study participants were asked for referrals to other potential subjects that met the sample criteria. Informed consent and confidentiality were established according to the University of Tennessee guidelines and procedures and ensured through the approval of the Institutional Review Board (see Appendix A). Consistent with Strauss and Corbin (1990), sample selection continued until saturation was achieved in most concepts, and no new themes emerged.

THEORETICAL SAMPLING

Glaser and Strauss (1967) describe theoretical sampling as a process of jointly collecting, coding and analyzing data. They contend that the blending of these activities generate the theory that emerges from this process. This process is continually refined to fit the data. As data are coded and analyzed, the researcher is directed towards further data collection based on what has emerged as needing further

clarification and/or exploration. Inquiry, therefore, begins with general exploration in the research area in the form of open-ended questions or identification of general themes. This study was conducted utilizing audiotaped, unstructured interviews. The subjects, themselves, were the data source, and the researcher was the instrument. Subjects were instructed, "Tell me about a recent eating experience that was problematic for you." Stern (1985) contends that the research question also emerges from the data. She states that "grounded theory is a method for searching out factors" (p. 53). The pre-study question was "What are the social processes involved in eating and obesity? The final research question comes at the completion of the study when those factors have been discovered (inductive). Further questioning followed as data were coded, analyzed and themes emerged. Silence was utilized as a tool to extract depth and meaning. Verbally acknowledging the silence also provided an opportunity to explore the meaning, thoughts and feelings that lay behind the silence. Probing techniques were utilized such as "tell me more about that" or "tell me what you mean by that." As the sampling process continued, interviews became more structured to explore thematic variations. Audiotapes, transcripts and consent forms were maintained in a locked file in the researcher's home during analysis and then transferred to a locked file in the College of Nursing. Audiotapes will be erased upon completion of the study (Glaser & Strauss, 1967; Sandelowski, Davis, & Harris, 1989).

Data Collection

Data collection, coding and analysis were conducted according to methods outlined by Strauss and Corbin (1990). Data were completely transcribed from the taped interview. Transcriptions were identified by code only and the actual identity of the subject was known only to the researcher. Transcribed data were transferred to the computer using the software program Ethnograph (Seidel, Kjolseth, & Seymour, 1988). Ethnograph was utilized for data management and retrieval. It was useful for open coding in that the data could be retrieved by code; however, the manual method of putting categories on cards facilitated the consideration of conceptual relationships. Subsequently, this manual method was more useful.

Data Coding and Analysis

Three types of coding are utilized in grounded theory: open coding, axial coding and selective coding. These types of coding are not mutually exclusive, and in fact, are utilized at all points in the analysis process.

Open coding was the first step in the data analysis process. Open coding involved breaking down the transcribed data into discrete parts called concepts. Concepts were then compared and contrasted. Further questions arose and data collection was directed toward asking these questions. This cyclical questioning and continual comparison constitutes the basis for the constant comparative method of analysis (Glaser & Strauss, 1967). As the transcripts were analyzed, incident was compared to incident, similar phenomena were conceptually labeled and subsequently grouped into categories. The category was then labeled with an abstract conceptual

term and, although provisional by nature of the ongoing process, was validated by the concepts supporting it (Strauss & Corbin, 1990).

Development of a category involved identification of properties and subsequent dimensionalization. Strauss and Corbin (1990) define properties as "...the characteristics or attributes of a category" and dimensions as representing "...locations of a property along a continuum" (p. 69). Dimensions and properties specify the relationship between major categories, categories and subcategories. Often the dimensional aspect of a property is what appears in the data and leads to the development of the full spectrum of the category.

Open coding can be done by line-by-line analysis, sentence or paragraph or by entire document observation or interview (Strauss & Corbin, 1990). Line-by-line analysis was performed initially to generate categories and facilitate theoretical sampling. As data analysis progressed, open coding was done by paragraph as content was determined to be related conceptually. Code notes or memoing were recorded in the left hand margins at the time of transcription and transferred to a separate document to facilitate comparison (Appendix B).

Axial coding utilizes the information obtained in open coding and is a process of "reconstituting" larger categories by "...making connections between a category and its subcategories" (Strauss & Corbin, 1990, p. 97). Several main categories eventually emerged. Axial coding focuses on: a phenomenon, what precipitates it, what properties it possesses (context), how it plays out and the resulting

consequences. These factors or strategies are related in the form of a paradigm

model. The paradigm model identified by Strauss and Corbin appears below:

(A) Causal conditions → (B) Phenomenon → (C) Context → (D)

Intervening conditions → (E) Action/interaction strategies → (F)

Consequences (Strauss & Corbin, 1990, p. 99).

The use of a paradigm model facilitated systematic analysis of the data

promoting density and precision. In this model, the phenomenon is the central

concern or event which precipitates behaviors or interaction in response. The causal

conditions are the antecedents to the phenomenon. Context involves the dimensional

properties of the phenomenon such as the location, sequence or specific conditions

that pertain to it. Intervening conditions are those conditions that influence the course

of action or interaction. Action/interactional strategies are those behaviors that occur

in response to the phenomenon. Consequences follow the action/interaction strategies

and represent the outcome of the phenomenon. The process of axial coding utilizing

the paradigm model allowed the performance of complex, analytic steps

simultaneously. Categories were developed and linked through the use of the

paradigm model. The data were then reexamined for supporting evidence. The

paradigm (or categorical relationship) was supported by data and a relationship was

confirmed. Continuous evaluation of the data provided evidence that supported this

relationship as well as evidence that did not. According to Strauss and Corbin

(1990), these differences "...add variation and depth of understanding" (p. 109).

They contend that further exploration of the differences is warranted and only

provides further depth and meaning to the theory. As axial coding progressed, patterns relating the dimensional properties of the phenomenon were noted. These patterns were considered in the process of selective coding (Strauss & Corbin, 1990). The paradigm developed through this process is discussed in detail in Chapter Four.

Selective coding is the final phase of coding and involves the identification and selection of the core category. The core category is defined by Strauss and Corbin (1990) as "...the central phenomenon around which all the other categories are related" (p. 116). Similar to axial coding, the integration of selective coding is performed on a more abstract level. There are several steps involved in selective coding. Again, these steps are not linear and one may move back and forth between them (Strauss & Corbin, 1990).

The first step was commitment to a story line. The story line is "...the conceptualization of a descriptive story about the central phenomenon of the study" (Strauss & Corbin, 1990, p. 119). A paper and pencil descriptive narrative that provides an overview of the essence of the study constitutes a story line. The story line was developed and appears in Chapter Four. The second step involved identifying and developing the properties and dimensions of the core category. Once identified, the other categories must be related to it. These related categories called subsidiary categories followed from the utilization of the paradigm process. The paradigm process enabled the ordering of events and sequences that differed due to intervening conditions. The process at this level provides explanations based on data for subsequent alternative strategies and consequences. The paradigm was shifted by

manipulating categories until they fit the story line. If the story is written in a logical and sequential manner the categories align without difficulty. The third step of selective coding involved validating the relationships. The relationship among the categories were validated in the data. The data related at the conceptual level and at the property/dimensional level to be considered a theory. "Laying out the theory" either narratively or diagrammatically grounds the process in the data. The theory was diagrammed as a substantive model. Statements that portray the relationship among categories under differing conditions were developed and supported by the data. The last step was filling in gaps in the categories. This phase continued through the write-up phase. Filling in missing detail adds "...conceptual density to the theory, as well as...increased conceptual specificity" (Strauss & Corbin, 1990, p. 141).

The resulting theory was further analyzed utilizing a conditional matrix to examine the interaction of the phenomenon within societal contexts. These contexts may be as constrained as the immediate action itself to those actions that influence consequences on an international level. The conditional matrix is discussed in Chapter Four. Substantive theory "...evolves from the study of a phenomenon in one particular situational context" (Strauss & Corbin, 1990, p. 174). Substantive theory, although located in one of the outer levels of the conditional matrix, does not cross levels. A formal theory "...emerges from a study of a phenomenon examined under many different types of situations" (Strauss & Corbin, 1990, p. 174). A formal theory crosses the conditional matrix and finds applicability on several levels. This

study culminated in the development of substantive theory since it was conducted in

only one situational context at the action level of the conditional matrix.

METHODOLOGIC RIGOR

Methodologic rigor is an issue of much debate and discussion between

researchers of quantitative and qualitative paradigms as well as among qualitative

researchers themselves. The literature offers numerous perspectives that vary from

attempts to unify the discourse between the two paradigms through the use of

common language (Atwood & Hinds, 1986; Brink, 1989; Goetz & LeCompte, 1984;

Hinds, Scandrett-Hibdon & McAulay, 1990; Miles & Huberman, 1994) to

perspectives that define and defend these issues in exclusive qualitative terms (Corbin

& Strauss; Leininger, 1994; Lincoln & Guba, 1985; Sandelowski, 1986). The

following discussion explores the issues of methodological rigor as represented by

these two perspectives.

Qualitative researchers discuss methodologic rigor in somewhat different

terms. The issues are similar, but each approach, as well as the terminology, differs.

Lincoln and Guba (1985) utilize four criteria that they define as appropriate to the

qualitative paradigm and espouse the concept of trustworthiness as the intended

outcome. The first criterion is truth value. Truth value is achieved when the study

does indeed describe and represent the perception of the subject's experience in the

context of the environment. Sandelowski (1986) supports Lincoln and Guba and

explains,

the truth value of a qualitative investigation generally resides in the

discovery of human phenomenon or experiences as they are lived and

perceived by subjec's, rather than in the verification of a priori

conceptions of those experiences" (p. 30).

She contends that "...truth is subject oriented rather than researcher defined (p. 30).

The second criterion is applicability. This criterion refers to transferability and is

determined by the extent that the study is applicable to other settings and other

subjects. Sandelowski (1986) uses the term "fittingness" to explain this criterion and

believes it is achieved when

...its findings can "fit" into contexts outside the study situation and

when its audience views its findings as meaningful and applicable in

terms of their own experiences. In addition the findings of the study

whether in the form of description, explanation, or theory, "fit" the

data from which they are derived (p. 32).

Consistency, the third criterion, refers to the replicability of the study and

whether "...the findings of an inquiry could be repeated if the inquiry were replicated

with the same (or similar) subjects (respondents) in the same (or similar) context"

(Lincoln & Guba, 1985, p. 290). Again, Sandelowski (1986) offers insight into this

criterion and suggests that "...auditability be the criterion of rigor or merit relating to

the consistency of qualitative findings" (p. 33). She further explains that,

a study and its findings are auditable when another researcher can

clearly follow the "decision trail" used by the investigator in the study.

In addition another researcher could arrive at the same or comparable

but not contradictory conclusions given the researcher's data,

perspective, and situation (p. 33).

The fourth criterion, neutrality, refers to the objectivity of the study and is

evidenced by how well the findings represent the subjects and the setting and not

"...the perspectives of the inquirer" (Lincoln & Guba, 1985, p. 290). These four

criteria represent the "naturalist paradigm" as espoused by Lincoln and Guba (1985)

and serve as standards of methodologic rigor viewed from the perspective of the

qualitative paradigm.

Leininger (1994), another researcher representing the qualitative paradigm,

offers six criteria as evidence of methodologic rigor. The first criterion is identified

as credibility. She contends that credibility refers to the "...'truth,' value, or

'believability' of the findings that have been established by the researcher..."

(Leininger, 1994, p. 105). Credibility is established through methodology in which

the researcher studies the subjects through prolonged contact and acquires "cumulative

knowing." The second criterion, confirmability, is evidenced when the researchers

through prolonged contact obtain repeated evidence of the phenomena being studied.

Furthermore, the subjects validate those findings in feedback sessions. Meaning-in-

context, the third criterion, provides a way of ensuring that the information obtained

from the subjects in the study and recorded as data are interpreted according to the

perceived meaning to these subjects within the context of their environment. As the

investigator attempts to understand the subjects' world view, data are given meaning

as represented within that context or as ascribed by the subjects. Recurrent patterning

is the fourth criterion. Leininger (1994) describes this as "...repeated instances,

sequence of events, experiences, or lifeways that tend to be patterned and recurs over

time in designated ways and in different or similar contexts" (p. 106). These patterns

or repeated experiences can be represented numerically (i.e. percentages). Saturation

occurs when the researcher has explored the phenomenon to the extent that the data

are redundant, and no new information is being obtained. This occurrence is the

hallmark of the fifth criterion and continued data collection and analysis only serve to

validate what is already known. Subjects often claim that they have told the

investigator everything they know about the topic. The last criterion, according to

Leininger (1994), is transferability. This criterion refers to the ability to transfer the

findings from a particular study to a similar setting and preserve the integrity of the

"...particularized meanings, interpretations and inferences from the completed study"

(Leininger, 1994, p. 106). The findings should be generalizable to similar study

situations. Both Leininger (1994) and Lincoln and Guba (1985), promote criteria for

methodologic rigor from a purist qualitative perspective.

Miles and Huberman (1994) offer another perspective that develops the criteria

from a qualitative paradigm bridges the gap and incorporates traditional quantitative

concepts. The first criterion or standard, according to Miles and Huberman (1994), is

objectivity/confirmability. This criterion, they explain is "...sometimes labeled

'external reliability'" (p. 278). The identification and acknowledgement of

researcher's bias provides reasonable assurance that the collection and interpretation

of data remains neutral. If objectivity, confirmability or external reliability are present "...independent researchers would discover the same phenomena or generate the same constraints in the same or similar settings" (Goetz & LeCompte, 1984, p. 210).

Reliability/dependability/auditability, the second criterion, refers to the consistency and stability of the findings. To be reliable or dependable the data must be consistent over time. This is accomplished through further studies with similar subjects in similar settings and under similar circumstances. The findings from the first study are either supported or refuted by the findings of the subsequent studies. To enhance this process an audit trail is often established that can be validated by an independent researcher and/or followed by future investigators.

The third criterion employed by Miles and Huberman (1994) is internal validity/credibility/authenticity. They refer to this criterion as "truth value." The findings must represent reality from the perspective of the subjects in the study. Atwood and Hinds (1986) suggest that the constant comparative method facilitates the establishment of validity during conceptual development and theory generation.

External validity/transferability/fittingness is offered as the fourth criterion. Often referred to as generalizability, this criterion assesses how well the study findings fit or are transferable to other similar circumstances. The findings should have merit when compared to similar groups. Strauss and Corbin (1990) contend that "a grounded theory is generalizable in so far as it specifies conditions that are linked through action/interaction with definite consequences" (p. 115). Detailed descriptions

of the specific conditions that existed during the study provide subsequent researchers with the information needed to replicate those conditions in future studies. This enhances the success of replicating the study and, therefore, generalizability or transferability.

The fifth and final criterion within Miles and Huberman's framework for methodologic rigor is expressed as utilization/application/action orientation. This criterion is unique to this framework and explained as "...what the study does for its participants, both researchers and researched--and for its consumers" (Miles & Huberman, 1994, p. 280). Promoting a sense of higher purpose, this criterion ensures that the benefits of conducting research offset the intrusive nature of these investigations. Presented as a question of ethics, Miles and Huberman (1994) ask "... who benefits..and who may be harmed?" (p. 280). They also suggest that the research should benefit the subjects in empowering them to seek change and/or participate politically as appropriate. These five criteria provide researchers with a common lens with which to view methodologic rigor complimenting both paradigm perspectives.

The criteria proposed by Miles and Huberman (1994) was chosen as the method for establishing methodologic rigor in this study. In the absence of specific criteria to employ as a part of the grounded theory procedure outlined by Strauss and Corbin (1990) the criteria as proposed by Miles and Huberman (1994) was determined by this researcher to have the best fit. In the discussion of evaluating grounded theory research, Stauss and Corbin (1990) contend that "...judgements are made about

the validity, reliability and credibility of the data" (p. 252). The following discussion outlines the steps taken to establish methodologic rigor according to these situations.

Objectivity/Confirmability

To assure objectivity/confirmability in this study a bracketing interview was conducted and analyzed prior to data collection to identify areas of this researcher's bias or concern. The bracketing interview is a technique employed in phenomenology. However, because of the researcher's prior experience with obesity it was deemed appropriate to use in identifying research biases. The bracketing interview was reviewed by three experienced qualitative researchers. The emergent themes were then incorporated as assumptions prior to beginning the data collection process. These assumptions were outlined in Chapter One. A research group composed of faculty and graduate students was utilized in concurrent data analyses. Areas of bias or researcher effect were addressed and the early interviews were coded according to group consensus. These processes assisted in maintaining neutrality.

Reliability/Dependibility/Auditability

This study provides for this criteria by careful attention to describing how the study was conducted with appropriate documentation to support the findings. The procedures as outlined in the methodology were closely followed. Examples of how data were coded appear in the appendices. The full measure of this criterion remains to be supported through validation in the findings of subsequent research.

Internal Validity/Credibility/Authenticity

Subjects who completed the interviews for this study agreed to review the findings during the analysis to clarify, change or validate the emerging concepts and developing linkages. Two of the subjects who were interviewed were later asked separately to evaluate the emerging paradigm and subsequent theoretical model. Both subjects adamantly insisted that the model fit and explained their experiences. No additions, changes, rearranging or differences were offered despite attempts to solicit that input. One subject became excited and discussed how one of her experiences fit within the model structure. Another woman who met the study criteria but who was not a subject confirmed that the model was representative of her experience as well. She exclaimed, "Anybody who has problems with food can identify with that!"

External Validity/Transferability/Fittingness

Descriptions of the conditions and their associated consequences are detailed in Chapter Four of this study. This study was conducted through interviews of subjects experiences; therefore, environmental conditions and circumstances are not as applicable as they are in participant-observation types of settings. Careful description of subject characteristics will help identify differences in subsequent studies. Furthermore data analysis was kept close to the data to prevent assumptions and conceptual leaps. If the data analysis accurately reflected the experience of the subjects, then the results should be transferable to other similar groups. This criterion can only be supported through replication of this research.

Utilization/Application/Action Orientation

The goal of this study was to examine the basic social processes of the experience of eating in obese, adult Caucasian women. The resulting theory offers insight for the subjects, their families, communities, and health care providers in addition to the research community. Dissemination of this information will be accomplished through the publication of this research.

Reliability and validity provide credibility to the research process. In general, "...reliability is concerned with the replicability of scientific findings" (Goetz & LeCompte, 1984, p. 210). Whereas, "...validity is concerned with the accuracy of scientific findings" (Goetz & LeCompte, 1984, p. 210). Reliability and validity are key issues in both qualitative and quantitative research methodologies but differ in their application to qualitative research. Grounded theory, by nature of its constant comparative method, facilitates reliability and validity. Based on the philosophy of symbolic interactionism, grounded theory is designed to look for meaning and value in social processes. Theoretical sampling occurs over time, thus, uncovering subjects' true feelings about the phenomenon under study. This "truthfulness" emerges as themes and categories are identified and reach saturation. One of the supporting rationales for the use of grounded theory lies in its validity. Validity is imported through the data collection and analysis process in which the data is "grounded in" or emerges from the empirical world being studied. Close adherence to the methodology supports an adequate research process (Atwood & Hinds, 1986; Strauss & Corbin, 1990).

SUMMARY

Grounded theory is a complex qualitative methodology that seeks to discover the social processes involved in human interaction. The procedure proposed by Strauss and Corbin (1990) was utilized to examine an "old" problem in a new light. This exploration of eating and obesity in adult American women provided a new conceptual framework and resulting substantive theory.

CHAPTER FOUR

FINDINGS

This chapter presents the findings from this study of eating and obesity in adult, American, Caucasian women. A description of the participants is offered followed by the story line developed in the data analyses. The relationship between the categories that emerged from the data is discussed in terms of their contribution to the paradigmatic model. The core category was identified as eating and reflected the phenomenon of central concern and most frequent occurrence in the data. The theory of seeking solace emerged as a process of the experience of eating and obesity in these women. Consequential outcomes are discussed as they pertain to the theory.

DESCRIPTION OF THE PARTICIPANTS

Eight women volunteered to participate in this study. All participants claimed that food issues were problematic and met the study criteria. They ranged in age from 28 to 54 years with a mean of 39.6 years. The mean height was 5 foot, 6 inches (167.6 cm) with a range from 5 foot, 4 inches (162.7 cm) to 5 foot, 9 inches (175.3 cm). Weight ranged from 200 to 292 pounds (90.9 to 132.7 kg) with a mean weight of 245.6 pounds (111.6 kg). Body mass index (BMI) was calculated and all participants met the study criteria of $\geq$ 27.3. The mean BMI was 39.7 and occurred within the range of 34.2 to 50. The median occurred between 38 and 39. No two BMIs were alike. Obesity staging places these participants in the moderate to severe obesity stages. Those with BMIs in the 30 to 40 range are classified as moderately

obese indicating 40-99% above ideal body weight. BMIs over 40 are classified as

severely obese and are greater than 100% above ideal body weight (Perri et al., 1992)

(see Table 4.1)).

Table 4.1 Subject Characteristics		
	Mean	Range
Age	39.6 yrs.	28-54 yrs.
Height	5' 6"	5'4"-5'9"
Weight	245.6 lbs.	200-292 lbs.
BMI	39.7	34.2-50.0

Other demographic characteristics of the participants were that each of the

participants were employed full-time. A variety of occupations were represented

including clerical, interior design, child development and nursing. Educational level

was high with half of the participants holding advanced degrees. Karen, Melissa and

Amy were single (never married). They were currently living on their own,

however, each had histories of moving back in with her parents during times of job

stress or student status. Betty, JoAnne and Doris were married, and each lived with

her husband. JoAnne had two grown children who had left home, but her mother

was living with her. Marie was widowed, and she and her mother lived together in a

shared residence. Emily was divorced. An adult child, the youngest of three, was

currently living with her. Of interest was the fact that despite the mean age of almost

40 years, only two of the women had children. This suggests that there may be

unresolved issues with their own mothers that have influenced their choice in becoming mothers. Five of the eight women were either living with or had lived as adults with their mothers. The participants' actual names were not used to ensure confidentiality. Demographic information emerged in the context of the interviews. No further information was requested. Their collective experience elicited from the interviews was summarized in the development of a story line.

STORY LINE

The story line is an important part of the analytical process and helps to explicate the central phenomenon and the core category. The main story was about women who have been labeled at some point in their lives as either physically big or overweight. They described themselves as feeling different or separate from others in their social networks. They described feelings of shame, frustration, disapproval, unacceptance and not feeling "good enough." Women seek resolution of these feelings through food. Food is perceived as able to provide them with something other than nutrition. They associated eating food with comfort, nurturing, love, and other pleasurable states. Eating was also linked to feeling states such as frustration, boredom, sadness, anxeity, stress, anger, being upset, or an attempt to feel good. The women were very clear that hunger was not the usual stimulus for eating. They responded by struggling to control their eating. The women described periods of being in and out of control.

Control seemed to be influenced by many things. There were three levels of control. Being out of control was evidenced by overeating, bingeing, taking diet

pills, sneaking or hiding food, purging or fasting particularly for atonement. These

behaviors emerged as an evolutionary process where repeated cycling brought some

women to a point where they had become more realistic in their appraisal of

themselves and their relationship to food, people and dieting, thus in control. This

evolution to in control was evidenced by the appearance of self care strategies,

abandonment of "the ideal" fantasy, the ability to set appropriate boundaries, realistic

food and activity strategies and an understanding of productive ways to deal with their

feelings. The third level was a marginal level of control where evidence of both

levels, as previously discussed, exist. For example, there was a diet plan or the

contemplation of a diet plan but they also indicated that these diets have not worked

in the past. Associated with the diet plan was an understanding of the role of exercise

and activity and at times evidence of follow through though not consistent. Fantasies

including reaching "the ideal" were often still present along with wishing, wondering,

and intellectualization (their words). Women in this level often said they knew what

to do; they just could not seem to do it. Because of this marginal level of control, the

possibility existed for women to go in either direction; to being more in control or

more out of control. These levels were not absolute but seem to co-exist.

Dieting was a universal experience for women who have a long history of

weight loss and weight gain. Regardless of the dieting strategies, the participants

regained the lost weight and often gained more. The weight gain led to social

rejection within all social levels, from nuclear to extended family, friends, community

and the larger social network often engendering negatively perceived comments from

complete strangers. The women talked about the stigma of being fat. The external social rejection was internalized and was evidenced by their self criticism and self rejection. The internalization of stigma was further evidenced by stated assumptions. The women all described numerous assumptions they made about what people were thinking or feeling about them in a variety of social situations in the absence of any external social stimuli. The encounter or even the contemplation of the encounter was sufficient to stimulate the assumption of rejection. This resulted in a rejection cycle that continued to impact the self with or without external influence. The women responded to the experience of rejection with a lot of feeling. They described feelings of anger, betrayal, depression and isolation. The elicitation of feeling states once again led to seeking solace through eating. The cycle continued.

PARADIGM

Axial coding resulted in the development of a paradigm model as outlined by Strauss and Corbin (1990). The core category was identified as eating and the remaining dominant categories became subcategories. The resulting paradigm model was generated from the relationships of the subcategories to the core category.

Open coding separated the narrative transcripts into concepts. The concepts that occurred most frequently in the data were transferred to 4 x 6 inch cards. The cards were then manually grouped in axial coding schemes according to relational categories until all concepts were subsumed in categories. The categories were explored for properties and dimensions. Considerable effort was expended in arranging and rearranging categories and subcategories until major categories

emerged. For example, the concepts of eating habits (eat habits), eating when bored (eat bored), eating related to hunger (eat/hunger), eating alone (eat alone) and eating when happy (eat happy) were identified (see Appendix B). These concepts were grouped into an initial category called eating. In subsequent groupings, eating habits was placed in the intervening conditions category. Eating when bored and eating when happy became dimensions of the property of emotional eating. Eating related to hunger became a dimension of nutritive eating. Eating alone clustered with the dimensions of social eating. Nutritive eating, emotional eating and social eating were identified as properties of the core category of eating. This process was consistent for all components of the paradigm. Second level coding is presented in Table 4.2.

Conceptual Definitions

Conceptual definitions were developed for each of the categories that emerged in the paradigm. It was determined that saturation has been achieved in all categories, however, the categories of struggling for control and negatively perceived difference were not as clear. Further research will be conducted to explore those concepts more fully. By virtue of the research design and population sampled, it was difficult to fully develop the struggling for control concept. A sample population of women who had achieved the control level more consistently would be able to further define that concept. The negatively perceived difference/separateness concept described by the women was connected to an event described by the researcher as a labeling event. It occurred in response to an external event. However, the term labeling event was described by the researcher and not the participants in explanation

Table 4.2 Second Level Coding

CODES	CATEGORIES		PARADIGM
	initial	final	
perceived difference	initial rejection	perceived	Antecedent
separateness		difference or	
birth issues		labeling event	
like mom	rejection	"	
unlike mom	"	"	
abuse		intervening	
sex abuse		conditions	
shame	emotions	feelings	Antecedent
lonely		appease	
betrayal		"	
frustration		"	
not good enough		"	
vulnerable		"	
fear of rejection		"	
sad unacceptance		"	
unapproval		"	
unloved		"	
resistance	rejection	"	
rebellion	"	"	
resentment	"	"	
defiance	"	"	
anger	response to rejection	"	
depression	"	"	
isolation	"	"	
hiding	food as something	"	
comfort	else	achieve	
nurturing		"	
love		"	
relief		"	
enjoyment		"	
acceptance		"	
reward		"	
fulfillment		"	
power		"	
love/sex substitute		"	

Table 4.2 (continued)

CODES	CATEGORIES		PARADIGM
	initial	final	
to cope	eating	eating	Phenomenon
not r/t hunger		emotional	
r/t anxiety		"	
r/t sadness		"	
love food		"	
like food		"	
r/t depression		"	
r/t anger		"	
to feel good		"	
r/t being upset		"	
r/t boredom		"	
r/t frustration		"	
not caring		"	
r/t stress		"	
to numb		"	
out		social	
alone		"	
cultural food		"	
patterns		"	
food rituals		"	
celebrations		"	
holiday food		"	
social		"	
r/t place		"	
cooking in		"	
eat while can	(these were	intervening	
eating fast	collapsed and	conditions	
expediency	became part of	"	
spontaneous	eating habits)	"	
low fat choice		nutritive	
low cal choice		"	
hunger		"	
nutrition knowledge		"	

Table 4.2 (continued)

CODES	CATEGORIES		PARADIGM
	initial	final	

control
control irony
dealing
coping
self care activity
diet evolution
  (implies learning)
setting limits/
  boundaries
identify needs
  (included in self
  care activity later)
self awareness
explanations about
  weight
assertiveness
	in-control	in-control
		
		intervening
		conditions
		  ■
			Action/Interaction
			Strategy

overeating
binge
purge
diet fail
quit diet
sneak food
hide food
diet pills
not eating/fasting
trigger eating
cravings
favorite foods
food preferences
eating habits
atonement
	out-of-control
	
	intervening
	conditions
		out-of-control
		
		intervening
		conditions
		  ■
		  ■
		  ■
		  ■
		  ■
			Action/Interaction
			Strategy

contemplating diet
diet plan
activity plan
knowing vs doing
 	
+presence of both
  in-control and out-
  of-control
  strategies (mixed)
	
	intervening
	condition
		marginal control	Action/Interaction
			Strategy

Table 4.2 (continued)

CODES	CATEGORIES		PARADIGM
	initial	final	
longing	+motivation	intervening	intervening
future desire		conditions	conditions
hope			
desire to be thin			
faith in God or HP			
health consequences			
deprivation			
plan to fail	-motivation		
weighing			
diet history			
diet cycle			
wanting to be thin			
for him			
scarlet			
(postponement)			
intellectualization			
(their words)			
wishing			
wondering			
dreams			
fantasy			
too busy			
why diet			
contrary evidence			
loss			
not assertive			
compliance			
industry influence			
being thin means			
repression			
weight as cocoon			
weight as safety			
sex abuse			
abuse	initial rejection		
age impact	"		
guilt about eating	dieting		
weight history	"		
knowing vs doing	"		
not eating/fasting		marginal control	
diet pills		out-of-control	
stress		"	
	response to rejection		

Table 4.2 (continued)

CODES	CATEGORIES		PARADIGM
	initial	final	
weight gain/regain	dieting	weight	Consequence
weight loss			(+weight gain-
weight maintain			antecedent to reject)
age impact		intervening	
guilt about eating		conditions	
weight history		"	
contemplating diet		marginal control	
diet plan		"	
weight as issue	rejection	rejection	Antecedent
w/husband			to feelings (replaces
mixed messages			initial perc
emot distance		.	difference)
(from others)			
social cruelty			
intolerance			
stigma			
discrimination			
prejudice			
cultural messages			
negative messages			
food police			
social scrutiny			
beration			
mom			
dad			
brother			
sign other			
children			
friend			
relationships			
w/mom			
relationships			
w/men			
approval depend			
on wgt			
harassment			
critical parents			
weight as an issue			
mom monitors wgt			
resistance		feelings	
rebel		"	
resentment		"	
defiance		"	

Table 4.2 (continued)

CODES	CATEGORIES		PARADIGM
	initial	final	
skinny as value body size self image pictures/mirror (true size) self esteem proper package perceived size brain wash self destructive renovate self fat body self berate male messages		self rejection	continues rejection antecedent
like mom unlike mom		perceived difference	
		recreated social	
assumptions (about what people think) unspoken rule first hit signif others unspoken preference	link to rejection	rejection	continues rejection antecedent
anger depression isolation hiding stress	response to rejection " "	feelings " " " intervening condition	

of their perceived difference/separateness. This may, in fact, reflect an abstraction to a more formal level of theory development. Further data collection may validate this concept. The conceptual denfinitions were developed as follows:

Perceived difference -- (Labeling event) the occurrence of a situation in which an awareness of being different was associated with being big in size or overweight and is attributed with a negative value.

Feelings -- a broad spectrum of emotions elicited in response to or in the absence of environmental stimuli.

Eating -- the ingestion of food as a response to feeling states or in response to hunger.

Struggling for control -- a dynamic process often requiring considerable effort to influence or regulate eating.

Weight -- a measurement of body size that has defined social standards and norms and is the consequence of control strategies.

Rejection -- a perception of difference from others initially and then from self that results in the negative experience of being or feelings set apart from a social affiliation.

Seeking solace through eating -- a continuous dynamic process of eating and struggling for control in adult, obese women in response to a perceived difference knowing that it is a temporary solution and condemning their subsequent actions.

Phenomenon

The phenomenon (core category) of concern in this study was eating. The women described eating as a central activity. Two women indicated that it was the center of their lives. Emily referred to it as a religion. The women indicated that they did not eat because they were hungry and, in fact, expressed envy for people who did. The properties of eating were identified as nutritive, emotional, and social.

Nutritive Eating.
Nutritive eating reflected knowledge of good nutritional principles. It is recognized that technically all eating is nutritive, but for the purpose of this discussion nutritive eating is defined as the intentional selection of foods for the purpose of following recommended nutritional guidelines that impact health status. Participants referred to low calorie, low fat guidelines for food selection. It was interesting that despite this knowledge most women indicated failure to actually follow those principles with any consistency. Karen discussed this dilemma and acknowledged her choice of traditional southern favorites and explained,

> "Yes, I know the chicken breast [grilled] is healthy but the chicken fried steak tastes better."

Doris maintained that she chose nutritive eating at times but added,

> "There have been times when I have changed my eating habits and eaten, well, sensibly. Umm, you know, essentially low fat, correct portion size. I don't consider that dieting. Thats, to me that's, I mean to me just how you're supposed to eat to maintain your body. Food's not the reason you're on the face of the earth. Food's just a perk or a lariap or a fun thing or whatever it is, it's not your central purpose."

Betty claimed that she knew what to eat when she said,

> "I mean, I don't feel like I need to be informed on what the right choices are, I just don't ever want to make those choices (laughs)."

Emotional Eating. Emotional eating another property of the core category of eating, was directed at achieving or appeasing emotional states. Eating food was perceived as an attempt to achieve comfort, nurturing, love, acceptance, relief or enjoyment. Marie indicated she had to relearn as an adult that eating was not something to be used to relieve pain. She lamented,

> "Yet it must be in the back, in the deepest part of my mind, [food] gives me a comfort that nothing else can give at this point in my life."

Eating food served as a refuge for Emily. She explained,

> "I used to try to bribe people with gifts or whatever for friendship, you know, just, 'like me' type of thing. And I found that uhh, the only way men would pay attention to me is if they could manipulate me into doing things for them. And that was, you know, at the ripe old age of nine. So uhh, I guess it's when I started turning to food, bacially. Cause it was good to me, it made me feel good, it accepts me, I have no problem with it and uhh, I just really enjoy it."

Karen, who was single, equated eating with love and affiliation when she said,

> "Yeah, it's almost like love or something, I don't know. I've read a lot that people use food as love and maybe, I don't know. All I know is that other people are eating the pasta in cream sauce. So, by God, you know, I'll eat the pasta in cream sauce too."

Eating also served to appease anger, frustration, boredom, sadness, anxiety, stress, depression or being upset. JoAnne said,

> "I use food now, not as much as I used to but I still swing on that refrigerator door when I'm stressed or anxious. Uhh, I don't snack that much anymore as I used to but I just don't feel the need for it. But when I'm, when I'm under stress, I eat, at meals, real fast and a lot more that I need, more than I need to satisfy myself. Umm, I'm the first one through and looking around to see if anything's (laughing) not nailed down."

Comfort and stress were cited by Karen as reasons for eating. She explained,

> "Well you know you get back probably to food and comfort, it's
> probably an intrinsic reason. That brings me comfort when I can't get
> comfort elsewhere. So I guess it all goes back to I don't 'eat bad' when
> my stress level was down. When I'm dealing with things lately. When
> my stress level was up, here come the food problems again. So what
> can I say (laughs). See it's all intertwined."

Melissa indicated that eating was a frequent response to arguing. She claimed,

> "I always eat--seems like my eating comes when I get into arguments
> with my parents, umm, when something upsets me is mainly when I
> want to eat. If I get depressed or now so--it's not as much when I get
> depressed as if I just get mad."

Anger was a difficult emotion for which women had to cope. Amy explained that in

the past, she never got angry at anybody in particular. If someone made her angry,

she would not address the person provoking the anger. She said,

> "I wouldn't say anything about it, I'd keep it all in."

When asked what she did with the anger she was holding, she said she would,

> "Stuff it. No, I never exploded at anybody. I might be a little rude
> sometimes you know, but that's about it. A little hateful here and there.
> I held it in, stuffed it in with food and stuff."

Emily eats for a lot of reasons. She indicated that she ate,

> "Well, when I'm alone, I'm bored, that's the first place I go. If I'm sad,
> or depressed, then I go in there and get something to eat and I feel
> better."

Social Eating. Social eating was another property of eating. Eating was

perceived as a way to connect with people. When asked about her preference to eat

at a restaurant rather than at home, Karen, who is single and lives alone, explained,

> "...if I'm in a restaurant I'm with people. If I'm at home, it's by
> myself."

Assuming she was with friends she corrected and said,

> "Well no, not necessarily. But it's like I'm, I'm still communing with people... Even it it's just talking to the lady who takes my money. I'm still interacting with another individual. Whereas at home, even if I go home and eat it, I'm still interacting with this individual. And whether that's a social factor, I don't know. But somebody says let's go out to eat, I say, let's go..."

Healthy food choices became irrelevant in this social invitation to eat and she

exclaimed,

> "I'm with people, and by God, I'm going to enjoy myself, to hell with the calories."

Melissa expressed a similar characteristic when she said,

> "I surround myself with people that eat now so I contribute a lot of my eating is because everybody else eats. You know, wherever we want to go eat, we go eat. We don't, umm, we don't watch what we eat."

Melissa and Karen's social eating was consistent with the philosophy that Doris

espoused. Doris explained,

> "I just--I like to eat I think. I enjoy food. But I enjoy the social context to food. Umm, I don't enjoy eating alone that much, I usually eat with friends and at work it's a social occasion."

One of the dimensions of social eating was eating alone. Not everyone was

comfortable eating in public. Emily indicated that she would only eat out if she were

comfortable with the person with whom she was dining. She explained,

> "I guess everybody likes partners in crime, you know. If I'm with another big woman, like I like to go with Beulah, Beulah loves to eat. Now she can appreciate eating, you know."

JoAnne explained her discomfort with eating socially. She said,

> "There's a difference between eating in public and eating in private at least for me and my hunch is other big women experience that too. Our

obesity is public, uhh, you can't hide it. Being black or being white is
public and so uhh, my weight is connected in my mind and I think a lot
of other people's to food, not necessarily genes or exercise patterns or all
those other kinds of things, so, umm, there's a natural connection
between being publicly fat and public eating that I'm aware of."

Emily prefers to bring her food home if she is not with a "partner in crime." She

said,

"I'm a private eater I guess, basically. Cause I can eat how I want, I
don't have to have table manners. I can scarf it in."

Celebrations, holidays and food rituals were also indicators of social eating. Betty

talked about the difficulty she encountered in eating with her husband. She explained,

"I think it sets up a little annoyance on my part because I'll be like well,
what do you mean you want a hamburger but not the fries to go with it?
That's what you're supposed to have. The hamburger and the fries.
And if he says well I'm not that hungry then I'm like, Geeze I don't
think that way. I don't think whether I'm hungry or not. I'm just like,
that's supposed to go together."

Doris talked about the impact of holidays on her eating when she said,

"And holidays, Christmas holidays at my parents' house where I go
every year for Christmas, is just a food feast for a week."

Participation in family feasts was not without consequence. The desire to join and

participate in the eating was greater than their efforts at restraint. Betty also

expressed difficulty during family gatherings. She explained,

"And then of course when my siblings come to visit on the weekends
with their families--oh she [mother] does everything then. It's just food
all over the place. It's kind of overkill.

The difficulty arises in when Betty participates in the feast. She elaborated further,

"So she [mother] cooks and she puts it on the table and you, you get
some and she's cooked it and she's put it down right in front of you but
if you're putting--you know, if you're putting the steamed broccoli on

your plate, life's fine, life's good. But when you reach for the mashed potatoes it's--oh, now, you know you didn't need that."

The women in this study were clear that their eating was not stimulated by hunger.

They talked about nutritive, emotional and social eating. Examination of the data

revealed the causes or antecedents of their eating.

Antecedents

Eating in this study was initiated by feelings. The women described feelings of

anger, betrayal, shame, loneliness, not feeling good enough, vulnerability, sadness,

disapproval, and unacceptance. Initially these feelings were of a perceived difference

and a sense of separateness. This perceived difference was the occurrence of a

situation in which an awareness of being different was associated with being big in

size or overweight and had a negative value. This event occurred for the women in

this study at different times in their lives.

Two of the participants claimed to have been overweight at birth despite being

born prematurely. They associate a normal birth weight for a full term baby (for

example, 6 lb. 4 oz.) as being overweight since they were born early. Marie

described her mother as being "my size" meaning overweight when she was born.

She recalled being told that the doctor's explanation for why she was so big was,

"Honey, rats don't have mice." She weighed 7 lb. 15 oz. The prematurity issue is

certainly brought into question in view of the cultural taboos about sex and conception

"out-of-wedlock" that were predominant during the time when these women were

born. Prematurity was often offered as the reason why a baby was born less than

nine months after the marriage. Miscalculation of due dates was also a common

occurrence. Unfortunately, interviews of the participant's mothers were not a part of this study and, therefore, specific reasons are not known. Regardless of these issues, the message was powerful. The women perceive themselves as being overweight in utero!

Other women related a similar experience in childhood. Karen recalled being bigger than the rest of her peers and being called names like "fatty." However, all participants were not overweight. Melissa and Betty described themselves as being just "big kids" who were taller and generally heavier but experienced ostracism as well. Other women describe their initial awareness of being different in size or weight as occurring in adolescence. JoAnne recalled,

> "High school was a nightmare...because I'm a big woman and strong and
> kind of boisterous and a bit of a rebel, I earned the nickname of
> 'Bouncer" (says quietly). Can you imagine anything more devastating
> than to be called 'Bouncer' by your peers in high school."

There was no differentiation between big in size and overweight. Amy and Marie now realize that they were not really overweight but thought that they were. The perception was influenced by a brother for one and a boyfriend for the other.

Adulthood was the first occurrence of the perception of being different for two of the other women in this study. Doris indicated that she was not overweight until she stopped smoking at age 30. The other subject began gaining weight following a hysterectomy at age 27 and back surgery when she was 30 years old. Despite the occurrence at different times in the participants' lives, all eight women recalled an initial negative perception of being different than or separate from others.

The initial perception of being different or separate, is subsequently reinforced by social rejection. Social rejection then becomes the antecedent. Over time, social rejection intensifies the feelings they experience in response to it. Emily described her anger as "the silent rage." Social rejection is experienced from all social levels from the nuclear to the extended family, friends, and community, and permeates cultural values as well. The women experienced beration from parents, siblings, friends, husbands and children. They relate overwhelmingly negative messages, usually from parents and society, in terms of violating cultural norms. Their weight is perceived as an issue in general and affects their relationships with men and with their husbands specifically. They experience rejection as intolerance, prejudice, and discrimination.

Melissa angered by the intolerance and prejudice she has experienced complained,

> "Now I can understand health reasons you know, but other than that, what's the big issue about it? You know, if, if I was happy with my weight then why does the world have a problem with it? You know, they don't have to carry it around. I'm the one that's having to carry it around. I'm the one it's taking a toll on. Nobody else, you know. And that's why I've never understood you know. What, what makes me different from the girl that's blond or brunette and she's 5'4" and weighs 110 pounds? What makes me different than the fact that I may weigh 100 or 150 pounds more than she does. I still have feelings. I still, I can still laugh, cry. I may not can run a race, a five mile race with her but I can do just about anything else anybody else can."

Marie felt she constantly had to defend her intelligence. She explained,

> "I am always having to go around and prove to people that fat people have a brain. It seems to be my mission in life. It's that because you're overweight or something then your brain does not work quite as well as

the other half of the population. It's kind of like, umm, I feel like I'm in the same category as minorities.

Karen recalled an interview with a restaurant manager when she was 16 or 17 years old. She talked about her humiliation when the manager said,

"Lady, you're too big. I'm sorry we don't hire fat women."

Karen continued,

"And he said 'fat women' to me!"

The initial perceived difference and separateness is now intensified and seven out of the eight women referred to it as stigma. JoAnne explained,

"But I really think that's a piece of what obese women have to deal with. If we could live in a vacuum, well, then who would care? Why would we care whether we were big or little? Where we have to deal with our public image all the time and that's just really there. I wonder sometimes if women that--I think that obese women are, are a lot of times very lonely and very isolated and I'm wondering now if that's not to avoid that stigmatization by the public?"

Betty shared her experience with stigma,

"I've heard another person who happened to be rather petite question one candidate's qualifications based on her size. 'Oh, I just think she'd be lazy' (mimicking). And I mean, I felt very insulted by that. But at the same time it just shows you that, you know, people process that way sometimes. It's like because of your body size, it must mean you never get off your butt so you're not capable of doing anything. You probably have no personal responsibility or control whatsoever, so. I don't know--I just--it's really--I don't like it personally and I don't like the social stigma that accompanies it."

Doris viewed the stigma of obesity as a woman's issue. She explained,

"And I see it really is a woman's issue because I really see a--I don't think there's anywhere near the stigma or the pressure on men who are overweight as there is on women. I think women are judged very harshly that way."

Particularly striking was the rejection these women recalled by their mothers. Betty

recalled her mother saying,

> "...I always wanted a pretty daughter. Look at those thighs...no one in
> the family has thighs like those, you know. Where did you get that
> butt?"

Marie described her mother's taunting.

> "And all through it was everything was for the packaging and then it was
> the dieting, 'You'll never get a husband' [imitating her mother in a sing-
> song voice]. And that seems to have been the driving force--was the
> packaging for the proper husband. It was never for me to be a whole
> person. It was to, to meet up to the task of somebody else taking good
> care of me (pause). I guess that's what angers me now."

Melissa described her mother's criticism of her weight and said,

> "...she was always just real critical of my weight and I guess the one
> thing that always hurt me the most was she told me I would never have a
> husband as long as I was overweight and, and, uhh, to me I keep
> thinking well, my mother's right. I ain't going to have a husband. But
> she, she always told me that and it always hurt my feelings you know. I
> thought, why would she say something like that to me because I mean,
> that's like wishing I'd never have a husband or something to me, you
> know?"

Four of the eight women, including those above described emotionally close

relationships with their mothers despite continued beration. Karen and Amy talked

about emotionally distant relationships and Emily was abandoned as a child at six

years of age. She essentially has no memories of her birth mother.

Melissa's words (above) also demonstrate the transition from social rejection to

self rejection where the external stigma is internalized. The continued and consistent

message from the external environment is perceived as true, and now the self is

rejected. Self beration then occurs. Emily's words exemplify this process when

talking about her ex-husband's continued harassment. She said,

> "This is what goes on [referring to her ex-husband's words]; 'people
> don't want you around them; people don't want to talk to you. They
> just--you know, they put up with you. They tolerate you, cause you're
> an idiot.' And you listen to that long enough, where you find yourself
> saying stupid things or saying something, you say, why did I say that? I
> must be an idiot, you know..."

Betty, also internalized the social rejection and explained,

> "I don't think I'm normal. I mean, I think my weight is not in the
> normal range and so I don't view myself as normal. I mean, people say
> that to you all the time, you observe and that's kinda what you use in
> creating your self image."

Karen associated her negative self-image with beration by her brother says,

> "I think it's very much a part of why I have such a negative self image
> right now. I don't like myself. But there's no reason not to like myself.
> Cause, I'm a good person. I'm intelligent, I can do a lot of things. I
> just can't seem to control my weight..."

On a wider scale, Karen talked about the impact of society's message on self image.

She explained,

> "You know that society gives out this image of super thin people and
> that's what effects a lot of people's negative self images, if you're
> heavy."

The internalization of stigma is further evidenced by stated assumptions. All eight

women described other situations in terms of real life experience where they were

berated or perceived prejudice. When questioned about whether those statements

were actually made they responded negatively. Instead they stated that they "knew"

or "could feel" what someone was thinking or would say. Betty shared this

experience. She said,

"...I'm more apprehensive with my husband's friends--his group of friends. Because they've all married smaller women who aren't (laughs)--I mean, I'm bigger than my husband, you know, obviously. He could probably put my pants on twice and wrap them around but umm--and he, like I said, he doesn't directly reflect anything to me that makes me feel inferior. But I know if we go out with his friends--like open spaces--if we're sitting at a table I'm fine cause I feel like part of me's covered. But if we're, in open spaces and we're, we're, we're sitting there and I'm sitting here going--'golly, I could put three of his thighs together to get one of mine' [imitating what they might say]. I mean, I start doing that. So, I think that they probably do the flip because I mean, I'm going--look at my thighs compared to this person. And I really think that if I'm capable of doing that then they're probably going--'golly, three of my thighs would make one of hers' [again, imitating them] (laughs). I mean, you know, I just--I, I just kinda--and that's not fair for me to decide what everybody else could potentially be thinking. But I think I do that."

Betty also recalled an experience in school. She explained,

"Actually, there was one [boy] that was a classmate that was a really good friend of mine too and we had somewhat of a relationship. But he didn't want anybody to know. And I always took that as--well, you'd be embarrassed to have a relationship with me because I'm not as cute as the other girls you tend to be seen with. And I think that was really hard for me. That was probably in junior high somewhere around in there. But I think I really did process it as--well, I would embarrass you so that's why you don't want to really talk about it and that's fine. He lived next to me so it was real convenient kind of thing."

When questioned what was actually said, Betty admits it was not anything he said

directly. She added,

"No, it was always an assumption. I think I didn't want to talk about it. I think I didn't want him to say--'I would be embarrassed.' So, I mean, I think I felt like I pretty much knew that for myself but I just didn't want to hear it come back from him. Because that would have hurt."

This excerpt also alludes to another interesting social phenomenon that Doris referred

to as the "unspoken rule." The "unspoken rule" is an assumption made by others that

it is hurtful or impolite to initiate a discussion about weight issues unless the person

who is overweight brings it up first. When asked about her ability to talk with her

husband about his feelings about her weight, she indicated that they talked

> "more so in the past. He was always afraid of hurting my feelings so he
> would never bring it up. So if I brought it up it was okay. That was the
> unspoken rule. He wouldn't bring it up because he really didn't want to
> hurt me. And he's being kind that way."

By bringing up the topic, the overweight person signals that it is acceptable to talk

about weight issues. If the overweight person feels vulnerable, she may make the

first derogatory comment in an effort to protect herself. Karen described this as

"hitting yourself first." She explained,

> "Yeah, I'm probably harder on myself, thinking what they might be
> thinking but you almost learn it as a protective mechanism, you, you
> want to hit yourself with something before somebody else hits you.
> Whether they're going to hit you with it or not is irrelevant. It's, if you
> hit, if you hit yourself with it ahead of time then it's not quite as hurtful
> as somebody else saying it."

Attempting to clarify, Karen was asked if she anticipated "the hit." She interrupted

and acknowledged,

> "Yeah, it's a protective mechanism. I call it a protective mechanism.
> Some people call it a defense mechanism, some people call it stupid,
> because it was not what they were going to say, you know. But uhh, but
> that's just the way it's developed over the years. It's just come in, you
> know. If I hit myself first then no--no matter what somebody else says it
> can't hurt as bad."

The negative assumptions these women make about what people are thinking, the

unspoken rule, and self beration offer evidence of the internalization of stigma.

Furthermore, by assuming they are perceived negatively by others, they are, in fact,

recreating the social rejection in the absence of any external environmental influence.

This process leads back to the social rejection and the subsequent impact on self and

continues in a rejection cycle. The rejection cycle elicits the feelings of anger,

betrayal, and others that precipitate eating to appease them.

Betty's experience exemplified this continued rejection cycle in talking about

her mother's critical words she explained,

> "Because I would say 'you know, you make me want to do this more.
> You don't make me feel like, oh, you're right, look at those thighs, I
> have to stop eating. Instead, you make me angry.' And I want to eat
> more."

Feelings that arise in response to the perception of being different and subsequently to

the rejection cycle are the antecedents to the phenomenon of eating.

Context

Eating takes place when the properties associated with it occur. This

association is referred to as context. The properties of eating were identified

previously as nutritive, emotional, and social. This association or context becomes

the stimulus for the response to eating with action/interaction strategies. Therefore,

under conditions of emotional eating, women struggle to control it. A more detailed

examination of these relationships follows. For example, under conditions of eating

to achieve nurturing and an invitation to eat with others for a special occasion, women

overeat. The conditions of eating to achieve nurturing, an invitation to eat with

people and a special occasion provides the context for the phenomenon of eating and

also set the stage for the response of the action/interaction strategy of overeating.

Doris related an experience of eating in an unemotional and social context. She

explained,

"Uhh, I can remember the one at my wedding. Umm, I had a long
gown on. It was a sit down dinner for about 250 people. It was at a
separate site than the actual wedding so it was really the reception. And
I got there and every time I turned around, the hostess there at the
country club kept putting a fresh glass of Champagne in my hand. I was
nervous and my throat was dry, so I kept on drinking it. So, I barely
remember eating but I know I just ate so much I had to take the belt off
my wedding dress (laughs), like in front of all these people. So, I
remember that. Yeah, I didn't like that."

This example introduces three additional factors, the alcohol, her nervousness and her

dry throat. These are examples of the next part of the paradigm, intervening

conditions.

Intervening Conditions

Recall from the discussion in Chapter Three, that intervening conditions

(variables) "either facilitate or constrain the action/interactional strategies taken within

a specific context" (Strauss & Corbin, 1990, p. 103). In Doris's experience,

intervening conditions such as alcohol, nervousness and a dry throat serve to facilitate

the loss of control. Additional intervening conditions that are not immediately

apparent in the example are her age, sex, weight, type of alcohol, time, and metabolic

rate. These factors all influence Doris' ability to maintain control. Other intervening

conditions identified in this study were numerous and included motivation, history of

repeated dieting, weight cycling, eating habits, knowledge about nutrition,

metabolism, and weight management, weighing, hope, desires for the future, faith in

God, fantasy, wishing, wondering, intellectualization, health and/or physical

consequences of obesity, risk factors, genetics, family history, self awareness and

social support. The following examples were common in the women's experience.

Emily shared her concern with motivation and highlights some of these intervening

conditions. She said,

> "And I don't know that I really have the--they say when you get the true
> desire you will. And maybe I have a self destruct mode in me right
> now. But I just don't care, you know. I know I've had a heart attack, I
> know it's bad for me, I know they tell me I have to get the weight off.
> And I was real good at first. And now it's just like I don't care."

Postponement was a common intervening condition. Betty expresses concern about

her responsibility and said,

> "...you know there's that immediate yes, I got what I wanted
> satisfaction. And then that's usually, not always even, but usually
> followed by--I don't know--maybe a little bit of guilt over well, why
> didn't you make a chargrilled chicken selection over those chicken
> tenders or something, you know. I mean I have, that rational part wants
> to come back for awhile and--but, it's not usually at that point that I
> really even get that disgusted. I mean I go through a period of
> disappointment. But it's usually a different time. I mean if I'm trying
> on clothes that fit two months ago and are tight now for some reason--not
> for some reason (mumbles). That's when I'm disgusted you know.
> Gosh--I just--and I think when I first pick up a menu or something like
> that at a restaurant I will look at those--at the selections and process--oh,
> you know for once you should order this. Or when is the point going to
> come when you start ordering the healthy things or that's at least more of
> a consideration than you make it now. And I don't know when that point
> comes. I don't take responsibility for when that--I mean that I just let go
> of that. It's kinda like--oh some day. Some day when I'm 30, you
> know. I always choose a different--you know when I was 22 it was
> when I was 25. Now I'm 28 and it's when I'm 30, so."

Fantasy indicates women are not willing to face the reality of what it takes to

realistically change this process. Many women engaged in fantasy, wishing and

wondering which served to postpone their willingness to take responsibility. JoAnne

shared,

> "If we could figure out--I've thought about, you know you have--one of
> my, one of my colleagues had her stomach stapled. Well, that's a little

extreme you know, all the side effects from that. Umm, but an idea I've
had would be to fill my stomach with ping-pong balls. Because then you
wouldn't feel hungry and you couldn't eat very much cause they'd
already feel full. But that's not very practical (laughs). That's a fantasy.

Emily shared a recurring dream she had. She explained,

"Sometimes I go to sleep at night, I know this sounds silly but somebody
from outer space came (laughs) and then you go inside and they put you
like in a microwave oven and they melt all that fat away and you get
thin. You walk out and everything's fine. It's not realistic, I know. It
seems like they can find cures for so many things but they can't find a
cure for obesity."

A common fantasy described by the woman was the fantasy of the achievable "ideal";

the "5 foot, 4 inch, blue-eyed, blonde" image that many held as the societal standard.

As long as the goal was impossible, there was little use to take action.

Sexual and physical abuse were part of the experience of two women and a

third woman indicated that she wondered if she has repressed memories of abuse.

Abuse becomes an intervening condition in three instances, when it contributes to the

feeling states, impacts the self-image and when weight is perceived as safety. Emily

shared her experience with abuse from her ex-husband. She described him as,

"Uhh, very domineering, very abusive, broke my nose a couple of times,
that type of thing, so--and isolated me from everybody and everything,
you know. I couldn't have friends, couldn't talk to people, so there I
started on my binge eating again."

Emily ate to cope with her feelings and isolation. The impact of sexual abuse as an

intervening condition is evident in this woman's words,

"It seemed like his sexual prowess got worse, more deviate. So by
putting on the weight, it was protection, you know, well I'm too fat now
he can't bring somebody over. He can't do this.

Marie, who was widowed, shared her experience. She explained,

> "After my husband died, ummm, I got involved uhhh, a relationship with
> someone that--it was a stupid relationship and then I went back and hid
> in my fat body again and every time I, I try to face the world with this
> new found body and all, it seems like I go and hide again. It's more
> comfortable to let it all go and get into my fat body where I know
> nobody's going to bother me (says quietly)."

The examples of intervening conditions cited are representative of all eight women,

some specifically or more than others. The intervening condition impacts the

action/interaction strategies for dealing with eating. The action/interaction strategy

for this study, already alluded to in this discussion is struggling for control.

Action/Interaction Strategies

The action/interaction strategy directed at eating emerged from the data as

struggling to control. After further interaction with the data, control was found to

consist of three properties: in-control, out-of-control, and marginal control.

Behaviors that reflected the out-of-control response to eating were overeating,

bingeing, purging, taking diet pills and hiding or sneaking food. It was interesting to

note that although restrictive dieting was a strategy these women had utilized in the

past, none of them referred to utilizing it as a current alternative (i.e. 500 or 800

calorie based diets). It was anticipated that restrictive dieting would be found to be a

strategy employed for rapid weight loss. Melissa described the out of control

struggle,

> "And then I decided I was going to lose weight. And I quit eating and I
> lost about 50 pounds and then it just all started all over again.
> Something would depress me or I'd get upset about something. I'd get
> in arguments with my mother and I'd go back to eating again. And
> that's the way it's always been."

Analyzing her out-of-control state, Betty, a married participant, said,

> "I think that just ties in with that breakdown of--of any rational control
> over the situation. It's just one of my coping mechanisms--just denial
> that there is something that I need to worry about right now other than
> the immediate issue which is what I'm going to order and eat. So the--
> the current issue becomes the food and whether I have it or not and the
> sense is--I've got to have it--for one reason or another. And I'm not
> even sure that I'm always aware of what those reasons are."

Progressive loss of control over the course of a work day was described by Amy who

said,

> "Used to, it was, daily it was problematic. By the end of the work day
> usually I'd be so, you know, so anxious and so frustrated and so tense
> that all I wanted to do was eat and hide. Come home and close my
> doors and windows and not answer the phone and just eat, you know, eat
> until I was basically sick or practically pass out. And get up the next
> morning drugged, you know and go ahead and start doin' the same thing.
> I'd do that.

She continued,

> "Sometimes it would start first thing in the morning but usually in the
> morning you know, of course I'd have a resolve of going on a diet and
> by the end of the--by mid afternoon, 3 or 4 o'clock, I'd just be--feel like
> I was completely out of control and very angry, very frustrated."

The progressive loss of control leads to the out of control state. Karen's struggle and

out of control strategy evolved around her stated inability to focus when others life

stresses were prevalent. She explained,

> "When I have other crises you know, my weight's the least of my
> worries. Even though the weight's probably causing some of these other
> factors to increase in intensity."

Emily described being out of control. She explained,

> "...but if it's something I like there's no control, there's no, until--I
> mean, I can be so full that my stomach is hurting and I can't stop eating.
> I mean it's cause I love the taste so much. I want that taste and I don't

want it to end. And I've done that. I mean it's no wonder my stomach
didn't burst or whatever. I mean, it's just, it's crazy."

Five of the eight women had tried purging (vomiting) and three had utilized it as a

weight control method. The three women who had practiced purging denied currently

using it. Emily explained that she "threw up" because she should not have eaten the

food in the first place. Furthermore she added,

> "But then I threw up too because knowing that if I threw it up then I
> would of, stupidly, lost all the weight and I could go eat it [the food]
> again 'cause it tasted so good. And then I would throw it up again
> because I didn't have the will power not to eat it. And it was a vicious
> cycle."

Sneaking and hiding food were described by over half of the participants and are also

out of control strategies. Amy shared her first encounter with hiding. She explained,

> "Food was always there since about--first time I can remember, umm,
> hiding to eat was at 4-H camp in the fourth grade. I told everybody--
> they were all going to supper and I told them I was sick at my stomach
> and I used all the money I had, which was only a couple of dollars but it
> seemed like to me a lot of money, and I went to the vending machines
> and spent it all and went and got back in bed and ate."

JoAnne, a married participant whose mother also lives with her, continues to

experience stress induced binges. She described sneaking and bingeing on,

> "Whatever's available. Don't keep a lot of stuff in the house. There's
> usually some things we all like, cookies and so, I'll sneak in there--sneak
> in there, is the operative word and get some cookies, four or five cookies
> and then, uhh, well now what else is in here? And umm, I'm not a
> candy prson but like at Christmas, somebody gave us some little candy
> balls, well, let's have a couple of these and uhh,"

JoAnne's binge may continue with whatever else is available including "...a whole

bowl of ice cream" with her family. She says these binges continue until there is

nothing left to eat or she's too full to eat anything else. Then she said,

"And I'd quit. It doesn't go away actually, usually (sighs) well, it passes."

The women shared far more experiences of being out-of-control than in control. In control strategies were evident but were not long lasting or consistent in most cases. Behaviors indicating the in-control response were evidenced by an "evolved" diet that reflected current recommended nutritional principles, implementation of an exercise/activity program, and self care activities with a focus on health. JoAnne shared her control strategy,

> "...the way I manage weight effectively when I'm in that mode is to balance what I eat--try to eat normally, not too much. And I usually don't eat--except for not watching fats--don't eat binge foods or a lot of sweets. I don't really like a lot of sweets. Uhh, what I have done is uhh, balanced what I eat with exercise and try to burn up more calories systematically--get in good shape physically. Then I really don't care that much about the weight issue cause I'm feeling good about myself. I feel good because I'm exercising and what not."

Melissa shared her experience. She said,

> "So I've decided not to set any goals. I'm just trying to watch what I eat umm I don't totally deprive myself of anything. If I if I want something then I eat it but then the next day I'm a little bit more careful I don't eat as much. You know I watch the fat grams and so I'm not saying that I'm going to be skinny in a year and I'm not going to say that I'm going to lose 50 pounds in six months but I won't weigh 300 pounds again. I, I--that's just, that's just it. I'm not going to do it."

Melissa sets a more realistic time frame and rejects the "ideal" fantasy. Establishing control is a learning process according to Amy's experience. She explained,

> "And learning how to take care of myself, to express my feelings and not use food to deal with them. I'm learning how to take care of myself to deal with situations in life on a day to day basis. No matter how cruddy it is without eating and hiding from it with the foods. To face things. To not be so afraid. I was able to move in this house, cause I was

concerned that I would be afraid, it was out in the country. And uhh,
I'm not afraid. So that tells me I've come a long way."

Betty expressed some self-awareness (an intervening condition) in the futility of some

of her weight loss attempts. She has some insight into what she needs to be able to

gain control of her eating. She explained,

"I want to be a little bit more in control and or--understanding what's
going on. Why I make the choices I make. Why the rational me
disappears at certain times and where it goes and how I can get it back, I
guess. Instead of doing this yo-yo stuff, well, good for a week, bad for
a week."

Struggling for control is a dynamic process and women move between being in and

out of control to varying degrees. Another property of control is marginal control

where evidence of both in and out of control strategies co-exist. Melissa leaves her

options open for a social invitation while contemplating a meal strategy. She

explained,

"...I'm not going you know, get down here and say well alright, you
can't have that cookie today you know. But I'm going to say each day,
well we're going to eat this, this and this but tomorrow now I know that
I want to go over here with my friends and and we're going to eat this
kind of food. And the the next day I'll eat sensible you know."

When asked if this strategy had worked for her in the past Melissa said, "no," and

changed the subject. Attitude influences control and impacts the action strategy.

Emily proposes to have low fat choices available and limit her encounters with

problem foods but sets herself up for failure. She proposed,

"But uhh, umm, I'm trying to maybe make myself go to the store and
buy things that I like to eat and try to stay away from it. But right now
I'm taking an attitude, okay, you know, if it works it works. If it
doesn't it doesn't. I'm trying not to be obsessed with food."

Later in the interview, Emily shared her real plan for getting back in control. She

explained,

> "I went off the Opti Fast. Right now, I swear to God, if you were to go
> in my room, I've got about a good 20-25 boxes of Opti Fast that I
> haven't--so I'm thinking in my mind subconsciously that--see I was really
> going to start today or yesterday, on my diet, again with--I was just
> going to start the Opti Fast, get some off and then try to follow a
> regiment after that."

Karen talked about her experience with a weight loss program. She explained,

> "I've started Weight Watchers before when I lived in the town I live in
> now and made it through about 10 visits, 10 weeks. But I wasn't seeing
> much weight lost after the first week or so. And it was like, well, this is
> not doing me any good. I didn't stop to think that I really wasn't
> following the diet either. I just said, 'Weight Watcher's is not doing me
> any good. I don't know why I'm paying this money.' So I quit."

Although Doris chooses nutritive eating from time to time, she expresses concern that

she doesn't follow through with an exercise plan. She admitted,

> "So, that whole activity level I know's real important and I just don't do
> it. And so I feel very frustrated that you know, I have all this kick in
> and I know exactly how many times a week and for how long to do the
> kinds of exercises that would give you that, you know 20 to 30 minute
> aerobic workout, so you got good cardiovascular stuff as well as you
> benefit for 24 hours after taking just a brisk walk and I know all that: I
> just don't do it. And I have really good excuses for why I don't do this
> too."

Marginal control strategies may lead either to in-control or back to out-of-control

strategies depending on the intervening conditions. Most of the women in this study

were struggling with marginal control or were out of control. Two women exhibited

more evidence of in control strategies. Action/interaction strategies (struggling for

control) are undertaken to manage a phenomenon (eating) and result in a consequence

or outcome which in this study is weight.

Consequence

The consequence of struggling for control is weight. Weight is affected by whether the strategy is in-control, out-of-control or in marginal control. The consequence of the in-control strategies is weight stabilization and sometimes weight loss. The out-of-control strategies ultimately result in a consequence of weight gain or regain. It was not unusual for the women to experience an initial weight loss if they had used restrictive methods (i.e. fasting, diet pills, Opti Fast, etc.). Marginal control may involve weight loss, weight stabilization and/or weight gain/regain depending on the course. Karen's experience with an in-control strategy resulted in a 50 pound weight loss as a consequence. She explained,

> "And it was very interesting the time I lost a substantial amount of weight, it was very calm at work, I felt wanted. I felt good about myself, job was going good, I had money. My life--I felt like my life was in order and therefore, here I can concentrate."

However, escalating stress resulted in a return to food for comfort, relapse to out of control and weight regain. Karen admitted,

> "Umm, and I quit work--walking, quit Weight Watcher's. It all went to hell in a handbasket rather fast. And I thought well I've gained some weight back. And it was fairly stable there for awhile."

This seemed to be a common experience especially for those with marginal control strategies. Although the women in this study had successfully lost weight many times, none had been successful in maintaining the loss. Marie explained her weight regain. She said,

> "Two years ago, I got in a relationship with a guy. I, umm, lost down 60 pounds from what I am now. But, when I decided it was a no-win

situation and cut that off--went right back up to where I'd started from (laughs).

She explained further,

> "...so I just went back to the same thing that gave me comfort, which was a full stomach. And every time I have a full stomach, I gain weight."

Melissa talked about her experience with her many diets. She shared,

> "...and I've been successful with all of them. But when I stop or don't go through maintenance program, or just give up because something upsets me, I always gain the weight back. And it was always more weight than what I'd actually lost. I hit my peak this year. I have never weighed as much as I weigh right now. And it was devastating when I went to the doctor and got on the scales and she told me how much I weighed. I thought, that's ridiculous, you know, healthwise."

In talking about her weight regain experience, Karen said,

> "So again, it's the emotional problems, the emotional stress that helps accentuate the eating. And the factor that during school, during the five years I was in Texas, it was like, push the weight aside. I'll deal with it at a later date. I've got other major problems on this graph here. I can't deal with the weight right now. It was much easier to go get the chicken fried steak and the french fries than it was to put in a Weight Watcher's dinner. It was comfort food, then, there goes the weight."

Emily described a beneficial consequence of her weight gain in her view. Her now ex-husband would "stay gone" since she was fat. The process of eating and the resulting weight gain, however painful, provided "solace and peace" in his absence. The consequence of weight gain/regain led to further social rejection. The weight gain then became an antecedent. The women responded to the continued rejection with a lot of feeling. Karen tearfully talked about continued rejection from her mother regarding her weight regain. She said,

"Uhh, my mother saying constantly, 'you need to lose weight'--you
know, 'you need to" umm, uhh, 'you realize how big your butt is?"
Uhh, 'When are you going to lose weight again?' Stuff like that. 'Quit
eating.' You know, 'You obviously, if you gained weight you're eating
something you shouldn't eat."

The elicitation of feeling states once again leads to seeking solace through eating and

the cycle continues.

PARADIGM MODEL

The paradigm model with the core category of eating and its related

subcategories is diagrammed in Figure 4.1. The phenomenon was identified as

eating. Three properties of eating were supported in the data: nutritive, emotional

and social. The antecedents to the phenomenon of eating were feelings. These

feelings arose in rsponse to a perception of being different or rejection. In the

context of one of the properties of eating an action strategy is undertaken. In this

study, the action strategy was struggling for control. Struggling for control was

evidenced by three properties; in control, out of control and marginal control. Many

intervening conditions were identified as influencing the struggle for control. The

consequence of the struggle for control was weight gain, regain, loss or stabilization.

BASIC SOCIAL PROCESS

Eating was the core category because it represented the phenomenon of greatest

concern to the participants and occurred most frequently in the data. It is a basic

social process because it "accounts for a large part of the variation in behaviors" and

logically links the parts of the process (paradigm) (Fagerhaugh, 1986, p. 135). When

examined as a basic social process, the paradigm as a whole reflects seeking solace

PARADIGM

ANTECEDENTS	PHENOMENON	CONTEXT
feelings	eating	when emotional or going out with friends
perceived difference and/or rejection--self, social, recreated	properties emotional, social, nutritive	

INTERVENING CONDITIONS

ACTION/INTERACTION STRATEGIES

motivation, postponement, abuse fantasy, hope, stress (many others)	STRUGGLE FOR CONTROL
	In control--evolved diet, activity
	Out of control--overeating, purging
	Marginal--diet plan, activity plan

CONSEQUENCES

Weight--loss, gain, stabilization

Figure 4.1   Paradigm Model adapted from Strauss and Cobin (1990)

through eating. As such, there may be wider applicability to this model in that it may have relevance to other experiences of eating or consuming alcohol. A paradigmatic model was constructed utilizing the grounded methodology analytic process (see Figure 4.1).

SUBSTANTIVE MODEL

A substantive model was constructed incorporating the paradigmatic model (see Figure 4.2). This model reflects the cyclical nature of the phenomenon of eating and obesity. Seeking solace through eating reflects the emotional tone of the process as well as the rejection and pain discussed by the partcipants that keep the cycle going. A negative perceived difference related to size or weight initiates the process. Feelings are elicited in response to that perceived difference or separateness and the women eat in response to those feelings. Once eating has begun, a struggle for control of that eating ensues. In control strategies result in weight loss or stabilization. Out of control strategies result in weight gain or regain. The struggle persists at times in a marginal control strategy. Theoretically, the marginal control strategies could evolve to in control strategies just as easily as to out of control strategies. That was not the consistent experience of these study participants. Although successful at times in weight loss strategies, the experience of the women in this study was with the marginal and out of control strategies. The women experienced social rejection due to their increased weight. The social rejection was internalized as stigma and incorporated into the self image. Once internalized, women recreated the social rejection through making assumptions about anticipated
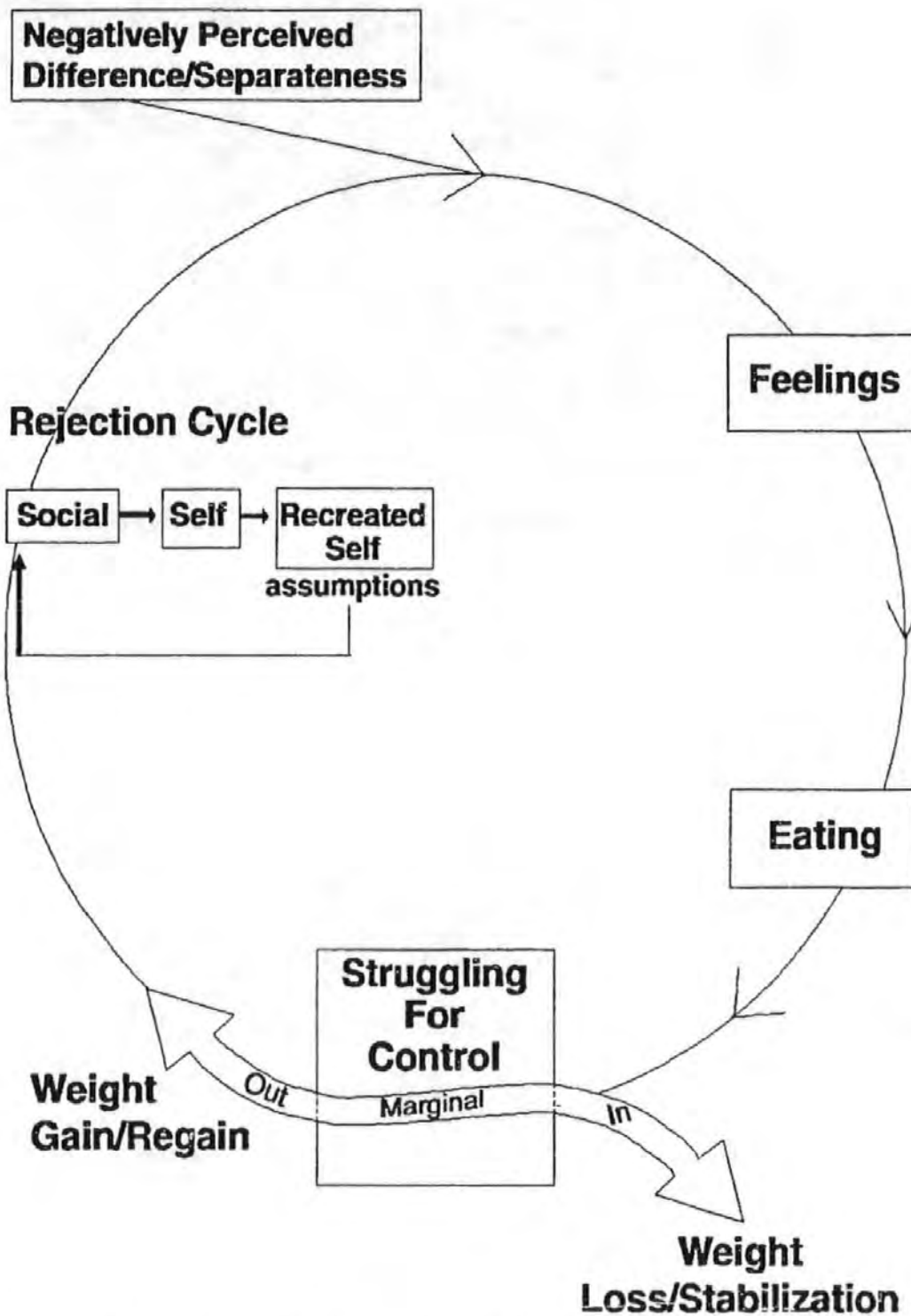
Figure 4.2   Substantive Model -- Seeking Solace Through Eating

social rejection without any external stimuli. This resulted in a rejection cycle that was perpetuated not only in the actual social setting but by the women themselves. Rejection precipitated feelings of anger, betrayal, depression and isolation. The elicitation of feelings began the cycle of eating again.

The Theory of Seeking Solace through Eating

The proposed theory demonstrates the sequence of events as women deal with eating. The cycle is initiated by feelings of being different or separate in terms of size and/or weight. The feelings precipitate eating. Nutritive, emotional and social eating were identified. Once eating was initiated, the women struggled to control it. Women reported three aspects of control: being in control, being out of control or having marginal control. Integrating the patterns that emerge in the data, nine possible consequences result.

Potential Consequences

When women's feelings are elicited from their perception of being different or rejection then emotional, social or nutritive eating occurs.

- * If nutritive eating occurs and control is lost then weight gain may occur.

- If nutritive eating occurs and control is maintained then weight may remain stable or result in weight loss.

- If nutritive eating occurs and control is marginal, then weight loss may initially occur and then result in weight gain.

- If emotional eating occurs and control is lost, then weight gain may result.

- If emotional eating occurs and control is maintained, the weight may remain stable.

- If emotional eating occurs and control is marginal, then weight may initially stay stable and then result in weight gain.

- If social eating occurs and control is lost, then weight gain may result.

- If social eating occurs and control is maintained then weight may remain stable.

- If social eating occurs and control is marginal then weight may initially stay stable and then result in weight gain.

All consequences except one (see asterisk) were validated by the data. It is conceivable that the exception could occur but it was not part of the experience of the women in this study. The theory of seeking solace through eating is useful, not so much in terms of predicting consequences but rather in its entirety as it informs us about the process and the influence of relationships in continuing the cycle. The theory is substantive because the study was conducted only at the action level. The study crosses all levels of the conditional matrix and has the potential to become formal theory if studied in a greater variety of situations.

<div align="center">SUMMARY</div>

The theory of seeking solace through eating emerged from the findings of the data analysis in the study of eating and obesity in adult, American, Caucasian women. The development of a paradigm model facilitated substantive theory development. Eating was identified as the basic social process. The conclusions and implications of this study will be discussed in Chapter Five.

CHAPTER FIVE

SUMMARY AND DISCUSSION OF FINDINGS

The theory of seeking solace through eating that emerged from this study on obesity and the experience of eating in a sample of adult American, Caucasian women, offers confirmation in some areas of previous research and enlightens our understanding in other areas in which we know very little. A unique contribution that this study has to offer is in the connectedness or wholeness of this process of eating. Numerous studies have examined pieces, for example, emotional eating or stigma, but none have looked at the whole experience of eating from the perspective of those obese persons who must deal with it in their every day lives. Grounded theory methodology provided the vehicle for this examination of an "old problem" in "a new light."

Asking the participants to "tell me about an eating experience that was problematic for you" unleashed their stories. Their responses were very different from the friends, colleagues and casual acquaintances, that were "unofficially polled" with the same question but for whom food issues were not problematic. Comments from colleagues involved isolated incidents involving poor service or bad food to occasional indiscretions that were told with great joy and delight. The participants of this study however, talked about a life's history of pain, struggle and the attempt to seek solace through eating. Although variation existed, common themes emerged from their collective experience.

The women recalled their initial feelings about being different or being separate. This perception of being different occurred at different age ranges suggesting that the cycle can be initiated at any time and is not exclusive to developmentally "at risk" stages, for example, infancy or adolescence. Although the women were very aware of the cultural messages related to size and weight, those who did not enter the cycle until adulthood expressed feeling the pressure to be thin as young girls and then women. Although numerous studies have demonstrated the propensity of children, adolescents and adults to discriminate against the obese person (see Chapter Two), no studies were found that discussed that experience from the perspective of the person being stigmatized. Examples are evident in everyday life. Discrimination begins subtly, as with an innocent young child who simply points out that someone else is "fat" and then is quickly quieted and shamed for being unkind·or with the standardized measurements that are taken in physical education classes in the name of "The President's Council on Fitness." The young child in the first instance is told in no uncertain terms that being fat is not "okay" and witnesses the social humiliation involved in the interaction. In the second instance, young pre-adolescent girls are weighed and their body fat analyzed often by teachers who have their own issues with fitness. No one needs to alert them to their body size and composition; very few of them feel their bodies are acceptable. No one tells them that an essential part of puberty is a perfectly normal increase of up to 120% in their body fat for the sole purpose of initiating menarche and fertility and that this will level off in time. Boys are weighed and measured too. However, their fat-to-lean muscle ratio

decreases as the influence of their sexual maturity focuses on height and muscle development (Frisch, 1988; Wolff, 1991). Feelings are engendered in these young girls as their discomfort grows. The focus of their attention and topic of conversation revolve around their assertion of being fat according to a study by Nichter and Vuckovic (1994). Reminiscent of medieval jousting, these young girls take turns in joining the discourse of "I'm so fat" (p. 112). This acquiescence allows them social permission to look at each other's bodies, compare themselves to each other and elicit reassurance that indeed they are not fat. Those for whom there is no such reassurance or who perceive none, the feelings of being different and separate intensify. They do not join in this discourse to avoid drawing attention to what they perceive is a flaw. Feelings of not being good enough, unaccepted, and disapproval were common to this current study and were associated with food to appease.

Research on emotional eating has been discussed in the literature but primarily in terms of negative emotions. Ganley (1989) indicates that in the studies since 1957 only occasional reports have indicated eating in terms of positive emotions. This study offers evidence of emotional eating both to appease negative emotions such as anger and depression as well as to achieve positive emotions such as love, nurturing, comfort and enjoyment. It is not unusual for women to equate the experience of eating to that of having sex. Ganley (1989) also alludes to the fact that the studies indicate that eating is primarily secretive. The findings from this study indicate that eating alone is one dimension of social eating but that some women will choose to eat with a "safe friend" and others with anyone for the pleasure of being with people.

This study adds to our understanding of the role of emotions in the etiology of obesity.

Nutritive eating, another property in this study, is not generally discussed in the obesity literature. The women in this study had a clear, cognitive understanding of what they should do; they had various reasons for why they did not. Women commonly referred to "next Monday" or "when I'm ready" as well as wishing and wondering when eating could become nutritive rather than a source of solace.

The women discussed their eating habits and food preferences in general terms. They did not offer dietary recall of past meals but instead referred to examples or descriptive terms such as high-fat foods or low-fat foods. Many women described states of sedation and calmness or sleep following the ingestion of high-fat, high-caloric foods. Eating in response to feelings states either to appease or achieve them is consistent with the neuroendocrine influence in altered eating. Further research is warranted to confirm this relationship, however, this finding offers support for the biologic perspective of obesity.

Eating precipitated a struggle for control. Nutritive eating, participation in an exercise program and self care strategies such as setting limits/boundaries, identifying needs and taking action to meet those needs were indications of in-control strategies. Strategies such as overeating, bingeing, purging, and fasting were examples of indicators of being out-of-control. The women in this study had a long history of struggling with control. It became clear that the two strategies were not dicotomous but in fact existed on a continuum. The coexistence of parts of both strategies was

conceptualized as marginal control as women attempted to change and adopt more in control strategies and then suffered setbacks and relapsed out-of-control.

Control for the women in this study was different than the control cited as the experience of anorexics or normal weight bulimics. The struggle for control in anorexia and bulimia is referred to as the control of self. Controlling their body size affords a sense of power. Control for the obese women in this study was about controlling eating. The reinforcement for succeeding with control was not sufficient to empower the women to continue. The women referred to defiant or rebellious behavior to sabatage control in an effort not to be controlled. They indicated that continuing to stay in control is often perceived as being controlled. They do not indicate by what or by whom but the defiance and rebellion suggest that it may be in response to societal rejection. It may be that being in control is equated with the societal expectation that the obese women should control their eating and therefore, their weight. Control would then be perceived as an extension of the society that rejects them instead of reflective of an internal belief. Two women referred to their eating experience as an "internal conflict." Research is warranted to investigate this relationship further.

The preponderance of intervening conditions and the influence they can have either selectively or collectively were an important finding as a product of grounded theory. As women precariously try to balance their eating with their control strategies, the kinds, numbers and frequency of things that influence that balance are astounding. From simple disappointment to inherited metabolic efficiency, these

factors make their struggle common but their experience unique. The literature discusses dealing with set-backs, lapses and relapses in behavioral modification techniques but in terms of global issues such as stress and relaxation. The women's attempts at being in control revealed their knowledge and incorporation of behavioral and cognitive perspective techniques. However, they were ultimately overwhelmed by multiple stressors or intense feeling states that claimed priority in their coping strategies. The day-to-day, cumulative factors, many of which are not amenable to standard techniques, continued to nibble away at the women's resolve and self esteem. Despite many attempts of control, these women ultimately gained weight. Behavioral and cognitive therapy techniques, although useful, were not sufficient to allow the women to maintain control.

Weight gain results in stigmatization in the social networks of the women. Their stories are replete with experiences of beration, prejudice and discrimination. Mayer (1968) suggests that the prejudice experienced by the obese is similar to that experienced by racial and ethnic minorities except that there is no group with which they can identify or feel a part of, including their nuclear families. Rothblum (1994) explains that "...unlike skin color or gender, weight is thought to be under voluntary control, so that fat people are held responsible for their condition and for changing it" (p. 56). There has been no social eruption for the civil rights of the obese, instead it has now been equated as a social handicap (Allon, 1979, 1982). Discussed in the literature since the 1950's (Bruch, 1957; Stunkard, 1957) the stigma of obesity continues to be recognized but the discussions fall short of realistic strategies for

personal and/or social change. In view of the prevalence of obesity in the United States, it is a strange twist of fate that despite the numbers, the obese are not even afforded the rights and privileges guaranteed minority status. Social rejection is a reflection of the prejudice and discrimination of groups and individuals. The prejudice and discrimination experienced by the women in this study reflect the sociocultural perspective of the etiology of obesity as discussed in Chapter Two. One of the relationships that the women of this study cited as important to them and at the same time the most painful was the relationship with their mothers.

The words of their mothers that the women recount both sting the psyche and wound the soul. The women describe being "like mom" or "un-like mom" referring to her weight. If these daughters were bigger than mom, they were perceived as different. If they shared their mother's tendency to be large, mothers sought to protect them from themselves. Some of the women in this study reported being the only family member who was obese. Others reported a family history of obesity that included and often extended beyond the nuclear family. The finding challenges genetic inheritability as espoused in the biologic perspective of obesity but is consistent with other studies that were cited in the literature (Brouchard, Perusse, Leblanc, Tremblay, & Theriault, 1988; Brouchard, 1991). Size impacted the women's identity formation and affected their relationships with their mothers. Wooley and Kearney-Cook (1986) proposed that this is the first generation of women who have been raised since infancy with the cultural norms of thinness and additionally whose mothers may have rejected their own bodies.

Dieting is prevalent and daughters, it seems, learned it from their mothers

(Feeling Fat, 1984; Kilbourne, 1994; Nichter & Vuckovic, 1994; Pike & Rodin,

1991). However, only one study was found that reported rejection similar to what the

women reported in this study. In comparing mothers of daughters with eating

disorders to mothers with daughters without eating disorders, researchers found that

the mothers of the disordered eating group rated their daughters significantly less

attractive than the other mothers. Even more alarming, however, is that they rated

them lower than the daughters rated themselves (Pike & Rodin, 1991)! This finding

is consistent with the beration reported by the women in this study. Seven of the

eight women experienced problematic relationships with their mothers.

The psychodynamic perspective finds support in this study particularly in the

Jungian approach. The relationship with the mother is considered to be critical to the

development of disordered eating. This view suggests that eating is an attempt to

internalize the "good mother" (Woodman, 1982). The women in this study grieve the

lost relationship with their mothers. Despite describing their relationships as close,

the women search for approval and connection with their mothers. It is theoretically

plausible that their eating is an attempt to ingest or connect with the mother they

desire.

Personal rejection compounded by social rejection facilitates the internalization

of stigma. The external message received about the self contributes to the self

concept (Dyrenforth, Wooley, & Wooley, 1980). Rosenberg (1981) refers to this

process of self esteem formation as "reflected appraisals" (p. 597). In the context of

this social and subsequent self rejection, the women in this study then "recreated" the social rejection through making assumptions. They imagine or anticipate what others may be thinking or saying and experience the rejection, as if it had really happened but now in the absence of any external stimuli. They may choose to take action or avoid social situations based on their assumptions. They discuss the assumptions as if they were real events. Operational in this same arena of unspoken words is a mutual assumption referred to as "the unspoken rule." This experience was only alluded to briefly in the literature in two citations (Nichter & Vuckovic, 1994; Szekely & DeFazio, 1993). Feelings are elicited in response to the social, self or recreated rejection and the cycle begins again. Zimberg (1993) explains,

> ...eating can be a way of suppressing feelings and needs.
> Consequently, at times women may feel as though they are taking care
> of themselves and their needs through food, but may ultimately be
> engaging in a form of self-denial. In such cases, needs are merely
> controlled; they are not actually acknowledged or fulfilled. Nothing
> changes (p. 144).

Women's Development Theory

The theory of seeking solace through eating becomes even more dimensional if it is embedded within women's developmental theory. Long defined by developmental stages ascribed to men, Miller (1986) differentiates women's development by claiming that,

one central feature is that women stay with, build on, and develop in a

context of connections with others. Indeed, women's sense of self

becomes very much organized around being able to make and then to

maintain affiliations and relationships. Eventually, for many women

the threat of disruption of connections is perceived not as just a loss of

a relationship but as something closer to a total loss of self (p. 83).

Gilligan (1982) elaborates in that transitions through life experience with attachment

and separation will be different for men and women. She continues,

and because women's sense of integrity appears to be entwined with an

ethic of care, so that to see themselves as women is to see themselves

in a relationship of connection, the major transitions in women's lives

would seem to involve changes in the understanding and activities of

care (p. 171).

She indicates that when women are able to differentiate "...helping and pleasing..." in

those care taking activities from the need to do them for "...approval by others..."

then "...the ethic of responsibility can become a self-chosen anchor of personal

integrity and strength" (p. 171). Miller's (1986) assertion is that the care taking

activities originate from inequality between a dominant (male) and subservient

(female) culture. She contends that when the subservient culture accepts their own

reality as truth, and as one not defined by the dominant culture, then the interaction

between the two will be based on a position of strength and integrity and not based on

the fear of the loss of self.

Gilligan (1982) in discussing Chodorow's (1978) analysis explains that gender and personality formation are different for both sexes after the age of three. She explains that up until then, the primary caretaker has generally been a female. Female identity formation takes place in the context of that continued relationship where mothers perceive their daughters to be like themselves and daughters reflect that identification thus internalizing the female experience. Whereas, boys are experienced by their mothers as a "male opposite" and therefore males separate from their mothers to identify with the male experience. Surrey (1984) explains,

it is in this early mother/daughter relationship that the core self-

structure is defined for women. Identity is based on positive

identification; connectedness is based on easy, open physical and

emotional sharing plus the early mutuality of caring that is found in

healthy mother/daughter interaction (p. 6).

She further contends that,

disturbance in women's basic relationship to food and eating, then, can

be viewed in the larger context of the lack of validation and attention

given to the importance of relationships to others that women confront

throughout life. The basic healthy expression of the need for this

connection is met with conflicts and obstacles as girls grow into

adolescence and adulthood in this culture (Surrey, 1984, p. 6).

Furthermore, she claims that "eating becomes an attempt to reinstate the sense of connection" (Surrey, 1984, p. 6).

The theory of seeking solace through eating fits well within the conceptual framework of women's developmental theory. Central to womens developmental theory is the mother/daughter relationship. The troubled maternal relationships described by the women in this study set the stage for the subsequent difficulties that follow. The entire cycle can be conceptualized as an attempt to seek, establish or maintain connectedness with others. The cycle will continue until a woman embraces her truth as being separate from the truth in service of the dominant culture. Only then can she negotiate relationships as an equal from a position of integrity and strength. From this position she can then maintain relationships within the care ethic based on "helping and pleasing" herself in addition to others (Gilligan, 1982; Miller, 1986; Surrey, 1984).

With this orientation of women's development and relational needs in perspective, it becomes obvious that traditional strategies such as caloric restriction directed at weight control will never be effective. Brown (1993) offers insight by explaining,

> dieting is often especially difficult for those who depend on food to meet their emotional needs. It will not provide weight loss for these women, for as soon as the diet is over, eating will be resumed as the way to meet emotional needs. For many, binge eating is a way to give comfort and nurturance to oneself. Dieting is then experienced as both physiological and emotional deprivation (p. 63).

In the study of obesity and the experience of eating in adult, American, Caucasian women offered support to some of the theories of obesity and enlightened our understanding in other areas. The biological, behavioral, cognitive, psychodynamic and sociocultural perspectives were examined as they pertained to the emerging paradigm structure. The role of women's development theory offers a unifying approach to the phenomenon of eating. Viewed from this perspective, the theory of seeking solace through eating is a process and as such must be considered in its entirety. It supports many of the tenets of the theories of obesity. But broken into theoretical perspectives prevents the discovery of the interconnectedness and relational components that integrate the whole. Attention to only parts of model neglects the essential process and results in partial solutions that ultimately are not effective nor affirming.

IMPLICATIONS

Unfortunately, the health care arena has not fostered women's development nor facilitated their exit from the cycle of eating despite the fact that a large number of providers are women. Surrey (1984) reminds us that "...the medical model for understanding obesity and weight loss diets was based on male body types and physiology" (p. 3). Furthermore, recall that obesity is more prevalent in women than men and the dominant culture has a vested interest in maintaining the status quo. Add to that the fact that the majority of researchers, physicians and administrators of health care policy are members of the dominant culture and one begins to understand

the full impact that the dynamics of power and politics bring to the equation. Wooley (1994) challenges us,

> "Perhaps it is time for women to take a radically skeptical look at patriarchal science, especially the "health" sciences. What health professionals have done to women's bodies is every bit as violent as what sex criminals have done. I would wager that many more women have died from obesity treatments alone than have died from sex crimes. I would also wager that what the health care industry ends up doing to women (and the women's movement) will make what the cosmetics and fashion industry have done pale in comparison" (p. 44).

In a study of patients who elected surgical options for the treatment of their obesity, 80% reported disrespectful treatment by health care professionals related to their weight (Rand & MacGregor, 1990). Basic care suffers because health care professionals are part of the existing social structure and as such as subject to the same social bias and discrimination upheld by the society at large.

It is time to examine personal and professional development around these issues. Nurses, in view of their interface, as a part of the existing culture, the health care community and as patient advocates can introduce change and acceptance. Patients depend on nurses to assist them in establishing connectedness often in the face of crisis and confusion. Assisting others with this process can only be accomplished when it originates from a position of integrity and strength where the nurse has been able to differentiate her responsibility of care as "helping and

pleasing" and not based on one's own needs for approval. As one makes the personal commitment to change, to seek and foster connectedness in relation to others, the profession will change. As the profession changes so to will the culture. If women in many arenas change, the power structure will erode and the dominant culture will reflect those changes to everyone's benefit. Miller (1986) contends that even the dominant culture benefits because its truth, previously self-defined and false, will be closer to reality.

The theory of seeking solace through eating is a useful tool to examine the dynamics of eating in obese women. Careful evaluation of the many intervening variables can help patients identify potential sources of difficulty and anticipate their consequences. Assisting patients to view eating as a process and then evaluate their relationships and connectedness in view of this process. Helping patients grieve the loss of those relationships that never were or never can be and then re-establishing or strengthening those connections that are healthy and have potential. Ultimately, patients must connect with the self in relation to others to establish their own position of strength and integrity. This perspective offers a new approach to the multidimensional phenomenon of eating and obesity.

RECOMMENDATIONS

Further data collection and analysis is warranted to thoroughly reach saturation of all concepts. The proposed theory is substantive and subject to further validation through continued research.

Research incorporating, utilizing and testing the theory of seeking solace through eating is warranted. Replicating the study in a male cohort is crucial in view of the conceptual link to women's developmental theory. Is this process the same or different for men? Expanding the participants to include women of more diverse ages, ethnic and racial cultures to examine this theory in light of those differences is necessary.

Does this model have utility in other frameworks? For example, does a similar process exist with women and other types of eating such as anorexia nervosa or with drugs and/or alcohol? Would that model be different or the same for men or other racial ethnic groups.

The tentative theory developed was well grounded in the data but by virtue of its design will be substantive in nature. Expanding the study to include a variety of settings may facilitate the development of formal theory.

Does the theory have utility when transposed within a nursing conceptual framework? For example, can women's developmental theory and the theory of seeking solace through eating be conceptually linked to find meaning and application in Rogers' (1986) Science of Unitary Human Beings? What nursing interventions can then be designed to facilitate mutual patterning? How would that differ for men or other ethnic groups.

What are the implications of this study for other health care professionals? The broad theoretical constructs of women's developmental theory facilitates use of

the theory of seeking solace through eating in a variety of practice settings, for example, psychology, human development, and social work.

The rejection cycle is a unique finding of this study. Further investigation of this phenomenon is warranted in view of its profound implications and influence on women's health. Do the assumptions of social rejection in fact facilitate actual rejection by virtue of nonverbal cues?

The mother/daughter relationship was problematic for seven of the eight women in this study. This represents another unique and important finding that mandates further research.

How does this model fit the experience of those who have exited the cycle either through adoption of effective in-control strategies and/or through connectedness with self and then others? Does it fit their experiences? How is it different? What factors influence or support maintaining control?

This study provides fertile ground for numerous research and practice directions. As such, it adds to the body of knowledge of nursing and provides a holistic, perspective to the care of obese women.

CONCLUSION

The purpose of this study was to explore the experience of eating in a sample of adult, obese, Caucasian women who identified food issues as problematic. The study demonstrated that eating could be understood as a basic social process. Grounded theory methodology facilitated the emergence of a substantive level theory of seeking solace through eating that offers insight into the multidimensional problem

of eating and struggling for control. Embedding the model within the broader theory

of women's development facilitates a broader understanding of the social context and

the complex forces that provide additional influence. Nursing, by virtue of its holistic

integrated approach to health and human behavior, is in the position to explore the

theory of seeking solace through eating and its utility for research and practice,

thereby offering interventions previously new strategies for management and

intervention.

BIBLIOGRAPHY

BIBLIOGRAPHY

Abramson, E. & Wunderlich, R. (1972). Anxiety, fear and eating: A test of the psychosomatic concept of obesity. Journal of Abnormal Psychology, 79, 317-321.

Agras, W. S. (1987). Eating disorders: Management of obesity, bulimia, and anorexia nervosa. New York: Pergamon Press.

Allan, J. D., (1988). Knowing what to weigh: Women's self-care activities related to weight. Advances in Nursing Science, 11(1), 47-60.

Allan, J. D. (1989). Women who successfully manage their weight. Western Journal of Nursing Research, 11(6), 657-675.

Allen, J. D. (1994). Explanatory models of weight: Linkages between beliefs and acitions [Abstract]. Proceedings of the Eighth Annual Conference of the Southern Nursing Research Society, Chapel Hill, NC.

Allon, N. (1979). Self-perceptions of the stigma of overweight in relationship to weight-losing patterns. American Journal of Clinical Nutrition, 32, 470-480.

Allon, N. (1982). The stigma of over-weight in everyday life. In B. B. Wolman (Ed.) Psychological aspects of obesity: A handbook (pp. 130-169). New York: Van Nostrand Reinhold Co.

Andrews, H. B., & Jones, S. (1990). Eating behavior in obese women: A test of two hypotheses. Australian Psychologist, 25(3):351-357.

Atkinson, R. M. & Rinquette, E. L. (1967). A survey of biographical psychological features in extraordinary fathers. Psychological Medicine, 29, 121-133.

Atwood, J. R. & Hings, P. (1986). Heuristic heresay: Application of reliability and

validity criteria to products of grounded theory. Western Journal of Nursing

Research, 8(2), 135-154.

Beck, S. T. (1976). Cognitive therapy and the emotional disorders. New York:

International Universities Press, Inc.

Bjorntrop, P. (1985). Regional patterns of fat distribution. Annals of Internal

Medicine, 103(6), 994-995.

Blumer, H. (1969). Symbolic interactionism. Los Angeles, CA: University of

California Press.

Bouchard, C. (1991). Heredity and the path to overweight and obesity. Medicine

and Science in Sports and Exercise, 23, 285-291.

Bouchard, C., Perusse, L., Leblanc, C., Tremblay, A., & Theriault, G. (1988).

Inheritance of the amount and distribution of human body fat. International

Journal of Obesity, 12, 205-215.

Boyd, M. A. (1989). Living with overweight. Perspectives in Psychiatric Care,

25(3, 4), 48-52.

Bray, G. A. (1990). A molecular approach to genetic and hypothalamic obesity. In

G. A. Bray, D. Ricquier, & B. M. Spiegelman (Eds.), Obesity: Towards a

molecular approach (pp. 1-15). New York: Wiley-Liss, Inc.

Bray, G. A. (1990). Obesity: Historical development of scientific and cultural ideals.

International Journal of Obesity, 14(11), 909-926.

Brink, P. (1989). Issues of reliability and validity. In J. Morse (Ed.), Qualitative

nursing research: A contemporary dialogue (pp. 164-186). Newbury Park,

CA: Sage Publishing, Inc.

Brown, C. (1993). The continuum: Anorexia, bulimia and weight preoccupation. In

C. Brown & K. Jasper (Eds.), Consuming passions: Feminist approaches to

weight preoccupation and eating disorders (pp. 53-68). Toronto, Ontario:

Second Story Press.

Brown, C. & Jasper, K. (1993). Why weight, why women, why now? In C. Brown,

& K. Jasper (Eds.), Consuming passions: Feminist approaches to weight

preoccupation and eating disorders (pp. 16-35). Toronto, Ontario: Second

Story Press.

Brown, C. & Zimberg, R. (1993). "Getting beyond weight": Women's health clinic

weight preoccupation program. In C. Brown & K. Jasper (Eds.), Consuming

passions: Feminist approaches to weight preoccupation and eating disorders

(pp. 400-408). Toronto, Ontario: Second Story Press.

Brownell, K. D. & Foreyt, J. P. (1986). The eating disorders: Summary and

integration. In K. D. Brownell & J. P. Foreyt (Eds.), Handbook of eating

disorders (pp. 503-513). New York: Basic Books, Inc.

Brownmiller, S. (1984). Femininity. New York: Simon and Schuster.

Bruch, H. (1957). The importance of overweight. New York: W. W. Norton Co.

Bruch, H. (1961). Transformation of oral impulses in eating disorders: A conceptual

approach. Psychiatric Quarterly, 35, 458-481.

Brumberg, J. J. (1988). Fasting girls: The emergence of anorexia as a modern

disease. Cambridge, MA: Harvard University Press.

Brunch, H. (1973). Eating disorders: Obesity, anorexia nervosa, and the person

within. New York: Basic Books, Inc.

Buchanan, K. S. (1993). Creating beauty in blackness. In C. Brown & K. Jasper

(Eds.), Consuming passions: Feminist approaches to weight preoccupation and

eating disorders (pp. 36-52). Toronto, Canada: Second Story Press.

Burgand, D. & Lyons, P. (1994). Alternatives in obesity treatment: Focusing on

health for fat women. In P. Fallon, M. A. Katzman, & S. C. Wooley (Eds.),

Feminist perspectives on eating disorders (pp. 212-230). New York: The

Guilford Press.

Burrows, B. A. (1992). Research on the etiology and maintenance of eating

disorders. In E. M. Freeman (Ed.), The addiction process: Effective social

work approaches. White Plains, NY: Longman Publ. Group.

Button, E. J. & Whitehouse, A. (1981). Subclinical anorexia nervosa. Psychological

Medicine, 11, 509-16.

Canning, H. & Mayer, J. (1966). Obesity: It's possible effect on college acceptance.

New England Journal of Medicine, 275, 1172-1174.

Cattanach, L., Phil, M., Malley, R., & Rodin, J. (1988). Psychologic and

physiologic reactivity to stressors in eating disordered individuals.

Psychosomatic Medicine, 50(6), 591-599.

Chodorow, N. (1978). The reproduction of mothering. Berkley, CA: University of California Press.

Ciliska, D. (1993). Beyond dieting. In C. Brown & K. Jasper (Eds.), Consuming passions: Feminist approaches to weight preoccupation and eating disorders (pp. 382-389). Toronto, Ontario: Second Story Press.

Clarke, P. N. (1986). Theoretical and measurement issues in the study of field phenomena. Advances in Nursing Science, 9(1), 29-39.

Cohen, M. R., Pickar, D., Cohen, R. M., Wise, T., & Cooper, J. N. (1984). Plasma cortisol and B-endorphin immunoreactivity in human obesity. Psychosomatic Medicine, 46(5), 454-462.

Corbin, J. & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. Qualitative Sociology, 13(1), 3-21.

Crisp, A. H. & McGuiness, B. (1976). Jolly fat: Relation between obesity and psychoneurosis in general population. British Medical Journal, 1, 7-9.

Daley, R. (1994). In the kitchen with Rosie: Oprah's favorite recipes. New York: Alfred A. Knopf, Inc.

Dattilio, F. M., & Freeman, A. (1992). Introduction to cognitive therapy. In A. F. Freeman & F. M. Dattilio (Eds.), Comprehensive casebood of cognitive therapy (pp. 3-11). New York: Plenum Press.

Deering, C. G. & Niziolek, C. (1988). Eating disorders: Promoting continuity of care. Journal of Psychosocial Nursing, 26(11), 6-8, 10-11, 15.

DeJong, W. (1980). The stigma of obesity. Journal of Health and Social Behavior, 21(1), 75-87.

Dornbusch, S. M., Carlsmith, J. M., Duke, P. M., Gross, R. T., Martin, J. A., Ritter, P. L., & Siegel-Gorelick, B. (1984). The desire to be thin among adolescent females as a form of conspicuous consumption: An empirical test in a national sample. Unpublished manuscript Stanford University, CA.

Drewnowski, A. (1988). Early puberty may be linked with extreme dieting in girls. American Family Physician, 38(4), 269, 272.

Dyrenforth, S., Wooley, O. & Wooley, S. (1980). A woman's body in a man's world: A review of findings on body image and weight control. In J. R. Kaplan (Ed.), A woman's conflict: The special relationship between women and food (pp. 30-57). Englewood Cliffs, NJ: Prentice-Hall, Inc.

Edelman, B. A. (1984). A multiple factor study of body weight control. The Journal of General Psychology, 110, 99-114.

Erikson, E. H. (1963). Childhood and society. New York: Norton Publ.

Fagerhaugh, S. Y. (1986). Analyzing data for basic social processes. In W. K. Chenitz & J. M. Swanson (Eds.), From practice to grounded theory (pp. 133-145). Menlo Park, CA: Addison-Wesley Publishing Co.

Fairburn, C. G. & Wilson, G. T. (1993). Binge eating: Definition and classification. In C. G. Fairburn & G. T. Wilson (Eds.), Binge eating: Nature, assessment and treatment (pp. 3-14). New York: The Guilford Press.

Faludi, S. (1991). Backlash: The undeclared war against American women. New

York: Anchor Books.

Fava, M., Copeland, P. M., Schweiger, U., & Herzog, D. B. (1989).

Neurochemical abnormalities of anorexia nervosa and bulimia nervosa.

American Journal of Psychiatry, 146(8), 963-971.

Feeling fat in a thin society (1984). Glamour Magazine, 82, 198-201, 251-252.

Ferster, L. B., Nurnberger, J. L., & Levitt, E. B. (1962). The control of eating.

Journal of Mathematics, 1, 87-109.

Fontaine, K. L. (1991). The conspiracy of culture: Women's issues in body size.

Nursing Clinics of North America, 26(3), 669-676.

Friedman, S. (1993). Decoding the "language of fat": Placing eating-disorder groups

in a feminist framework. In C. Brown & K. Jasper (Eds.), Consuming

passions: Feminist approaches to weight preoccupation and eating disorders

(pp. 288-305). Toronto, Ontario: Second Story Press.

Frisch, R. E. (1988). Fatness and fertility. Scientific American, 258(3), 88-95.

Ganer, D. M., Olmstead, M. P., Bohr, Y., & Garfinkel, P. E. (1982). The eating

attitudes test: Psychometric features and clinical correlates. Psychological

Medicine, 12, 871-878.

Ganley, R. M. (1989). Emotion and eating in obesity: A review of the literature.

International Journal of Eating Disorders, 8(3), 343-361.

Garfinkel, L. (1985). Overweight and cancer. Annals of Internal Medicine, 103,

1034-1036.

Garfinkel, P. E. & Kaplan, A. S. (1986). Anorexia nervosa: Diagnostic conceptualizations. In K. D. Brownell & J. P. Foreyt (Eds.), Handbook of eating disorders (pp. 266-282). New York: Basic Books, Inc.

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

Geary, M. C. (1988). A review of treatment models for eating disorders: Toward a holistic nursing model. Holistic Nursing Practice, 3(1), 39-45.

Geissler, C., Miller, D., & Shah, M. (1987). The daily metabolic rate of the post-obese and the lean. American Journal of Clinical Nutrition, 45, 914-920.

Gelazis, R. S. & Kempe, A. (1988). Therapy with clients with eating disorders. In C. K. Beck, R. P. Rawlins, & S. R. Williams (Eds.), Mental health-psychiatric nursing (pp. 662-680). St. Louis: The C. V. Mosby Co.

Gilligan, C. (1982). In a different voice: Psychological theory and women's development. Cambridge, MA: Harvard University Press.

Gilligan, C., Lyons, N.P., & Hammer, T. J. (Eds.) (1990). Making connections. Cambridge, MA: Harvard University Press.

Glaser, B. G. & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. New York: Aldine Publishing Co.

Glaser, B. (1978). Theoretical sensitivity. Mill Valley, CA: The Sociology Press.

Goetz, J. P. & LeCompte, M. D. (1984). Ethnography and qualitative design in educational research. San Diego, CA: Academic Press, Inc.

Goodman, N., Dornsbusch, S. M., Richardson, S. A. & Hastorf, A. H. (1963). Variant reactions to physical disabilities. American Sociological Review, 28, 429-35.

Greenberg, B. R. & Harvey (1986). The prediction of binge eating over time. Addictive Behavior, 11, 383-8.

Grilo, C. M., Shiffman, S., & Wing, R. (1989). Relapse crises and coping among dieters. Journal of Consulting and Clinical Psychology, 57, 488-495.

Grossman, S. P. (1984). Contemporary problems concerning our understanding of brain mechanisms that regulate food intake and body weight. In A. J. Stunkard & E. Stellar (Eds.), Eating and its disorders (pp. 5-11). New York: Raven Press Books, Ltd.

Grunberg, N. & Straub, R. (1992). The role of gender and taste class in the effects of stress on eating. Health Psychology, 11, 97-100.

Guidano, V. F. & Liotti, G. (1983). Cognitive processes and emotional disorders. New York: The Guilford Press.

Guyton, A. C. (1987). Basic neuroscience. Philadelphia: W. B. Saunders Company.

Haddock, C. K., Stein, R. J., Klesges, R. C., Eck, L. H. & Hanson, C. L. (1990). An examination of the impact of obesity on the psychological functioning of married individuals. Paper presented at the Society of Behavioral Medicine, Eleventh Annual Meeting, Chicago, IL.

Hamm, P., Shekelle, R., & Stanler, J. (1989). Large fluctuations in body weight during young adulthood and twenty-five-year risk of coronary death in men. American Journal of Epidemiology, 129, 312-318.

Hawkins, R. C. & Clement, P. F. (1980). Development and construct validation of a self-report measure of binge eating tendencies. Addictive Behavior, 5, 219-26.

Herman, C. P. & Mack, D. (1975). Restrained and unrestrained eating. Journal of Personality, 43, 647-660.

Herman, C. P. & Polivy, J. (1988). Restraint and excess in dieters and bulimics. In K. M. Pirke, W. Vandereycken & D. Ploog (Eds.), The psychobiology of bulimia nervosa (pp. 33-41). Berlin: Springer-Verlag.

Herman, C. P. & Polivy, J. (1980). Restrained eating. In A. J. Stundard (Ed.), Obesity. Philadelphia, PA: W. B. Saunders, Co.

Herman, C. P., & Polivy, J. (1984). A boundary model for the regulation of eating. In A. J. Stunkard & E. Stellar (Eds.), Eating and its disorders (pp. 141-56). New York: Raven Press.

Hernandez, L. & Hoebel, S. (1980). Basic mechanisms of feeding and weight regulation. In A. J. Stunkard (Ed.), Obesity (pp. 25-47). Philadelphia, PA: W. B. Saunders Company.

Hesse-Biber, S. (1992). Report on a panel longitudinal study of college women's eating patterns and eating disorders: Noncontinuum versus continuum measures. Health Care for Women International, 13(4), 375-391.

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

Hill, S. & McCutcheon, N. (1975). Eating responses of obese and nonobese humans during dinner meals. Psychological Medicine, 37, 395-401.

Hinds, P. S., Scandrett-Hibden, S. & McAulay, L. S. (1990). Further assessment of a method to estimate reliability and validity of qualitative research findings. Journal of Advanced Nursing, 15(4), 430-435.

Hubert, H., Feinleib, M., McNamara, P., & Castelli, W. (1983). Obesity as an independent risk factor for cardiovascular disease: A 26-year follow-up of participants in Framingham heart study. Circulation, 67, 968-977.

Hudelson, E. (1992). Points to remember when caring for an obese patient. Nursing, 22(10), 62-63.

Hutchinson, S. (1986). Grounded theory: The method. In P. Munhall & C. Oiler (Eds.), Nursing research: A qualitative perspective (pp. 111-130). Norwalk, CT: Appleton-Century-Croft.

Jacobs, F. B. (1989). Environmental and behavioral factors influencing weight management among medically at risk obese adults. Dissertation Abstracts, 51(-7-B), 3324, University of Florida.

Johnson, S. F., Swenson, W. M. & Gastineau, C. F. (1976). Personality characteristics in obesity: Relation to MMPI profile and age of onset of obesity

to success in weight reduction. American Journal of Clinical Nutrition, 29, 626-632.

Johnson, W. G., Corrigan, S. A., Crusco, A. H. & Schlundt, D. G. (1986). Restraint among bulimic women. Addictive Behavior, 11, 351-4.

Johnson, R. J. (1990). Restructuring: An emerging theory on the process of losing weight. Journal of Advanced Nursing, 15, 1289-96.

Jordan, H. A. (1969). Voluntary intragastric feeding: Oral and gastric contributions to food intake and hunger in man. Journal of Comparative and Physiological Psychology, 68, 498-506.

Kaplan, H. & Kaplan, H. S. (1957). The psychosomatic concept of obesity. Journal of Nervous and Mental Disease, 125(2), 181-201.

Kaschak, E. (1992). Engendered lives: A new psychology of women's experience. New York: Basic Books.

Katcher, A. & Levine, M. M. (1955). Children's concept of body size. Child Development, 26, 103-110.

Katherine, A. (1991). Anatomy of a food addiction: The brain chemistry of overeating. New York: Prentice Hall Press.

Khawaja, X. Z., Bailey, C. J., & Green, I. C. (1989). Central mu, delta, and kappa opioid binding sites, and brain and pituitary beta-endorphin and met-enkephalin in genetically obese (ob/ob) and lean mice. Life Sciences, 44(16), 1097-1105.

Kiell, R. (1973). The psychology of obesity. Springfield, IL: Charles C. Thomas.

Kilbourne, J. (1994). Still killing us softly: Advertising and the obsession with

thinness. In P. Fallon, M. A. Katzman, & S. C. Wooley (Eds.), Feminist

perspectives on eating disorders (pp. 395-418). New York: The Guilford

Press.

Kittel, F. (1978). Psycho-socio-biological correlates of moderate overweight in an

industrial population. Journal of Psychosomatic Research, 22, 145-158.

Kornguth, M. L. (1981). When your client has a weight problem: Nursing

management. American Journal of Nursing, 81(3), 553-554.

Kratina, K. (1993). Empowering women: Eating disorders and the struggle for

identity. Symposium by Refrew Center, May 14, 1993, Knoxville Hilton,

Knoxville, TN.

Kristeller, J. L. & Rodin, J. (1989). Identifying eating patterns in male and female

undergraduates using cluster analysis. Addictive Behaviors, 14, 631-642.

Laessle, R. G., Tuschl, R. J., Waadt, S. & Pirke, K. M. (1989). The specific

psychopathology of bulimia nervosa: A comparison with restrained and

unrestrained (normal) eaters. Journal of Consulting and Clinical Psychology,

57, 772-5.

Leininger, M. (1994). Evaluation criteria and critique of qualitative research studies.

In J. M. Morse (Ed.), Critical issues in qualitative research methods (pp. 95-

115). Thousand Oaks, CA: Sage Publishing, Inc.

Leon, G. & Chamberlain, K. (1973). Emotional arousal, eating patterns, and body image as differential factors associated with varying success in matintaining a weight loss. Journal of Consulting and Clinical Psychology, 40, 474-480.

Leon, G. R., Kolotkin, R., & Korgeski, G. (1979). MacAndrew Addiction Scale and other MMPI characteristics associated with obesity, anorexia, and smoking behavior. Addictive Behaviors, 4, 401-407.

Lincoln, Y. S. & Guba, E. G. (1985). Naturalistic inquiry. Newbury Park, CA: Sage Publishing.

Lissner, L., Odell, P. M., D'Angostino, R. B., Stokes, III, J., Kreger, B. E., Belanger, A. J., & Brownell, K. D. (1991). Variability of body weight and health outcomes in the Framingham population. The New England Journal of Medicine, 324(26), 1839-1844.

Listen to the hunger (1987). MN: Hazeldon Foundation.

Loevinger, J. (1976). Ego development: Conceptions and theoris. San Francisco, CA: Jossey-Bass, Inc., Publishers.

Loro, A. D. & Orleans, C. S. (1981). Binge eating in obesity: Preliminary findings and guidelines for behavioral analysis and treatment. Addictive Behaviors, 6, 155-166.

Louderback, L. (1970). Fat power: Whatever you weigh is right. New York: Hawthorne Books.

MacInnis, B. (1993). Fat oppression. In C. Brown & K. Jasper (Eds.), Consuming

passions: Feminist approaches to weight preoccupation and eating disorders

(pp. 69-79). Toronto, Ontario: Second Story Press.

Maddox, G. L., Back, K., & Liederman, V. (1968). Overweight as social deviance

and disability. Journal of Health and Social Behavior, 9, 287-98.

Mahoney, M. J. (1975). The obese eating style: Bites, beliefs, and behavior

modification. Addictive Behaviors, 1, 47-53.

Manson, J., Colditz, G., Stampfer, M., Willett, W., Rosner, B., Monson, R.,

Speizer, F., & Hennekens, C. (1990). A prospective study of obesity and risk

of coronary heart disease in women. New England Journal of Medicine, 322,

882-889.

Maslow, A. H. (1970). Motivation and personality (2nd ed.). New York: Harper

and Row.

Matthews, J. (1991). Library in a book: Eating disorders. New York: Facts on File,

Inc.

Mayer, J. (1968). Overweight: Causes, cost and control. Englewood Cliffs, NJ:

Prentice-Hall.

McBride, A. B. & McBride, W. L. (1981). Theoretical underpinnings for women's

health. Women and Health, 6, (1/2), 37-55.

McReynolds, W. T. (1982). Toward a psychology of obesity: Review of research on

the role of personality and level of adjustments. International Journal of

Eating Disorders, 2, 37-57.

Mennell, S., Murcott, A., & van Otterloo, A. (1992). The sociology of food: Eating, diet and culture. Newbury Park, CA: Sage Publ., Ltd.

Methods for voluntary weight loss and control (1992). Technology Assessment Conference Statement. (March 30 - April 1) Bethesda, MD: National Institutes of Health.

Meyer, J. M. & Stunkard, A. J. (1993). Genetics and obesity. In A. J. Stundard & T. A. Wadden (Eds.), Obesity: Theory and treatment (pp. 137-149). New York: Raven Press, Ltd.

Miles, M. B. & Huberman, A. M. (1994). Qualitative data analysis. Thousand Oaks, CA: Sage Publishing.

Miller, T. W., Jay, L. & Smith, D. G. (1987). Obesity: Cognitive-behavioral and pharmacological approaches to treatment. The Journal of Practical Nursing, 37(4), 32-37.

Miller, J. B. (1976). Toward a new psychology of women (2nd ed.). Boston, MA: Beacon Press.

Miller, K. D. (1991). Compulsive overeating. Nursing Clinics of North America, 26(3), 699-705.

Miller, W. C. (1991). Obesity: Diet composition, energy expenditure and treatment of the obese patient. Medicine and Science in Sports and Exercise, 23, 273-274.

Mitchell, E. S. (1986). Women's experience of food cravings: A biopsychosocial model. Dissertation Abstracts, 47(10-B), 4114.

Mitchell, Y. E., Hatsulnami, D., Pyle, R. L. & Eckert, E. D. (1986). The bulimia

syndrome. Comprehensive Psychiatry, 17, 165-170.

Mitchell, M. (1936). Gone with the wind. New York: The MacMillan Co.

Morley, J. E. (1980). The neuroendocrine control of appetite: The role of the

endogenous opiates, cholecystokinin, TRH, gamma-amino-butyric-acid and the

diazepam receptor. Life Sciences, 27(5), 355-368.

National Center for Health Statistics (1986). Advance data from vital health statistics.

DHHS Publication No. [PHS] 86-1250. Hyattsville, MO: U.S. Publich Health

Service.

National Institutes of Health Concensus Development Panel on the Health Implications

of Obesity (1985). Health implications of obesity. Annals of Internal

Medicine, 103(6 pt. 2), 1073-1077.

National Institutes of Health Technology Assessment Conference Statement (1992).

Methods for voluntary weight loss and control. Bethesda, MD: Office of

Medical Applications of Research, National Institutes of Health.

Nichter, M. & Vuckovic, N. (1994). Fat talk: body image among adolescent girls.

In N. Sault (Ed.), Many mirrors: Body image and social relations. New

Brunswicks, NJ: Rutgers University Press.

Nisbett, R. E. (1968). Determinants of food intake in obesity. Science, 159, 1254-

1255.

Nisbett, R. E. (1972). Hunger, obesity and the ventromedial hypothalamus.

Psychological Review, 79, 433-453.

Orbach, S. (1990). Fat is a feminist issue. New York: The Berkley Publishing Group.

Perlow, S. & Shrifter, S. (1992). Obesity and overeating: The value of mutual goal setting in social work treatment. In E. Freeman (Ed.) the Addiction Process: Effective Social Work Approaches (pp. 161-179). White Plains, NY: Longman, Publishers Group.

Perri, M. G., Nezu, A. M. & Viegener, B. J. (1992). Improving the long-term management of obesity. New York: John Wiley & Sons.

Perusse, L., Tremblay, A., Leblanc, C. & Brouchard, C. (1989). Genetic and environmental influences on level of habitual physical activity and exercise participation. American Journal of Epidemiology, 129, 1012-1022.

Pi-Sunyer, F. X. (1991). Health implications of obesity. American Journal of Clinical Nutrition, 1(53), 15955-16035.

Pike, K. & Rodin, J. (1991). Mothers, daughters and disordered eating. Journal of Abnormal Psychology, 100(2), 198-204.

Polivy, J. (1976). Perception of calories and regulation of intake in restrained and unrestrained subjects. Addictive Behavior, 1, 237-43.

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

Popkess-Vawter, S. (1982). Reducing cardiac risk factors in the obese patient. Nursing Clinics of North America, 17(2), 233-244.

Price, R., Cadoret, R., Stunkard, A., & Troughton, E. (1987). Genetic contributions

 to human fatness: An adoption study. <u>American Journal of Psychiatry</u>, <u>144</u>,

 1003-1008.

Pudel, V. E. & Oetting, M. (1977). Eating in the laboratory: Behavioral aspects of

 the positive energy balance. <u>International Journal of Obesity</u>, <u>1</u>, 369-386.

Rand, C. S. W. (1982). Psychoanalytic treatment of obesity. In B. B. Wolman

 (Ed.), <u>Psychological aspects of obesity: A handbook</u> (pp. 177-191). New

 York: Van Nostrand Reinhold.

Rand, C. S. W. & MacGregor, A. M. C. (1990). Morbidly obese patients'

 perceptions of social discrimination before and after surgery for obesity.

 <u>Southern Medical Journal</u>, <u>83</u>, 1390-5.

Rand, C. R., & Stunkard, A. J. (1983). Obesity and psychoanalysis: Treatment and

 four year follow-up. <u>American Journal of Psychiatry</u>, <u>140</u>(9), 1140-1144.

Rand, C. R. & Stunkard, A. J. (1978). Obesity and psychoanalysis. <u>American</u>

 <u>Journal of Psychiatry</u>, <u>135</u>(5), 547-551.

Ravussin, E., Lillioja, S., Anderson, T., Christin, L., & Bogardus, C. (1986).

 Determinants of 24-hour energy expenditure in man: Methods and results using

 a respiratory chamber. <u>Journal of Clinical Investigations</u>, <u>78</u>, 1568-1578.

Ravussin, E., Acheson, K., Vernet, O., Danforth, E., & Jequier, E. (1985).

 Evidence that insulin resistance is responsible for decreased thermic effect of

 glucose in human obesity. <u>Journal of Clinical Investigations</u>, <u>76</u>, 1268-1273.

Richardson, S. A., Goodman, N., Hastorf, A. H., & Dornbusch, S. M. (1961). Cultural uniformity in relation to physical disabilities. American Sociological Review, 26, 241-7.

Ritter, M. M., Sönnichsen, A. C., Möhrle, W., Richter, W. O. & Schwandt, P. (1990). B-endorphin plasma levels and their dependence on gender during an enteral glucose load in lean subjects as well as in obese patients before and after weight reduction. International Journal of Obesity, 15(6), 421-427.

Roberts, S., Savage, J., Coward, W., Chew, B. & Lucas, A. (1988). Energy expenditure and intake in infants born to lean and overweight mothers. New England Journal of Medicine, 318, 461-466.

Rodin, J., Radke-Sharpe, N., Rebuffe-Scrive, M., & Greenwood, M. (1990). Weight cycling and fat distribution. International Journal of Obesity, 14, 303-310.

Rodin, J., Elman, D. & Schachter, S. (1974). Emotionality and obesity. In S. Schachter, & J. Rodin (Eds.), Obese humans and rats (pp. 15-20). Potomac, MD: Erlbaum.

Rodin, J., Schank, D., & Striegel-Moore, R. (1989). Psychological features of obesity. Medical Clinics of North America, 73, 47-66.

Rodin, J., Silberstein, L. & Striegel-Moore, R. (1984). Women and weight: A normative discontent. Nebraska Symposium on Motivation, 32, 267-307.

Rodin, J. (1980). The externality theory today. In A. J. Stunkard (Ed.), Obesity (pp. 226-239). Philadelphia, PA: Saunders.

Rodin, J. (1981). The current status of the internal-external obesity hypothesis: What went wrong? American Psychologist, 36, 361-372.

Rodin, J. & Striegel-Moore, R. H. (1984). Predicting attitudes towards body weight and food intake in women. Paper presented at the 14th Congress of the European Association of Behavior Therapy. Brussels, September.

Rogers, M. (1986). Science of unitary human beings. In V. M. Malinski (Ed.), Explorations on Martha Rogers' Science of Unitary Human Beings (pp. 3-14). Norwalk, CT: Appleton-Century-Crofts.

Rogers, P. J. & Hill, A. J. (1989). Breakdown of dietary restraint following mere exposure to food stimuli: Inter-relationships between restraint hunger, salivation, and food intake. Addictive Behaviors, 14, 387-97.

Root, M. (1989). Treatment failures: The role of sexual victimization in women's addictive behaviors. American Journal of Orthopsychiatry, 59, 542-549.

Rosenberg, M. (1981). The self-concept: Social product and social force. In M. Rosenberg & R. H. Turner (Eds.), Social psychology: Sociological perspective (pp. 593-624). New York: Basic Books.

Rosenfield, S. N. & Stevenson, J. S. (1988). Perceptions of daily stress and oral coping behavior in normal overweight and recovering alcoholic women. Research in Nursing and Health, 1, 165-174.

Rothblum, E. D. (1994). "I'll die for the revolution but don't ask me not to diet": Feminism and the continuing stigmatization of obesity. In P. Fallon, M. A. Katzman, & S. C. Wolley, (Eds.), Feminist perspectives on eating disorders (pp. 53-76). New York: The Guilford Press.

Ruderman, A. J. & Christensen, H. C. (1983). Restraint theory and its applicability to overweight individuals. Journal of Abnormal Psychology, 92, 210-215.

Ruderman, A. J., Belzer, L. J. & Halperin, A. (1985). Restraint, anticipated consumption, and overeating. Journal of Abnormal Psychology, 94, 547-55.

Ruderman, A. J. & Grace, P. S. (1987). Restraint, bulimia, and psychopathology. Addictive Behavior, 12, 249-255.

Ruderman, A. J. (1985). Restraint, obesity, and bulimia. Behavioral Research Therapy, 23, 141-6.

Russell, S., & Shirk, B. (1993). Eating and Anger. In S. Thomas (Ed.) Women and Anger (pp. 170-185). New York: Springer Publishing Co.

Sandelowski, M. (1986). The problem of rigor in qualitative research. Advances in Nursing Science, 8(3), 27-37.

Sandelowski, M., Davis, D., & Harris, B. (1989). Artful design: Writing the proposal for research in the naturalist paradigm. Research in Nursing and Health, 12, 77-84.

Schachter, S. (1971). Emotion, Obesity, and Crime. New York: Academic Press.

Schacter, S. (1968). Obesity and eating. Science, 161, 751-6.

Schacter, S. (1971). Some extraordinary facts about obese humans and rats. American Psychology, 26, 129-44.

Schacter, S., Goldman, R., & Gordon, A. (1968). Effects of fear, food, deprivation, and obesity on eating. Journal of Personality and Social Psychology, 10, 91-97.

Schacter, S. & Rodin, J. (1974). Obese humans and rats. Washington, DC: Erlbaum/Halsted.

Schlundt, D. G., Taylor, D., Hill, J. O., Sbrocco, T., Pope-Cordle, J., Kasser, T., & Arnold, D. (1991). A behavioral taxonomy of obese female participants in a weight loss program. American Journal of Clinical Nutrition, 53(5), 1151-1158.

Schroeder, M. A. (1981). Symbolic interactionism: A conceptual framework useful for nurses working with obese persons. Image, 13(3), 78-81.

Schroeder, M. A. (1982). Foreward. Nursing Clinics of North America, 17(2), 189.

Schwartz, F. G. (1991). Personality characteristics, eating styles and weight in adult women. Dissertation Abstracts, 52(03-B), 1359. Columbia University Teacher's College.

Segers, M. J. & Mertens, C. (1974). Psychological and bioclinical CHD risk factors: Quantitative differences between obese, normal and thin subjects. Journal of Psychosomatic Research, 18, 403-411.

Seid, R. P. (1989). Never too thin: Why women are at war with their bodies. New York: Prentice Hall Press.

Seid, R. P. (1994). Too 'close to the bone': The historical context for women's obsession with slenderness. In P. Fallon, M. A. Katzman, & S. C. Wooley (Eds.), Feminist perspectives on eating disorders (pp. 3-16). New York: The Guilford Press.

Seidel, J. V., Kjolseth, R., & Seymour, E. (1988). The ethnograph: A user's guide (Version 3.0). Corvallis, OR: Qualis Research Associates.

Shah, M. & Jeffery, R. W. (1991). Is obesity due to overeating and inactivity, or to a defective metabolic rate? A review. Annals of Behavioral Medicine, 13(2), 73-81.

Shipman, W. G., & Plesset, M. R. (1963). Anxiety and depression in obese dieters. Archivers of General Psychiatry, 8, 530-535.

Sjoberg, L. & Persson, L. (1979). A study of attempts by obese patients to regulate eating. Addictive Behaviors, 4, 349-359.

Slochower, J., Kaplan, S., & Mann, L. (1981). The effects of life stess and weight on mood and eating. Appetite, 2, 115-125.

Slochower, J. A. (1983). Excessive eating: The role of emotions and environment. New York: Human Sciences Press.

Smith, G. P. (1984). Gut hormone hypothesis of postprandial satiety. In A. J. Stunkard & E. Stellar (Eds.), Eating and its disorders (pp. 67-75). New York: Raven Press Books, Ltd.

Sorensen, T., Price, R., Stunkard, A. J. & Schulsinger, F. (1989). Genetics of

obesity in adult adoptees and their biological siblings. British Medical

Journal, 298, 87-90.

Spencer, J. A. & Fremouw, W. J. (1979). Binge eating as a function of restraint and

weight classification. Journal of Abnormal Psychology, 88, 262-67.

Staffieri, J. R. (1967). A study of social stereotype of body image in children.

Journal of Personal and Social Psychology, 7, 101-4.

Steiner-Adair, C. (1988). Weightism: A new form of prejudice. Keynote address at

the Seventh National Conference on Eating Disorders, Columbus, Ohio.

Steiner-Adair, C. (1994). The politics of prevention. In P. Fallon, M. A. Katzman,

& S. C. Wooley (Eds.), Feminist perspectives on eating disorders (pp. 381-

394). New York: The Guilford Press.

Stern, P. N., Allen, L. M., & Moxley, P. A. (1982). The nurse as grounded

theorist: History, process and uses. The Review Journal of Philosophy and

Social Science, 7(1,2), 200-215.

Stern, P. N. (1985). Using grounded theory method in nursing research. In M. M.

Leininger (Ed.), Qualitative research methods in nursing (pp. 149-160).

Orlando, FL: Grune & Stratton, Inc.

Strauss, A. & Corbin, J. (1990). Bases of qualitative research: Grounded theory

procedure and techniques. Newbury Park, CA: Sage Publications, Inc.

Striegel-Moore, R. H., Schreiber, G. B., Pike, K. M., Wilfrey, D. E., & Rodin, J. (in press). Drive for thinness in black and white preadolescent girls. International Journal of Eating Disorders.

Stunkard, A. J., Harris, J. R., Pederson, N. I., & McClearn, G. E. (1990). The body-mass index of twins who have been reared apart. New England Journal of Medicine, 322, 1483-1487.

Stunkard, A., Sorensen, T., Harris, C., Teasdale, T., Chakraborty, R., Schull, W., & Schlusinger, C. (1986). An adoption study of human obesity. New England Journal of Medicine, 314, 193-198.

Stunkard, A. J. (1957). The "dieting depression." American Journal of Medicine, 23, 77-86.

Surrey, J. L. (1984). Eating patterns as a reflection of women's development (pp. 1-8). Work in progress: Wellesley, MA: Stone Center for Developmental Services and Studies No. 83-06.

Szekely, E. & DeFazio, P. (1993). Gaps between feminist understandings of eating disorders and personal experience. In C. Brown & K. Jasper (Eds.), Consuming passions: Feminist approaches to weight preoccupation and eating disorders (pp. 361-378). Toronto, Ontario: Second Story Press.

Székely, E. (1988). Never too thin. Toronto: Women's Press.

Thompson, B. (1994). Food, bodies, and growing up female: Childhood lessons about culture, race and class. In P. Fallon, M. Kutzman, & S. Wooley (Eds.), Feminist perspectives on eating disorders (pp. 355-378). New York: The Guilford Press.

Tice, L., Hall, R. C. W., Beresford, T. P., Quimones, J., & Hall, A. K. (1989). Sexual abuse in patients with eating disorders. Psychiatric Medicine, 7, 257-267.

Trower, P., Casey, A., & Dryden, C. (1988). Cognitive-behavioral counseling in action. Newbury Park, CA: Sage Publ., Inc.

Van Itallie, T. (1985). Health implications of overweight and obesity in the United States. Annals of Internal Medicine, 103(S pt. 2), 983-988.

Venes, A. M., Krupka, L. K. & Gerard, R. J. (1989). Overweight/obese patients: An overview. Practitioner, 226, 1102-9.

Vettor, R., Martini, C., Cestaro, S., Manno, M., Sicolo, N. & Federspii, G. (1989). Possible involvement of endogenous opioids in beta-cell hyperresponsiveness in human obesity. International Journal of Eating Disorders, 13(4), 425-432.

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

Wardle, J. (1990). Dietary restraint and binge eating. Behavioral Analysis Modification, 4, 201-9.

Watson, L. A. (1991). Patterns of perceived hunger in healthy adults. Dissertation Abstracts, 53(02-B), 778. University of Arizona.

White, J. H. (1991). Feminism, eating, and mental health. Advances in Nursing Science, 13(3), 68-80.

White, J. H. (1992a). Women and eating disorders, Part I: Significance and sociocultural risk factors. Health Care for Women International, 13(4), 351-362.

White, J. H. (1992b). Women and eating disorders, Part II: Developmental, familial, and biological risk factors. Health Care for Women International, 13(4), 363-373.

White, J. H. (1986). Behavioral intervention for the obese client. Nurse Practitioner, 11(1), 27-28, 30, 32, 34.

White, J. H. & Schroeder, M. A. (1981). When your client has a weight problem: Nursing assessment. American Journal of Nursing, 81(3), 550-553.

White, J. H. (1982). An overview of obesity: Its significance to nursing. Nursing Clinics of North America, 17(2), 191-197.

White, J. H. (1981). A study of the obese individual's reasons for embarking on a weight control program. Dissertation Abstracts, 42(05-B), 1825. The Catholic University of America.

White, J. H. & Schroeder, M. A. (1986). Femininity, image, feminism and a decision to seek treatment in obese women. Health Care for Women International, 7, 455-467.

White, J. H. (1984). The relationship of clinical practice and research. Journal of Advanced Nursing, 9, 181-187.

Wilbur, J. F. (1991). Neuropeptides, appetite regulation and human obesity. Journal of the American Medical Association, 266(2), 257-259.

Williamson, D. A., Kelley, M. L., Davis, C. J., Ruggiero, L. & Blouin, D. C. (1985). Psychopathology of eating disorders: A controlled comparison of bulimic, obese, and normal subjects. Journal of Consulting and Clinical Psychology, 53(2), 161-166.

Wolff, N. (1991). The beauty myth. New York: Anchor Books.

Wolff, N. (1994). Hunger. In P. Fallon, M. A. Katzman, & S. C. Wooley (Eds.), Feminist perspectives on eating disorders (pp. 94-111). New York: The Guilford Press.

Wood, M. H. (1991). Health promotion behavior: The relationship with health conception, health perception, and self-esteem in obese women. Dissertation Abstracts, 52(08-B), 4130, Texas Women's University.

Woodman, M. (1982). Addiction to perfection: The still unravished bride. Toronto, Canada: Inner City Books.

Woody, E. Z., Costanzo, P. R., Liefer, H. & Conger, J. (1981). The effects of task and caloric perceptions on the eating behavior of restrained and unrestrained subjects. Cognitive Therapy and Research, 5, 381-90.

Wooley, O. W., Wooley, S. C. & Dyrenforth, S. R. (1979). Obesity and women II: A neglected feminist topic. Women Studies International Quarterly, 2, 81-89.

Wooley, S. C. & Kearney-Cooke, A. (1986). Intensive treatment of bulmia and body

    image disturbance. In K. Brownall & J. Foreyt (Eds.), Handbook of eating

    disorders: Physiology, psychology, and the treatment of obesity, anorexia, and

    bulimia (pp. 476-502). New York: Basic Books.

Wooley, O. W. (1994). ...and man created 'woman': Representations of women's

    bodies in Western culture. In P. Fallon, M. A. Katzman, & S. C. Wooley

    (Eds.), Feminist perspectives on eating disorders (pp. 17-52). New York:

    The Guilford Press.

Wurtman, J. J. (1985). Neurotransmitter control of carbohydrate consumption. In

    N. S. Braveman & P. Bronstein (Eds.), Experimental assessments and clinical

    applications of conditioned food aversions: Vol. 443 Annals of the New York

    Academy of Sciences (pp. 145-151. New York: The New York Academy of

    Sciences.

Wurtman, J. J. & Wurtman, R. J. (1981). Suppression of carbohydrate consumption

    as snacks and at mealtime by dl-fenfluramine or tryptophan. In S. Garattini

    (Ed.), Anorectic agents: Mechanisms of actions and tolerance (pp. 169-182).

    New York: Raven Press.

Wurtman, R. J. & Wurtman, J. J. (1983). Nutrients, neurotransmitters synthesis, and

    the control of food intake. Psychiatric Annals, 13(11), 854-857.

Wurtman, R. J. & Wurtman, J. J. (1984). Nutrients, neurotransmitter synthesis, and

    the control of food intake. In A. J. Stunkard & E. Stellar (Eds). Eating and

    its disorders (pp. 77-86). New York: Raven Press Books, Ltd.

Wurtman, R. J. & Wurtman, J. J. (1986). Carbohydrate craving, obesity and brain

serotonin. Appetite, 7 (supplement), 99-103.

Wurtman, J. J., Wurtman, R. J., Growdon, J. H., Henry, P., Lipscomb, A., &

Zeisel, S. H. (1981). Carbohydrate craving in obese people: Suppression by

treatments affecting serotoninergic transmission. International Journal of

Eating Disorders, 1, 2-15.

Wurtman, J. J., Wurtman, R. J., Mark, S., Tsay, R., Gilbert, W. & Growdon, J.

(1985). D-Fenfluramine selectivety suppresses carbohydrate snacking by obese

subjects. International Journal of Eating Disorders, 4, 89-99.

Wysoker, A. S. (1991). Women's experiences losing weight and gaining the lost

weight back. Dissertation Abstracts, 52(05-B), 2505.

You've come a long way baby. (1993, Nov-Dec). New Age Journal (p. 24).

Zimburg, R. (1993). Food, needs, and entitlement: Women's experience of

emotional eating. In C. Brown & K. Jasper (Eds.), Consuming passions:

Feminist approaches to weight preoccupation and eating disorders (pp. 137-

150). Toronto, Canada: Second Story Press.

APPENDICES

APPENDIX A

The Experience of Eating in Adult Women
Consent Form

You are invited to participate in a research project. The purpose of this study is to explore the experience of eating in overweight adult women who identify food issues as problematic. Despite years of research, multiple theories and the rise of a multimillion dollar health and fitness industry, successful programs for long-term weight loss and maintenance have not been developed. This study seeks to ask adult women, themselves, about their own experience with eating and weight. The interview will be conducted by the investigator who has worked with people in healthcare for many years.

You will be asked to participate in an audiotaped interview that will last approximately one hour (maximum of two hours) in a place of your choice. You will be asked to share your experience with eating and weight. Subsequent questions will follow and be based on your comments and responses. This interview will be audiotaped so that the investigator can use your exact words to compare with the words of the other women in the study. These interviews will be transcribed into written form to allow this comparative analysis. Your name will not appear on the tape or the transcript and will be known only to the investigator and kept in a locked file with the tapes and transcripts in the University of Tennessee, College of Nursing. You may be contacted by the investigator following the interview and during the analysis to clarify or validate the investigator's interpretation of your experience. Upon completion of the study, the transcripts and code-book linking your name to your tape will be destroyed. The audiotapes will be erased. No incentive is available to reimburse you for your time and effort in participating, however, you may personally benefit in this introspective examination of your experience. There also exists a potential benefit for women in general in exploring and discovering new issues that contribute to this ongoing dilemma.

The nature and direction of the interview will be determined by you and the investigator and will unfold as the interview progresses. Some areas of exploration have the potential to produce anxiety, or embarrassment or may bring up painful memories. You are free not to answer any questions. You are free to choose not to participate or you can withdraw from this study at any time without penalty. Your audiotape will be erased upon your request to the investigator or co-investigator whose phone numbers appear at the end of this letter.

Any information you provide will be kept in confidence. Your name will not be used in any reports although your words may be used to support the interpretation and analysis. At no time will your words be linked with, or traceable to, your name.

<div align="right">

Sheryl S. Russell, RN, MSN
Investigator

</div>

Subjects Statement

      This study has been explained to me and I voluntarily consent to participate in this study. I have had an opportunity to ask questions and understand that I may ask further questions at any time in the future by contacting the investigator named above. I can withdraw from the study at anytime without penalty. I have received a written copy of this consent form.

Investigator:	Sheryl S. Russell, RN, MSN	Co-investigator: Inez Tuck, RN, PhD
	Doctoral Candidate	Associate Professor and Chair
	College of Nursing	College of Nursing
	Phone: (615) 974-4151	(615) 974-7626

APPENDIX B

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potatoes, it has to be a satisfying	56	
food. One that sticks with me, not	57	food prefer (cont)
sweets.	58	
Sheryl: I see, umm.	59	
Subject: When I grew up I was never	60	
exposed to sweets or candy so I	61	
guess--I grew up in an Irish family	62	
in one of the foster homes, and they	63	eat habits
always had a great big breakfast, a	64	
huge lunch and very light dinner.	65	
And I've done different studies about	66	
when I eat, because of my job and	67	
stuff like that I notice that my big	68	
binges are like after 9:00 at night.	69	binge
I've tried to control them so I've	70	
reversed it now and now it's during	71	
the day.(laughs).	72	
Sheryl:So your eating patterns have	73	
changed?	74	
Subject:In the sense that I don't eat	75	
as much at night, because now I work	76	eat habits
nights. But when I'm not working,	77	
yeah, I eat. I've just reversed it.	78	
Sheryl:So that's more related to your	79	
change in occupation?	80	
Subject:Uh umm, Uh umm (affirmative)	81	
Sheryl:Can you tell me more about that?	82	
About your eating at night or...	83	
Subject:Well I think I eat mainly cause	84	eat-bored
I'm bored. Cause I, you know, I read	85	
a book once that said only eat when	86	
you're truly hungry and you get	87	
terrible hunger cramps or something.	88	eat/hunger
And I, I don't usually get to that	89	
point. I'm sitting there and I'm	90	
watching something and if I'm feeling	91	
alone or something like that, I get	92	eat-alone
up and I eat and then I'm happy.	93	+ eat-happy
Cause it's shortly after I eat I	94	
usually get sleepy and it's like a	95	
baby, you know, after you've been fed	96	:respons/fd
you go to sleep. And I guess that's	97	
what I do. I have--my social life is	98	
zip. I work, as you know, seven days	99	
a week, I never go out, I never do	100	single
anything. So my world is pretty much	101	
food. Although it upsets me. Cause	102	
I'm trying to lose the weight and	103	
every time I try to go on a diet I	104	sick-no eat
get real, real irritable, and I	105	
actually get physically sick. I mean	106	diet hx +
nausea, vomiting, really pains if I	107	diet cycle
don't eat certain foods. So then	108	
that's like a movie I saw on dieting,	109	Scarlet
ate one blueberry and had a little	110	+
		quit diet
	↓(129)	↓(121)
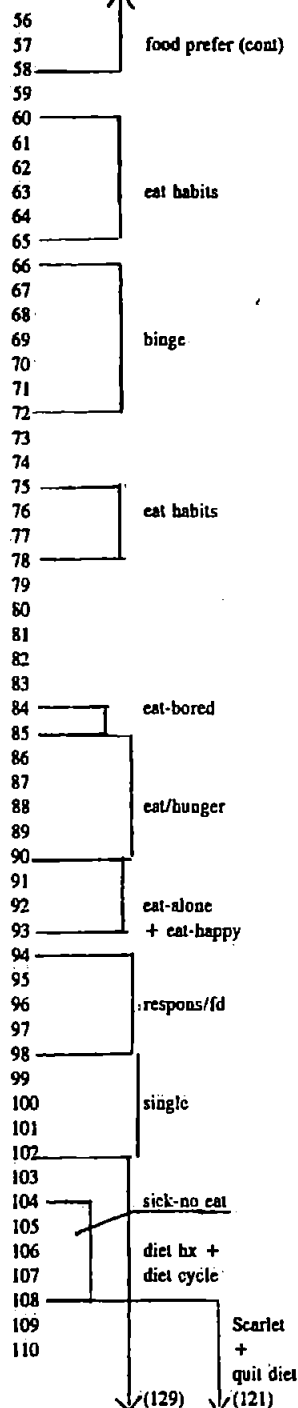
VITA

Sheryl S. (Kenny) Russell was born in Iowa City, Iowa on January 1, 1953. She attended public schools in Brigham City, Utah, Manhattan, Kansas and graduated from Oak Ridge High School in Oak Ridge, Tennessee in 1971. The following year she entered the University of Tennessee, Knoxville. She married and began her family in 1973. Returning to the University in 1976 she graduated with honors with a Bachelors in Science in Nursing in June, 1979. In March of 1987, she received a Master of Science in Nursing from the University of Tennessee, Knoxville. She was accepted into the doctoral program in the College of Nursing in 1990 and was awarded a Doctorate of Philosophy degree with a major in Nursing in August, 1994.