A qualitative study of the perceived psychosocial outcomes of gastric bypass surgery

Lindsey Eva Bocchieri
University of Nevada, Las Vegas

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A QUALITATIVE STUDY OF THE PERCEIVED PSYCHOSOCIAL OUTCOMES OF GASTRIC BYPASS SURGERY

by

Lindsey Eva Bocchieri

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Examination Committee Chair

Dean of the Graduate College

Examination Committee Member

Examination Committee Member

Graduate College Faculty Representative
ABSTRACT

A Qualitative Study of the Perceived Psychosocial Outcomes of Gastric Bypass Surgery

by

Lindsey Eva Bocchieri

Dr. Marta Meana, Examination Committee Chair
Assistant Professor of Psychology
University of Nevada, Las Vegas

Attempts to understand postoperative psychosocial changes in the lives of individuals who have undergone gastric bypass surgery for morbid obesity have 1) been guided by constructs emanating from the assumptions of researchers, and 2) have resulted in fragmented conclusions that catalogue changes without theoretically integrating them. Using unstructured and semi-structured interviews and in-depth focus groups, patients were asked in an open-ended fashion about the ways, if any, in which gastric bypass surgery had affected their lives. Grounded theory methodology was utilized in order to identify emergent themes and their interrelations, and build a meaningful, comprehensive theory of life after gastric bypass surgery. Patients’ report of a rebirth/transformation was identified as the core process of the theory. The changes marking this process were clearly conceptualized in dichotomous terms comparing pre to postsurgical life. Patients reported changes that they regarded as unequivocally positive, a number of which had not been previously reported in the literature. Unique to this particular study was the finding of numerous life changes that generated tension and posed challenges in various aspects.
of patients' lives. The emergent theory proposes that the extent to which patients
successfully negotiate this tension may be a major determinant in the long-term outcome
of gastric bypass surgery, both weight loss and psychosocial adjustment. Clinical
applications of this research and theory are discussed.
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CHAPTER I

INTRODUCTION

Nearly one-third of the United States is faced with the challenge of living with obesity (Kuczmarski, Flegal, Campbell, & Johnson, 1994). Due to the pervasiveness of this problem, there is a voluminous literature on the impact of obesity on health and well-being, primarily assessing attendant medical risks. Obesity is associated with 5 of the 10 leading causes of death in the United States, including heart disease, some types of cancer, stroke, diabetes, and atherosclerosis (Berg, 1993), and the cost of obesity-related illnesses is over $45 billion annually (Wolf & Colditz, 1996). The most serious adverse health conditions are associated with "morbid" obesity, defined as a Body Mass Index (BMI) of $\geq 39.0$ (Kuczmarski, 1992), 100 pounds above ideal body weight (Rabner & Greenstein, 1991) or more than 100% over ideal weight (Stunkard, Stinnett, & Smoller, 1986). The more severe the obesity, the more serious the medical complications and mortality risk; hence the term "morbid" (Stunkard et al., 1986). Morbid obesity affects between 3-5 million Americans (Pories and MacDonald, 1993), just over half of which are women (Kuczmarski, 1992; Kuczmarski et al., 1994).

While the physical consequences of morbid obesity are well documented, considerably less is known about the psychosocial correlates of excess weight (Friedman & Brownell, 1995). Inconsistent results abound in the literature, controlled comparisons are few, and standardized measures designed specifically to assess the
hypothesized psychosocial effects of morbid obesity are lacking. It can be particularly difficult to establish the impact of a disorder characterized by early progressive onset and a chronic nature. Lacking a “before and after,” it is problematic to distinguish obesity-related psychosocial symptomatology from that with no specific connection to the obesity. Saunders, Johnson & Teschner (1998) found that, of 125 patients presenting for gastric bypass surgery, the mean self-reported age for onset of obesity (defined as at least 10 pounds overweight) was 11.78 years of age (SD = 6.54). There is consistent support for prepubescent onset, as well as a strong family history among morbidly obese person. (Rabner et al., 1991; Sarwer & Wadden, 1999). For the vast majority of the morbidly obese, the battle with weight is thus life-long with few reliably successful interventions available. Notoriously resistant to nonsurgical treatments, sustained weight loss is evidenced in less than 5% of morbidly obese patients (Brolin, Kenler, Gorman & Cody, 1989; Shamblin & Shamblin, 1987). Even among the minority who achieve significant loss through non-surgical methods, an even smaller minority maintains this loss over time (Sarwer et al., 1999).

Surgical procedures involving the gastro-intestinal system are currently the best means of long-term weight reduction in the morbidly obese population (Brolin, 1987). These surgeries for fall into two categories: those relying primarily on the mechanism of malabsorption and those relying primarily on gastric restriction. The malabsorption-based surgeries (e.g., the no longer performed intestinal bypass and jejunoileal bypass, and the still currently performed biliopancreatic diversion and duodenal switch) interfere with the digestive system’s processing of nutrients. Patients who undergo these malabsorption surgeries can generally eat a normal amount and variety of foods, but
Diarrhea can be persistent and, there are frequent complications during the first year after surgery (Stunkard et al., 1986). Today, it is a minority of surgeons perform malabsorption obesity operations and they do so either because they put a high premium on their patients being able to eat normally or they have patients with unusual circumstances. Generally, malabsorption surgeries have been replaced by gastric restriction operations (Pories & MacDonald, 1993) as they have fewer complications and equivalent weight loss benefits. The basic mechanism common to these newer gastric restriction surgeries (e.g., gastric bypass, vertical band gastroplasty, salastic ring gastroplasty) is a surgically reduced stomach capacity and limited gastric outlet, although malabsorption continues to be an element (Fisher & Barber, 1999). Gastric restriction surgery requires that patients change their eating patterns substantially, including amount, frequency, and the choice of foods ingested, but it is the current surgery of choice for the morbidly obese.

What all of these surgeries share, however, is dramatic weight loss. On average, morbidly obese patients will lose two-thirds of their excess weight within two years following surgery. A study by Pories and MacDonald (1993) found that 89% of patients could no longer be defined as “morbidly obese” within two years of surgery. Sugarman, Kellum, Engle, Wolfe, Starkey, Birkenhauer, Fletcher, & Sawyer (1992) found that patients (N = 126) lost an average of 60% of their excess weight at one year and more than 51% of their weight at 8 and 9 years after gastric bypass surgery.

Despite its superiority to other methods of weight loss for the morbid obese, surgery still carries the risk of failed weight loss or weight regain. When there is weight regain, it typically begins 18-24 months post surgery (Hsu, Benotti, Dwyer, Roberts,
Saltzman, Shikora, Rolls, & Rand, 1998; Powers, Perez, Boyd, & Rosemurgy, 1997; Shamblin & Shamblin, 1987). Delin & Watts (1995) report that, although most patients do well initially, some ultimately fail to sustain their improvement. Some researchers attribute the weight gain to physiological factors (Sugarman et al., 1992), but others claim that inadequate coping strategies are usually at the source of patients’ inability to maintain weight loss (Delin & Watts, 1995). Currently, there is an appeal toward the consideration of a more holistic set of outcome measures for obesity surgery. Added to the traditional measures of simple weight loss and resolution of pre-surgical medical problems are psychosocial factors, such as social and personal adjustment, positive changes on pre-operative psychological parameters, satisfaction with outcome, and confidence in the ability to adopt or maintain new behavior patterns (Delin & Watts, 1995).

Despite variations in weight loss, a mean 2/3 loss of pre-surgical weight as a function of surgery remains impressive and there is little question that this procedure has a substantial and immediate impact on weight, unlike non-surgical treatments. What remains to be understood is the impact of this uniquely dramatic weight loss on the psychological and social well-being of the once morbidly obese. The physical transition is immense. Is it matched by commensurate changes in the quality of their lives? The critical decision to undergo gastric surgery is commonly prompted by life-threatening medical risks, but psychosocial factors, including social isolation, depression, discrimination, and inability to perform desired tasks, are often cited as primary reasons for deciding to have obesity surgery (Hall, Horne, O’Brien, & Watts, 1983). Interestingly, spontaneous patient comments regarding the impact of the operations have been found to
focus almost exclusively on psychological and social changes rather than on health benefits (Harris & Green, 1982).

The purpose of this study was to utilize qualitative methodology in order to 1) uncover emergent themes without limiting participants to predefined subject areas, and 2) elaborate on these themes and the relationships between, and 3) incorporate them into a meaningful, comprehensive theory of the phenomenon.
Social Perceptions: Discrimination and Stigmatization

The stigma of obesity is widespread (De Jong & Kleck, 1986). The belief that weight can be controlled and that obesity is a manifestation of character deficits seems to grant the general public permission to be openly unkind to those who are considered most obese (Lampert, 1993). This tendency has been described as the "last safe prejudice" in U.S. society (Stunkard & Sorenson, 1993). Even children have described silhouettes of an obese child as lazy, stupid and deceptive and rated them as least likeable in a series of silhouettes of all types of children, including those with other serious disabilities (Wadden & Stunkard, 1985). Negative attitudes towards obesity often translate into the behavior we generally term discrimination (Freidman & Brownell, 1995). Numerous studies have found potential evidence for obesity discrimination in college entrance rates, hiring practices, and socioeconomic upward mobility, and perhaps most surprisingly, in the attitudes of health-care providers (Wadden & Stunkard, 1985). On a more personal level, obese individuals also report a scarcity or absence of social contacts (Valtolina, 1996).

There has been only one study directly addressing perceived reductions in stigmatization and discrimination after obesity surgery. Rand & MacGregor
(1991) assessed perceptions of discrimination in 57 patients prior to surgery and then 14 months after surgery when the mean weight loss was 101 pounds. Using a 20-item questionnaire developed by the authors specifically for the measurement of perceived obesity-related discrimination, they found that more than 80% of patients answered "always" or "usually" to items relating to mistreatment prior to the surgery. Post-operatively, patients reported almost no such perceptions.

Other than this one study, decreases in discrimination have had to be inferred (correctly or not) from changes in patients' social and occupational gains after surgery. Nearly a quarter of a century ago, Solow (1977) published pre- and post-surgery data indicating that obesity surgery patients express greater satisfaction and improvements in relationships with other people following substantial weight loss. Using a cross-sectional design, Leon, Eckert, Teed, & Buchwald (1979) found significantly lower scores on the Social Isolation scale of the Minnesota Multiphasic Personality Inventory (MMPI) in 35 one year post-operative patients when compared to 24 pre-operative morbidly obese patients. In Hall et al.'s (1983) retrospective study of 30 randomly chosen gastric bypass patients, those who lost weight reported experienced improved relations with others, and as a result, became more socially active than they had been pre-surgically. Rand, Kowalske, and Kuldau's (1984) prospective study also reported an increase in social activities in 10 of 14 married intestinal bypass patients as did the majority of Hawke et al.'s (1984) 245 patients 3 years post-operatively. As early as 6 months after surgery, Kincey, Neve, Solsby, & Taylor (1996) found that patients had significantly reduced social interaction difficulties compared to pre-surgery levels as measured by the Fear of Negative Evaluation and Social Avoidance and Distress Scales. In one of the most recent
retrospective and controlled studies, Isaacson, Frederiksen, Nilsson, & Hedenbro (1997) found significant differences between 102 post-operative gastroplasty patients had made significant gains compared to 55 non-obesity-surgery control patients in indices of relations with the opposite sex and social networks in general.

In addition to improvements in social relations, employment opportunities also tend to increase. Solow (1977) reported vocational gains in 22 of 29 intestinal bypass patients studied, with 10 previously unemployed patients either finding employment or starting school, 6 receiving promotions, and 6 reporting improved job performance. At two years post surgery, 30% of Crisp, Kalucy, & Pilkington's (1977) previously unemployed patients had found full-time work while 42% of those who had been employed pre-surgically had found more personally satisfying jobs. Sixteen percent of Hall et al.’s (1983) sample of gastric bypass patients found work post-operatively and 83% reported being able to perform better at work. Rabner & Greenstein (1991) found that out of 32 patients, 30% of who had been previously unemployed became employed post-operatively, while Hawke et al’s large sample went from a pre-surgically employment rate of 38% to 60% post-surgically.

We can only speculate that the reported increase in social contacts, social activities, and occupational opportunities post-operatively are attributable, at least in part, to a decrease in stigmatization and discrimination. However, many other factors may directly influence the social/occupational advances observed in obesity surgery patients. These include, but may not be limited to, improvements in the patients’ self-esteem and psychological state, greater assertiveness, reduction of physical limitation, less debilitating pain. Considering the enormity of the prejudice against obesity, it seems
germane to investigate this issue directly with obesity surgery patients. Objective measures of discrimination are notoriously difficult to obtain as stigmatization can be subtle and self-reports of prejudicial behavior are obviously rare. Perceptions of discrimination can also be problematic, as it is difficult to tease apart potential distortions based on poor self-image from actual discriminatory practices or events. Although there is no perfect solution to this methodological quandary, a more complete picture of the psychosocial outcome of obesity surgery requires careful research into this area. With only one questionnaire study (Rand & MacGregor, 1991) available that did not ask patients to elaborate on perceived changes with behavioral examples, our knowledge of perceived reductions in stigmatization and discrimination is negligible.

Another deficit in the literature is the investigation of negative social outcomes. While weight loss typically helps to improve the social lives of patients, they may have difficulty adjusting to the demands of increased social acceptance (Hsu et al., 1998) or dramatic changes in social circles. Patients previously involved in relationships with other obese persons may find that the changes in their lifestyle (i.e., more activity, greater social contacts, and dramatic changes in eating behavior) become incompatible with that of pre-surgical relationships. Family members, friends, coworkers, and acquaintances may also react with envy, or feel threatened following the patient’s rapid weight loss. Given the capacity of the stomach is significantly reduced following restrictive surgery, social and business functions that revolve around food may become awkward. It is also possible that the patient may feel resentment at their sudden social acceptance following weight loss. Being related to positively by people who once treated you badly because of your weight may not be an altogether joyful experience.
Examination of potentially distressing social outcomes is lacking. It may be that the very paucity of research addressing this particular concern reflects the social bias against obesity. Non-obese individuals doing research in this area may have difficulty conceiving of potential social hazards that may accompany drastic weight loss. Future research efforts need to drop this assumption of unmitigated benefits and remain open to the possibility that there may be some negative outcomes, as well.

Psychopathology and Psycho-Behavioral Disturbance

Psychological symptoms such as depression, anxiety, and poor self-esteem were long believed to be prominent in the etiology of obesity, despite scant empirical support (Wooley, Wooley & Dreynforth, 1979). The current consensus among researchers is that obese populations, in general, manifest no more gross psychopathology than do non-obese populations and that psychological symptomatology is mostly a result of obesity rather than a cause in its development. (Friedman & Brownell, 1995; Stunkard et al., 1986; Stunkard & Wadden, 1992). Halmi, Long, Stunkard & Mason (1980) further extend this consensus to include morbidly obese patients, as well as moderately obese patients. There is, however, evidence of a higher rate of psychological distress in obese persons seeking hospital-based treatment (not necessarily surgery), as opposed to those who do not seek hospital-based treatment. It has been reported that obese individuals seeking hospital-based medical intervention (only a minority of whom were actively considering surgery) were more likely to have a history of anxiety and depression than obese individuals seeking dietary restriction programs or normal weight controls. Those diagnosed as binge eaters, in particular, displayed significantly more psychopathology.
and more distress than comparison groups (Higgs, Wade, Cescato, Atchinson, Slavotinek & Higgins, 1997; Fritzgibbon, Stolley, & Kirschenbaum, 1993;). These studies may actually under-represent the severity of psychological distress in the morbidly obese who are specifically seeking surgical treatment. These individuals generally weigh much more than individuals seeking other types of weight-reduction treatments and are seeking maximally invasive treatment, possibly indicating a level of distress that borders on desperation. It seems that an important surgery outcome measure would be their level of psychological distress post-operatively.

Gross Psychopathology

A handful of studies have investigated psychopathology in the morbidly obese pre- and post-operatively using the MMPI. All of them found that patients had relatively normal pre-operative profiles, with some elevations in the mood scales and, only rarely clinically significant elevations on any of the MMPI scales (Bull, Engels, Engelsman, & Bloom, 1983; Castelnuovo-Tedesco & Schiebel, 1976; Castelnuovo-Tedesco, Weinberg, & Buchanan, 1982; Leon et al., 1976; Salztein & Gutmann, 1980; Wampler, Lauer, & Lantz, 1980;). Bull et al. (1983), Castelnuovo-Tedesco et al., (1976, 1982), and Salztein et al. (1980) found no changes at all postoperatively. Leon et al. (1976) found decreases in the Depression scale and Wampler et al. (1980) found decreases in the Depression and Hysteria scales. This literature indicates that morbidly obese individuals seeking surgery do not appear to have elevated levels of psychopathology. If surgery has an alleviating effect on psychological symptoms, it is not detected by measures of gross psychopathology, like the MMPI, designed to identify clinically severe mental health.
Other attempts to identify psychopathology in the pre-surgically obese and then trace improvements post-operatively have met with more mixed results. Using an unspecified “psychiatric interview” with 68 patients prior to surgery and then 6 months later, Kulda & Rand (1980) found that 45% of their 68 patients had no change in psychopathology post-operatively, 31% had improved and 24% had deteriorated. Gentry, Halverson, & Heisler (1984) found no change in psychiatric status in their 33 patients assessed 24 months post-operatively using the Clinical Analysis Questionnaire (partly based on the MMPI) and Larsen et al. (1990) reported fewer psychiatric diagnoses 3 years post surgery. In the largest study conducted on one variant of gastric bypass surgery (Greenville Gastric Bypass), Waters, Pories, Swanson, Meelheim, Flickinger, & May (1991) found significant mental health gains in their sample of 462 patients at 6 and 12 months after surgery, as measured by the 22-item Health Insurance Study-General Well-Being (HIS-GWB) battery. Interestingly, these gains had eroded at two-year follow-up when mental health scores had returned to preoperative levels, a finding also reported by Pories & MacDonald (1993). Powers et al. (1997) reported that 44% of their 131 gastric restriction patients had Axis I psychiatric diagnoses (affective disorders being the most common). Although they did not report how many still met criteria post-surgically, almost one-half reported mental health improvements.

The dissipation of mental health gains at 2-3 years after surgery is an important finding to investigate (Hsu, Sullivan, & Benotti, 1997; Hsu et al., 1998; Pories & MacDonald, 1993). This time frame corresponds to the period that most patients have either stabilized their weight, or have begun to gain some weight back. The reasons for the timing of this supposed maladjustment in a significant number of patients are
uncertain. It is probable that patients expect life to dramatically improve once their bodies have reduced to socially acceptable sizes. The realization that many of the pre-surgical problems (relational, financial, familial, etc.) persist post-surgery may come as a shocking disappointment for some. Another possible explanation for poor adjustment after surgery may have to do with patients’ pre-surgical tendency to attribute the majority of negative life events to obesity. Following surgery, patients who previously ascribed their life difficulties to being obese (i.e., getting hired for a particular job, rejection from others, lack of self-esteem) may no longer be able to blame their weight for these negative events. These issues may indicate a need for interventions (e.g. support groups) aimed at the development of new social skills and cognitive restructuring to cope with the psychological consequences of weight loss (Hsu et al., 1998). There is clearly a need for research in this area. To address poor psychosocial adjustment after obesity surgery, however, longitudinal studies with follow-up periods of at least three years are necessary.

Despite varying measures of psychopathology and follow-up times, the overall picture emanating from these studies indicates that indices of gross psychopathology may not be the most appropriate in tracking psychological gains or losses endured postoperatively. More subtle measures of psychological distress that does not rise to the level of psychiatric diagnoses may be better able to detect changes in psychological adjustment.

*Psychological Distress*

Post-operative improvements in mood have consistency found despite the lack of findings for pre-operative psychology. Again, it is difficult to make cross-study
comparisons as measures used are mostly non-standardized structured interviews and a variety of psychometrically untested questionnaires, often designed for the study in question.

Post-operative decreases in depression and anxiety have been commonly reported since Solow’s first studies in the 1970’s (Solow, 1977; Solow, Silberfarb, & Swift, 1974;) using the Zung Depression Scale and a semi-structured interview. Halmi et al. (1980) asked their sample of 80 gastric bypass patients to compare feelings after surgery to those they had when they were dieting and found 54% reported less depression, 61% less anxiety and 69% less irritability. Crisp & Lacey (1983) reported significant decreases in anxiety and depression using the Crown-Crisp Experiential Index. Since these early studies, there have been consistent reports of decreases in depression and anxiety postsurgically (Delin, Watts, & Bassett, 1995; Dubovsky, Haddenhorst, & Murphy, 1985; Kincey et al. 1996; Larsen, 1990; LaManna, Ricci, & Giorgi, 1992; Rand, MacGregor, Hankins, 1986). Hafner, Rogers, & Watts’ (1990) study of 71 pre- and post-gastric restriction surgery patients and Bull et al.’s (1983) post-surgery only assessment study are the only ones that did not find decreases in depressive symptomatology after surgery. Hafner et al. did, however, report significant decreases in phobic anxiety.

A comparison of these studies is also plagued by the methodological problem of varying measures of mood as well as different follow-up times. However, the consistency of reports of improved mood post-surgery lends credence to the generally positive effect of surgery on the psychological adjustment of morbidly obese individuals. Unlike the lack of results evidenced in searches for gross psychopathology and post-surgical improvements therein, sub-clinical psychological symptomatology is seen in the
pre-surgical obese patient and surgery appears to have a positive impact on these more subtle indices of psychological well-being. It may, however, be important to note the finding that patients who pursue surgical intervention are often prompted by a distressing event (Sarwer et al., 1999). This could indicate that the immediately pre-surgical psychological state may not be representative of regular mood. It may constitute a misleading control that inflates differences when determining pre to postoperative psychological change.

These findings suggest that a propitious direction for future research may be in investigations of the detailed ways in which patients’ lives are changed by surgery. It is altogether possible that current standardized measures of mood may be inadequate, as they have not been standardized on obese populations. Perhaps measures specific to obesity-related affect and problems would be helpful in this regard, as well as the more qualitative investigation of postoperative changes.

**Self-concept**

Lower on the severity hierarchy of mental health are a number of variables related to self-concept that have also intermittently been studied in obesity surgery patients. These include self-esteem, self-confidence, assertiveness, and body image and they are hypothesized to be important contributors to mood and efficacy. If the literature on psychopathology and lesser psychological distress in obesity surgery patients is plagued by measurement heterogeneity, the research on self-concept is doubly affected as self-concept measures have received much less psychometric attention. However, as is the case in studies investigating psychological symptoms, the consistency of results comes close to a consensus. Twenty-five years ago, Solow et al. (1974) reported a post-surgical
“escape from helplessness” and since then, all studies investigating this issue, but one (Gentry et al., 1984), have found increases in self-esteem, self-confidence, assertiveness and expressiveness (Castelnuovo-Tedesco & Schiebel, 1976; Chandarana, Holliday, Conion, & Deslippe, 1988; Crisp et al., 1977; Delin et al., 1995; Dubovsky et al., 1985; Hall et al., 1983; Halmi et al., 1980; Harris & Green, 1982; Isaacson, 1997; Neill, Marshall, & Yale, 1978; Rand et al., 1986; Wampler et al., 1980). These positive changes in self-concept are generally hypothesized to be a direct function of major improvements in body image and satisfaction reported as weight loss increases postoperatively (Adami, Meneghelli, & Scopinaro, 1999; Chandarana et al., 1988; Crisp et al., 1977; Gentry et al., 1984; Halmi et al., 1980; Wampler et al., 1980).

It is interesting to note that none of the studies investigating body image directly address the problem of the large folds of sagging skin that are a common consequence of drastic weight loss. Many patients cannot afford to correct this problem surgically as it is usually considered cosmetic surgery and not covered by most insurance plans. Clinical reports of distress about the physical appearance of this disfiguring aspect of weight loss are not reflected in the literature. This could be because the “skin problem” is considered minor by the patients compared to their previous weight problem but it is curious that it is not mentioned at all in the research. Perhaps this is another example of research bias interfering with a comprehensive patient report of all aspects of postsurgical life.

A handful of studies have also attempted to track personality changes after surgery in mostly psychodynamic formulations. Larsen & Torgensen (1989) reported that their sample experienced decreases in oral scores (less neurotic) and increases in obsessive-compulsive tendencies (more disciplined). Using the Meta Contrast Technique
to assess defensive organization, Ryden, Olsson, & Danielsson (1989) found reductions in defensiveness and immature identity. Two studies by Chandarana et al. (Chandarana, Conlon, & Holliday, 1990; Chandarana et al., 1988) used the Millon Clinical Multiaxial Inventory (MCMI) and reported improvements in personality profiles postoperatively.

**Binge Eating Behavior**

Among obese persons, the incessant strife to lose weight and maintain the loss is encumbered by the high prevalence of eating disturbances, primarily binge eating. In two different samples of 92 pre-gastric bypass patients, Adami et al. (Adami, Gandolfo, Bauer, & Scopinaro, 1995; Adami, Meneghelli, Bressani, & Scopinaro, 1998) found that over 40% met the criteria for binge eating disorder (BED). Hsu et al. (1997) investigated the prevalence of eating disturbance in 27 pre-gastric bypass patients and reported that 3 patients met DSM-IV criteria for binge eating disorder, while 22 reported presurgical eating disturbances. Kalarchian, Wilson, Brolin, & Bradley, (1998) classified 25 of 64 (39%) gastric bypass patients as binge eaters. Of 125 gastric bypass patients, Saunders et al. (1998) reported that 33.3% of the respondents had severe binge eating problems and that 73% engaged in grazing behavior (snacking continuously). Powers, Rosemurgy, Boyd, & Perez (1997) studied a group of 116 bariatric surgery patients and found that 16% met DSM-IV criteria for binge eating disorder, however preoperative binge eating occurred in 52% of patients.

Clearly a significant number of individuals go into obesity surgery with pre-existing eating disordered behavior. To maintain the weight loss that typically follows surgery, they have to change their eating patterns dramatically. This is obviously a behavioral issue that the surgery alone cannot remedy. Post gastric restriction diets have
extremely stringent guidelines, such as eating only three very small meals per day, eating very slowly, and avoiding soda, sugar, high-fat foods, and liquid with meals. An important question that is recently receiving more research attention has been the extent to which surgery actually results in a normalization of eating patterns.

The only older psychosocially oriented studies that investigated eating patterns in any detail were those of Mills & Stunkard (1976) and Crisp et al. (1977), and their samples had had intestinal bypass surgery which, unlike gastric restrictive surgery, does not impose serious dietary regimen. Despite this, Mills et al. (1976) found a general normalization of eating behavior with less food consumed with fewer meals, less food at each meal, less eating between meals and less eating in response to strong emotions at an average of 37 months after surgery. Crisp et al. (1977) reported a significant decrease in bulimic episodes, secretive eating, and hyperphagia at 6 months after surgery. Results since then have been mixed. Hsu et al. (1997; 1998) reported post-surgical improvement in eating disturbances in most patients but an erosion of this improvement around 2 years after surgery. On the other hand, Adami et al. (1999) found that by the third postoperative year all patients who had been binge eating presurgically (27 out of a sample of 63 gastric bypass patients) had stopped.

Severe binge eating becomes virtually impossible due to the severely restricted stomach. Most gastric bypass patients claim they would still overeat if it were not for the vomiting and early satiety they experience (Powers et al., 1997, Rabner et al. 1991). Powers et al.’s (1997) 116 patients reported they were unable to binge because of the early satiety they experienced as a result of the surgery. Interestingly though, the
majority of these patients (79%) were vomiting occasionally and attributed this to eating certain foods or quantity of foods that they knew they should not eat.

If gastric restriction surgery patients can no longer binge eat, the question remains, how do those that regain weight do it? Patients who regain weight tend to develop maladaptive eating patterns, including continuous snacking and consuming large quantities of soft or liquid foods, which pass quickly through the bypassed stomach (Hsu et al., 1998). Sugarman et al. (1992) have also posited that failure of gastric restriction surgeries may also be attributable to the loss of the “dumping syndrome.” This is a syndrome consisting of dizziness, palpitations, lightheadedness, nausea and sometimes the sudden intense urge to vomit or defecate in response to the ingestion of certain foods with high carbohydrate content (Hsu et al., 1998). According to Rabner et al. (1991), patients continued to snack after surgery (in contradiction to prescribed diets) and, although they were consuming about 25% of the calories they once ate, the relatively high percentage of calories from fat (37%) was no different from that prior to surgery. Thus, the quality of the diet may remain unhealthy despite a reduction in quantities ingested.

The question of eating disturbances is particularly important to our increased understanding of failed outcomes, most of which happen approximately 24 months after surgery. Shamblin et al. (1987) proposed a possible explanation for this particular time period in which presurgical eating disturbances tend to resurface and contribute to weight regain. As patients are rapidly losing weight, they receive a substantial amount of external stroking; people around them are complimenting and encouraging them. After weight stabilizes, typically after the first year, the external stroking decreases or stops.
altogether and patients lose their external source of reinforcement thereby consoling
themselves as they did presurgery – by eating. Perhaps identifying and addressing eating
disorders prior to surgery could prevent them from resurfacing when the external
motivation has ceased. These findings suggest the need for psychoeducation in order to
prepare patients for potential future pitfalls and ways in which they may effectively cope
in order to prevent regaining weight. Gastric restriction surgeries are a “tool” to help
patients lose weight but the surgery cannot work without some dramatic behavioral
changes.

Marital Adjustment and Sexual Functioning

The literature addressing marital functioning and sexuality following obesity
surgery is surprisingly scarce considering the intuitively reasonable assumption that any
such dramatic life change would have a substantial impact in these areas. A number of
studies investigating psychosocial outcomes in general have included occasional
questions regarding marital adjustment and sexual activity, but only 2 studies have been
devoted exclusively to an investigation of these issues, the most recent being 18 years old
(Rand, Kuldau, & Robbins, 1982).

Among the former studies in which marriage and sexuality questions are part of a
larger battery of questions, results have been generally positive, although difficult to
interpret and lacking in detail and richness. In their study of 12 superobese women
following intestinal bypass surgery, Castelnuovo-Tedesco et al. (1976) reported that
patients claimed to have “a fuller sexual life” after surgery. Dano & Hahn-Pedersen
(1977) also reported that patients experienced improved sexual activity postoperatively.
Crisp et al. (1977) had more mixed results in their foray into questions of marriage and sex. Although 46% of their married patients and 18% of their unmarried patients reported a postoperative increase in sexual interest, they also reported that only 2 out of 10 patients in their prospective study claimed their marriage to have improved. The reasons given for the marital friction revolve around the conflict posed by the patient’s new autonomy as they lose weight. On the other hand, Dubovsky et al. (1985) reported general increases in marital and sexual adjustment and speculated the improvement to be attributable to the benefits, rather than the problems, of the patients’ new found autonomy. They posited that when patients lose their fear of abandonment they are able to insist on changes that will improve the marriage. Chandarana et al. (1988) asked their sample whether their sex life had improved or worsened and found 77% responded “improved” to “much improved.” Like Crisp et al. (1977), Hafner et al. (1990) also found mixed results in terms of marital quality postoperatively. Using the Marital Attitudes Questionnaire (MATE), they found only one significant postoperative change and that was a decrease in the Affection Feeling/Behavior scale of the measure. They also reported that marital conflict centered on issues of control and power. Finally Isaacson et al. (1997) found improvements post operatively in perceptions of appreciation by the opposite sex, quality of sex life, and relations with partner.

Of the 2 studies (4 articles) concentrating exclusively on marital relations and sexual life, one found a deterioration in relations while the other reported improvements. Neill & Marshall (1978) interviewed 14 married intestinal bypass patients and their spouses preoperatively and at an average of 24 months after surgery. Of the first 12 patients, 9 reported their marriages to be unsatisfactory presurgically although they

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reported they felt “lucky to be married.” Of the final 14 couples, 12 reported marital disruption post-surgically with spouses commonly reporting anxiety and jealousy. The conflict, again, was reported by the authors to revolve around issues of marital dependency and control, especially in the areas of social contact, distribution of family workload and employment. Obesity is interpreted to be a stabilizing factor in the marriage pre-surgically despite low levels of satisfaction. The role changes that accompany the weight loss destabilize the marriage and are presumed by the authors to lead to discord. Along with marital deterioration, they also found that 9 couples reported an increase in interest in sexual fantasies and intercourse.

These negative outcomes have not been replicated in other marital studies. Rand et al. (Rand et al., 1982; Rand et al., 1984) examined the marriages of 54 patients pre and 1 year and 3 years post surgery. Pre-surgically they found more marital discord in obesity surgery patients than in controls, with 33% endorsing that obesity posed sexual problems. One year after the surgery 52% reported their marriages to have improved, 42% reported the marriages to have stayed the same and 61% reported their sex life to be better. At 3 years post-surgery, 87% of the follow-up sample reported their marriages to be good with 63% claiming they are either better or unchanged. Marital adjustment measures 3 years post-surgery were no different than normal weight controls. Goble, Rand, & Kuldau’s (1986) further analyses of this data set attributed improvements in marital function to increases in boundary activity, as couples participated more in social activities. Alluding to the aforementioned question of marital stability versus marital
satisfaction, Rand et al. (1982) concluded that good marriages pre-surgically either stay the same or improve after surgery, while the surgery has a negative effect on pre-surgically problematic unions.

The dearth of data on marital outcomes in obesity surgery is unfortunate, as marriages may be instrumental in the patient’s ability to adhere to the life changes required of them. It is difficult at this point to reach any conclusion about the impact of surgery on marital adjustment. Isolated questions in larger psychosocial batteries are likely to be inadequate indices of the complexity of marital relations and concentrated attention on the measurement of marital outcomes is sorely lacking. Patient spouses should be included in future studies as they are important informants with potentially valuable information that the patient may be less aware of in their concerted effort to lose weight. Again, the limited amount of research in this particular area may be reflective of the pervasive stigmatization associated with obesity (e.g., sex and relationships cannot be central to morbidly obese people).

Future Research Directions

More research is needed to elaborate and consolidate our knowledge about the impact of obesity surgery on perceptions of stigmatization and discrimination, psychological distress, and the quality of marital and romantic relationships. However, there are also other areas of pointed relevance to the obesity surgery patient that have received little to no attention at all. Among these are obesity-related pain, general quality of life, and gender issues.
**Obesity Related Pain**

One of the primary reasons one sample reported as their reason for attending a weight loss clinic was the reduction or elimination of debilitating bodily pain (Fontaine, Cheskin & Barofsky, 1996). Bodily pain may occur in one half of the population seeking medically based treatment for obesity (Barofsky, Fontaine, & Cheskin, 1977; Fontaine et al., 1996), with low back pain the most prevalent, followed by arthritis, chronic headache, and chest pain. These pains are perceived as having a debilitating effect on normal daily activities (Fontaine et al., 1996) and exercise.

As weight decreases, obesity related pain should subsequently decrease, and the alleviation of pain should contribute to a more active, unrestricted lifestyle. The effect of weight loss on chronic pain following obesity surgery, however, has not yet been investigated directly (Fontaine et al., 1996). The increases in physical activity witnessed in many outcome studies may be directly attributable, at least in part, to a reduction in obesity related pain. It is also possible that patients with presurgical pain are more motivated to keep weight off as they fear the recurrence of pain with weight gain. Pain measures may also be instrumental in understanding issues of substance abuse in the morbidly obese. Considering the ubiquity of obesity related-pain in the non-surgical literature, it is curious that this has not appeared as an outcome measure in any of the studies here reviewed.

**General Quality of Life**

As is the case in individuals with any number of somatic disorders, morbidly obese persons are faced with multiple obstacles in their daily living that can have a profound impact on general quality of life, some of which this review has already
touched on. General quality of life measures bring together a number of factors hypothesized as a whole to measure the overall quality of one’s life without privileging any one area. For example, the Medical Outcomes Survey SF-36 (Ware & Sherbourne, 1992) measures health-related quality of life (HRQOL) using the following subscales: physical functioning, physical role, bodily pain, general health, vitality, social functioning, emotional role and mental health. Researchers working with somatic disorders have generally found these measures to be specifically useful in the investigation of outcomes for medical procedures.

Using the SF-36, Fontaine et al. (1996) compared the HRQOL of 312 consecutive obese persons seeking outpatient treatment at a weight management center. Substantial decrements in HRQOL were reported among obese persons. In 1995, Kolotkin, Head, Hamilton, & Tse published a preliminary report on the development of a new instrument, the Impact of Weight on Quality of Life (IWQOL). Results indicated that the impact of weight on quality of life generally worsens as the severity of the obesity (BMI) increases (Kolotkin et al., 1995). Barofsky et al. (1997) found that obese patients who report pain are significantly impaired on all HRQL domains. Sociodemographic factors, BMI, or depression could not account for the differences. The pain appeared to be associated independently with significant decrements in HRQOL. Of the studies available, researchers typically agree that obesity profoundly affects health related quality of life.

Despite the evidence of HRQOL deficits in the morbidly obese, to the authors’ current knowledge, there is no research that systematically studies the effects of surgical weight loss using standardized quality of life instruments. The only study investigating
the post-surgical quality of life retrospectively found that gastroplasty patients reported significant improvement in quality of life as measured by a little known instrument (Isaacson et al., 1997).

It is possible that QOL is the single most important determinant in the ultimate outcome of obesity surgery, yet there is no empirical evidence to support this hypothesis. Perhaps in a prospective study, one could identify fluctuations in quality of life that correspond to the significant two year period in which some patients begin to regain weight and others do not. Those who are resistant to regaining weight are likely to have increased their overall quality of life and fear the loss of these positive life gains (e.g. increased social life, greater mobility, and increased self-esteem). Those patients whose life quality has not significantly improved may have less of an incentive to maintain the proper lifestyle necessary to prevent weight regain. The increased use of standardized quality of life measures would also facilitate comparisons between obesity surgery studies and those already using these instruments to gauge the efficacy of other interventions.

Gender

Despite the fact that women represent only slightly over half of the morbidly obese population (Kuczmarski, 1992), they represent over 80% of obesity surgery patients (Brolin et al., 1989). The percentage of women participants in the outcome studies included in this review ranged from 63% to 100%, with 70% of studies reporting gender ratios over 4:1. These numbers beg the question; why are morbidly obese women so much more likely to opt for surgery? The research has not addressed this question at all, although Wadden & Stunkard (1985) speculate that the answer must reside in the
consistent finding that obese women in general are stigmatized to a greater extent than obese men. The question has yet to be investigated directly. Kolotkin et al.’s (1995) preliminary report on their new instrument, Impact of Weight on Quality of Life, hints at some interesting gender differences. They found that even at the lowest BMI group studied, women reported that weight had a substantial impact on Self-Esteem and Sexual Life, suggesting that women experience distress in these areas at relatively low BMI’s. Men, on the other hand, remained relatively unaffected in these areas, with the exception of those who fall into the highest BMI group. It is at this most extreme level of obesity that the self-esteem and sexual lives of men are affected to the same degree as women.

The low numbers of men in the obesity surgery studies have not made feasible gender comparisons in either motivation for surgery or outcomes. An effort should be made to recruit men for future studies to investigate gender differences. If differences in fact exist, they could be useful in enhancing our understanding of factors that lead to successful outcome as well as the motivating forces behind this fairly radical intervention, for both sexes.

General Methodological Considerations

It is not unusual for early research efforts to be characterized by a heterogeneity of measurement attempts and the problem of cross-study comparisons. This is particularly common in the measurement of psychosocial outcomes associated with medical interventions, as they are not generally considered the focal outcome, which is primarily medical. However, 25 years after the first psychosocial investigations of
obesity surgery, it is time to consolidate our efforts and streamline the research so that we can proceed with both pre-surgical assessments and post-surgical interventions that enhance all types of obesity surgery outcomes.

The measurement of outcomes in the studies reviewed seems stuck between appropriately standardized measures and purely qualitative attempts. The result is the common use of structured and semi-structured interviews, the characteristics of which remain unclear in almost all of the outcome studies. It is thus not only difficult to make cross-study comparisons; it is problematic and, sometimes, impossible to understand measurement in any one given research attempt. Future research would be well served by both the strict adherence to psychometrically sound instruments and the, as of yet uninvestigated, qualitative approach to obesity surgery outcomes. The latter has the potential to 1) provide the richness of detail currently missing in the outcome literature; 2) escape researcher assumptions/bias about potential outcomes (positive and negative), and; 3) guide the relevance of future quantitative outcome studies.

The standardization of existing measures on obese populations would also be useful, as current comparisons to normal weight controls may not be appropriate. For example, the use of depression measures with medical populations has in the past few years been considered problematic as these individuals tend to score high on the somatic symptoms of depression (e.g. fatigue, appetite disturbances, sexual desire) for reasons related to their medical condition rather than depression. The result has been an overestimation of depression in these groups. Morbidly obese individuals would be vulnerable to this measurement dilemma. The development of obesity-specific measures may also improve our ability to understand the changes these patients undergo.
Finally, post surgical assessments have to take place at least two years after surgery in order to elucidate outcome. The increasing finding that even impressive weight gains are lost by a significant number of patients two or more years after surgery is starting to render shorter follow-up times insignificant from a research point of view, unless the aim is to intervene early clinically. There may also be an increased patient bias in early follow-up assessments to report positive results. The principle of cognitive dissonance could be argued to possibly effect a post-behavioral (surgery) attitudinal shift toward justification of the behavior. Furthermore, the research is commonly conducted in the very clinics where patients got the treatment and there may be some unintended pressure to “please the doctor.” Ultimately, the relationship of psychosocial measures to deterioration in the long term has the potential to introduce important interventions that target whatever hypothesized psychosocial factors may be at play (e.g., unrealistic expectations, inability to cope with major life changes, disappointment with resulting quality of life) and must be seriously studied.

The scarcity of long-term data can be attributed, in part, to the difficulty tracking patients. Those patients “lost to follow up” represent a frustrating problem in analyses of results of obesity operations (Brolin et al., 1989; Hsu et al., 1997). Some patients are not lost to follow-up but seem to be refusing to come in for follow-up visits (Powers et al., 1997). Patients who are doing well may not feel they need to return for follow-up and those doing poorly may either feel guilty that they have failed the procedure (Sugarman, 1992) or angry that the procedure has failed them. More attention needs to be given to this problem, and researchers are only recently starting to employ a variety of strategies in order to ensure patient follow up.
Literature Review Conclusion

Kirschenbaum & Fritzgibbon (1995) claim that “the first 25 years of research on the treatment of obesity has had its share of disappointments.” However, recent surgical developments promise to improve the lives of those afflicted with morbid obesity. At the core of these developments is an increased awareness that morbid obesity is a serious disease that “is not the result of immorality or gluttony but is, in most cases, a disabling genetically determined handicap” (Pories et al. 1993, pp. 195). What still remains unclear is the extent of the psychosocial impact of this surgery and the ways in which these psychosocial outcomes are related to the ability to maintain weight loss. The empirical evidence available on discrimination, psychological distress and marital/sexual adjustment seems to be pointing in a positive direction, but a more integrated and methodologically sound research effort is necessary to raise our knowledge of psychosocial outcomes to the level of medical ones. It is not just a question of documenting gains or losses but of actively using this knowledge to intervene clinically and increase the long-term holistic success of these surgeries.

Purpose of the Present Study

The vast majority of obesity surgery literature to date has utilized quantitative measures in an attempt to assess what researchers presuppose to be the specific constructs associated with morbid obesity and psychosocial outcomes of surgery. Through the use of qualitative methods, the present study intended to reconstruct our understanding of the specific psychosocial phenomena associated with gastric bypass surgery, but this time inducted directly from the patients’ point of view. Through qualitative methodology the
individual characteristics addressed in former studies were coherently linked together in order to formulate a theory that exemplifies the experience of gastric bypass surgery patients, while honoring the uniqueness of each individual's experience.
CHAPTER 3

METHODOLOGY

Participants

Participants consisted of 31 patients who had undergone gastric bypass surgery at a university-based hospital. Time elapsed since surgery ranged from six months to eleven years. The mean age of patients was 41 years (range 30-53). Ninety-four percent were European-American (N=29) and 6% were Latino (N=2). Twenty-two of these patients participated in a ninety-minute individual interview, while the remaining 11 were assigned to either male- or female-only focus groups.

Procedure

Participants for the present study were recruited through a variety of methods. Patients were either approached by the author during follow up clinic appointments or support groups, notified via an online gastric bypass group, or invited to participate by their surgeon. A brief description of the procedures involved in the interview and focus groups was provided. The patients were also informed of their confidentiality, reassured of their right to withdraw at any time, and provided with the relevant contact information. Patients who wished to be part of the study were given an informed consent to sign and assigned to participate in either the focus group discussion or the in-depth individual interview. Patients were informed that the interviews and group discussions would be
The majority of interviews took place in a familiar, central location compatible to the physical needs of patients still confined by limitations common to morbidly obese persons (i.e., large, sturdy chairs, handicap access, reasonable distance to restrooms, available parking in the vicinity). Seven individual interviews were conducted within the patients' home or place of occupation. While the likelihood exists that patients who chose to participate in this study self-selected, the present qualitative study is more concerned the lived experience of individual patients, than with random selection of respondents. Qualitative approaches allow for the potentiality that alternative and heterogeneous perspectives could be extrapolated from other participants and that these perspectives would be equally true.

**Interview**

The initial portion of the individual interview asked patients in an open-ended manner to describe the ways, if any, in which gastric bypass surgery had affected their life. Once patients were no longer able to elaborate on their perception of the ways in which the surgery and attendant weight loss had affected their life experience, the interview proceeded with semi-structured prompts of target areas not yet addressed (see Appendix I). These areas included relationships, occupational status, social life, activities, moods, feelings about self, and feelings about the future. Although the interview prompts were designed with some influence from the literature on the psychosocial outcomes of surgery, as well as from the authors' clinical experience as a
support group facilitator, they were generic in nature and were designed to elicit elaborate responses regarding experiences that were central to patients’ lives. All interviews were conducted by the author.

Focus-Groups

The nine remaining patients participated in either a male- or female-only focus group. Two additional male patients who participated in the male-focus groups were not included in the data analysis, as six months had not elapsed since their surgery. However, due to the difficulty recruiting local male participants (less than 20% of entire gastric bypass patient population), they were asked to participate in the interview to help facilitate the discussion. The duration of each focus group was approximately 90 minutes. Questions utilized in the group interview were derived from the data analysis of the individual group interviews. The focus groups were designed to check the emergent theoretical categories from the individual interviews.

Proposed Data Interpretation and Analysis

The interview transcripts were analyzed using the grounded theory method of qualitative analysis (Chamberlain, 1999; Charmaz, 1995; Glaser, 1992; Glaser & Strauss, 1967; Strauss & Corbin, 1990). Although some debate exists regarding the procedures befitting grounded theory (Chamberlain, 1999), grounded theorists generally agree on several fundamental strategies central to the methodology. The basic premises essential to grounded theory are that the theory must emerge from the data, rather than from preconceived notions formulated by the researcher, and that this must go beyond a purely
descriptive account to a theoretical formulation of the phenomenon being studied (Chamberlain, 1999). The essential methodological strategies of data analysis, interwoven with data collection, were utilized for the present study. After the transcription of taped interviews, data were initially broken apart line-by-line into incidents, labeled and sorted during the process of open coding. This process continued as incidents were compared, conceptualized, and categorized. These substantive and theoretical categories were then further examined for their various dimensions, properties, and relationships to other categories. The ongoing process of constant comparative analysis, a hallmark of grounded theory, involved constantly checking and comparing each new concept and category with those identified before and after, and continually refining the emergent theory (Glaser, 1992; Strauss, 1967; Strauss & Corbin, 1990). Ideas, intuitions, and hypotheses were constantly checked and confirmed against the data.

As categories and their interrelations between them were discovered, theoretical sampling was utilized to support or disconfirm the findings. Theoretical sampling in grounded theory analysis refers to the deliberate interweaving of data collection and data analysis throughout the study. Patient sampling continued until the point at which no new information was emerging related to the central theory of the phenomenon under study, a process known as ‘saturation’ in grounded theory. Through the use of these procedures, the central process underlying the phenomenon, referred to as the core category, was eventually determined. The core category tied all categories together and unified the grounded theory.
To ensure that in the process of coding we had not distorted patients' responses, patients who had participated in individual interviews were each hand delivered a copy of their transcripts as well as a summary of the categories and emerging theory. Patients were encouraged to rate the extent to which the researcher had accurately depicted their experience as well as provide any additional comments. This process helped to ensure that the deductive and inductive processes that are integral to building a sound grounded theory were operating concurrently, without the authors' preconceptions guiding the analysis. In addition, a second researcher was consulted throughout the entire data analysis process to assist the primary author by challenging ideas, assisting in the construction of categories, and building the theory.
CHAPTER 4

FINDINGS

Participant Verification of Coding and Theory

All patients who participated in the individual interview were given the opportunity to review the transcription of their interview as well as a summary of developing categories and emergent theories depicted in their transcription. They were encouraged to provide feedback by rating how accurately they felt the researcher had categorized and conceptualized the content of the interview on a scale from 1 to 10, with 10 being "completely" (See Appendix II). Patients who returned the form (N=14) provided an average rating of 9.3 (range 7-10). Patients were also prompted to write any changes they would make or information they would like to add. None of the responses provided suggested alteration in the content of the summaries they were given. Several patients did describe the interview process as being very beneficial to them. After struggling through a weight loss plateau, one patient explained how the opportunity to read her transcript and carefully examine the researchers' summaries provided the exact motivation she needed to lose twenty more pounds. Another patient described the impact his ninety minute interview had on him:

I appreciate you giving me the opportunity to participate in your research, and found the experience to be very interesting and enlightening. It was the first time I actually was faced with looking at the reality of being overweight.
Overall, patient ratings and feedback indicated that the researchers had accurately interpreted both the content and the meaning of their experience following gastric bypass surgery.

The Grounded Theory

The core process that emerged from participants’ descriptions of life after gastric bypass surgery can best be described as one of rebirth and transformation. The surgery seemed to be a landmark in their psychic landscape that created a clear, dichotomous division between their old, presurgery life and their new, postsurgery one. The cascade of life changes attributed by participants to the surgery and consequent weight loss were numerous and varied. Some changes brought about unqualified benefits and were universally described as unconditionally positive in their impact. A greater number of life changes, however, seemed to generate tension. This tension was not described as necessarily negative but as challenging – the tension of becoming a full participant in a complex world with new demands. Old ways of dealing with life’s issues no longer applied and new ways were unfamiliar, requiring a set of skills at which participants were not yet necessarily adept. Postsurgery life seemed to consist of a daily negotiation of these tensions – exciting at times, frustrating at others. Grounded in participants’ accounts, this emergent theory proposes that the extent to which patients successfully negotiate the tension created by the surgery/weight loss may be an important determinant of the long-term outcome of gastric bypass surgery. A detailed elaboration of the grounded theory in the words of participants is presented in the rest of this “Findings” section. For a schematic representation of the proposed theory, see Figure 1.
Figure 1. Schematic representation of grounded theory.
Rebirth/Transformation

Data support the core process of rebirth or transformation as being central to the outcome of gastric bypass surgery. This process helped to explain patients’ experience as they progress from presurgical to postsurgical life. Respondents presented this concept of transformation/rebirth in various forms, such as a getting a second chance at life, suddenly becoming visible to a world in which they once felt insignificant, and developing a newfound sense of freedom from preoperative entrapment in their own bodies. This process was documented by patients’ statements such as:

We always say, “Man if I could just be reborn and do it all over again.” I think literally what we go through is a rebirth. And that’s neat, to go through that...literally we get a chance to start all over...physically it’s being reborn, as well as emotionally.

I can do anything I want to now. So there is a sense of freedom that I never had before.

Patients who recall suffering preoperatively from severe psychosocial impairment and desperation tended to experience the most dramatic rebirth/transformation. Similarly, patients who were massively obese typically lost weight more rapidly than the average patient, perhaps making this evolution more remarkable. One such patient who, prior to surgery, spent a significant portion of her life at 500 pounds explained:

It’s an amazing transformation. I feel like I’ve woken up in someone else’s life.

A patient with a preoperative weight of over 400 pounds described her experience similarly:

I’ve seen myself change so much during this process, I mean, it’s just really been like being reborn in a way.

All of a sudden I feel like people are like seeing me for the first time, like, like a ghost is now visible, you know, to people.
While patients suffering from extreme preoperative weight-related physical and psychosocial impairment were likely to experience this rebirth/transformation with the greatest intensity, numerous patients who began this process as 'lightweights' (term patients used to describe those who typically are less morbidly obese preoperatively than average) also described a similar phenomenon. As one such patient remarked:

I think what it is, is that you are invisible. As a fat person, you are invisible, and then all of a sudden, you become visible. I am no longer invisible. I am seen as a human being and before I was not.

The experience of surgery as a rebirth/transformation sets up a dichotomy between the old presurgery self and the new postsurgery self. Every aspect of life after surgery seemed to be compared to its presurgery analog in a search for contrasts. The search definitely yielded a long list of change for most individuals. An analysis of these changes showed that they could be generally categorized into either unqualified positive life changes or changes that generated some degree of tension even if they seemed positive at face value. There was hardly a mention of any change that could be easily classified as immediately negative.

*Positive changes*

Patients consistently regarded certain domains of their transformation/rebirth as unequivocally positive. These domains included increased activities/abilities, resolved medical conditions/pain, the ability to envision a future for themselves, enhanced parenting ability and improved occupational status.

*Increased activities/abilities.* The most prevalent benefit/positive outcome cited was an increase in activities and physical abilities. When referring to their preoperative level of functioning, patients oftentimes equated morbid obesity to a disability in which
walking, breathing, standing, and sleeping had become a challenge. Their physical size restricted their capacity to be physically accommodated in restaurants, planes, public restrooms, amusement parks, hospital waiting rooms, and their own vehicles. They recalled feeling anxious regarding potential physical restrictions in public places and either planned their engagements carefully, opted to stay home, or faced these challenges with difficulty, and oftentimes, humiliation. Surgical weight loss alleviated these restrictions and consequently, patients regarded their ability to physically function and “fit” into society as an enormous benefit.

"We don’t have to think about where we go anymore. We can go to a movie theater and I can fit in a movie seat."

I had to plan things more and it was so restrictive and I just don’t have those restrictions now that I had before.

"It is a big accomplishment for me to bend down to put my shoes on or put my socks on or tie my shoes or walk without my cane or get in my van and be able to put the seatbelt on every time without fighting it trying to squeeze me to death or have to wear a seatbelt extender…to cook, to do laundry."

"I feel good. I can walk. I have my wheelchair sitting in the corner of my bedroom and I have not once got into that. I don’t need it anymore."

"I can do things. I can do laundry. I can cook a meal. I can stand up and do dishes. I can load the dishwasher. I can put my shoes on. I can cross my legs. I can bend over to tie my shoe!"

"I’m physically capable now to have a job, and be able to run a household, and be able to raise kids."

_Resolution of medical conditions/pain._ The complete resolution, or dramatic improvement, of life-threatening medical conditions and obesity related pain was also regarded as an unqualified positive outcome of surgical weight loss. Several of the common obesity-related comorbidities are not only life threatening but they also drastically impact the patients’ quality of life and daily functioning. The most common of
these are stress urinary incontinence, respiratory problems, joint pain and sleep apnea, all of which tend to resolve almost miraculously shortly after surgery. Although several patients experienced health complications as a result of surgery, they were always regarded as minor in comparison to the health benefits:

Probably within two weeks of surgery my breathing medicine was gone, most of the joint pain was gone. I lost very fast. I lost over 100 pounds the first month.

My blood pressure has been normal for, God, two years now. Incontinence went away almost immediately, the sleep apnea, almost immediately. I’m down to sleeping on one pillow, like a normal person, as opposed to four or five being propped up in bed because I’m afraid I’m, you know, gonna stop breathing.

I have no sleep apnea, no high blood pressure, I don’t take no medications. I can get up in the morning and I can get out of bed without my back hurting.

I had a lot of weight associated health problems. I walked with a limp, and I was in constant pain. I don’t walk with a limp anymore. As far as any health related problems that I was having because of the weight, all of them have cleared up due to losing the excess weight. My health has drastically improved since surgery.

Envisioning a future. Prior to seeking surgery, obesity-related death seemed inevitable for many patients, shortening their life span and robbing them of years with loved ones. Often it was the fear of premature death that initially drove patients to seek surgery. Dramatic improvements in health status and self-efficacy immediately following surgery changed the dim ways in which patients once regarded their future. After surgery, patients began to envision the prospect of a longer, healthier, more satisfying life. The majority of patients expressed desires to do and try things in the future that were once considered impossible. These comments illustrate the change in outlook regarding the future:

I figured I would either die at 69 or kill myself before then. I can see past that now. I can see that there’s a life after that now.
I didn’t want kids. Because, well why should I have kids if I’m just going to die? Now, I am much more eager to have kids.

Maybe instead of dwindling into this person in my sixties who was going to be dependent, on medications, and, now I think I have the likelihood of a much longer life and a much fuller life.

He [spouse] didn’t think I would live past fifty...Now, I can see that mental image of us sitting on the rocking chair in our eighties, holding hands.

There’s a lot of stuff I wanna try and do again that I missed in my life that I wasn’t able to do.

At least I have something to look forward to now, where as before I had no life.

*Enhanced parenting ability.* A common motivation to undergo surgery was the desire to be a more effective and involved parent. Physical and emotional consequences of morbid obesity were obstacles to parenting. Engaging in play activities with children, taking them out to public places, and teaching them basic skills, such as hygiene maintenance and household chores, were difficult tasks for many patients and were either delegated to other household members or did not occur at all. After surgery, energy, mobility, and confidence increased. Parents usually increased the quantity and enhanced the quality of time spent with their children. Some patients found that the eating habits and activity levels of their children began to improve as well:

My husband was doing everything, changing diapers, getting on the floor helping the kids. It had gotten to the point where he was literally doing everything. Now, I’m an equal parent.

I feel like I can take her [daughter] to the park or I could take her to the pool, or I can do stuff with her that I didn’t really care to do before. It was just too physically exhausting.

It’s [surgery] changed me as far as being a mom. I can do the things I want to with my kids.

It's about being able to go the park and fly kites and go out and go to concerts and just do stuff [with kids] and take trips together, instead of being in the four walls.
Even the baby has lost weight because we don’t eat like we did before.

*Improved Occupational Status.* Many patients expressed that prior to surgery they had settled for less than satisfying jobs because they themselves believed they were incapable of anything more enriching. After surgery there was a dramatic improvement in the occupational status of most patients. Two patients did feel as if their new levels of assertion created some stress in the workplace but for the majority, occupational changes were consistently regarded as beneficial. Some attributed this change to increased physical abilities and energy:

I’ve taken on another job and started my own business. I could have never done that. Before, I had no hope of going back to work. Now, I’m starting my own business. My productivity has gone way up and I’m not working any harder so it’s kind of amazing.

Often patients attribute these changes to improved treatment by employers, coworkers and people they interact with in the workplace:

I can tell you there is more respect. I think that they thought because I was so big and everything that my choices were very limited, that I was kind of stuck there.

It’s strange as that is to think that someone respects you or they think you have more knowledge or whatever because of the way you look. It’s strange, but that’s what happened to me. So, it helped me with my business and it’s helped me with my career.

I don’t have to overcome as much as I used to because in my business there is so much competition and the first thing they see is your exterior.

Patients also reported going back to school to pursue a career in a desired field, moving to a more public position within the same field, and some even returned to work after spending considerable time on government assistance for obesity-related disabilities.
Tension-generating changes

While the aforementioned positive outcomes were consistently affirmed, weight loss and its accompanying changes did produce many changes causing tension in various aspects of patients’ lives. These tension-generating changes were not necessarily negative in nature but they posed dilemmas that patients felt they had to work through or struggle with. These can be classified as existing in three primary spheres of patients’ lives: the self and existential concerns, the social realm, and the domain of skills acquisition. The majority of the respondents spent significant portions of their lives as morbidly obese individuals. The physical transformation that these patients experienced occurred at a much greater rate than their psychosocial adjustment to life in their new bodies. This was evidenced by patients’ statements such as:

It’s helped me in a lot of respects come to terms with what I was searching for. It’s created other things, but in certain aspects as far as how I view my soul, it’s helped me come in contact with that...it’s also created a lot of things that I don’t want to deal with.

It’s been a struggle because I’ve had to confront issues in my life that I’m not happy with. This is still a constant mental struggle.

Some of the things I was prepared for, some I totally wasn’t. They totally blind-sided me.

Self/Existential

A number of the changes mentioned seemed to be directly related to patients’ identity and sense of self. Many patients expressed that the changes after surgery had a lot less to do with the numbers on the scale than with existential questions such as who we really are and what we really value. Within this constructed category of self and existential issues, we found evidence of tension stemming from the following domains:
increased feelings of vulnerability, changes in personal values and self-focus, surgery as evidence for failure, extent to which weight determines self and perceptions of self, and new issues pertaining to appearance.

*Increased feelings of vulnerability.* One major existential challenge for many patients was the realization that problems they had preoperatively blamed on weight persisted after weight loss. These patients recognized that they had used their weight as a shield, a way of protecting themselves from addressing painful fears, obstacles, or rejection. Patients recalled using weight as an excuse for not accomplishing certain goals. As weight became a non-issue, patients could no longer use it as their defense for not trying or for failing. Many patients blamed society for leading them to believe that their lives would be perfect if they could lose their excess weight. For many patients the tension built as weight loss uncovered weaknesses, insecurities, and realities that the old self did not have to deal with, and the new self was not entirely prepared to face. Patients were forced to consider other reasons contributing to their limitations:

I was blaming most of my problems in my life on my obesity beforehand and now I’m coming to the realization that it’s really [patients’ name].

I would never, you know, have tried anything that I didn’t think that I would succeed at... I’m probably gonna fail more than I would have 250 pounds ago, but I’m gonna try more.

I had always blamed things bad in my life on my weight... I would say, “Well it was because I was fat.” If I didn’t accomplish something, “Well, it was because I was fat.” The problems in my life were not all weight-related. So emotionally that’s a big change.

When I was going through my mid-life crisis, my mid-fat crisis, that when people were rejecting me and I was thin I was like, woah, wait a minute, you’re not supposed to be rejecting me when I’m thin, you’re supposed to reject me when I’m fat. And that was a big reality check for me, because now all the excuses, you’re a lot more vulnerable.
It’s like leveled the playing field. I succeed and fail because of my own abilities or inabilities...it’s not the weight anymore.

I know that I put all my goals...okay, well I’m gonna be this great singer after I lose all my weight. Well I had the same voice then. You know, everything was after I lose the weight, after I lose the weight. I have not lived my life for 12 years because waiting until after I lose the weight. Well now, it’s like the weight coming off and it’s like, uh oh, oh crap. You know, can I really do this? It’s a fear of rejection for who I really am, not just a fat person.

If somebody doesn’t like me or if somebody says something about me, it’s because of me. It’s not because I’m big and fat.

The protective function of weight also emerged in a different context. During the focus group, half of the female participants disclosed having experienced sexual abuse in their past. Two of the female patients who participated in the individual interviews discussed their experience of prior sexual abuse as well. These women felt that weight had protected them from being viewed as sexual by men. As they lost weight, tension developed because they felt increasingly vulnerable. These patients explained how this tension had impacted their weight loss:

It terrifies me. I don’t like it. I was just in a car wash and some guy came and like cornered me in my car. He worked there and all the sudden he’s hanging over my car and he has me in a corner and I can’t get out and all I could do was go in my car. And he goes, “Did anyone ever tell you, you have beautiful eyes?” And he starts telling me all this stuff. I just pushed him out of the way and said, “Back off. Get out of my way...” I did not like it. I am not dealing well at all with positive attention...I’m starting to eat...he [surgeon] says I’m building a fence around me again.

I’m afraid of men, I’m afraid of me... I mean quite frankly I didn’t know how to say no before I got fat. I didn’t know how. I mean if I said no, they’d do it anyways. So I learned to just... I was a whore basically... I know that is terrible. But when I got pregnant with my first baby I got huge. Because in my world, a mother can’t be a whore, a mother is special. So, I stayed fat the whole time I’ve been a mother and I’m so afraid, I don’t know... that something is going to happen to me.

That’s been like one of my biggest issues. The smaller I am becoming, and I still have a long way to go, but people are so much more receptive to me, especially men and it scares me. It really, really, really scares me.
I’m not dealing well with guys giving me compliments. I don’t want to be in the same predicament that I was before. I basically built a wall around me to keep men away from me… I went into a shell.

I was heavy all my life… and I used weight as a protection against the outside world, not letting someone get too close to me. A lot of that has to do with the abuse I suffered as a child. I thought it could give me more personal space… it was a conflict when I didn’t have that anymore and when people wanted to get into my space… It’s a conflict that you fight everyday.

*Change in personal values/self-focus.* Patients commonly experienced a shift in their value system, primarily with regards to the value placed upon their own lives. These respondents described various ways in which they had settled preoperatively for far less than they are willing to settle now. Tension arose when various aspects of patients’ old selves were no longer compatible with new standards:

I always thought, well, this will do, my little life. I don’t believe that anymore.

I’m thinking about myself, about life, in a different light.

I would settle for anybody that had anything to do with me. [Now] I expect more, I want more.

Some patients recalled a presurgery pattern of consistently placing other peoples’ needs ahead of their own. Postsurgery, patients commonly experienced tension between learning to give themselves priority occasionally and the extreme of becoming too self-focused:

...he (a friend) was like, “This changed you.” And he wasn’t sure it was for the better. And I was like, “You’re right. I did turn into a bitch, because I was protecting myself finally.” Something I didn’t do. I had to learn how to take care of myself first. It’s my choices now. It’s all about me. I’ve gotten more wrapped up in myself and I really need to back off from that and I’m aware of that… it’s what I want, it’s what I want to do… I want it now. I don’t want to wait. Part of me thinks it’s justified because of what I missed out on.

My kids really gave me a hard time about it. My skirts too short or I wasn’t dressing my age or I didn’t have time for them and my grandkids. So, I went through a six-month period where I did really get narcissistic. I think now that the time has gone by
because I flipped back to being a mom and a grandmom. They were used to mom being at their beck and call 24-7, and when mom had something else to do, they didn’t like it.

*Surgery as evidence for failure.* Some patients worried that the decision to have surgery might indicate a character flaw. They felt that the fact that they were unable to lose weight and maintain weight loss through their own efforts meant they were weak willed or at least that they would be perceived that way. This was especially common for patients who felt successful in other aspects of their lives and viewed weight loss as the only thing that they had ever failed:

I always felt like I was an extremely strong person and my weight was one thing I never could control and I didn’t like, I didn’t like being able to...not be in control of that.

What bothered me about not losing the weight is I couldn’t do that. That’s the one goal that I’ve ever failed at and it’s just simply, I couldn’t. It was a failure that I had to accept that I couldn’t do and that, that was hard ‘cause it really was the only failure I’d ever had.

If I really wanted to do something, I could set my mind to it...and the only exception to that rule was to lose the weight and keep it off on my own.

These patients reported feeling ashamed and embarrassed about having to resort to surgical measures. For some, these feelings were stable even after the realization that with gastric bypass surgery one still needed an enormous amount of effort and will power to maintain weight loss. For others, it was a gradual process of acceptance. As one patient described:

At first I wasn’t going to tell people. I was ashamed that I needed this tool and could not do it on my own. By the time I got back [to work], I was more proud of it and felt it was more, it was something I had accomplished.

*Extent to which weight determines self and perceptions of self.* As patients lost weight, a cascade of rapid changes occurred. Not only did they look different, but they
conducted themselves differently, were treated differently, changed activities, dressed differently, became healthier, experienced mood changes, and for many, changes in relationships. Many patients began to question the degree to which weight defined them as individuals. Am I a fat person in a thin body? Or was I a thin person trapped in a morbidly obese body? Do people react differently to me solely because I am thinner? Or, do I interact with people differently, which in turn has influenced their reaction to me? A common finding was that people reported that their body changed before their mind could catch up:

It’s like living two worlds. I am who I am now, but probably in my own eyes I’ll always be big. Things happen to me to remind me that I’m not big anymore [but] I don’t see that big of a change. I don’t seem to be any different than I was then. You’re looking in the mirror, you’re still you.

People say that…they didn’t like the way strangers reacted to them. Well I think it was me, and my unwillingness to meet people in the eye.

Once you’re a fat person, you’re always a fat person. Even if you go down to 110 pounds it’s still in the back of your head, it’s… mentally it’ll come back.

I don’t view myself differently, unfortunately. In a lot of aspects I still view myself as heavy, everyday. I don’t know whether there will ever be a time when I will see myself as thin.

I’m still suffering the effects of obesity even though I am not carrying around that eighty pounds anymore.

I was always thin, but in my head I swear I was fat. I always saw myself as fat, until I finally became that person that I truly saw. Well I’m afraid that’s always how it’s going to be, that I’m always going to feel fat.

I do kind of chuckle at myself that I think that… I can pass. It makes me feel almost like a black person who can pass for a white person like in the 1950’s. I do feel still that I’m morbidly obese on the inside, but I can pass.

People’s perceptions of me have changed, but also my perceptions of them have changed. I feel like they’re more accepting of me. I feel like they respect me more. I
don't know if I changed which allowed them to change... I do feel better about myself, you know, so I probably project that... Did them showing me more respect make me feel like I can be more outspoken?

Some respondents explained that early obesity prevented them from experiencing a typical adolescence. When these patients lost a significant portion of their weight, curiosity arose as to the ways in which they would have turned out differently if weight had not been so central to their development. At forty years old, one patient explained:

The realization just sunk in recently that I weigh less than I did in high school. Who can you be now? Do you go back? And there's really no going back. But what would you have been?

New issues pertaining to appearance. Following a significant amount of weight loss, patients typically will have folds of sagging skin. The severity of hanging skin depends upon the patients' age and the extent of their obesity at the time of surgery. Some patients report being more self-conscious about the skin than they were about the excess weight. The decision to undergo another surgical procedure to have the folds of excess skin removed also can create tension. As one married woman explained:

I don't know if you've had the wonderful opportunity to see any of us without our clothes on, but it's not a pretty sight. Clothes hide things and skin hangs, and I am so uncomfortable. And he [husband] says I'm sexy, I'm thinking, "What is sexy about this body?" I don't understand...I'm just thinking...this is gross.

What he says time and time again is, "I can't wait 'til you are able to have this surgery to remove your excess skin, because you are so hot now, wait 'til you have the excess skin removed, you are going to feel sexy." But then [he says], I can't wait for you to have the skin removed." Am I sexy or not sexy? I don't understand. And so, I'm a bit confused.

Several patients felt as if surgery and the subsequent rapid loss of fat hastened the aging process, making them look thinner but older. Wrinkles previously filled with fat had became more evident following weight loss:
This might sound a bit conceited or what now, but I always felt that I was very attractive. Now that I’ve lost the weight, I’ve got this that I can’t stand [tugs at hanging skin under chin]. I never grew old naturally, you know what I’m saying. All the sudden I look my age and that has bothered me...it didn’t happen so I could get used to it. So, when I look in the mirror, it shocks me that I am this old.

My body’s deflating. I’m seeing wrinkles that were previously filled with fat. I just feel kind of deflated...I feel like my face is changing dramatically...now it’s getting thinner and it’s not looking as youthful.

Social

Considering the impact of obesity on relationships and social perceptions reported in the quantitative literature, it is not a surprise that most patients reported changes in social relations and social perception. For some, these changes were predominantly positive and raised few challenges. For many patients however, even positive changes posed some challenges, as everything seemed to get a little more complicated. The tension generating changes in the social arena could be classified into the following areas: changes in friendships, changes in marital/relational dynamics, conflicted emotions regarding new reactions from others, and conflicted reactions to discrimination against other obese people:

Changes in friendships. Many patients experienced changes in their friendships. For some, the patient implemented these changes after reevaluating friendships and deciding they were not constructive:

There’s some relationships you give up because they’re not good, for what you need to do...cause’ their habits could effect your decisions. So, you should stay away from those things... what you did together, you no longer do. Going out and having some beers, you don’t do that anymore.

I wasn’t part of the beautiful crowd and she kind of put me off to the side and just used me cause’ I was always home. Now if she calls I am not available, I’m busy. I have my other friends. So, I’m not able to meet her needs.
For this patient, and several others, the new life began with the momentous decision to have surgery. It was at this point in which she started examining her life and reevaluating her relationships:

I really started analyzing a lot of things and one of the things was a couple of friends I had had for a long time, it was kind of one sided.

For others the conflict began when old friends reacted differently to the new self. Patients hypothesized as to why they lost friendships. Often cited reasons were jealously and insecurity on the part of the old friend, role changes in which patient was no longer the ‘fat friend,” or that activities associated with old friends were no longer conducive to patients’ new lives:

What I came to realize is that she, I guess our roles changed...She felt needed when I weighed 500 pounds. As I lost weight, she didn't feel as needed. So while I wanted to go out and do things, that wasn't a role she was comfortable with, with me. She got very resentful...she stopped talking to me.

I have two [friends] I don’t really consider myself friends with them anymore. We just drifted apart. And I just feel like it has so much to do with our weight because, my weight, because maybe we don't do the same things we did before. I think it has to do with, again, the attention that I might get compared to them.

It [weight] kept our friendship strong. They felt more comfortable when I was no longer attractive to the men. Now that I’m losing weight again it’s kinda like a joke, “you bitch you’re looking pretty again,” and I’ve noticed they don’t call as often anymore.

This is my best friend. We are the best of friends and she tells my daughter, “Well your mom took the easy way out. She didn’t try. She took the easy way out.” And that really hurts me. We’ve been very dear friends... and that really bothered me that she thinks that I took the easy way out. That really hurt our relationship as friends. We are not as close as we used to be.

I think I lost all my friends. I had them beating down the door. I was so popular. I had best friends all over the place. I couldn’t even keep up with the phone. I don’t have anybody now. It makes me really sad... I’ve never been as lonely in my life.
Changes in marital/relational dynamics. Some patients experienced the changes following surgery as enhancing their relationships with their spouse/significant other. They found that increased energy, better mood, wider range of possible activities, and the prospect of a longer future improved their relationship. However, other patients found that some changes created conflict:

There’s parts of my relationship that have gotten much better and parts of my relationship that have gotten worse.

One frequently reported difficulty was the partners’ reaction to patients becoming more desirable to other people. It was not uncommon for partners to respond to these changes with feelings of insecurity and fear of loss. Patients claimed that their partners felt more secure when they were heavier:

My husband had definitely turned into a whole different person because of my weight loss…I probably did anything I wanted to before. Well, now he is jealous of everything. I think he kind of just always is afraid I’m gonna leave or something… I can just feel it. I mean I can tell when he is…insecure… He actually accused me of, you know, fooling around. He never would have done that before.

Now it’s starting a little bit… for the first time since we’ve been married I weigh less than my wife. Now between the two of us, I’m the littler person and she has it in her… mind…that, I’m not cheating on her, but, she’s like, “now you’re looking at other women cause’ I’m not good enough for you.” She’s feeling insecure.

Several patients recalled feeling dependent on their partners and incapable of living independently prior to surgery. As they lost weight, their physical limitations decreased and their confidence increased, helping patients develop a greater sense of autonomy. This created tension because partners no longer felt needed:

I don’t feel as though I need a man in my life to survive…that I can be me, that I can stand on my own two feet, that I can be self-sufficient.
The only impact gastric bypass had on my marriage is that I am now capable of doing so much more that I ever have been. So, I don’t have to be married. I’m not codependent on anyone for physical reasons.

As my self-image is getting even better, I find I have less patience, I’m not as nice.

He just had a really hard time with the fact that I was gaining self-esteem and that I was becoming more outgoing and I was wanting to do things. The future will not have my husband in it. I can’t take his alcoholism... It was very sad because that was going to be the rest of life...now...I am physically capable now to have a job, and be able to run a household, and be able to raise kids. I can do it, I’m strong, I’m capable, I’m independent, I can do it. Before, I was physically incapable.

The following patient described her husband’s reaction to her weight loss:

My husband does not like smaller women. He likes bigger women. So, we’ve had a rough three years... It almost ended up in a divorce after 27 years... It’s really hard when you’ve got someone who doesn’t want you to make that change, who doesn’t want you to lose that weight, that was perfectly happy with the size you were. And they fight you, they fight the change, too. Cause’ your going, is it worth losing more weight if I am going to lose my marriage?

Sexual functioning is another area impacted by surgical weight loss. For some, these changes are regarded as strictly positive. These patients report being more desirable to their partners, feeling sexier, and having less difficulty with the physical act of sex. All patients who addressed the topic of sex found sex to be easier due to the removal of weight as an obstacle, increased agility, energy, and stamina. However, several of the patients discussed a dramatic decrease in sexual desire following surgery. These married women all disclosed similar experiences pertaining to their sexual desire since surgery:

I seem to have lost my desire for sexual intercourse.

I lost all sexual desire. I don’t have any. I could care less about it. [Before surgery] it wasn’t fun sex but I did want it more than I do now. I like the attention I’m getting from other men, yet the attention I’m getting from my husband I don’t really pay much attention to it.

The big negative effect right now, the major one I’m dealing with right now would probably be our sex life and the lack of. I don’t care if I get anything out of it.
The latter patient also discussed the impact of the aforementioned excess skin on her sexuality:

Now, I look and all I see is what hangs and what sags and when we’re having those intimate moments, all I can think of is where my boobs are, what’s hanging here, oh my God, how can he? I’m not thinking about the sensation, or the feelings of the pleasure, instead I’m thinking, oh my God, there is just folds and folds and wrinkles and wrinkles, and how can he look at that.

Several patients reported that surgery and weight loss affected their relationships with family members. While some changes between patients and their families were viewed as adaptive and beneficial, others experienced tension regarding the familial changes:

She couldn’t look at me after surgery. She had always been the fat sister, I became the fat sister, so she was comfortable again, and now, she turned back into the fat sister. Her mouth would say that she was proud of me, that she was happy for me, but I could see the looks.

My position in the family has definitely changed... I can’t put my finger exactly what it is. I just know it’s changed, just something about the dynamics. I don’t think I put up with as much from them. I think I stand up for myself now. In that group dynamics, where the weak one can get “sic”ed upon...I don’t let them do that to me anymore.

They [family] want you to be happy, they want good things to happen to you, but they are so used to the old way, that old self, they can’t quite accept, you know, the new self.

*Conflicted emotion regarding new reaction from others.* The expectation may be that being treated with more respect and positive attention would unequivocally be regarded as a positive experience. For some patients, that was the case. However, many patients discussed struggling with feelings of resentment and anger at people in general who treat them better than they were treated preoperatively:

When I go somewhere, when I walk into a department store, when I park valet, now, they are very nice and respectful. I’m just treated better. I enjoy it in a way, I’m resentful in another way. Part of me thinks, “Where were you before?”
I began to like, date and stuff in this process and that has been kind of interesting because the very men I would have repulsed at 400 pounds are now being attentive to me. I went through this phase where I was like angry and I didn’t want to have anything to do with people like that and my goal was to find a man that would have wanted me at 400 pounds. That’s been kind of interesting to handle the attention, like, from men, but not be angry and resentful with the knowledge that, I know you wouldn’t have anything to do with me at 400 pounds.

Sometimes it’s (attention) flattering, sometimes it’s annoying. Deep down inside you’re annoyed.

When I lost my weight and I ran into people that did not know or, um, people that did know and now they treated me so totally different. They ignored me before and now they, you know, they didn’t ignore me, um, it kicked in a whole new set of problems. And so consequently it was a really hard time.

In one way I crave it (attention), and in another way I’m like, “Don’t look at me!”

Conflicted reaction to discrimination against other obese people. Most patients recalled experiencing obesity-related discrimination prior to surgery. Of the patients who lost a significant percentage of their excess weight, several recounted experiences in which they witnessed discriminatory or derogatory comments made toward obese people.

This put these patients in a conflicted position:

I hear people now make statements about other people, you know, “Oh, she’s a fat pig.” It’s interesting because I see it from a different perspective. I either feel honored that they are saying that about someone else and that obviously I don’t fit in that category, so that on one level makes me feel like, good. And on another level it makes me physically sick. It just stings me because I still feel like a fat pig. I still feel like they are talking about me.

I said, “I’m here to meet a friend of mine.” And she [hostess at restaurant] says, “Oh is she a real heavy lady?” And she puts her arms out to make it like fat is rolling and I said, “Yeah, she’s a large girl.” Takes me right to my friend... I thought, oh my gosh, that’s what people used to think of me! ...because I came in as someone perceived as normal, she felt comfortable, “Oh, a big girl? A large lady?” And I’m just like, “Oh my gosh, I am not seen as someone that is overweight!”
Skills acquisition

With any life-changing surgery, patients must alter their behavior and adapt to new circumstances in almost all areas of life. Often these changes call for the acquisition of an entirely different set of skills. This can be experienced by patients as stressful and even scary. Three areas of skills acquisition most often identified by patients were in the areas of eating behavior, coping with emotions, and developing social skills.

Establishing new eating behavior. Immediately after surgery, patients must modify their eating behavior dramatically, eating small amounts of pureed foods in limited amounts. Gradually patients can return to eating solid foods, with the restriction of no more than four ounces at a time, three times a day. Typically, any deviation from these strict guidelines will result in the unpleasant experience of dumping. They initially drop large amounts of weight in short duration of time. This weight loss will begin to taper off significantly between six to twelve months. Patients are adjusting to the surgery by learning what they can, or cannot eat, how much and how often, which can often fluctuate from person to person and day to day. They may learn that certain foods that were once forbidden can now be eaten with ease. They may notice that their stomach that could once hold only four ounces can hold five or six. They may discover that whereas binge eating may be impossible, the new stomach can easily tolerate eating steadily throughout the day. Continued weight loss will depend on their ability to adhere to dietary guidelines regardless of capabilities of their stomach. What was once a fairly straightforward physiological weight loss requires more psychological control. This pattern of weight loss during the first year was relatively consistent across the sample of respondents. It was most commonly referred to as the honeymoon period:
When you have this, there's part of you that thinks, "Oh, I am cured. I’m automatically going to lose weight. But that weight and [the surgery] works all by itself but only for the first several months. The first year, it does the majority of the work for you. You have to take over.

I didn’t hear that beforehand that the surgery would take off 40-50 percent of the fat and I’d have to take off the rest. I came up against this brick wall of when the weight loss stopped and I plateaued, that I wasn’t prepared for.

[the surgery] gives you a short window of time to blow a huge amount of weight off. My experience has been that the window closes, that it doesn’t stay open forever. I’m just gonna have to deal with the weight I have left to lose at this point on my own. Because there’s not gonna be any magic bullet. There is no magic bullet at this point.

As the honeymoon period ends, patients must establish lifetime eating habits in order to lose the weight they want to lose and in order to maintain that loss. For the majority of respondents this is an everyday struggle. Essentially, many of them are attempting to change a lifetime of eating behavior:

Whatever he [surgeon] does technically to people’s stomachs doesn’t change the appetite, doesn’t change the drive to eat.

I am still a compulsive overeater. He [surgeon] did not take that out of me.

I’m still craving carbohydrates, chocolates and sugars, pastries. And I think that craving is in my head, not in my stomach.

I loved food. I absolutely loved food. I miss the fact that I can’t love food. Sometimes something is delicious and I wanna eat more of it and I can’t.

I do miss a lot of stuff. I miss chocolate and I miss ice-cream and I miss cakes and just all the junk food like any ordinary person would miss...

I do cheat and I’m not gonna say I don’t cheat. I do cheat. I eat things that you are not supposed to eat. I’m sure everybody does. I’ll sneak something and try something to see if I’m gonna purge or get sick on it. Some days I do, some days I don’t.

**Implementing non-dietary means of coping with emotions.** Many patients continue to struggle with the establishment of new eating behavior long after surgery, including those patients who reach their goal weight. Patients who considered themselves to be
"emotional eaters" typically had the most difficulty adapting to new eating behavior.

These patients had the added challenge of having to find an alternative means of coping with their negative emotions. For some, the surgery helped them to recognize times in which they were eating in response to unpleasant emotions. Eating had clearly become a form of safeguard against feeling certain emotions. In order to maintain the weight loss, clearly this safeguard has to be dropped and a new way of coping with emotions has to be implemented:

Everything that bothered me, I put in my mouth. Somehow, I would eat it. And now, I put it somewhere else. I don't let it go in my mouth. If I am stupid or if I get emotional and I do eat too fast or I do eat too much... it's there to remind me, "Hey, you can't do that."

It was much easier just to shove them [emotional issues] to the side, pat them down and cover them with food and move on to something else.

The surgery fixes obviously the physical problem, your stomach is stretched out too much. But the surgery cannot cure your emotional state of mind. You know, boredom, I ate a lot because I was bored. I'm more in touch with how I feel and why I'm feeling. That partly has to do with, I don't want to eat, so I examine my moods more.

If I'm under a great deal of stress or there's things in my life that aren't going the way I want it, I revert right back to old habits—unfortunately stuffing my mouth.

That's the way you're comforted. That's the way my friends comforted me. It's easier to go out and feast on a fast food than to actually have to deal with the issues.

Many patients equated their relationship with food to that of a drug addiction.

These patients continuously had to face the challenge of controlling their emotions without the use of food:

Anytime you have an addiction I think it is one of the hardest things in the world to kick, because it really doesn't go away... It's something in my life that will always be there... it takes everyday looking at it, just like a reformed smoker or a reformed drunk or a drug addict.
Looking back on it, I think it was a recovery from my food addiction. Because I know that’s what I have and had, and still continue to have... unfortunately you can’t “cold-turkey” food.

I still have food issues. That’s one thing about the surgery, it’s not a cure, you know. I realize I am addicted to food. Food does control me.

For these patients it is imperative that they find alternate means of dealing with their emotions, or risk turning back to food. Some patients explain that they became just as compulsive with their new coping skills as they had been with food:

Our lives revolved around food. We need to find something to replace it with. I spent all of my time eating, I need to find something else to do with my time now that I am not eating, and something productive, something that’s not going to hurt me or anyone I love. Um, right now it’s shopping, but again, I know that really needs to stop.

Because of my compulsive behavior, I probably have 30 pounds of coffee, whenever coffee goes on sale, I buy coffee and have it... before it would have been a dozen donuts...the compulsiveness, it just changes to a different direction...

*Developing social skills.* Patients’ new lives commonly consisted of increased social activity. For those respondents who were unaccustomed to an active social life, they described feeling somewhat unprepared for novel interactions. This was most common among patients who were in the process of dating after surgery:

It’s hard for me sometimes to know what people mean when they are saying things. I was out one day with a friend of mine and...she said, “That guy was hitting on you!” And I said, “No, he wasn’t he was talking.” She said, “No he wasn’t he was hitting on you...” I knew that would have never happened before...I think my radar is broken.

Emotionally, I stopped developing in relationships at about the age of 13... In relational issues, I’m that far behind... See I’m clueless, I have no idea. How am I supposed to know when someone is trying to pick me up?

I’ve had to learn how to accept compliments because I wasn’t really given a whole lot of compliments before.
Negotiation of tension in multiple areas

Patient responses suggested an ongoing process of negotiating these changes to varying degrees. Patients who continued to strive towards reaching and maintaining their goal weights have determined, through their process of negotiation, that their quality of life is increasing continuously and predict the same pattern to continue. For patients who stopped losing weight, or maintained their weight at a level significantly higher than their initial goal, it appears as if they have determined that further weight loss will no longer enhance or contribute to the quality of their lives. Therefore, continued weight loss may only serve to increase tension in various aspects of their lives without producing benefits substantial enough to warrant these further tension-producing changes. Patients who lost and regained a significant portion of excess weight described a similar process of negotiation. The difference for these patients is that they have experienced a lower weight, yet the improvements in quality of life did not warrant the subsequent tension experienced. As the following patient suggests, the ability to negotiate successfully the tension-producing changes accompanying weight loss may be a primary determinant of gastric bypass surgery outcome:

I wanna say I'm kind of scared that I'm going to sabotage my weight loss because I'm afraid of confronting some of the issues that I know are gonna come up. I'm frightened to think that I'm gonna have to deal with this stuff.
CHAPTER 5

DISCUSSION

When patients were provided the opportunity to elaborate freely on their experience of life after gastric bypass surgery, their responses consisted of rich and complex narratives. These detailed accounts provided new depth and perspective to the fragmented picture emanating from the review of the literature. As was expected, detailed patient responses revealed not only new psychosocial domains relevant to the outcome of surgery, but also guided the integration and explanation of these and other previously investigated domains. This information provided the foundation of the grounded theory. As this theory illustrates, the impact of gastric bypass surgery on patients' lives is far more complex than what can be captured by scores on researcher selected and developed variables and measures. While quantitative measurements of psychosocial, social, and medical change can be useful, they fall short of explaining the changes as they are perceived by the patients, as well as the ways in which patients adjust or do not adjust to these changes. The grounded theory methodology was useful in eliciting such information and the theory itself has the potential to explain how patients’ ability to adjust to postsurgical changes may impact surgical weight loss and maintenance.

Several of the changes patients experienced following surgery were consistent with the constructs selected and measured in the previous studies reviewed. These were primarily changes regarded by patients as unequivocally positive such as increased
physical activities and abilities, resolution or improvement of obesity-related comorbidities, and improved occupational status. In addition, patients described several other changes as unequivocally positive that have yet to be identified in previous studies. The resolution of obesity related pain, the ability to envision a future, and enhanced parenting ability were unique to the present study and, along with the previously identified positive changes, incorporated into the grounded theory. The improvement in parenting ability may contribute to our understanding of why women elect to have gastric bypass surgery at a such a greater rate than men do, although other factors such as discrimination and stigmatization are likely to be important as well. The overall combination of these various positive changes typically increase patients' quality of life dramatically and may be a substantial incentive for patients to lose and maintain weight.

If patients are surgically reconstructed in order to physically regain control over their weight, and if dramatic weight loss results in the aforementioned positive changes, then how do we explain the finding that a significant number of patients do not succeed in reaching goal weight or in maintaining postoperative weight loss (Hsu, Benotti, Dwyer, Roberts, Saltzman, Shikora, Rolls, & Rand, 1998; Powers, Perez, Boyd, & Rosemurgy, 1997; Shamblin & Shamblin, 1987)? A definitive explanation to this question has yet to be discovered. There is little doubt that the surgical manipulation of the stomach provides the necessary tool for patients to regain control of their weight, but, contrary to popular and, even many researchers' general assumptions, dramatic weight loss does not result in positive changes exclusively. As the present grounded theory suggests, perhaps the most essential component of this phenomenon, the tension-generating changes, have yet to be investigated. Many aspects of patients' rebirth and transformation were identified as generating tension in various aspects of their lives. The
term tension was utilized to convey the psychological state experienced by patients when various aspects of their rebirth or transformation resulted in either some degree of loss or in the challenge of confronting unknown or potentially threatening circumstances. Patients must find some way to cope with these tension-generating changes so that the quality of their life is maintained at what they consider to be an optimal level. The tension-generating changes were classified as either self/existential, social, or skills acquisition.

The majority of the identified tension-generating changes impacting patients’ identity and sense of self are unique to the present study. It is surprising that these changes have yet to be systematically investigated in the literature, considering the consistency with which patients introduced and discussed such changes, as well as their potential impact on their weight loss and maintenance. These changes included increased feelings of vulnerability, altered personal values and level of self-focus, surgery as evidence for failure, questions regarding the extent to which weight determines self and perceptions of self, and new issues pertaining to appearance. Delin and Watts, (1995) reported that several participants in their study claimed they had difficulty adjusting to their changing size and shape, and subsequently the authors suggested investigating the emotional meaning that patients place on their initial size when selecting patients for surgery. With the exception of this study, tension-generating changes have yet to be addressed in most of the literature. This may be in part due to researcher assumptions that weight loss invariably results in greater satisfaction in all areas of life. Although previous literature has consistently found large increases in self-esteem (Adami, Meneghelli, & Scopinaro, 1999; Chandarana et al., 1988; Crisp et al., 1977; Gentry et al., 1984; Halmi et
al., 1980; Wampler et al., 1980), the need to identify potential challenges in adjusting to life changes has been conspicuously absent from the literature.

Socially, patients discussed four types of changes that generated some degree of tension. Among these, only changes in marital dynamics and sexual functioning have even remotely been addressed. This is interesting as social support was commonly identified by patients as a contributing factor to postoperative adjustment. Previous studies investigating marital and sexual functioning typically have quantified the extent to which surgery has made a positive or negative impact in these areas (Castelnuovo-Tedesco et al., 1976, Chandarana et al., 1988, Crisp et al., 1977, Dano & Hahn-Pedersen, 1977, Dubovsky et al., 1985, Goble et al., 1986, Hafner et al., 1990, Neill & Marshall, 1978, Rand et al., 1982, Rand et al., 1984). The present study supports previous findings of both positive and negative changes in marriages. However, the emergence of the notion of tension accompanying these marital changes, as well as the potential impact of these changes on weight loss and psychosocial adjustment, were both incorporated into the grounded theory. These changes can be generalized to relationships with significant others, friendships, and family members.

Inconsistent with previous conclusions regarding sexual functioning, our data suggest that these changes were not necessarily regarded as positive in all patients. For several of the married, female patients, a drastic reduction in their libido was experienced following surgery. These changes appeared to be psychosocial in origin rather than physiological (i.e., hormonal). Although the general consensus was that the physical act of sex became easier with weight loss and many patients reported drastic improvement in their sexual lives, a number of women lost desire for their spouses, not their desire in general. This may be directly related to changes in self-focus and values, as well as
marital dynamics. As patients started to think of themselves as more desirable to others, a partner who at one point was judged to be of equal or greater desirability now might not meet patients’ increased standards. Also, patients may have felt capable of attracting a more desirable mate than when they were morbidly obese.

In addition to changes in intimate relationships, patients reported experiencing changes in the ways society in general related to them, as well as the ways in which they reacted to societal members. The one available study addressing patients’ perception of discrimination and discrimination found that patients reported significantly less mistreatment following surgery (Rand & MacGregor, 1991). With only one study available on the topic, researchers are left to assume that patients are treated better postoperatively. Perhaps the lack of research in the area of changes in perception of discrimination and stigmatization is due to the assumption that this is an unequivocally positive experience. However, the present theory indicates that this is not necessarily so. For many patients, feelings of resentment and anger surfaced as people increasingly began to acknowledge and affirm them as they lost significant weight, especially when there was a marked differential between presurgical and postsurgical treatment. Another finding unique to this study was the tension generated when patients who had lost significant weight were put in a situation in which they witnessed an obese person being discriminated against. Tension arose when patients simultaneously experienced feelings of relief stemming from no longer being the object of discrimination and feelings of anger because they still identified with the obese person.

The new demands placed upon patients to acquire skills necessary to cope with postsurgical life were reported to generate tension. Establishing new eating behavior, implementing non-dietary means of coping with emotions and developing social skills
were all identified as areas that generated tension. Based on their findings relating to patient self-esteem as a predictor of successful weight loss, Delin and Watts (1995), found that self-esteem was strongly related to feeling able to handle social situations involving food, and self-efficacy in ability to control weight. They suggested, and the current theory supports, that interventions guided toward boosting self-esteem may increase the likelihood of successful eating skill acquisition.

There are numerous ways in which this study may be potentially useful in increasing successful long-term outcomes of surgery. It is currently known that weight regain typically begins approximately 18-24 months past surgery (Hsu, Benotti, Dwyer, Roberts, Saltzman, Shikora, Rolls, & Rand, 1998; Powers, Perez, Boyd, & Rosemurgy, 1997; Shamblin & Shamblin, 1987). After more than 30 years of research in the field of obesity surgery, we still do not know why this happens. Sugarman (1992) suggested that failure of gastric restriction surgeries might be attributable to the loss of dumping syndrome that tends to correspond with this particular time frame. Our sample suggested that chronic maladaptive eating early on actually may contribute to the dissipation of the dumping syndrome as the body habituates to high fat and high sugar content foods. The source of the maladaptive eating may originate in the patients' inability to negotiate postsurgical-life changes. In other words, if quality of life is not increased significantly with weight loss, then the motivation to maintain it weakens or disappears.

More recently, Delin et al., (1995), in their study of 20 gastric bypass patients, reported that fear of confrontation and difficulty coping with lifes' demands were characteristic of patients who lost the least amount of weight. This finding is consistent with the present theory, which suggests that patients' ability to negotiate tension arising from various changes may be a critical determinant in patient outcome. If, for example,
patients develop an increasing sense of vulnerability as excess weight is lost, this tension must be negotiated until it either disappears or becomes manageable. The outcome of this negotiation depends on the patients' ability to effectively identify and cope with the changes so that further weight is psychosocially indicated. It is altogether likely that some patients might opt to be obese rather than face feelings of fear and vulnerability. Others may decide that the benefits of weight loss outweigh the tension created as a result of feeling increasingly fearful or vulnerable, determine that their quality of life can only improve with more weight loss, and therefore find ways actively coping with these emotions. The ultimate goal of weight loss is, after all, the promise of a better life.

If enhanced quality of life is the ultimate goal of gastric bypass surgery, what is the appropriate outcome measure? Is weight loss the only criterion that defines success? These questions were addressed by Delin and Watts (1995), who have suggested that percentage of excess weight lost, despite being the most widespread method of determining success, may not be the best. In these terms, ‘lightweight’ patients (those at the minimum end of surgery weight requirements) who have 100 pounds to lose in order to reach goal have a much greater likelihood of being ‘successful’ than patients who start at 500 pounds and must lose 350 pounds to reach goal. In three separate papers, Delin and Watts (1995) suggest that a calculation of present weight minus goal weight may be a more appropriate measure of success and that psychological and social variables should also be considered. The present study suggests that some patients may be satisfied with the outcome of surgery, and report dramatic increases in the quality of their lives, while not being statistically considered successful using the various measures that only take into account some calculation of weight loss. What this suggests is that some of the patients deemed ‘failures’ by standard numerical measures consider themselves to be
successful and may have no intention of losing more weight. It is likely that their medical conditions have resolved, they have increased their activity level, they have higher self-esteem, their occupation has improved, yet they are still substantially overweight. This is important to keep in mind when the term ‘success’ is utilized. Success may connote a very different meaning across patients, doctors, psychologists, and other professionals in the field.

In order to determine the extent of the relationship between the ability to negotiate tension-generating postsurgical changes and long-term outcome, the theory must be tested empirically. The theory suggests that negotiating tension-generating changes in a manner that optimizes quality of life may determine long-term patient outcome. A fruitful research effort may be to develop an intervention targeting patient-identified challenges and administer it both presurgery and at various times postsurgery. Three phases of such an intervention might be preparation, implementation and maintenance. The initial goal of this intervention might concentrate on preparing patients for potential tension-generating changes. Numerous patients recount hearing prior to surgery that some of the changes may occur, yet they felt as if they were not adequately prepared to deal with these changes when they arose. The preparation phase might consist of identifying particular aspects of individual patients’ lives in which postsurgical change may generate tension and implementing various skills to help patients successfully negotiate and cope with these changes. This presurgical phase might focus on enhancing patients’ cognitive and behavior skills.

Cognitive skill building could involve helping patients to establish realistic expectations for the outcome of surgery and this may prevent the disappointment that can arise when patients realize that life is not perfect when they lose weight. Various methods
might be utilized to help patients improve their feelings of self-esteem and self-efficacy. Identifying any beneficial role that obesity may play in patients' lives, such as providing feelings of protection from others, may help to prepare them for the increased feelings of vulnerability that may arise with weight loss. One patient who lost over 200 pounds described her period of rebirth beginning when she made the decision to have surgery. It was at this point, months before surgery, that she began reevaluating her relationships and the value she placed upon herself. This process, she believes, helped prepare her for successfully negotiating subsequent changes that occurred in her relationships following surgery.

Behavioral preparation might involve role-playing situations that may arise, such as social situations surrounding eating, changes in reactions from others, assertive ways to appropriately prioritize one's needs, and other potential social skills in which patients may feel they are somewhat lacking. The implementation of coping skills might also begin during this preparation phase so that patients are prepared with a repertoire of skills that have already been established and practiced by the time the situation arises. Coping skills might be useful when emotional states such as sadness, boredom, and anxiety that had previously been alleviated by eating surface. Preparing patients with alternate activities and skills to deal with these emotions may help to prevent maladaptive eating. Enhancing patient social support prior to surgery during this preparation phase may consist of educating selected support people, whether family members, significant others, or friends. Providing ways for patients to meet other patients at a similar phase in the surgery process, as well as patients who are postoperative and can act as mentors may help to improve the likelihood of successful negotiation. Psychoeducation may provide valuable information regarding postsurgical eating behavior, such as creative, tasty, and
nutritious ways of eating within the surgical guidelines that patients may otherwise not be aware of. For instance, some patients emphatically described the importance of various eating behaviors, such as using child-size plates and cutlery, setting a kitchen timer when eating to ensure that chewing and swallowing is slow and mindful, and making their first few bites of any meal consist of protein to ensure adequate consumption of this vital nutrient. Being prepared with such valuable knowledge may help to alleviate the tension arising from drastic changes in eating behavior.

Following surgery, as patients begin to implement these new skills, problems and challenges may arise. An intervention plan may include a forum in which patients can discuss these challenges and practice the aforementioned cognitive and behavioral skills with the guidance and assistance of a trained professional. Subsequent booster sessions might be implemented that continue throughout the period in which patients plateau and typically begin to regain weight. As with any intervention, patient compliance becomes an issue, especially so for this particular population in which numerous patients are lost to follow-up (Brolin et al., 1989; Hsu et al., 1997, Powers et al., 1997). However, if intervention strategies are implemented as a mandatory preoperative requirement for surgery, this may potentially increase the value patients place on the practice and maintenance of cognitive and behavioral skills.

This study had some limitations. The most obvious one was that patient data was based solely on retrospective self-report. Therefore, there is no way of knowing if the changes described by patients actually occurred or if these are merely constructions—patients’ post-hoc perceptions of and attributions for change. These patients elect to undergo a massive surgical procedure that permanently alters their bodies and places them at considerable risk. The surgery is also expensive and not covered by all insurance
plans. Thus there is obviously significant motivation for patients to believe and report change. If patients' descriptions of their experience are at least in part constructions, than the present theory may be a construction on top of a construction. However, whether patients' stories actually happened in the manner presented or they were constructed to varying degrees, both what really happened and what they think happened is surely relevant. What patients believe to be their experience, whether accurate or not, is likely to have a causal force. And if these constructions have an impact on their lives, we need to understand them if, as health professionals we are to guide patients through the long process that is gastric bypass surgery and its effects.

Another limitation in this study, and the majority of obesity studies, is that the patient sample did not include patients lost to follow-up. The possibility exists that patients who are no longer in contact with their surgeon may have a different experience than the patients in the current study with regards to the ways in which their lives have changed since surgery. While this is impossible to determine, an intervention plan based on the theory proposed in this study may help to alleviate the likelihood that these patients will be lost to follow-up. Participants in the present study also self-selected and therefore the likelihood exists that the experience of these patients may be different from the experience of patients who did not choose to participate. Participants who self-selected were those patients who were still attending their follow-up appointments and therefore still in contact with their surgeon. This potential bias, in addition to the fact that most interviews were conducted within the surgery clinic, may have potentially resulted in patient responses designed to "please the doctor." However, despite this potential tendency, various tension-producing changes were identified in the interviews and we might assume that more tension would have been identified if the tendency to try to
pleased the doctor did not exist at all. In essence, this study may represent a conservative estimate of the challenges posed by obesity surgery.

Despite the methodological limitations of this study, this grounded theory of life after gastric bypass surgery has brought us one step closer to the actual, lived experience of patients following gastric bypass surgery. A valuable next step may be designing future studies investigating the present findings and theory, and using this information to develop intervention strategies to improve the likelihood of successful outcome following gastric bypass surgery.
APPENDIX I

INTERVIEW GUIDE

The purpose of this interview is to gather information that will help professionals in the field of obesity surgery (surgeons and psychologists), as well as future patients, to better understand the life experience of individuals who have undergone gastric bypass surgery. As patients who have had gastric bypass surgery, you are in a unique position to describe how the surgery has affected your life and the lives of others around you. And that is what this interview is about: your experience following gastric bypass surgery, and your thoughts and feelings about your experience. The interviews (there will be about 30 of them) will be audiotaped, transcribed, and combined into a summary. Nothing you say will be identified with your name or any of your identifying information. The tapes will be erased immediately following transcription.

As we go through the interview, if you have any questions, feel free to ask. The main purpose of the interview is to get detailed accounts of your insights into how gastric bypass surgery has affected your life. I will first give you five minutes to think about the ways in which gastric bypass surgery has affected your life. If you find it helpful, feel free to jot down the areas you want to talk about before we get started.
1) Please take this time to think about your life since you had gastric bypass surgery and briefly take notes for yourself if you would like. In a few moments, I will ask you to tell me as much as you possibly can about your own personal postsurgical experience, and equally as important, your feelings and thoughts about your experience. In other words, how did the surgery affect your life? (Time 5 minutes)

Okay please go ahead and tell me as much as you possible can about the ways in which gastric bypass surgery has affected you life, if any.

**Subsequent responses to this initial query will be prompted for clarification, detail, and elaboration purposes only. Only when this question has been completely exhausted (subject has absolutely nothing else to contribute) will the interviewer progress to the following questions, if any of them have yet to be addressed.**

2) Since having surgery, describe ways in which the surgery has affected your __________, if any (address a, b, c, and d).

(a) partner
(b) family/children
(c) friends
(d) coworkers

3) Did the surgery affect your job or job status, or your work at home? How?
4) Did the surgery affect the way strangers react to you or treat you? How?

5) Has your social life changed since surgery? How?

6) Have the activities you engage in changed since surgery? How?

7) Do you view your future differently since the surgery? How?

8) Are your moods and/or level of satisfaction with your life different since the surgery? How?

9) Are your feelings about yourself (self-esteem, self-confidence) different since the surgery? How?

10) Has the surgery had any negative effects on your life? If so, please describe.

11) What is the most significant positive change you have experienced in your life since surgery?

12) What is the most significant negative change you have experienced in your life since surgery?
13) What was the most important reason that motivated you to have the surgery? In your estimation, has the surgery succeeded in fixing/changing that problem?

14) Is there anything else that we have not discussed that you feel would contribute to my understanding of your experience since surgery?
APPENDIX II

RELIABILITY CHECK

Participant Number_______

Thank you so much for your participation in the study “Psychosocial Outcomes of Gastric Bypass Surgery.” Your personal thoughts and feelings contribute in the most important way toward a better understanding of the impact of gastric bypass surgery on people’s lives. You are the experts here because you have lived through these experiences. As researchers, it is essential that we listen to you directly to know what matters and what does not.

Prior to your interview, I explained to you that your audio-taped responses would be typed up and read very carefully by me. When I read the transcripts I am looking for issues expressed by you as important. I go through them and organize everything you say into categories of important issues that I call themes. I then combine the themes into a summary. Now, I want to make sure that I have completely understood what you meant so I would like you to go over what I’ve done and let me know if there is anything you would like to correct or add.

Inside this envelope, you will find a transcribed copy of your audiotaped interview. You will also find a list of the individual ‘themes’ that I perceived in the information that you disclosed. Next to these themes you will find the parts of
the interview that relate to this theme, as well as the page and line number where they can be found in the transcript. To ensure that the ‘themes’ I have extracted from your interview are representative of what you said, I am requesting that you take a few moments to read over those themes and provide feedback. You are in no way obligated to do this, however it will be very helpful to me and to the research effort. Only you can tell me whether I accurately interpreted what you said.

Below are some questions for you to answer. When you are done reading the themes and answering these questions, please place this questionnaire only in the self-addressed stamped envelope provided and mail it to me. The transcription and the themes are yours to keep. If you wish for these to remain confidential, dispose of them properly, or keep them in a secure place.

1) How accurately do you think the themes reflect what you said to me during our interview? (please circle)

0 1 2 3 4 5 6 7 8 9 10
not at all somewhat completely

2) Is there any category that you would change? (If so, please explain)
3) Based on what you told me, is there any category that I missed? (If so, please explain)

4) Is there anything you would like to add that was not discussed in our interview?
APPENDIX III

IRB APPROVAL
DATE: November 14, 2000

TO: Lindsey Bocchieri
Psychology
M/S 5030

FROM: Dr. Fred Preston
Chair, Social/Behavioral Committee
of the Institutional Review Board

RE: Status of Human Subject Protocol Entitled:
“A Qualitative Study of the Perceived Psychosocial Outcomes of Gastric Bypass Surgery”

OSP # 113s1000-136

This memorandum is official notification that the Social/Behavioral Committee of the
Institutional Review Board has approved the protocol for the project listed above. This approval
is for a period of one year from the date of this notification, and work on the project may
proceed.

Should the use of human subjects described in this protocol continue beyond a year from the
date of this notification, it will be necessary to request an extension.

If you have any questions or require any assistance, please contact the Office of Sponsored
Programs at 895-1357.

cc: OSP file
REFERENCES


VITA

Graduate College
University of Nevada, Las Vegas

Lindsey Eva Bocchieri

Local Address:
4201 S. Decatur Boulevard, Apt. 2087
Las Vegas, NV 89103

Degree:
Bachelor of Arts, Psychology, 1998
University of Maine, Orono

Special Honors and Awards:
GREAT Summer Scholarship, UNLV, 2001
Psi Chi
Alpha Kappa Delta

Publications:

Thesis Title: A Qualitative Study of the Perceived Outcome of Gastric Bypass Surgery

Thesis Examination Committee:
Chairperson, Dr. Marta Meana, Ph. D.
Committee Member, Dr. Russell T. Hurlburt, Ph. D.
Committee Member, Dr. Mark Floyd, Ph. D.
Graduate Faculty Representative, Dr. Andrea Fontana, Ph. D.