FEMALE PERCEPTIONS OF MARRIAGE BEFORE AND AFTER BARIATRIC SURGERY

by

NICOLE MARIE CHILDS

(Under the Direction of Lee Johnson)

ABSTRACT

Bariatric surgery is the most recognized and effective treatment for obesity. The purpose of this study was to further understand the impact bariatric surgery has on marital relationships from the female perspective. A qualitative analysis, guided by grounded theory, was conducted on ten post-surgical patients. It was revealed that regardless of their marital status before surgery, all women reported an improvement in their overall marriage after surgery. Improvements in communication, time spent together, sex/intimacy, and levels of affection were mainly attributed to the wife’s increased self-esteem and assertiveness. Other unique findings included participants reports of a brain/body disconnect in the patient, along with an increase in husbands support and jealous behavior. This study helps researchers and clinicians develop a better understanding of the biopsychosocial facets that women experience with their spouses before and after bariatric surgery.

INDEX WORDS: Bariatric surgery, Surgical weight loss, Obesity, Grounded theory, Marriage, Biopsychosocial perspective.
FEMALE PERCEPTIONS OF MARRIAGE BEFORE AND AFTER BARIATRIC SURGERY

by

NICOLE M. CHILDS

B.A., University of North Carolina at Chapel Hill, 1998
M.S., East Carolina University, 2002

A Dissertation Submitted to the Graduate Faculty of the University of Georgia in Partial
Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GA

2007
FEMALE PERCEPTIONS OF MARRIAGE BEFORE
AND AFTER BARIATRIC SURGERY

by

NICOLE M. CHILDS

Major Professor: Lee Johnson
Committee: Stephanie Burwell
            David Wright

Electronic Version Approved

Maureen Grasso
Dean of the Graduate School
The University of Georgia
December 2007
DEDICATION

To Michael and Susan Childs, for your infinite patience, faith, and support.
ACKNOWLEDGMENTS

Throughout my time at the University of Georgia, I have been blessed to have many people by my side, providing me with support and guidance along the way. Special thanks to my major professor, Lee Johnson for his ability to push me when I needed to be pushed, for his patience and support throughout the editing process of this paper, and most importantly, for his mentorship. Thank you for sticking with me, despite certain challenges threatening my success. Thank you to my committee members, David Wright and Stephanie Burwell for making themselves available to me when I needed additional clarification and encouraging words. Your feedback and editing expertise helped make this paper more theoretically sound.

A special thank you to my friends and colleagues, Jennifer Gonyea, Trina Slater, Luciana Silva, and Summer Davis, for keeping a smile on my face throughout this process. I especially appreciate Jeremy Altfeder for his patience and love throughout the most demanding and emotionally challenging times of this dissertation. You all have made such a difference in my life and I appreciate the support, love, and encouragement you all provide. I look forward to our shared experiences in the future.

Lastly, I thank my entire family; my dad, Michael; my mom, Susan; my sister, Michelle; and my brother, Adam, for always being there for me and providing me with words of encouragement when I needed them most. You all were my backbone throughout this entire process and without you this would not have been possible.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>ACKNOWLEDGMENTS</th>
<th>v</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>ix</td>
</tr>
</tbody>
</table>

## CHAPTER

1. **INTRODUCTION** ...............................................................................................................1

2. **LITERATURE REVIEW** ....................................................................................................8
   - Risk Factors of Obesity ..............................................................................................9
   - Impact of Obesity ........................................................................................................12
   - Treatments for Obesity .................................................................................................14
   - Bariatric Surgery .........................................................................................................17
   - Impact of Bariatric Surgery on Patient ......................................................................24
   - Impact of Bariatric Surgery on Couples ....................................................................36
   - Research Limitations ..................................................................................................41

3. **METHOD** .......................................................................................................................44
   - Ensuring Rigor .............................................................................................................56

4. **RESULTS** ......................................................................................................................62
   - Ensuring Rigor .............................................................................................................99

5. **DISCUSSION** ..................................................................................................................108
   - Limitations ................................................................................................................137
### LIST OF TABLES

<table>
<thead>
<tr>
<th>Table Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE 1: Participant Demographics</td>
<td>49</td>
</tr>
<tr>
<td>TABLE 2: Pre and Post Surgical Reports</td>
<td>49</td>
</tr>
<tr>
<td>TABLE 3: Core Story</td>
<td>97</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

FIGURE 1: Categories and subcategories explaining female perceptions of various marital components before bariatric surgery ................................................204

FIGURE 2: Categories and subcategories explaining female perceptions of various marital components after bariatric surgery ..............................................206
CHAPTER 1

Introduction

Currently in the United States, obesity is a health care problem reaching epidemic proportions (Centers for Disease Control and Prevention, 2006; Price & Pecjak, 2003; Wyatt, Winters, & Dubbert, 2006). As many as 60 million Americans are obese; a frightening number considering the negative effects it has on human life (Wyatt et al., 2006). Severe obesity is associated with premature mortality and morbidity, most commonly due to various obesity-related diseases such as diabetes or coronary heart disease.

Currently, bariatric surgery is the most recognized and effective treatment for obesity (National Institute of Health, 1991; Sjostrom, 2000). Through surgical methods of restriction or restriction and malabsorption, patients lose a substantial amount of weight and undergo various types of individual transformations. These changes are both positive and negative for the individual patient and other people surrounding him or her. This is especially true for married patients or patients involved in an intimate relationship. For instance, if a patient’s self-esteem increases following surgery, she may be more assertive in the way she speaks to her husband (Hafner & Rogers, 1990). The husband has the opportunity to decide whether he wants to accommodate to these changes by altering the way he interacts with his wife. However, some patterns of interaction are so strong that the spouse may not be able to adjust appropriately.

Additionally, existing theories report that obesity may serve to stabilize particular aspects of the obese patient’s marriage (Hamilton, 1985). This might make it more difficult for the obese patient to maintain surgical weight loss as the spouse inadvertently pressures the patient to return
to pre-surgical weight. If obesity was an essential component to keeping the marriage stable (i.e. a crucial ingredient to the marital pattern), the patient may regain weight in an effort to save his or her marriage from depleting.

For these reasons, many patients experience negative and positive marital changes as a result of undergoing bariatric surgery and weight loss. Early evidence suggests that bariatric surgery negatively impacts marriages as patients report an increase in rates of marital and sexual dissatisfaction, conflict, and divorce following bariatric surgery (Castelnuovo-Tedesco & Schiebel, 1976; Kalucy & Crisp, 1974; Marshall & Neill, 1977, 1998; Neill, Marshall, & Yale, 1978; Rand, Kowalske, & Kuldau, 1984; Solow, Silberfarb, & Swift, 1974). Further, spouses of patients have also reported that bariatric surgery negatively impacts marital satisfaction. Specifically, husbands report increased levels of anxiety and marital dissatisfaction after their wives surgical procedure (Hafner & Rogers, 1990). These increased rates of anxiety and dissatisfaction are a common finding among partners of patients as studies show that spouses have a difficult time accommodating to the changes brought on by bariatric surgery and end up divorcing or having affairs (Castelnuovo-Tedesco & Schiebel, 1976).

While these early reports suggest that bariatric surgery negatively impacts marital and sexual relationships, later research presents contradictory findings. In fact, researchers not only demonstrate the positive impact of bariatric surgery on marital and sexual relationships, they also describe non-examined pre-surgical variables as a reason why previous researchers found negative effects. In particular, obese individuals tend to report higher rates of pre-surgical marital and sexual discord compared to non-obese individuals (Kolotkin et al., 2006). Researchers report these rates of pre-surgical marital discord as being the primary cause for the negative findings of
bariatric surgery and marriage, rather than the surgery itself (Rand, Kulda, & Robbins, 1982). However, pre-surgical rates of marital and sexual discord were not considered in early research.

Current research depicts bariatric surgery and subsequent weight loss as having a positive impact on marital relationships (Camps et al., 1996; Chandarana et al., 1990; Gahtan, 1992; Goble, 1986; Harris & Green, 1982; Hawke et al., 1990; Kinzl et al., 2001; Kulda & Rand, 1980; Peace et al., 1989; Rand et al., 1982, 1984; Rand, MacGregor, & Hankins, 1986; Valley & Grace, 1987). Specifically, evidence reveals post-operative improvements in the quality of the patient’s marriage, amount of time spent together, sexual satisfaction, and future marital expectations. This positive impact is especially noticed within the first year after surgery, as marital satisfaction levels tend to decline with longer postoperative follow-up (Rand et al., 1982). Since many patients have the tendency to regain their weight at around six to twelve months post operation, it may be that as obesity returns, the associated martial difficulties appear (Hsu et al., 1998).

Based upon existing literature and research on bariatric surgery and marital relationships there are inconclusive results. While some research shows improvement in marital satisfaction post operation, other findings report a decline, and some studies suggest that bariatric surgery has no impact whatsoever on marital relationships (Porter & Wample, 2000; Ray, Nickels, Sayeed, & Sax, 2003).

Several possibilities account for these contradictory findings. First, studies with findings indicating a negative impact of bariatric surgery on marital relationships were conducted over a decade ago. Potential problems exist from basing current knowledge on dated research due to the recent advancements in bariatric surgery that create differences in postoperative care which may impact marriages in various ways. For instance, different surgical procedures produce various
risks and complications that pose more or less of an impact on the patient and his or her spouse after surgery. This leads to another problem in existing research that may explain the inconclusive findings regarding bariatric surgery and marriages. Specifically, many researchers do not control for the type of surgical procedure. As a result, reports from patients undergoing a restriction only procedure (i.e. a procedure that involves minimal side effects) are reported alongside information from patients undergoing a Roux-en-Y (i.e. a procedure with many related side effects and complications).

Methodological problems inherent in most available research pose a threat to the reliability and validity of findings. This is especially relevant to research examining bariatric surgery and marriages. Specific limitations of (1) poorly operationalized pre and post-surgery variables, (2) no use of control groups, (3) small sample sizes, (4) missing data, and (5) lack of longitudinal data (Hsu et al., 1998; Rand et al., 1986; Schok et al., 2000), provide some explanation to the overall contradictory research findings regarding bariatric surgery’s impact on marriages. Additionally, some researchers report biases in patient’s pre-surgical reports of marital dissatisfaction because they might deliberately provide misleading information to improve the chances of being selected as a surgical candidate (Ray et al., 2003). This provides an inaccurate account of the genuine changes patients and marriages undergo as a result of bariatric surgery.

Traditional methods for assessing the impact of bariatric surgery on marital relationships include the use of standardized instruments that mainly use quantitative methods to assess marital reactions to surgery {e.g. Gastric Bypass Questionnaire (Hafner, Watts, & Rogers, 1991); Lock-Wallace Marital Adjustment Test (Locke & Wallace, 1959) and the Marital Attitudes Evaluation Scale (Schutz, 1967)}. The myriad of experiences that patients may report after
bariatric surgery is not always confined to the categories or variables of these instruments. Additionally, while quantitative researchers provide information regarding the changes that occur after bariatric surgery, they do not provide reasons as to why these changes occur. This may be another reason why there is a current lack of understanding why some marriages suffer following bariatric surgery and some do not.

Qualitative inquiry allows for the uniqueness of each patient’s experience to be recorded and analyzed through in-depth interviewing and the interpretation of recorded artifacts (Glesne, 1999; Lincoln & Guba, 1985). Only a small number of researchers have qualitatively investigated the depth and breadth of patient’s experiences following bariatric surgery (Bocchieri, Meana, & Fisher, 2002; Keish, 2005; Ryan, 2005). While these findings contribute to the small body of qualitative literature on the impact bariatric surgery has on marriages, they primarily focus on individual changes (Keish, 2005, Ryan, 2005) or general psychosocial factors (Bocchieri et al., 2002). Thus, marital relationships serve as a small component to larger studies examining how bariatric surgery impacts various quality of life issues. Currently, there are no qualitative studies that only examine patient reports of marital changes following bariatric surgery.

The primary goal of the current work was to enhance both quantitative and qualitative work previously done on bariatric surgery and marital relationships by qualitatively exploring patient experiences of marital interactions pre and post surgery. Patient experiences of marital interaction before surgery were examined so that comparisons between before and after bariatric surgery could be made. Grounded theory methodology guided the present study. Interviews containing open-ended questions were conducted and transcribed. Data collection and analysis were continuously revised so that the theoretical understanding of marital experiences and
bariatric surgery emerged from the data, and not from preconceived notions formulated by previous research or the primary investigator. Since qualitative inquiry seeks to understand the unique individual experiences of the event under investigation, no formal hypotheses were generated for this study.

Results from this study will add to the existing literature on the impact bariatric surgery has on marital relationships and help patients and medical professionals understand the merits of considering intimate relationships before and after weight loss surgery. Additionally, this study will be the first known qualitative investigation exploring specific components impacting marital relationships after bariatric surgery.

The current work begins by reviewing various components and problems associated with obesity in chapter two. A brief explanation of unsuccessful attempts at treating obesity non-surgically follows in an effort to illustrate the importance and necessity of bariatric surgery. In order for the reader to understand the medical components of surgery, an overview of the various types of bariatric surgical procedures and associated risks and benefits is then provided. Following this description, existing literature examining the impact bariatric surgery has on the patient and his or her marital relationships is thoroughly examined, so that limitations and problems associated with this are research can then be addressed. These limitations help provide the purpose of the current study.

In chapter three, grounded theory is explained as the research methodology for this study. Specific information regarding the research procedure, including participant demographics, measures, data collection and analysis processes are detailed next. This chapter concludes with a detailed description of how rigor or trustworthiness was ensured.
Chapter four includes the findings of the current study. Specifically, detailed descriptions regarding the development of meanings, categories and subcategories, and core story are presented as they relate to the biopsychosocial perspective. An in-depth discussion of these results is included in the fifth and final chapter. In this section, categories and subcategories are further explained and compared to previous qualitative and quantitative research regarding the impact bariatric surgery has on the individual and couple relationship. Unique findings are explained using a variety of existing theories and hypotheses. Limitations of the current study and future research are then addressed. To conclude this chapter, clinical implications are presented to help professionals discover ways to implement the study’s findings.
CHAPTER 2

Literature Review

One of the fastest growing health concerns reaching epidemic proportions in the United States is obesity (Centers for Disease Control and Prevention, 2006; Price & Pecjak, 2003; Wyatt, Winters, & Dubbert, 2006). Certain diseases such as coronary heart disease, asthma, hypertension, type 2 diabetes, sleep apnea, and other obesity-related illnesses are responsible for many preventable deaths and morbidity (Mokdad et al., 2003; Mokdad, Marks, Stroup, & Gerberding, 2004). Despite these health risks, adult obesity rates have increased significantly over the past few decades. For instance, between 1976 and 1980, 47.4% of the adults surveyed over 20 were overweight, and 15.1% were obese (Centers for Disease Control and Prevention, 2005). According to the most recent reports from the Behavioral Risk Factor Surveillance System (BRFSS), 60.5% of the adult population surveyed in 2005 were overweight, 23.9% were obese, and 3.0% were extremely obese (Centers for Disease Control and Prevention, 2006). Similarly, the National Center for Health Statistics (NCHS) reports that approximately 60 million Americans are obese (Wyatt et al., 2006).

Due to this continual increase in the rates of obesity, the need for surgical treatments as a way to decrease obesity and its associated costs have emerged. As a result, many people are turning to bariatric surgery as a way to obtain and maintain weight loss. While previous researchers have examined the individual impact of bariatric surgery, there is scant research examining the impact bariatric surgery has on marital relationships. Moreover, existing evidence is inconclusive. It is important for medical and mental health professionals to have a thorough
understanding of the social implications of obesity surgery since it is becoming the most popular and utilized form of weight loss (Sheipe, 2006; Sjostrom, 2000). The purpose of the current work is to qualitatively examine bariatric surgery and marital relationships in an effort to gain a descriptive understanding of the relational components impacted by surgery. Results from this study will provide mental and medical health professionals with a more comprehensive understanding of how patients perceive their marital relationships before and after bariatric surgery. Unique findings from the current study may also help inform professionals of marital issues specific to bariatric surgical patients and their spouses that could positively impact the outcome of bariatric surgery if addressed and managed with the couple before and after surgery.

Before literature regarding the impact bariatric surgery has on marital relationships is reviewed, it is important to have a better understanding of obesity. Consequently, risk factors, costs, and non-surgical treatments associated with obesity are described next. This is reviewed in an effort to show the importance of surgical treatments as the best way to decrease the rates, factors, and costs of obesity. As rates of obesity surgery continue to rise, it is essential that professionals also increase in their awareness regarding the potential impact it has on a patient’s individual and relational life.

Risk Factors of Obesity

A simplified reason explaining why people gain weight is that the amount of their caloric intake exceeds the amount of energy spent. However, researchers indicate that weight gain leading to obesity is a more complex phenomenon that involves biological, genetic, psychological, cultural, social and environmental factors. For instance, biologists have discovered connections between specific proteins, hormones, and neurotransmitters on certain obesity factors, such as an individual’s appetite, feeding, and metabolic rate (Krauss, Winston,
Fletcher & Grundy, 1998; Wyatt et al., 2006). Additionally, researchers assert that genetics plays a major role in obesity (Levin, 2005). In fact, more than 20 different genes can be linked to an increased level of fat cells and susceptibility to weight gain (Ganley, 1986; Wyatt et al., 2006; Yamada et al., 2006).

While biological and genetic factors seem relevant to understanding obesity prevalence, the majority of obesity research focuses on various psychological, social, cultural, and environmental facets of obesity and overweight. For instance, researchers have discovered that certain psychological factors such as previous sexual abuse (King, Clark, & Pera, 1996; Ray, Nickels, Sayeed, & Sax, 2003), and harsh childhood (Lissau & Sorensen, 1994) play a role in obesity. Additionally, individual level of emotional reactivity (Fischmann-Havstad & Marston, 1984; Leon, 1974; Schachter, 1971), motivational readiness to change (Ray et al., 2003; Wee, Davis, & Phillips, 2005), and psychopathology (Friedman & Brownell, 1995), especially depression (Istvan, Zavela, & Weidner, 1992; Wing, Matthews, Kuller, Meilahn, & Plantinga, 1991), are also considered psychological risk factors of obesity.

Since depression has been linked to obesity, examining how these two factors may impact or maintain certain social processes is essential. According to Cohen (1976), certain types of psychopathology such as depression elicit negative responses from others. This interpersonal model can be applied to obesity so an obese person may also “induce negative moods in those with whom they interact” (Tan & Stoppard, 1994, p. 212), especially if that obese person is also depressed. Thus, an obese person may elicit negative responses from others and consequently turn to food to emotionally cope with social rejection.

In addition to Cohen’s model, some theorists suggest that obesity serves as a function for social processes in the family and associated subsystems. Thus, an individual may become or
remain obese in order to maintain a level of familial homeostasis (Ganley, 1986). For instance, obese spouses remain obese and have more of a difficult time losing weight when they are involved in a conflictual marriage (Fischmann-Havstad, 1984; Hamilton & Zimmerman, 1985). Specifically, researchers have discovered that obesity in marital relationships serves as a symptom that “moves to maintain or establish equilibrium where a power-dependence imbalance exists…either by accommodating to an existing imbalance to preserve the relationship, or by covertly negotiating for a greater balance” (Hamilton, 1985, p. 633).

An individual’s age, gender, and cultural background may be another factor of obesity (Wyatt et al., 2006). In fact, research findings indicate that women compared to men are a) more likely to be overweight, b) want to loose weight, and c) rate thin women as more attractive compared to average sized women (Cachelin, 2002). Even though African American women are on average more overweight compared to Caucasian women, they seem to be more accepting of their weight, rate heavier women as more attractive, and perceive their bodies as smaller than they actually weigh (Cachelin, 2002). These findings indicate that the views of an individual’s surrounding culture significantly impact the way she feels about her body image and size. Since an individual’s culture is a subsystem of society as a whole, researchers have also suggested that a person’s immediate environment or society impacts obesity rates (Wyatt et al., 2006).

In fact, industrialization is the one of the most prominent factors explaining the increase in obesity rates in the United States. The amount of physical activity has decreased significantly as a result of longer working hours, sedentary jobs, and technological advances of the television and computer. Simultaneously, the need for more convenient and inexpensive food has increased. Thus, the intake of healthy food choices such as fruits and vegetables has decreased due to their expensive costs, inability to remain fresh for long periods of time, and need for
preparation (Drewnowski & Specter, 2004). As a result, Americans are not only increasing their caloric intake, but are not getting the appropriate amount of physical activity to balance out this increase (Wyatt et al., 2006).

As researchers have noted, it is indisputable that obesity has a variety of possible psychological, social, cultural, and environmental factors. Further research is needed to improve the understanding regarding the specificity of each of these factors and how they may interplay to produce the result of obesity. Regardless of why it occurs, however, the undisputed increase in obesity rates produces legitimate concern due to the potential physiological, psychological, social, and economic impact to the patient and to society.

Impact of Obesity

Obesity is a major cause of many chronic illnesses such as asthma, non-insulin-dependent diabetes mellitus, hypertension, cardiovascular disease, gallbladder disease, and certain types of cancer (Colditz, 1992; Klein et al., 2004; Mokdad et al., 2003; Mokdad, Marks, Stroup, & Gerberding, 2004; United States Department of Health and Human Services, 2001). Researchers have found a decrease in life expectancy for obese persons of six to seven years and an average mortality rate ranging from 110,000 to 400,000 per year (Flegal, Graubard, Williamson, & Gail, 2005; Olshansky et al., 2005; Peeters et al., 2003).

In addition to the added physical impact of obesity, there is concern regarding the potential impact obesity has on an individual’s psychological health (Wyatt et al., 2006). Researchers have discovered that obese individuals have increased rates of anxiety and depression, along with inadequate self-esteem (Dallman et al., 2003; Grantmakers in Health, 2001; Kottke, Wu, & Hoffman, 2003; Simon et al., 2006; Stunkard, Faith, & Allison, 2002; Sullivan et al., 1993). Many of them suffer from cognitive distortions associated with body-
image disparagement (Mussel et al., 1996; Wadden & Stunkard, 1985) and disturbed eating patterns (Powers, Perez, Boyd, & Rosemurgy, 1999), such as binge-eating syndrome (Marcus, Wing, & Hopkins, 1988; Wadden, Foster, Letizia, & Wilk, 1993) and night eating syndrome (Hsu, Betancourt, & Sullivan, 1996).

Being obese not only impacts an individual’s psychological well being, it also effects his or her social life (Price & Peckjak, 2003; Wyatt et al., 2006). Previous research indicates that overweight and obese people experience discrimination in the education, employment, and healthcare settings (Allon, 1982; Puhl, 2001). Due to the social stigma attached to being obese, many obese individuals have decreased social interactions. Some research even suggests that people who are overweight tend to complete fewer years of education, make less money, and are less likely to get married compared to non-obese individuals (Haas, Lee, Kaplan, Sonneborn, Phillips, & Liang, 2003; Soball, 1984; Wadden & Stunkard, 1985). For those obese individuals who do marry, they typically report higher rates of marital difficulty and sexual discord, and have in increased rate of divorce compared to non-obese individuals (Kolotkin et al., 2006; Sobal, 1984).

In addition to the personal and social turmoil obesity creates for individuals and their families, it also generates direct and indirect costs to the economy. Approximately 5.7% to 9.1% of the total United States health care expenditures are spent on obesity related conditions (Allison, Zannolli, & Narayan, 1999; McTigue et al., 2003). This results in over 61 billion dollars spent annually on direct costs of medications, hospital care, personal health care, physicians’ services, and other professional services and treatment (Colditz, 1992; Wickelgren, 1998). Hospitals have to accommodate to the obese population by spending money on equipment, such as larger beds and wheelchairs, and lifts (Myczek, 2004). In addition to these
direct health care costs of obesity and obesity-related conditions, an average of 56 billion dollars is spent annually on indirect costs to the economy (Fierro, 2002). Indirect costs are determined by the value of loss associated with obesity related morbidity and mortality (Colditz, 1992; Wyatt et al., 2006). For instance, illnesses associated with obese individuals cause lower rates of productivity, increased absenteeism, and premature death (Colditz, 1992; Frezza, Wachtel, & Ewing, 2006; Sturm, 2002). Additionally, due to the higher health care expenditures, obesity also produces indirect costs to “taxpayers, employees, and consumers in the form of higher taxes, cost of goods, and fewer raises in earnings” (Wyatt et al., 2005, p. 171).

Thus far, the current paper has revealed the prevalence, potential factors, and various costs of obesity. In an attempt to decrease these problems, researchers have initiated different individual and couple treatments designed to help patients lose weight. A brief explanation and success rates of these treatments are illustrated below with the intention of determining the necessity of bariatric surgery.

Treatments for Obesity

Traditional treatments for obesity mainly focus on the obese individual and what he or she can do to successfully lose weight (Black, Gleser, & Kooyers, 1990). Actions and cognitions of the obese individual have been the primary modes of change utilized by health professionals to create weight loss. Specifically, the most utilized non-surgical treatment modalities include (1) pharmacotherapy (i.e. weight loss pills) (Carek & Dickerson, 1999; Clapham, 2004; Khan, Serdula, Bowman, & Williamson, 2001), (2) behavioral modification (i.e. dietary management, nutrition plans, and exercise) (Berkel, Poston, Reeves, & Forety, 2005; Carek & Dickerson,
1999; Shaw, O’Rourke, Del Mar, & Kenardy, 2005), and finally, (3) cognitive-behavioral therapy (i.e. how the role of emotion impacts eating pattern (Bennet, 1988; Marchesini et al., 2002).

While some of these treatments help produce weight loss for obese individuals, outcomes associated with these treatments contain a considerable amount of variability. Additionally, they have been particularly unsuccessful, alone and in combination, for helping severely obese individuals achieve long-term weight loss (Cerulli & Malone, 1998; Ray, Nickels, Sayeed, & Sax, 2003). Thus, it is evident that improvements need to be made for the treatment of obesity. One way researchers have tried to alleviate this problem is by introducing the obese persons’ spouse in the weight loss treatment program (Black, Gleser, & Kooyers, 1990; Dubbert & Wilson, 1984; Weisz & Bucher, 1980; Wing, Marcus, Epstein, & Jawad, 1991). However, the types of spousal involvement researchers manipulate and examine are not consistent throughout existing research. For example, some researchers define spousal involvement as having the spouse attend treatment sessions with their obese partner (i.e. esteem support) (Black et al., 1990). Others have identified spousal involvement as monitoring, reinforcing, and modeling appropriate eating behavior (i.e. informational support) (Black et al., 1990; Weisz & Bucher, 1980). In some instances, researchers have spouses sign contracts that specify ways the spouse will help his or her partner monitor diet, exercise, and moods (i.e. instructional support) (Black et al., 1990). Lastly, some researchers define spousal involvement as having partner and spouse participate in weight control programs together, so that each partner can simultaneously support each other’s weight loss program (Dubbert & Wilson, 1984; Wing et al., 1991).

Due to inconsistent definitions and variables of spousal involvement, there are contradictory findings on the advantage of spousal involvement compared to the absence of
spousal support in obesity treatment. Findings from a meta-analysis evaluation examining couples programs compared to programs not involving partners in weight loss therapy indicate that spousal involvement makes a significant contribution to weight loss (Black, Gleser, & Kooyers, 1990). Some researchers have suggested that spousal involvement produces positive effects for the treatment of obesity (Brownell, Heckerman, Westlake, Hayes, & Monti, 1978; Murphy et al., 1982; Pearce, LeBow, & Orchard, 1982; Rosenthal, Allen, & Winter, 1980). Specifically, researchers noted that compared to individuals receiving treatment with no spousal involvement, obese individuals with an involved spouse lost more weight (Brownell et al., 1978), maintained their weight loss for a longer period (Brownell et al., 1978; Israel & Saccone, 1979; Murphey et al., 1982), and reported less rates of depression due to obesity (Brownell & Stunkard, 1981; Duppert & Wilson, 1984; Weisz & Bucher, 1980). Moreover, findings suggest that women do better in treatment when her husband is actively involved compared to men who actually do better without spousal support (Weisz & Bucher, 1980; Wing, Marcus, Epstein, & Jawad, 1991). Researchers explain this gender difference by hypothesizing that since women are generally responsible for the preparation of food for the entire family, they are forced to alter and maintain good eating habits by accommodating to their husband’s diet (Wing et al., 1991). Thus, women may me more apt to stick with their diets when their husbands are involved in the same dietary program.

While researchers report these findings as noteworthy, they also indicate that the effects are very small and do not agree on a specific type of spousal support particularly helpful to the obese individual in treatment (Black et al., 1990). For these reasons, other available evidence examining the effect of spousal involvement on obesity treatment indicates no significance
Research examining the effects of these non-surgical treatments for obesity portrays them as ineffective. Although some studies report successful weight loss, most suggest that these treatments contain too much variability in the results and do not (1) maintain weight loss long-term, (2) identify specific types of spousal support proven to be helpful for the obese spouse, and (3) benefit the severely obese (Herpertz, Kielmann, Wolf, Hebebrand, & Senf, 2004; Sarwer, Wadden, & Fabricatore, 2005). In fact, these treatments are so ineffective that people usually gain all of their weight back within five years of treatment (Fabricatore & Wadden, 2004; Wadden, Sternberg, Letizia, Stunkard, & Foster, 1989; Wardle, 1999; Wilson, 1994; Wilson & Brownell, 2002). Additionally, the overwhelming increase in obesity rates appropriately suggests that these treatments do not effectively help people lose weight. This failure of individual and couple treatments has led to an increase in bariatric surgery as a way to more effectively treat obesity.

Bariatric Surgery

Currently, bariatric surgery is the most recognized and effective treatments for obesity that achieves and maintains significant weight loss (National Institutes of Health, 1991; Sjostrom, 2000). In fact, rates of bariatric surgery from 1998 to 2002 have increased from 7.0 to 38.6 per 100,000 adults (Smoot, 2006). Other researchers report similar findings, indicating a significant increase in bariatric surgeries from 14,000 in 1998 to over 108,000 in 2003 (Shinogle, Owings, & Kozak, 2005). Typically, high-income women with private insurance utilize bariatric surgery as a treatment for weight loss (Santry, Gillen, & Lauderdal, 2005). In contrast, people who a) are publicly insured, b) have a lower income, c) are less educated, and d) are African
American, are underrepresented in the population of bariatric surgical patients, especially considering their high prevalence of obesity (Livingston, 2004).

It is not surprising that overall rates of bariatric surgery have increased, since patients who have bariatric surgery typically lose up to 80% of excess weight (Pritts, Fischer, & Pritts, 2005). However, the rate of weight loss varies across different types of bariatric surgical treatment (Korenkov, Sauerland, & Junginger, 2005). All gastric bypass surgeries can be divided into 3 different methods of (1) restriction, (2) malabsorption, or (3) restriction and malabsorption (Pritts, Fischer, & Pritts, 2005; Woodward, 2003). While a comprehensive review of all surgical options is beyond the scope of the current paper, a basic understanding of the most utilized restriction and restriction/malabsorption procedures is important.

*Restriction Procedures*

During gastric restriction procedures, surgeons reduce the size of the stomach and create a delaying of the emptying process of food from the stomach (Woodward, 2003). This helps limit the amount of food intake and produces a feeling of food satiation for longer periods of time. The laparoscopic adjustable gastric banding (the Lap-Band System) is one kind of these restriction procedures where a silicone band is laparoscopically inserted around the uppermost part of the stomach (Woodward, 2003). As a result, a small upper stomach and lower stomach in the shape of an hourglass is created. This band is adjustable and regulates the food process from the smaller to the larger stomach, producing an early and longer feeling of fullness. The Lap-Band System is the least invasive and least painful type of bariatric surgery, has the least amount of recovery time, and is completely reversible (Woodward, 2003). Like all surgical procedures, however, risks are involved. For instance, the body may fight off the foreign body of the band or the band may move in position, which requires reoperation.
The vertical banded gastroplasty (VBG) is another type of restriction operation that limits dietary intake by creating a smaller stomach (2 to 4 ounces) at the top of the original stomach using surgical staples and the marlex band (Woodward, 2003). This band “serves as the food gatekeeper” (Woodward, 2003, p. 90) by decreasing the flow of food from the new stomach to the old stomach, which ultimately creates a feeling of fullness quicker and over a longer period of time. The VBG procedure is a relatively uncomplicated surgery with very low mortality rates and complications. However, since the VBG is dependent on the patient’s ability to adjust his or her diet so that the band can effectively work, one third of patients who receive this surgery regain the weight. In fact, many patients are not satisfied with the restriction methods of bariatric surgery and usually have more invasive procedures where restriction and malabsorption is required for substantial and long-term weight loss.

*Restriction and Malabsorption Procedures*

Restriction and malabsorption procedures differ from the simple restrictive surgeries because in addition to the restriction component of altering the size of the stomach, the absorption rate of the stoma intestines is also altered. Specifically, the rate of absorption is changed when surgeons reroute or bypass sections of the small intestine, resulting in “food being poorly digested or rapidly passed into the large intestine prohibiting excessive calorie absorption” (Woodward, 2003, p. 89).

The Roux-en-Y gastric bypass (RYGB) surgery is a procedure that combines the restriction and malabsorption components to weight loss. While the RYBG can be performed openly or laparoscopically (LRYGB), a growing number of patients are choosing the laparoscopic procedure due to the diminished recovery time, hospital stay, and associated medical complications (Schneider, 2003; Moose, 2003; Sheipe, 2006; DeMaria, 2005). Whether
performed open abdominally or laparoscopically, the immediate and long-term success rates of
the RYGB make it the most utilized and popular bariatric procedures. In fact, many surgeons and
patients have distinguished the RYGB as the “gold standard” for bariatric surgery
(Sandrasegaran, 2005).

The first step of the RYGB is dividing the stomach into 2 parts using surgical staples. This creates an uppermost part of the stomach that is responsible for limiting food intake
(Woodward, 2003). Although still functional, the remaining 90% of the lower section of the
stomach no longer stores food. The next step of the RYGB procedure is detaching the small
intestine. Once that is done, surgeons connect the lower part of the small intestine to the newly
created small stomach pouch. This connection to the small stomach, called an anastamosis, helps
to “delay food from emptying the pouch, causing longer satiety” (Woodward, 2003, p. 94). It
also allows food to pass directly to the small intestine where it can be digested. The remaining
upper portion of the small intestine is then reconnected to the lower portion of the small
intestine, creating a complete bypass of the original stomach and parts of the small intestine. This
bypass prevents the body from absorbing calories or nutrients until further down at the
connection between upper to lower small intestine (Woodward, 2003). As a result of this caloric
malabsorption, the body absorbs fewer calories and the patient loses weight. Although a
decrease in malabsorption is beneficial when taking calories into account, it is negative when
considering essential nutrients. Specifically, vital nutrients such as iron, calcium, and vitamins A,
B, and E, are not efficiently absorbed and many patients suffer from vitamin and mineral

Another negative facet to the RYGB procedure associated with the body’s inability to
fully absorb food is the dumping syndrome (Woodward, 2003). This occurs as a result of the
bypass of the pyloric sphincter, which serves as the gatekeeper of food motility from the stomach to the small intestine. When this sphincter is bypassed, food passes into and down the intestinal tract at an increased rate, causing diarrhea, cramping, nausea, rapid heartbeat, and dizziness (Woodward, 2003). The dumping syndrome especially occurs when patients consume foods high in sugar. Because dumping is inconvenient, embarrassing, and painful, it is recommended that patients decrease their consumption of high caloric foods. For this reason, along with the supplementary restrictive and caloric malabsorption components of RYGB, patients undergoing this procedure lose a significant amount of weight and suffer less from obesity related comorbidities (Blackburn & Mun, 2005; Sheipe, 2006).

Although the RYGB procedure is more effective for weight loss compared to the restriction procedures, it is also associated with more short and long term complications. In fact, 20-25% of RYGB patients experience major complications such as anastomotic leaking (i.e. leaking at the stomach/intestine attachment site), gastric and small bowel obstruction, gastrogastric fistula (caused by staple gun failure), gastrointestinal hemorrhage, herniation, and treatment-resistant ulcers (Sandrasegaran, 2005). Additional RYGB surgical complications include wound infection, pneumonia, pulmonary embolus, and prolonged nausea or vomiting. Many of these complications are serious since some can lead to death. In fact, the mortality rate of the RYGB ranges from .05% to 1% (Livingston, 2004; Nguyen et al., 2006; Sandrasegaran et al., 2004; Sheipe, 2006; Shinogle, Owings, & Kozak, 2005; Steinbrook, 2004). The risk of surgical death is related to the type of performed surgical procedure, along with various patient variables. For instance, the LRYGB has a lower mortality rate compared to open-RYGB (.05%
versus 1-2%). Additionally, patient variables of age, degree of obesity and presence of other non-obesity related complications also impact mortality rates associated with RYGB (Shinogle et al., 2005; Steinbrook, 2004).

Despite these complications, the RYGB is associated with better weight loss outcomes compared to other obesity surgical treatments. In fact, researchers suggest that the RYGB results in more initial and long-term weight loss and decreases the rate of obesity related diseases, such as sleep apnea and type II diabetes (Kushner & Noble, 2006; Mott, 2004; Sjostrom, 2004; Steinbrook, 2004). It is also the most researched and understood surgical treatment for obesity (Woodward, 2003). For these reasons, patients frequently decide on the RYGB procedure amongst other surgical options for obesity.

In order to be approved for all types of bariatric surgical treatments, patients are required to meet general physical and psychological qualifications before surgery. While a standardized protocol for assessing eligible patients for bariatric surgery does not exist (Bauchowitz et al., 2005), consensus guidelines suggest that pre-surgical patients have (1) a BMI over 40, (2) at least one obesity related condition, and (3) previous documentation of unsuccessful non-surgical weight loss attempts (Pentin & Nashelsky, 2005; Voelker, 2004). It is also highly recommended that all bariatric surgical patients undergo some type of psychological evaluation. In fact, many insurance companies will not cover bariatric surgery without a pre-surgical mental evaluation (Bauchowitz et al., 2005). Despite the importance and prevalence of evaluations, however, “there are no uniform guidelines for the psychological assessment of surgery candidates” (Bauchowitz et al., 2005, p. 825). The only established contraindications for surgery that most assessments measure includes patient active drug use, schizophrenia, mental retardation, and lack of knowledge about the surgery. However, some professionals utilize other types of psychological
evaluations that assess for (1) depression, (2) psychopathology, and (3) binge eating, because of their high frequency rates in obese patients seeking treatment and negative impact on post-surgical outcome (Black, Goldstein, & Mason, 1992; de Zwaan et al., 2003; Dixon, Dixon, & O’Brien, 2003; Friedman & Brownell, 1995; Kalarchian, Wilson, Brolin, & Bradley, 1998; Mazzeo, Saunders, & Mitchell, 2006; Roberts, Kaplan, Shema, & Strawbridge, 2000).

While the assessment of these pre-surgical psychological variables is important, some researchers suggest that additional factors, such as patient’s age, pre-operative weight, social, cognitive, and behavioral influences, be considered since they may impact post-surgical outcome. For instance, being young and having less pre-surgical weight contributes to better post-surgical weight loss outcomes (Hafner, Rogers, & Watts, 1990; Larsen, 1990; Vallis & Ross, 1993). Additional pre-surgical social factors such as marital satisfaction, social support, and amount of environmental stress may also impact patient surgery recovery and weight loss outcome (Bauchowitz et al., 2005). In fact, research shows that when patients undergo surgery with a low amount of social support in combination with previous psychiatric history, they have an increase rate of post-operative psychological complications (Valley & Grace, 1987). Bauchowitz and colleagues (2005) also suggest that specific cognitive and behavior factors, such as patients’ eating habits and expectations of weight loss, also be assessed pre-surgically due to their impact on the outcome of bariatric surgery. Specifically, researchers report that when patients are provided a comprehensive understanding of the specifics of the surgery, they have a more realistic view of anticipated weight loss (Gentry, Halverson, & Heisler, 1984). This helps to decrease the patient’s disappointment when they do not lose a large amount of weight in a short time, with little to no effort on his or her own part. Thus, if a patient recognizes the realities
of surgery, he or she may be more apt to stick with the required adjustments associated with the surgery and, consequently, more likely to loose weight over a longer period of time.

Patients and medical health professionals make decisions about bariatric surgery with a limited amount of knowledge regarding the potential impact that certain pre-surgery variables have on bariatric surgery (Vallis & Ross, 1993). It is therefore essential that additional research be performed so that health professionals can have a more comprehensive awareness of the pre-surgery factors and, thus, be more standardized in deciding whether a patient should undergo bariatric surgery. Additionally, having a better understanding of pre-surgery factors may provide additional insight to understanding the post-surgery changes that occur in a patient following bariatric surgery, which are detailed in the following section.

Impact of Bariatric Surgery on Patient

Despite the lack of knowledge regarding pre-surgery factors, there is a substantial amount of extant research examining the post-operative impact of bariatric surgery on the patient. In fact, researchers have found that patients experience numerous side effects as a direct or indirect result of bariatric surgery. Specifically, existing evidence suggests that a patients’ physical, psychological, and psychosocial health can be positively or negatively impacted by bariatric surgery.

Changes in Physical Health

Post-Operative Physical Changes

Following bariatric surgery, patients will experience numerous physical side effects and changes (Voelker, 2004). Medical professionals closely monitor these post-operative changes, such as patients breathing, medicinal usage, wound care, sepsis, and diet (Voelker, 2004). These post-operative conditions are especially pertinent to the bariatric surgical patient because of the
numerous pre-surgical problems that are associated with being obese. For instance, many obese patients undergoing bariatric surgery suffer from numerous breathing deficiencies that have the tendency to become intensified post-surgery. Additionally, since many patients have various pre-surgical comorbid conditions medicinal usage also needs to be closely monitored. In the obese patient, wound care and sepsis are especially important for professionals to monitor, since obese patients have “an increased risk of infections due to reduced circulation, glucose intolerance tendencies, and difficulties in managing personal hygiene” (Voelker, 2004, p. 98). Another physical change that patients undergo following surgery that is also closely monitored by medical professionals is diet. The slow dietary process for the post-operative patient begins with a strict two-week liquid diet, progresses to soft food, and eventually ends with solid foods. Decrease in chewing rate and eating small portions are especially important due to physical complications that can occur when the patient does not efficiently chew his or her food or overeats (i.e. vomiting, diarrhea, bowel dysfunction, and dumping syndrome) (Rand, Macgregor, & Hankins, 1986). In fact, this dietary component of the physical effects of bariatric surgery is what helps many patients successfully loose weight.

*Post-Operative Changes in Eating Behavior*

Despite the myth that bariatric surgery is the magical cure to obesity whereby patients exert little to no effort to loose weight, the actual success of bariatric surgery ultimately resides in the patients ability to effectively adjust to post-operative changes in body (Rand et al., 1986). In fact, one of the primary components to significant short and long-term weight loss after surgery is similar to non-surgical treatments that focus on changing in patients’ eating behavior. According to researchers, if a patient fails to adjust his or her eating behavior after surgery, he or she also has a higher failure rate of obtaining and sustaining weight loss (Halverson & Koehler,
1983; Rand et al., 1986). Specifically, it is essential for patients to alter the (1) quality (Cook & Edwards, 1999; Hafner, Watts, & Rogers, 1991; Ogden, Clementi, Aylwin, & Patel, 2005), (2) quantity (Hsu et al., 1998; Kenler, Brolin, & Cody, 1990; Ogden et al., 2005), and (3) personal attitudes (Ogden et al., 2005; Rand et al., 1986) toward food in order to achieve a successful outcome of weight loss.

**Post-Operative Changes in Physical Abilities**

A patient’s recovery from bariatric surgery depends upon certain components within the individual (i.e. pre-surgery physical, psychological, and social facets), along with the type of bariatric procedure performed (Sabbioni et al., 2002). As previously mentioned, the restrictive procedures are less invasive, have less post-surgical complications, and have a shorter recovery time compared to restrictive and malabsorption procedures (Sandrasegaran et al., 2005; Woodward, 2003). Both procedures, however, create initial changes in the body that impede a patient’s ability to function physically. For instance, recovery from a surgical procedure, incision pain, vomiting, diarrhea, and the dumping syndrome all decrease a patient’s ability to participate in physical activities. Many patients report being uncomfortable (not to mention embarrassed) due to increased abdominal bloating and odorous flatulence that occurs after surgery. Fortunately, these negative side effects are temporary. In fact, most of these side effects decrease after the first six months after surgery (Sollow, Silberfarb, & Swift, 1974).

Shortly after surgery, patients typically begin to increase their level of physical activity (Voelker, 2004). For instance, patients gradually increase their lifestyle activity by taking the stairs instead of elevators or walking down the shopping mall aisles instead of using a wheelchair. Part of these post-surgery changes is also a significant increase in the participation of leisure activities. While some patients report an increase in fatigue that prevents them from
participating in leisure activities, the majority of patients report less fatigue (Ogden et al., 2005) and an increase in leisurely pursuits such as gardening, walking the dog, and daily household tasks (Peace, Dyne, Russell, & Stewart, 1989).

In addition to increasing everyday leisurely interests, many patients typically initiate a rigorous exercise program post-operatively (Bocchieri, Meana, & Fisher, 2002; Hafner, Watts, & Rogers, 1991; Schok et al., 2000; Voelker, 2004). Following surgery and associated weight loss, patients are better able to participate in activities that were previously abandoned due to excess weight that made any physical activity physically impossible and embarrassing. In particular, patients incorporate programmed activities such as aerobics, cardio-walking, swimming and bicycling into their post-surgical lifestyle (Klein, 2001; Voelker, 2004). Compared to their virtually homebound and sedentary pre-surgery lifestyle, many patients report this increase in activity as a positive change in their life (Hafner, Watts, & Rogers, 1991; Peace et al., 1989). In fact, according to patients, the ability to participate in these lifestyle and physical activities is viewed as the most prevalent benefit to having bariatric surgery (Bocchieri et al., 2002). Patients report these health benefits as the major selling point of bariatric surgery because as patients’ physical health improves, they “also begin to envision the prospect of a longer, healthier, more satisfying life” (Bocchieri et al., 2002, p. 784). Thus, improvement in physical health is potentially a major component to a healthier psychological framework and outlook on life.

Changes in Psychological Health

Many researchers have examined the impact of bariatric surgery on a patient’s psychological health. Existing evidence suggests that the majority of patients who undergo bariatric surgery experience some type of psychological impact. Specifically, researchers have discovered positive and negative changes in certain psychological factors such as patient
depression, anxiety, body satisfaction, self-esteem, and personality. While the majority of these studies suggest that bariatric surgery produces encouraging psychological outcomes, some studies have discovered that not all patients benefit psychologically from surgery.

Negative psychological changes

Obesity is a complex phenomenon with different psychological sources and functions (Hsu et al., 1998). For instance, some researchers suggest that obesity serves a function for the individual as it may (1) protect them from becoming close with other people, or (2) be emotionally satisfying to overeat (Hsu et al., 1998). Due to the significant weight loss and food restrictions associated with bariatric surgery, the function(s) that obesity previously served no longer exists and patients may experience adverse psychological effects following bariatric surgery. In fact, some researchers have discovered that regardless of the amount of weight loss, patients report an increase in depression following bariatric surgery (Dubovsky, Haddenhorst, Murphy, Liechty, & Coyle, 1985; Hsu, Betancourt, & Sullivan, 1996; Hsu, Sullivan, & Benotti, 1997; Ryden, Olsson, Danielsson, & Nilsson-Ehle, 1989). Unfortunately, researchers are not sure why patients experience an increase in depression after surgery; whether because of the surgery itself, weight loss, or other psychological, biological, or social factors (Hsu et al., 1998).

An additional psychological component negatively impacted by bariatric surgery is patient level of anxiety or nervousness (Bocchieri, Meana, & Fisher, 2002; Gentry, Halverson, & Heisler, 1983). Specifically, patients report increased feelings of tension due to some of the changes brought on by surgery. For instance, excess skin due to significant weight loss provides anxiety for many patients as it produces embarrassment and concerns about whether to have it surgically removed (Bocchieri et al., 2002; Sarwer, Wadden, & Fabricatore, 2005).
Another more intense post-surgical issue creating tension and anxiety for patients is facing repressed personal issues. Since some patients use obesity as a mechanism to protect them from “addressing painful fears, obstacles, or rejection” (Bocchieri et al., 2002, p. 784), surgical weight loss generates feelings of vulnerability and anxiety. Thus, tension arrives when patients realize they can no longer place blame on their weight if (1) others rejected them, (2) they could not perform certain function, or (3) did not attempt new challenges. Additionally, patients can no longer use their weight to protect them from being sexual. This is particularly difficult for patients who experience past sexual abuse, as they may become anxious and frightened in sexual situations (Bocchieri et al., 2002).

A change in personal identity is another reason why patients describe an increase in anxiety after surgery (Bocchieri et al., 2002). Many patients report that the surgical weight loss provokes a de-stabilization in personal values and self-concept. Radical shifts in behavior, perceived values, level of activity, mood, and perception of others consequent to surgical weight loss causes tension, as patients are forced to negotiate “various aspects of themselves that are no longer compatible with new standards” (Bocchieri et al., 2002, p. 785).

From this literature indicating negative psychological reactions to surgery, it is appropriate to suggest that some patients may experience depression and anxiety following bariatric surgery and consequent weight loss. Additionally, a minority of patients (19%) report experiencing an increase in DSM-IV Axis I psychiatric symptoms after bariatric surgery and consequent weight loss (Larsen, 1990). Moreover, researchers also suggest that even when patients report improvement in psychological status, the improvement is short-lived. In fact, many studies suggest that while feelings of depression and anxiety may improve after bariatric surgery, they eventually deteriorate to baseline or worsen (Karlsson, Sjostrom, & Sullivan,
1998). This is displayed in the higher than expected rates of suicide among bariatric surgical patients during follow-up (Gentry, Halverson, & Heisler, 1984; Macgregor & Rand, 1993; MacLean, Rhode, & Forse, 1990; Mitchell et al., 2001; Powers, Rosemurgy, Boyd, & Perez, 1997). All of these studies report that the suicide gestures and rates occur seven months post surgery, and therefore, suggest that the potentially positive psychological findings of bariatric surgery are limited to the first few months (Sarwer, Wadden, & Fabricatore, 2005).

While these alarming findings indicate that bariatric surgery and consequent weight loss may negatively impact a patient’s psychological well being, they need to be interpreted with caution. In fact, many researchers note several methodological problems associated with this research (Hsu et al., 1998; Sarwer et al., 2005; Vallis & Ross, 1993).

Specifically, issues such as lack of clear operationalized variables (i.e. how to define depression or what determines a successful outcome), lack of pre-surgical data to compare to post-surgical data, and absence of well-controlled longitudinal research make it difficult to ascertain these findings as truly valid. Furthermore, Stunkard and colleagues (1986) report that it is difficult to interpret data reporting ill psychological effects of bariatric surgery because “many of the problems antedate the surgery or derive from the physical complications of it; some are apparently no more than the emotional turbulence of the postoperative period, which clears promptly” (p. 425). Moreover, a much larger body of literature exists that indicates the positive psychological effects of bariatric surgery.

*Positive psychological changes*

Numerous studies have examined the positive psychological changes to patient level of psychosis, depression, anxiety, and self-esteem (Black, Goldstein, & Mason, 1992; Glinski, Wetzler, & Goodman, 2001; Halmi, Long, Stunkard, & Mason, 1980; Larsen, 1990; Sarwer et
al., 2005). Specifically, some researchers have reported that bariatric surgery decreases psychiatric symptoms post-surgery (Gentry et al., 1984; Larsen, 1990). For example, during a three-year follow up, Larsen (1990) discovered a decrease in Axis I psychiatric diagnoses from 41% pre-surgery to only 22% post-surgery. Other researchers discovered similar findings when they compared pre-surgery psychiatric status to post-surgery status and found that while some patients completely lost their psychiatric diagnosis (Gentry et al., 1984), others had between 33% (Gertler & Ramsey-Stewart, 1986) to 50% less reported rates of psychiatric diagnosis (Karlsson, Sjostrom, & Sullivan, 1997). This research provides evidence that the majority of patients undergoing bariatric surgery experience positive psychological changes in relation to psychiatric symptoms and formal psychopathology. In fact, the only psychiatric disorder that does not show any improvements after bariatric surgery is personality disorders (Larsen & Torgersen, 1989; Sarwer et al., 2005).

Other types of psychological difficulties, such as depression and anxiety, also decrease in symptoms and prevalence rates following bariatric surgery. Numerous studies examining depression and anxiety show that patients report a marked improvement postoperatively (Karlsson et al., 1998; Porter & Wampler, 2000; Rand, Macgregor, & Hankins, 1986; Rowston et al., 1992; Solow, Silberfarb, & Swift, 1974). This improvement is seen most in patients 1) at 6 months post-operation (Karlsson et al., 1998) and 2) who experience a significant amount of weight loss (Karlsson et al., 1998, 1998; Larsen, 1990; Ryden et al., 2001). These findings indicate that while depression and anxiety may decrease as a result of bariatric surgery, it is also dependent upon the amount of weight loss. The amount of weight a patient looses post-bariatric surgery is dependent upon numerous components. However, researchers have discovered that patients suffering from pre-surgery obesity related depression and anxiety typically loose more
weight compared to those who do not (Brolin et al., 1986; Delin, Watts, & Bassett, 1995; Dubovsky et al., 1985; Hafner, Rogers, & Watts, 1990). In these events, it seems that pre-surgical rates of depression and anxiety may serve as a motivator toward obtaining and maintaining weight loss.

Following surgery and weight loss, many patients gain a sense of hope for a brighter future, one that contains a better acceptance of self. Indeed, many patients report experiencing significant improvements in self-esteem (Bocchieri et al., 2002; Hsu et al., 1998; Solow, Silberfarb, & Swift, 1974), body-image (Gentry, Halverson, & Heisler, 1983; Masheb, Grilo, Burke-Martindale, & Rothschild, 2006; Peace et al., 1989) and personality characteristics (Larsen & Torgersen, 1989) following bariatric surgery and subsequent weight loss. Many patients report positive changes in how they perceive their inner strengths and abilities. Specifically, changes in personal assertiveness, confidence, and esteem are expressed as a result of the weight loss associated with bariatric surgery. Researchers suggest that this change in personal identification occurs as a result of “internal change, but may also have stemmed from the more positive way in which patients are viewed by others” (Chandarana, Holliday, Conlon, & Deslippe, 1988, p. 85). As a patient’s self-esteem increases, her body image also improves as she finds herself more physically attractive. In fact, some researchers have found a difference in the way that patients perceive their physical appearance by measuring the amount of times a patient reports avoiding a mirror. Findings from this research suggest that compared to 90% of patients whom avoided mirrors pre-surgery, as many as 67% to 70% of post-surgical patients like the image in the mirror, and thus, avoid them less often (Peace et al., 1989; Rand, Resnick., & Macgregor, 1999). Many researchers have also found that patients report less body dissatisfaction and in fact, admire their new bodies (Gentry et al., 1984; Masheb et al., 2006;
Peace et al., 1989; Solow et al., 1974; Stunkard et al., 1986). In fact, pre-surgery rates of body dissatisfaction (90%) decrease significantly post-surgery (72%) (Peace et al., 1989). This is especially prevalent within African American patients since they report more of an increase in reported body image regardless of weight loss compared to Caucasian patients (Gentry et al., 1984).

As a consequence to the noted improvements in patient level of self-esteem, confidence, and perceived physical appearance, patients may experience shifts in personality characteristics. For instance, Larsen and Torgersen (1989) discovered that personality traits of self-doubt, insecurity, and sensitivity decreased significantly following bariatric surgery. Additionally, obsessive traits of parsimony and orderliness increased as patients not only became more in control over food intake, but also more controlling in various aspects of their life (Larsen & Torgersen, 1989).

A substantial amount of research indicates that bariatric surgery is related to psychological improvement for the patient. Thus, it seems that after bariatric surgery patients undergo several internal changes that ultimately lead to a healthier view of self and psychological well-being. This increased psychological health in turn impacts a patient’s social health. Specifically, as a patient increases his or her level of self-esteem and identity, he or she feels more confident dealing with others in social settings. As a result, current research reveals social changes occurring in patients following bariatric surgery.

Changes in Social Health

Many patients report an increase in their social well-being following bariatric surgery and subsequent weight loss. In fact, social discrimination that was present before surgery dissipates for many post-surgical patients, as they report that “their weight no longer caused them to be
excluded from social activities, no longer elicited critical stares from strangers, and no longer prevented access to public facilities” (Rand & Macgregor, 1990, p. 1392). Many patients also report dramatic improvements in the obese-related prejudices at work following bariatric surgery (Kral, Sjostrom, & Sullivan, 1992). Due to this decrease in job discrimination, in partnership with an increase in patient level of self confidence, many patients report making positive career adjustments following bariatric surgery (Bocchieri et al., 2002; Crisp, Kalucy, Pilkington, & Gazet, 1977; Herpertz et al., 2003; Kral et al., 1992; Rand & Macgregor, 1990; Solow, 1977). For instance, while some patients report job promotions, others realize that they are not satisfied in their current jobs, quit, and go back to school to pursue different careers.

Another social change reported by patients after bariatric surgery involves patient relationships with friends and family. According to some studies, patient’s social life and interactions tend to improve after bariatric surgery (Hawke et al., 1990; Herpertz et al., 2003; Karlsson et al., 1998; Peace et al., 1989; Solow et al., 1974). Many patients not only report making new friendships, but also describe pre-surgery friendships as more satisfying after bariatric surgery.

In addition to improved social interactions with friends, patients also report an enhancement in their familial relationships after bariatric surgery. Specifically, many patients describe having more energy to play with their children, and thus, experience improvements in the quantity and quality of family time (Bocchieri et al., 2002). Additionally, several patients find that as they improve their eating habits and level of physical activity, other members of the family accommodate and, in fact, adopt similar lifestyle habits (Bocchieri et al., 2002).

Not all research, however, shows a positive and long-lasting change in relationships with friends and family members after bariatric surgery. Moreover, the initial improvements in patient
social interactions typically dissipates by three years after bariatric surgery (Waters et al., 1991).

In fact, Bocchieri and colleagues (2002) discovered that many patients reported losing friends after surgery due to (1) friends not being able to accommodate to post-surgical role changes, (2) old friends being jealous of patient’s weight loss, and (3) the patient’s improved self-esteem leading them to acknowledge some friendships as not healthy. Since friends treated them differently, several patients report “struggling with feelings of resentment and anger at people who treated them better than they had preoperatively” (Bocchieri et al., 2002, p. 786). Some patients even report changes in familial dynamics after bariatric surgery. For instance, early researchers found that some family members gain weight in an effort to compensate for the weight lost by the patient who had bariatric surgery (Crisp et al., 1977). Researchers explain this phenomenon as the need for the family to “maintain homeostasis and realign previous family dynamics around obesity” (Crisp et al., 1977, p. 111).

Due to the intense individual transformations a patient experiences after bariatric surgery, it is apparent that some relationships cannot withstand these changes and end in conflict. Sadly, this can leave the patient with a limited amount of people to depend on as he or she loses weight and undergoes significant lifestyle changes after bariatric surgery. While this lack of social support has not been shown to impact the amount of weight an individual loses (Gentry, Halverson, & Heisler, 1984; Hafner & Rogers, 1990; Schrader et al., 1990; Valley & Grace, 1987), it negatively impacts the amount of satisfaction a patient reports with the results of surgery (Valley & Grace, 1987). This may be due to the external motivations guiding these particular patients before and after surgery (i.e. “if I lose weight, then more people will like
me”) (Ray et al., 2003). If relationships decrease after bariatric surgery, patients will not be as satisfied with the surgical procedure because it did not socially accomplish what the patient intended.

The overall impression of social changes in patients following bariatric surgery is that while many patients show improvement in their social interaction with others (i.e. career, friendship, and family relationship enhancement), some relationships cannot adjust to the personal changes made by the patient after bariatric surgery. This is especially relevant for close relationships, such as marital relationships. Since spouses agree to undergo various life transitions together, the spouse of a patient who has bariatric surgery is forced to accommodate to the various physical, psychological, and social changes a patient may endure as a result of the surgery. Consequently, the majority of couples experience changes in their marital relationship following bariatric surgery.

Impact of Bariatric Surgery on Couples

Whether obesity is present before or after a marriage begins, it plays a major role in relationships. According to theorists, some marriages are organized in response to or around obesity (Doherty & Harkaway, 1990; Harkaway & Madsen, 1989). For example, being obese may protect a spouse from being physically attractive to others, which thereby ensures his or her fidelity to marriage (Doherty & Harkaway, 1990). When obesity no longer exists for a spouse because of bariatric surgery, previously established couple dynamics are altered. When this happens, many couples report that they cannot adjust to these changes and experience deterioration in their marriage.
Negative Impact of Bariatric Surgery on Couple Relationships

Early evidence shows that many couples experience marital difficulty when a spouse undergoes bariatric surgery and consequent weight loss (Castelnuovo-Tedesco & Schiebel, 1976; Crisp, Kalucy, Pilkington, & Gazet, 1977; Kalucy & Crisp, 1974; Marshall & Neill, 1977; Neill, Marshall, & Yale, 1978; Rand, Kowalske, & Kulda, 1984; Solow, Silberfarb, & Swift, 1974). In fact, due to a range of marital and sexual problems in couples’ relationships after surgery, some researchers have found an increase in divorce (Neill et al., 1978) and infidelity (Castelnuovo-Tedesco & Schiebel, 1976).

Researchers and theorists provide three explanations for these negative findings on bariatric surgery and marital relationships. First, some researchers link the increase in marital conflict to “the de-stabilization of old relationship dynamics” (Bocchieri et al., 2002, p. 785). For instance, several researchers have discovered that patients experience negative changes in their marital relationships as a result of the patient’s increased level of autonomy and assertiveness post-operation (Bocchieri et al., 2002; Hafner, Watts, & Rogers, 1987; Haffner & Rogers, 1990; Neill et al., 1978; Rand, Kulda, & Robbins, 1982). This patient transformation may completely alter couple dynamics if the patient was quiet and subservient to his or her spouse before surgery. In fact, many couples experience tension around this change because “partners no longer feel needed, and in some cases, patients realize that they no longer need their partners” (Bocchieri et al., 2002, p. 785). Researchers have also discovered that many spouses cannot appropriately adjust to the increase in patient assertiveness and autonomy and react with fears of abandonment, insecurity (Bocchieri et al., 2002; Hafner & Rogers, 1990; Neill et al., 1978), and jealously (Ray et al., 2003).
Another explanation theorists offer to account for the increase in marital discord following bariatric surgery is that obesity stabilizes particular aspects of the obese patient’s marriage by taking focus off of marital problems (Doherty & Harkaway, 1990; Ganley, 1986; Hamilton & Zimmerman, 1985; Marshall & Neill, 1977). Specifically, triangulation between the husband, wife, and obesity occurs, whereby obesity is the focal point of the marriage, rather than marital conflict or indifference. When the obesity factor is taken away as a result of bariatric surgery, what remains for the couple may not be enough to succeed (Rand et al., 1982). A patient may subconsciously process the importance of obesity on the survival of the marital relationship and thus, maintain the weight in an effort to salvage the marriage. Research findings reinforce the idea that patients tend to gain weight approximately six to twelve months after surgery (Brolin, Robertson, Kenler et al., 1994; Sugerman, Kellum, Engle et al., 1992; Yale & Weiler, 1991). Thus, allowing enough time to elapse whereby the patient experiences the tension around her initial weight loss and inadvertently regains the weight as a way to re-stabilize her marriage.

Some researchers describe problems with previous research as the final reason for the negative research findings associated with bariatric surgery and couple relationships (Rand, Kuldau, & Robbins, 1982). Specifically, Rand and colleagues conducted research examining the impact of bariatric surgery on marital relationships using a comparison control group of non-obese individuals. They discovered that pre-surgical rates of marital discord were higher among obese individuals compared to non-obese individuals (Kolotkin et al., 2006: Rand et al., 1982). As a result, researchers report these rates of pre-surgical marital discord as being the primary cause for the higher rates of divorce among marriages, rather than the surgery itself (Rand et al., 1982). Corresponding with these results are findings that when patients report pre-surgical rates
of uncomplicated marital and sexual relations, they are more likely to report heightened marital and sexual satisfaction after surgery (Kinzl et al., 2001; Rand et al., 1982).

Although early evidence suggests that bariatric surgery negatively impacts marital relationships, researchers have described the limitations of this research and discovered contradictory findings. In fact, a greater body of current literature exists which suggests that bariatric surgery improves marital and sexual relationships.

*Positive Impact of Bariatric Surgery on Couple Relationships*

Researchers have shown dramatic improvements in marital satisfaction following bariatric surgery and subsequent weight loss (Camps, Zervos, Goode, & Rosemurgy 1996; Chandarana et al., 1990; Gahtan, Kurto, Powers, & Rosemurgy, 1992; Goble, Rand, & Kulda, 1986; Harris & Green, 1982; Hawke et al., 1990; Kinzl et al., 2001; Kulda & Rand, 1980; Larsen, 1990; Peace et al., 1989; Rand et al., 1982, Rand et al., 1984; Rand, MacGregor, & Hankins, 1986; Valley & Grace, 1987). These findings suggest that a significant majority of patients report that weight loss surgery improves various factors of their marriage. For instance, several pre-surgical patients report avoiding spending recreational time with their spouse due to social embarrassment and negative self-esteem. However, many patients report an increase in the amount of time spent with their spouse doing outdoor and social activities following surgery. As a consequence, patients report an increase in the quality and quantity of marital interactions (Goble et al., 1986; Rand et al., 1984).

Another marital factor positively impacted by bariatric surgery is sexual functioning and satisfaction. Due to the patient’s weight loss and improved body image, confidence, energy, and stamina, many report sex with his or her spouse as more enjoyable compared to pre-surgical rates of sexual satisfaction (Goble et al., 1986; Harris & Green, 1982; Rand et al., 1984; Rand et al.,
As patients discover they enjoy sex more and, thus, want it more often, the frequency, desire, and quality of sexual relations improve after bariatric surgery (Camps et al., 1996; Gahtan, Kurto, Powers, & Rosemurgy, 1992; Hafner, Watts, & Rogers, 1991; Kinzl et al., 2001; Peace et al., 1989; Rand et al., 1982; Solow et al., 1974). According to some researchers, these sexual enhancements are dependent upon the amount of weight lost (Hafner et al., 1991; Rand et al., 1982) and have an impact on the amount of overall marital satisfaction reported by patients after bariatric surgery (Goble et al., 1986). In this way, the more weight a patient loses, the more apt he or she is to report being sexually satisfied. The more sexually satisfied a patient is, the more apt he or she is to report an increase overall marital satisfaction.

Post-surgical marital improvement is predominantly observed in marriages that report little to no marital conflict before bariatric surgery (Kinzl et al., 2001; Rand et al., 1982, Rand et al., 1984). Specifically, when couples report having a satisfied relationship before the operation, they have a greater tendency to report improved marital gains and satisfaction after bariatric surgery and subsequent weight loss. On the other hand, patients describing a conflicted marriage before surgery will be more likely to experience marital discord after surgery.

Marital improvements after bariatric surgery are especially recognized and reported by patients within the first year after surgery (Hafner, Rogers, & Watts, 1990). This may be due to the lack of longitudinal research examining marital changes after the first year. The majority of available research examines patients and their spouses within one to two years after bariatric surgery (i.e. Goble et al., 1986; Hafner et al., 1990, Hafner et al., 1991; Kinzl et al., 2001; Peace et al., 1989; Rand et al., 1986; Ray et al., 2003). Findings from the few existing longitudinal studies indicate that after the first post-operative year, reports of marital improvement decline and rates of divorce increase (Rand et al., 1982). Since patients tend to regain their weight at
approximately 12 months after surgery, theorists explain that this may have something to do with the decrease in marital satisfaction (Hsu et al., 1998). What remains unclear is whether this weight gain is the source of or the outcome of marital dissatisfaction.

In the current review of bariatric surgery and marital relationships, contradictory results exist in determining whether or not surgery enhances or worsens marriages. While some research findings show improvement in marital functioning and satisfaction, other findings report a decline. To add to these already inconclusive results is existing evidence that suggests bariatric surgery has no impact whatsoever on marital relationships (Porter & Wample, 2000; Ray et al., 2003). With such a variety of results associated with bariatric surgery and marriage, it is difficult to assert confidence in existing findings. Problems with the way in which this research has been conducted and analyzed can account for these inconsistent findings.

Research Limitations

The first of many research limitations that provides some insight to the contradictory findings of bariatric surgery’s impact on marriage is the scant amount of recent literature examining this phenomenon. Specifically, some of the current understanding of marital relationships and bariatric surgery is based on research conducted over a decade ago. Within the past five years, however, major medical advancements have been made, making bariatric surgery a less invasive procedure with fewer related complications. Potentially, these advancements could provide a different understanding of bariatric surgery’s impact on marriages. For instance, through the innovative advancement of laproscopic bariatric surgery, patient’s rate of complications and post-surgical recovery time decreases. Consequently, the influence bariatric surgery has on marital satisfaction may not be as compelling.
This leads to another problem in existing research, which may explain the inconclusive findings regarding bariatric surgery and marriages. Specifically, most existent research does not control for the type of surgical procedure patients undergo. Reports of a patient undergoing the lap-band procedure are reported alongside patients undergoing a Roux-en-Y procedure. Due to the fact that these procedures range in their severity of physical, psychological, and social impact, this may explain why researchers have reported positive, negative, and absent changes in marriages after bariatric surgery. For instance, patients undergoing the less invasive lap-band procedure may experience a positive change in their marriage since they do not undergo as much stress and complications associated with the surgery. On the other hand, the Roux-en-Y patient may experience a negative change in his or her marriage due to the increased amount of post-surgical complications. Most of the current research, however, does not take these different procedures into consideration and do not account for the inconsistencies in post-operative marital satisfaction.

Another research limitation that may provide some insight to the contradictory findings of bariatric surgery’s impact on marriage is a range of methodological problems. For instance, poorly operationalized pre- (i.e. evidence of marital satisfaction, social support) and post-surgical (i.e. actual weight loss versus reports from assorted questionnaires) variables pose a threat to research findings (Rand et al., 1986).

A properly used control group is another methodological limitation that may explain the unclear findings regarding bariatric surgery and marriage (Kinzl et al., 2001; Rand et al., 1982, Rand et al., 1984). Specifically, because of the ethics and health risks associated with not allowing patients to undergo bariatric, most researchers do not use a comparison group in which
to compare patient results to non-patient results. This poses as a potential problem to existing findings since there is no way to determine marital changes were a result of the surgery itself.

Other methodological limitations including (1) small sample sizes, (2) missing data, and (3) lack of longitudinal data (Hsu et al., 1998; Rand et al., 1986; Schok et al., 2000) offer additional potential explanations for inconclusive findings regarding bariatric surgery’s impact on marriage. Pre-surgery biases also pose a threat to these findings as some researchers report that patients may deliberately provide misleading information to improve their chance of being selected as a surgical candidate. Consequently, an inaccurate account of the genuine changes patients and marriages undergo as a result of bariatric surgery is presented.

In an effort to address some of these limitations of previous research studies and to further understand the relationship between marital relationships and bariatric surgery, the current work qualitatively examines the impact of bariatric surgery on marital relationships. By qualitatively addressing this phenomenon, a more in-depth understanding regarding participants’ experiences based on their description, context, and meaning is gathered. Utilizing the grounded theory approach presents findings in a narrative form, which eloquently describes data categories and subcategories. The primary goals of the current study was to gain a better understanding of the impact bariatric surgery has on marriages by providing the reader with comprehensive and rigorous findings that most appropriately describes each patient’s perspective of their marriage before and after surgery. The descriptive narrative in the current study provides medical and mental health professionals with a more in-depth understanding of the various marital components potentially impacted by bariatric surgery.
CHAPTER 3

Method

Paradigmatic Underpinnings

The current study adheres to a qualitative research paradigm. According to Silverstein and colleagues, the epistemology underlying this paradigm “rejects the idea that there is an objective reality that can be studied without bias” (2006, p. 351). Rather, qualitative research reflects the richness of a person’s lived subjective experience (Auerbach, Salick, & Fine, 2006; Silverstein, Auerbach, & Levant, 2006). Researchers who practice qualitative research augment the traditional reductionistic methods of understanding a phenomenon by allowing for outcomes to emerge from the data rather than being concluded from numerical indications of significance. By capturing in-depth perceptions and emotions from each participant, qualitative researchers are able to illuminate rich thematic accounts of each individual’s experience. These accounts help to understand the phenomenon and the participants’ experiences based on the description, context, and meaning that the participants assign to them.

Qualitative data is gathered through personal conversation and open-ended questions, rather than through various types of instruments and questionnaires (Silverstein et al., 2006). Within qualitative inquiry, the researcher is required to be very active in gathering the data by observing or recording an individual’s behavior in his or her natural setting. Qualitative data analysis follows a “recursive method of data analysis” whereby the researcher alternates between inductive and deductive interpretations of participant reports (Silverstein et al., 2006, p. 351). This process requires the researcher to gain different perspectives, theories, and educated guesses
from details reflected by the individual(s) being studied (Polkinghorn, 2005). Qualitative data analysis also requires the researcher to be self-reflexive in his or her biases. These biases are acknowledged and monitored in an effort to limit their impact on the interpretations of research (Silverstein et al., 2006). Findings from qualitative data analysis tend to be very descriptive as they identify overall themes gained through words or pictures that describe the process, meaning, and understanding of an individual’s experience.

According to Polkinghorne (2005), the qualitative research paradigm serves as “an umbrella term” for a variety of approaches (p. 137). Researchers select from a variety of qualitative research methodologies, some of which include discourse analysis (Potter, 2003), phenomenology (Creswell, 1998; Giorgi & Giorgi, 2003), and grounded theory (Charmaz, 2000; Glaser & Strauss, 1967; Corbin & Strauss, 1990). The rationale behind selecting one specific methodology versus another is decided “by the research question, together with the consideration of the applicability and feasibility of the method in the context of the phenomena of interest” (Jeon, 2004, p. 249). In the process of examining available literature and shaping the current study’s research question(s), it became apparent that the existing literature does not have a clear understanding how bariatric surgery impacts various components of marital relationship. As a result, the current study generates with as few presuppositions as possible. In fact, since “the basic premise essential to grounded theory is that the theory must emerge from the data, rather than from preconceived notions formulated by the researcher” (Bocchieri et al., 2002, p. 782), three central questions regarding patients’ marriage a) before surgery, b) after surgery, and c) other experiences, guide the initial set of interviews (See Appendix A). Additionally, since existing literature does not have a clear understanding of how bariatric surgery impacts various components common to marriage, facets including before and after surgery experiences of
marital communication, time spent together, sex, affection, decision-making, changes in spouse, and change in patient, are addressed in the interview.

Ten phone interviews were conducted with female patients who experienced bariatric surgery between one to three years ago. Data from each interview were audio taped, transcribed, and analyzed according to the methodology of grounded theory. The ultimate goal in collecting and analyzing this data was to determine themes and distinctions across bariatric surgical patients, while adhering to the uniqueness of each individual’s experiences with their spouse before and after bariatric surgery.

Research Design

Grounded Theory

Grounded theory (GT) is currently one of the most utilized and respected approaches of qualitative research (Ponterotto, 2005; Silverstein, Auerbach, & Levant, 2006). Developed by Glaser and Strauss (1967) and later expanded by Corbin and Strauss (1990), GT is an approach that aims at generating a theory that is ‘grounded’ in and derived from raw data. The goal of grounded theory research is to develop a theoretical formulation that most appropriately “describes, explains, interprets and predicts the phenomena of interest” (Jeon, 2004, p. 252).

Based upon the sociological theory of symbolic interactionism, grounded theory was developed to understand and explain the ways in which people create meaning based on their interactions with others. Specifically, symbolic interactionism posits that individuals “construct their realities through social interactions in which they use shared symbols (i.e. words, clothing, gestures) to communicate meaning” (Fassinger, 2005, p. 256). Grounded theory is highly influence by these theoretical underpinnings of symbolic interactionism, as its main goal is to
examine, understand, and explain the meanings and realities people create on the basis of their interactions with others (Cutcliffe, 2000).

Since the primary goal of the current study is to discover and delineate how bariatric surgery impacts marital relationships from the wives perspective, grounded theory with theoretical underpinnings of symbolic interactionism is central. Specifically, open-ended questions were addressed so that discovery could be made regarding “what is going on in the processes” (Jeon, 2004, p. 251) of marriages before and after a spouse’s experience of bariatric surgery and subsequent weight loss.

Research Procedure

Participants

Participants in the current study were recruited from a list of 69 post-bariatric surgery patients provided by Dr. Alan Williams, a psychologist at Mercer University School of Medicine in Macon, Georgia. All participants were referred to Dr. Williams for pre-surgery psychological evaluations. During this evaluation, patients provided contact information and agreed to be contacted in the future for research purposes.

Ten participants were interviewed for the current study. According to GT researchers and theorists, data gathered from 10 participants provides the researcher with a sufficient amount of information to develop initial theoretical concepts (Burgess, 1989; Sandelowski, 1995; Smith, 1976). During the initial stages of data collection, the amount of participants was estimated since it was unclear when a sufficient amount of information would be obtained to develop sound theoretical constructs and theory. Thus, the amount of participants was not a strict criteria or determined before data collection but rather, determined as data were gathered (Blaikie, 2000;
Patton, 1990). This process of sample selection combines theoretical sampling and saturation, two of the hallmarks of grounded theory that are described in more detail later in the paper.

According to researchers, participant selection in grounded theory should be determined by the phenomena of study and “deliberately selected to provide the most information-rich data possible” (Morrow, 2005, p. 255). This method is called purposive sampling and is the most utilized method of obtaining participants in qualitative research (Hoepfl, 1997). Since the purpose of the current study was to explore female experiences of marital interactions before and after bariatric surgery, purposive sampling for the current study involved gathering information from married women who underwent bariatric surgery. In order to obtain consistency across surgical procedures, all participants received the Roux-en-Y procedure. The Roux-en-Y was selected because it is currently the most utilized, successful, and popular surgical weight loss procedure (Woodward, 2003). Participants fitting these inclusion criteria and willing to discuss their experiences devised the sample for the current study. Only one person declined to participate due to her husband’s request to refrain from exposing private information. Specific information regarding participant demographics is displayed below in Table 1.

At the time of the interview, all participants (N=10) reported having had the Roux-en-Y procedure during years 2004 (N = 6), 2005 (N = 3), and 2006 (N = 1). Only three women reported having post-surgical complications, which were all considered minor and did not impact the overall healing process. As a result of surgery, participants lost between 100 to 162 pounds, with a mean weight loss of 122.7 pounds. All but one participant received full medical insurance coverage for the surgery due to a range obesity related illnesses or diseases. These illnesses, along with additional information regarding pre and post-surgical participant reports, are presented in Table 2.
Table 1

Participant Demographics

<table>
<thead>
<tr>
<th>Classification</th>
<th>Average</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of Participant</td>
<td>44</td>
<td>26-58</td>
</tr>
<tr>
<td>Age of Spouse</td>
<td>45</td>
<td>26-58</td>
</tr>
<tr>
<td>Years Married</td>
<td>17.4</td>
<td>7-39</td>
</tr>
<tr>
<td># of Children</td>
<td>2.7</td>
<td>Ages 1-35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participant Race</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian (N = 8)</td>
<td></td>
</tr>
<tr>
<td>African American (N = 2)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>High School (N = 1)</td>
<td></td>
</tr>
<tr>
<td>Associates (N = 3)</td>
<td></td>
</tr>
<tr>
<td>Some college (N = 3)</td>
<td></td>
</tr>
<tr>
<td>Four year college (N = 2)</td>
<td></td>
</tr>
<tr>
<td>Post-graduate (N = 1)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time (N = 6)</td>
<td></td>
</tr>
<tr>
<td>Stay at home (N = 2)</td>
<td></td>
</tr>
<tr>
<td>Retired (N = 1)</td>
<td></td>
</tr>
<tr>
<td>Disability (N=1)</td>
<td></td>
</tr>
</tbody>
</table>

Table 2

Pre and Post Surgical Reports

<table>
<thead>
<tr>
<th>Obesity Related Illness</th>
<th>Pre-Surgery</th>
<th>Post-Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>High blood pressure</td>
<td>N = 9</td>
<td>N = 1</td>
</tr>
<tr>
<td>Type 2 diabetes</td>
<td>N = 5</td>
<td>N = 0</td>
</tr>
<tr>
<td>Sleep apnea</td>
<td>N = 4</td>
<td>N = 0</td>
</tr>
<tr>
<td>High cholesterol Depression</td>
<td>N = 2</td>
<td>N = 0</td>
</tr>
<tr>
<td>Acid reflux</td>
<td>N = 1</td>
<td>N = 0</td>
</tr>
<tr>
<td>Joint problems</td>
<td>N = 2</td>
<td>N = 0</td>
</tr>
<tr>
<td>Cancer</td>
<td>N = 4</td>
<td>N = 0</td>
</tr>
<tr>
<td>Stroke</td>
<td>N = 1</td>
<td>N = 0</td>
</tr>
<tr>
<td></td>
<td>N = 1</td>
<td>N = 0</td>
</tr>
</tbody>
</table>

* All patients took respective disease related medication before bariatric surgery. After surgery patients reported vitamins as their only medication use (N = 7). If additional medicines were listed, they were not related to obesity or bariatric surgery (i.e. migraine).
Measures

An open-ended, semi-structured interview called the Marital Relationship Before and After Bariatric Surgery Interview Guide was developed for the current study (See Appendix A). This interview guide was developed by the primary researcher in an attempt to gain an in-depth patient account of couple dynamics and interactions before and after bariatric surgery. While questions provided the framework for this questionnaire, the semi-structured nature of the interview allowed the flexibility to digress or further discuss specific topics related to patient experiences. This flexible approach to interviewing is most often cited in grounded theory literature because while there is structure to the interview, participants are also provided the opportunity to “tell their stories largely in their own words as they react to mostly-open ended questions delivered in a flexible interviewing style on the part of the researcher and in a context of established rapport” (Fassinger, 2005, p. 158).

As a result of these open-ended questions, participants were given the opportunity to respond with a variety of unique responses. Throughout the data analysis and collection process, participant responses guided certain adjustments to the interview guide. For instance, specific questions regarding a) advice to other women considering surgery, b) decision making processes of surgery, and c) changes in spouse after surgery, were all added to the interview guide as interviews and data analyses were conducted. These questions were added based on participant responses to other questions. For instance, when asked if participants had anything else they wanted to report about their experiences before and after bariatric surgery, many women described the importance of undergoing surgery for personal reasons. Thus, the question of “What made you decide to have bariatric surgery?” was included in the interview guide so that future participants had the opportunity to talk about what motivated them to decide to undergo
bariatric surgery. That way, further interviews and observations were influenced by the analysis of previous interviews (Corbin & Strauss, 1990), creating a research process grounded in the data.

Data Collection and Analysis

Unlike other research approaches that collect and analyze data in sequential stages, grounded theory researchers collect and analyze data simultaneously through a constant comparison method (Corbin & Strauss, 1990; Fassinger, 2005; Jeon, 2004). Data analysis occurs as soon as the first interview is conducted. As initial concepts are derived, the researcher gathers additional data from subsequent participants to obtain “more clarity, density, and comprehensiveness in the theoretical constructs” (Silverstein, Auerbach, & Levant, 2006, p. 352). This helps to ensure that theory emerges from data and “enables the research process to capture all potentially relevant aspects of the topic as soon as they are perceived” (Corbin & Strauss, 1990, p. 6).

All interviews were conducted over the phone by the primary investigator. Upon contacting the potential participant, the investigator informed her of the requirements of the study. The researcher also informed her that if she chose to participate, that the interview would be audiotaped for transcription purposes and take 45 minutes. Other additional factors regarding the informed consent to participate were outlined over the phone using a script (see Appendix B). After receiving verbal consent, the interview began by asking questions from the Marital Relationship Before and After Bariatric Surgery Interview Guide (see Appendix A). While the interview guide includes examples of probing questions, most were not scripted nor standardized since they mainly resulted from the open-ended conversation between the primary investigator and participant.
Once the first interview was conducted and transcribed, the initial steps of data analysis transpired. Specifically, this process adhered to the following steps:

(1) Conducted and audio taped one interview.

(2) Transcribed this interview.

(3) Coded the interview using the first two steps of the three-step data coding procedure described below (i.e. open and axial coding).

(4) To gather subsequent information, additional interviews were conducted which were informed by previous findings.

(5) Continued this process until theoretical saturation occurred.

While most GT researchers report that information gathered from 10-12 participants is sufficient for the initial stages of data analysis (Burgess, 1989; Morrow, 2005; Sandelowski, 1995; Silverstein et al., 2006; Smith, 1976), data was gathered and analyzed until theoretical saturation occurred, whereby no new information emerged from new data (Fassinger, 2005; Lincoln & Guba, 1985; Silverstein et al., 2006). Thus, at the beginning of the data collection and analysis process, the exact number of participants was hypothesized since the exact point of theoretical saturation was unknown. Since no new data emerged after interview six, the primary investigator, triangulated investigator, and peer debriefer agreed that theoretical saturation had been reached by interview ten.

Regardless of how many interviews were ultimately gathered, all information from the interviews were analyzed and interpreted according to specific grounded theory coding procedures. While there are variations in the way that grounded theorists analyze data (see Annells, 1997 and Fassinger, 2005 for a review), this study analyzed and interpreted data using a three-step process of coding called open, axial, and selective coding (Corbin & Strauss, 1990).
**Open coding.** During the process of open coding, the researcher analytically breaks down the data provided by the participant (Corbin & Strauss, 1990). The first step of open coding requires the researcher to analyze and break down the data line-by-line into ideas and issues. Next, meanings or concepts are developed from the ideas and issues. These meanings are then labeled into coded units of meaning with words that can range in size from a small word, a large paragraph, or a page of data (Morrow & Smith, 2000). The final step of open coding occurs when the researcher compares these coded units of meaning to other coded units of meaning so that they can be grouped together in categories and subcategories (Corbin & Strauss, 1990; Fassinger, 2005). These categories are consistently compared to the existing data and undergo modifications to ensure that all variations in concepts are accounted.

In reading the transcripts, for example, the analyst might observe several issues and reports of interactions between patient and spouse that appear to be directed at providing support. From these concepts, the analyst labels “spousal support” as a category. The analyst observes specific “properties or dimensions” (Corbin & Strauss, 1990, p.12) that fall under the category of spousal support, such as type, duration, and conditions. For example, a sub-category of spousal support might be “indirect support” whereby the spouse takes care of household tasks so the patient has less to worry about during his or her post-operative period.

By establishing this framework of categories and subcategories, the researcher is provided with specific information to further examine in future transcripts. Examining the properties and dimensions of “indirect support”, for instance, helps the researcher return to the data and ask questions such as “What is indirect support and how does it manifest itself? How does it differ from other types of support that the spouse provides, for example?”
example from Corbin & Strauss, 1990, p. 12). This type of examination occurs specifically in the second level of grounded theory coding called axial coding.

**Axial coding.** During axial coding, categories and subcategories are further explored and developed by relating them to each other, along with testing them against the available data (Corbin & Strauss, 1990; Fassinger, 2005). In order to do this, a constant comparative method is used whereby the following kinds of comparisons are made:

“(1) comparing and relating subcategories to categories, (2) comparing categories to new data, (3) expanding the density and complexity of the categories by describing their properties (attributes of a category) and dimensions (ordering of the properties along a continuum), and (4) exploring variations (i.e. disconfirming instances in the data and reconceptualizing the categories and their relationships as necessary” (Fassinger, 2005, p. 160).

Another component to the process of axial coding has the researcher formulating and testing her hypothesis regarding the conditions and dimensions of categories and sub-categories (Corbin & Strauss, 1990). These hypotheses were formed based on her previous mental health related experiences and knowledge, along with participant responses to questions addressed in the interview guide. They serve only as hypothetical ideas until incoming data confirms or denies them. In order to be verified all hypotheses must be displayed repeatedly throughout existing data. Thus, all hypotheses generated by the researcher must endure the same procedures as the data generated categories.

As the researcher proceeds with open and axial coding, she needs to be observant for what grounded theorists term the ‘core category’ (Jeon, 2004). According to Corbin and Strauss
(1990), the core category “represents the central phenomenon of the study” (p. 14). Discovering this core category begins the final coding process called selective coding.

**Selective Coding.** To begin the process of selective coding, the researcher determines a core category that is central to all categories and subcategories previously gathered through open and axial coding procedures. This core category is representative of other categories and integrates them into an “explanatory whole” (Strauss & Corbin, 1998, p. 146). From this core category, a ‘core story’ is generated. This story is a few sentences long narrative that captures the overall essence of the study.

Just as in the other stages of analysis, the core story is also “constantly compared to the data to ensure that it is grounded in participants’ experiences, and it is also compared to the existing literature to enrich understanding and explanatory power” (Fassinger, 2005, p. 161). Accordingly, it follows the same coding processes of theoretical sampling and constant comparison until theoretical saturation is achieved.

**Theoretical sampling and saturation**

While the depiction of the coding process is sequential, the actual process of coding occurs recursively. In fact, the coding process follows “a method of constant comparison, wherein each new piece of data is compared to existing data to generate coherent categories of meaning” (Fassinger, 2005, p. 160). Categories and subcategories are re-visited throughout the entire data collection and analyzing process. In doing this, a process called theoretical sampling occurs.

Theoretical sampling is one of the key components to grounded theory and can be defined as “the process of data collection for generating theory whereby the analyst jointly collects, codes, and analyses her data and decides what data to collect next and where to find
them in order to develop his or her theory as it emerges” (Jeon, 2004, p. 252). The goal of theoretical sampling is to continually examine and verify findings emerging from the data, to the data. As previously mentioned, this process begins with the information gathered from the first interview and continues throughout the entire data collection and analyzing process. Theoretical sampling may take the form of interviewing additional participants, returning to existing participant information, or examining other forms of data collection, such as researcher audit trails or existing literature (Fassinger, 2005).

In grounded theory research, theoretical sampling occurs until theoretical saturation is reached (Corbin & Strauss, 1990, 1998; Fassinger, 2005; Jeon, 2004; Shakespeare-Finch & Copping, 2006). Researchers define theoretical saturation as the point at which no new findings emerge from the data (Maykut & Morehouse, 1994). Achieving theoretical saturation helps ensure that the information is sound and grounded in the data.

Theoretical sampling, constant comparison, and theoretical saturation are all components of grounded theory research that work to ensure the rigorousness of the proposed study (Fassinger, 2005; Jeon, 2004). In fact, the grounded research approach has such an in-depth process by which data is collected and gathered, “that rigor is addressed through the careful implementation of the method itself” (Fassinger, 2005, p. 163). In spite of this, however, supplementary efforts proposed by grounded theory researchers to ensure methodological rigorousness were employed in the current study.

Ensuring Rigor

Qualitative researchers embrace the concept of maintaining trustworthiness as their standard for maintaining adequate rigor (Lincoln & Guba, 1985; Morrow, 2005). To build trustworthiness for a study, specific criteria, which run parallel to traditional quantitative
methods of rigor, need to be addressed. Referred to as “parallel criteria” by Lincoln and Guba (2000), these criteria are used in comparison to the typical criteria of internal validity, external validity, reliability, and objectivity in quantitative research. Specifically, detailed methodological objectives have been established in qualitative research that helps maintain credibility (internal validity), transferability (external validity), dependability (reliability), and confirmability (objectivity); all of which increase a study’s trustworthiness. In an effort to ensure trustworthiness in the current study, various methods were built into its design.

**Credibility**

Credibility is the likelihood that the findings and interpretations are representative of the data collected (Lincoln & Guba, 2000). This concept is similar to the quantitative researcher’s objective of obtaining internal validity. While there are various ways to enhance qualitative research credibility, the current study employed methods of (1) triangulated investigator, (2) peer debriefing, and (3) thick descriptions (Lincoln & Guba, 2000; Morrow, 2005).

**Triangulated investigator**

A common method that qualitative researchers have used to help establish credibility is triangulation. Triangulation involves the use of multiple sources to validate the findings in a study. For the purposes of the current study, one triangulated investigator (TI) was utilized (Denzin, 1978). This TI was the primary investigator’s major professor. This individual routinely checked-in with the researcher for validation or co analysis of the data (Morrow, 2005). The TI examined the researcher’s findings in order to “check out insights gleaned from different informants or different sources of data” (Bogdan & Taylor, 1985, p. 80). The investigator is
triangulated because he served as the third entity (i.e. researcher, triangulated investigator, and the data) involved throughout the entire project, compared to the next credibility method of peer debriefing, where the investigator only examines the final end products.

**Peer debriefing**

According to Lincoln and Guba (1985), peer debriefing involves exposing “oneself to a disinterested peer in a manner paralleling an analytic session and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer’s mind” (p.308). The peer debriefer for the current study was a colleague with experience conducting qualitative research. She served as a one-time end product check to ensure that there were no discrepancies between original data and analyzed categories, subcategories, and core story. This method helped to maintain the researcher’s honesty about the meanings and basis of her interpretations of the qualitative data. Peer debriefing also provided an opportunity for the inquirer to obtain advice about future steps within the emerging methodological design by “providing the inquirer an opportunity for catharsis, thereby clearing the mind of emotions and feelings that may be clouding good judgment” (Lincoln & Guba, 1985, p. 308). She also provided advice in how to enhance the core category so that another credibility method of thick description was elaborated.

**Thick descriptions**

When theoretical saturation occurs and a core story is composed, researchers obtain another method of ensuring credibility called thick descriptions. These descriptions detail findings that “transcend research paradigms, involve detailed, rich descriptions not only of participants’ experiences of phenomena but also of the contexts in which those experiences occur” (Morrow, 2005, p. 252). In presenting research findings in a descriptive narrative, the
reader is able to connect the final story to the original data. This procedure in itself increases the credibility of the study.

Transferability

Transferability holds the researcher responsible for providing results that are potentially transferable to other contexts (Gasson, 2004). This aspect of trustworthiness is comparative to the quantitative concept of external validity. It is important to note that the goal of qualitative research is not to establish generalizability, but rather to disseminate information to potential stakeholders who then may legitimize its worth and integrate part or all of it into their setting (Atkinson, Heath, & Chenail, 1991). According to researchers, transferability is enhanced when “the researcher provides sufficient information about the self and the research context, processes, participants, and researcher-participant relationship to enable the reader to decide how the findings may transfer” (Morrow, 2005, p. 252). This issue was addressed in the current study through the use of self-reflective journaling (Lincoln & Guba, 2000; Morrow, 2005; Rennie, 2004).

Self-reflective journal

In an effort to enhance transferability, the researcher composed a reflective journal throughout the entire data collection and analysis process. Notations in this journal include internal thoughts and processes experienced throughout the course of the study (Morrow, 2005). It provided an avenue to express day-to-day experiences during the data analysis process and helped to acknowledge and control researcher biases by stating them and owning them in written form. By journaling, the researcher examined and presented her reflections, which serves to impact and support the data collection and analysis process.
**Dependability**

Dependability is the way that the qualitative researcher attests to the constancy of the inquiry, interpretations, and recommendations. Quantitative researchers’ use of reliability measures is similar to the qualitative researchers’ intention of dependability. Dependability was established in the current study by incorporating the method of auditing (Fassinger, 2005).

**Auditing**

The term auditing encompasses all written documentation regarding the specifics of data collection and analysis procedures (Fassinger, 2005; Lincoln & Guba, 1985). Corbin and Strauss (1998) also describe the importance of auditing in grounded theory research, but define it as memo writing. While all methods of trustworthiness employ some type of auditing approach (i.e. identification of research expectations, peer debriefing and data checking), the audit trail was explicitly used to increase the dependability of the current work. The purpose of an audit trail is to examine the “process of the inquiry, along with determining its acceptability by attesting to the dependability of the inquiry” (Lincoln & Guba, 1985, p. 318). The audit trail in the current study consisted of the researcher recording a journal detailing each step followed during the data collection and analysis process. These notations began upon receipt of the first interview and continued until the end of the research study. This was completed so that if the investigation were to be repeated, or audited, others can understand how findings were derived throughout each step of the data analysis process.

**Confirmability**

Confirmability helps to ensure that the data, and the process of analyzing it, supports the reported results. It is the equivalent to “objectivity” in conventional research terms. While the methods establishing dependability also work to enhance confirmability, the current work
utilized a bias statement as a mode to create findings that represent “as far as is humanly possible, the situation between being researched rather than the beliefs, pet theories, or biases of the researcher” (Gasson, 2004, p. 93).

*Acknowledging researcher bias*

Particularly in qualitative research, the role of the researcher as the primary data collection instrument and data analyzer necessitates the identification of personal values, assumptions, and biases at the outset of the study (Creswell, 1994). The researcher is required to set aside all prejudgments concerning his or her own prejudices and experiences through a process of “bracketing”, which displays the identification of any preconceived biases. This allows the researcher to better identify an overall understanding for an individual’s experience that is not based upon the researchers own experiences and/or defined ideas. This researcher bias is presented in the results section.

*Final end product check*

The current study also performed a final end product check as a way to achieve and maintain credibility. Once data has been gathered and analyzed, the researcher “asks the participants for feedback on her interpretation of the data, in a manner congruent to a therapist checking to confirm the accuracy of her understanding of the client’s internal experience” (Auerbach & Silverstein, 2006, p. 351). This is helpful because it provides the participant the opportunity to improve on the finalized outcomes or provide constructive criticism by suggesting alternative information.
CHAPTER 4

Results

In an effort to better understand wives’ perceptions of their marriage before and after bariatric surgery, responses from interviews were analyzed according to grounded theory methodology. This chapter includes a brief review of the data analysis process, along with an in-depth description of the resulting categorical and subcategorical findings. A core story will be represented in a three paragraph long narrative, which captures the overall essence of the array of experiences women endured with their spouse before and after bariatric surgery. A detailed account of the steps taken to increase the trustworthiness of these findings will also be included.

Research Findings

A total of ten interviews were conducted for the purpose of this project. All interviews were audiotaped and transcribed. Data provided by each participant were extracted from each interview and arranged into 364 ideas. All of these ideas were exact quotes taken directly from the interview transcripts. From these ideas, 17 meanings were developed. From these meanings, 14 categories and 23 related subcategories were developed. The core story was then organized based on the categories and subcategories.

Data from the current study offers itself to the application of the biopsychosocial perspective (Engel, 1977; Frankel, Quill, & McDaniel, 2003). This model “acknowledges the hierarchical, interdependent relationships of biological, psychological, individual, family, and community systems” (McDaniel, Hepworth, & Doherty, 1992, p. 14). While the intent of the current study was to examine perceptions of marital relationships before and after bariatric
surgery, reports from participants did not exclusively focus on their marital experiences per se. Specifically, while all women offered their perceptions regarding the social component of their marital relationship, they also portrayed the significance of various biological and psychological experiences before and after bariatric surgery. Many discussed how the biological and psychological factors impacted their relationship with their spouses and how this interplay in turn impacted various biological and psychological experiences. In fact, participants offered a complex interaction between various biological, psychological, and social factors before and after bariatric surgery. Consequently, results of the current study are presented in accordance with the biopsychosocial perspective. This section describes the process in which data were analyzed, along with specific details regarding how categorical and subcategorical findings are consistent with particular components from the biopsychosocial perspective.

*Development of meanings*

The questions addressed in the interviews were the main focus guiding the conceptualization of the meanings. For instance, since participants were asked to describe various marital factors before and after surgery, two main groups of a) before surgery and b) after surgery were organized. Before surgery questions including: a) How would you describe your relationship with your partner before surgery?, b) How would you describe your communication with your partner before you had surgery?, c) How would you describe the time you spent together as a couple before you had surgery?, d) How would you describe your sex/intimacy level before you had surgery?, e) How would you describe your level of affection with your partner before you had surgery?, f) Would you describe your relationship with your partner as positive or negative before the surgery?, g) What made you decide to have bariatric surgery?, and h) Was your partner supportive of this decision?, were organized accordingly into
meanings of: a) Relationship status, b) Communication, c) Time spent together, d) Sex/Intimacy, e) Affection, f) Relationship as positive or negative, g) Decision to have surgery, and h) Support from husband in decision making.

After surgery questions of: a) How would you describe your relationship with your partner after surgery?, b) Has your communication changed at all since the surgery?, c) Has how you spend your time together changed since the surgery?, d) Has your level of sex/intimacy changed since the surgery?, e) Has your affection toward your partner changed since the surgery, f) Has your partner’s affection toward you changed since surgery? g) Has your partner changed at all since you’ve had surgery?, h) Overall, would you describe your relationship with your partner as positive or negative after the surgery? i) Are you glad that you had the surgery?, j) Is your partner glad that you had the surgery?, k) Any advice you have for women in relationships getting ready to have bariatric surgery based on your experiences enduring surgery with your spouse?, and l) Is there anything that I have not asked about that you think is an important question or comment to address at this time?, were organized accordingly into meanings of: a) Relationships status, b) Communication, c) Time spent together, d) Sex/Intimacy, e) Affection, f) Affection, g) Changes in him, h) Relationship status, i) Changes in patient, j) Affection, Sex/Intimacy, or Changes in him, k) Advice, and l) Anything else.

While the interview guide served as a major source in the development of meanings, participant responses to the questions also helped to conceptualize the proposed meanings. For example, responses from the question addressing communication reinforced the meaning of ‘communication’ since all women discussed their perception of how they communicated with their spouse before and after surgery. In these instances, the meaning developed from the interviews was reinforced by the participants’ responses to the questions. However, not all
organized meanings developed mainly from the interview were reinforced by participant responses. Instead, the meaning was organized to describe the responses from patients. For instance, the ‘after surgery’ question of “Are you glad that you had the surgery?” did not become a meaning of “Satisfaction of surgery” or “Glad with surgery”. Rather, a meaning of “Changes in patient” was organized. Participants not only reported that they were happy that they had the surgery, but they also discussed in detail why they were satisfied. They were mainly satisfied with the surgery because of the personal changes they experienced as a result of bariatric surgery. Many of the women reported experiencing a “brain/body” disconnect whereby even though they had lost a significant amount of weight and were no longer overweight, they still perceived themselves as obese. One woman in particular stated, “although I am skinny, I still have a fat mind.”

Some women reported being satisfied with the surgery because it provided them the opportunity for various career and educational rewards. For instance, one woman reported that the surgery helped her become more efficient at work and as a result got promoted. She also stated “I noticed that I got more respect at work. Even though I had the same brain that I had then. Others did not see how smart I was, all they saw was the weight”. All of this rich, unique information was gained by asking the question “Are you glad that you had the surgery?” So, while the original question addressed her level of satisfaction with surgery, the uniqueness in the response guided the organization of the meaning of “Changes in patient”.

This was also the case in the question “Is your partner glad that you had the surgery?” Responses from this question were typically related to the noticeable changes in the husband suggesting that he was glad that she had the surgery. Most of the women reported that although he did not verbally tell her that he was happy she had the surgery, she could tell by subtle or
obvious nonverbal and verbal changes. For instance, when asked if she thought her partner was glad that she had the surgery, she stated, “well, I think so, he wants to spent time with just me and get away and not tell anyone, which is probably the first time he has ever suggested going to do something by ourselves with no other children or family”. Since this response has more to do with the meaning of “Time spent together”, it was organized as such. This occurred for all the responses to the question of partner satisfaction with surgery, whereby responses were more appropriately organized into already developed meanings. In an effort to be transparent with how each meaning was conceptualized and organized, a complete list of all meanings and their subsequent ideas is portrayed in Appendix C.

After organizing this list, these coded units of meaning and associated ideas were developed and grouped together in categories and subcategories (Corbin & Strauss, 1990; Fassinger, 2005). These categories and related subcategories were further explored, developed, and tested against the available data and hypotheses generated by the primary investigator (Corbin & Strauss, 1990; Fassinger, 2005). The 17 meanings and supporting 322 ideas originally developed during open coding were divided into two different sections of 1) before surgery and 2) after surgery. The list of categories and subcategories initially conceptualized contained 9 before surgery categories (with 12 related subcategories) and 17 after surgery categories (with 21 related subcategories). These categories and subcategories were further examined, related to each other, and discussed alongside the triangulated investigator. The final outcome became a condensed list containing findings related to patient perceptions before and after bariatric surgery. Specifically, ‘before surgical’ findings were condensed to six categories with ten related
subcategories. ‘After surgery’ findings were condensed to eight categories with 13 subcategories. Visual models illustrating these ‘before’ and ‘after’ categorical and subcategorical findings are presented in Figures 1 and 2.

**Development of ’before surgery’ categories and subcategories**

*Range of marital rates of satisfaction including strained, fine, good, or excellent.* The first step in developing this category was examining participant responses to the question regarding women’s overall perception of their marriage before bariatric surgery. A variety of responses ranging from strained to fair to excellent were reported. Since there was not one central theme in the responses and to ensure that the broad range of responses were included, a category was developed and termed “Range of marital rates of satisfaction”. The other factor considered in the development of this category was the meaning and associated ideas of “Relationship as positive/negative.” This meaning was developed from participant responses to the interview question that asked women to report their marriage before and after surgery. Answers to this question were either “positive” or “negative.” These responses seemed to represent similar meanings to the responses from the question addressing patients’ perception of marriage before surgery (i.e. strained, fair, good, or excellent). Consequently, the meaning of “Relationship as positive/negative” was grouped into the category of “Range of marital rates of satisfaction.”

Direct statements from participants addressing their overall marital satisfaction before surgery that support the labeling of the “Range of marital rates of satisfaction” category include: a) Um, let me see, kind’ve somewhat strained because I didn’t feel attractive, b) It’s fine, I mean nothing has really changed for us, c) My relationship with my husband has always been good,
and d) We had an excellent relationship; not very strenuous. Thus, when asked about the nature of their marital relationship before surgery, participants responded with a range of experiences. As the data were analyzed, it seemed apparent that the level of marital satisfaction before surgery could be further explained and justified by examining other categorical and subcategorical findings. Specifically, answers to questions about their level of communication, time spent together, sex/intimacy, affection, and decision-making processes provided justification to their overall perception of their marital relationship before surgery. For instance, if a woman reported her relationship as strained, she further explained why she thought it was strained by detailing the limited amount of time spent with her husband. However, the majority of participants, regardless of the way they labeled their overall marital satisfaction, reported experiencing a range of weight-related problems that affected various components of their marriage including limited levels of communication, time spent together, sex/intimacy, affection, and decision-making.

**Level of communication.** The development of this category was contingent on the earlier organized meaning of “level of communication”. In fact, many of the categories in the current study were identically named or classified in association with the meanings. They were not altered because the meanings seemed like a general, yet substantial and concise way to describe and categorize some of the marital experiences occurring before and after surgery. While the categories serve as frameworks guiding the findings of the current work, some of them do not provide the reader with an adequate amount of information. For instance, “level of communication” in itself does not convey the assorted reports of spousal communication before surgery. As a result, subcategories were developed as a way to provide support or further explanation to categories.
Sub categorical development for all categories were primarily dependent on participant responses. Thus, the organization of the subcategories was initiated by revisiting the previously developed ideas (i.e. direct quotes or statements from interviews). This type of processing was completed for every subcategory. The majority of the subcategories contain ranges of experiences of the category (i.e. limited versus good and no change versus change). It was important to include these ranges as they provide further explanation to the unique experiences patients endured with their spouse before bariatric surgery.

Upon further examination of the current study’s list of meanings and ideas, it seemed apparent that reports of communication with husband before bariatric surgery could be divided into two subcategories of “Strained” or “Good”. Women who reported their communication as “strained,” attributed having a difficult time communicating with their husband mainly because they were unable to confidently express themselves. Descriptions from participants that reinforce the labeling of “Strained” as a subcategory include:

a) We never really communicated well because I didn’t want to push his buttons, b) We were not able to talk to one another and open up, c) Communicated through non-verbal cues, if we really did know what was going on with each other, which was difficult, d) I would have been more withholding just in expressing things just because I am like that, I tend to be like that with everyone.

These reports helped establish the subcategory of a “strained” level of communication before surgery. However, some participants did not report their communication as strained before surgery. Rather, these women reported relatively good experiences in communicating with their husband before surgery. For instance, some women described that a) Our communication was fair, b) Sure, we were able to talk with each other, c) We talked and shared
feelings all the time, d) I mean, I would have to say we had pretty good communication, e) I always felt that I could communicate with my husband openly. As a result of these responses, the other subcategory associated with the category of communication was labeled as “Good”. In these instances, women reported that their level of communication was not negatively impacted by obesity. In fact, these women reported experiencing satisfactory levels of communication with their husband and were thus, labeled into the subcategory of “Good” level of communication before surgery.

*Time spent together.* This category was another category that was contingent on the earlier organized meaning of “time spent together”. Thus, the derived meaning label was not altered from meaning to category. This category addresses the amount of time women reported spending with their husbands before bariatric surgery. Two subcategories were developed within this category. Specifically, while some women reported that they were satisfied with the amount of time they spent as a couple, the majority of women described their time with their husband as limited in both quality and quantity. As a result, subcategories were organized as “Satisfied with time together” and “Limited in quality and quantity”. Quotes from the subcategory of “Satisfied with time together” reported participant accounts of:

a) We spent normal time together as far as we would go places or watch tv together and that kind’ ve (sic) thing; b) We’d have some dates like, dinner and a movie; c) We didn’t do anything too extraneous, but we always make sure that we had special time with each other.”

Other quotes that support the subcategory of “Limited in quality and quantity” include:

a) We did not spend a lot of time together at all, we went our own separate ways; b) He likes the outdoors and I couldn’t stand to be outside because of shortness of breath and
things like that that are associated with being overweight; c) We didn’t do, you know extracurricular activities together because I didn’t like to go to many places; d) Time spent together was mostly spent in my bedroom watching tv, never doing anything, we mostly didn’t go do anything, mostly; e) We didn’t do a whole lot; We spent a lot of time really at home; f) We didn’t go out that much because I didn’t like to put myself out there a lot; my inability at the time is what you would call it.

In these instances, many of the women reported being limited due to weight related issues of inhibition. Being obese also prevented many women from participating in physical and leisure activities with their spouse. Consequently, many of the women enjoyed more sedentary activities, while their husbands enjoyed more physical activities.

Sex and intimacy. “Sex and intimacy” is another category that was derived from the earlier organized meaning of “Sex and intimacy.” Thus, the derived meaning label was not altered from meaning to category. Specific information detailing the nature of women’s sexual relationship with their spouse before surgery was organized into subcategories. In particular, while a few women described sex as a non-issue, the majority of women reported having a limited desire for sex with their husbands. As a result, the subcategories of “Non issue” and “Limited in desire and frequency” were developed.

Sex was not an issue for some women before surgery because they had an agreed upon non-sexual relationship with spouse, or were physically unable to have sex because of medical illnesses not associated with bariatric surgery or obesity. Supporting quotes from two different women for the development of the “non issue” subcategory include:
a) I was not inhibited sexually because he is not a real sexual person. Has never been, even when I met him at 21; b) Was not a factor in our relationship since I have had several back surgeries and sex is not a priority.

The majority of participants, however, reported their sexual relationship with their spouse as limited in desire and frequency. Since the majority of husbands were reported to still desire sex with their wives, women mainly attributed their own negative self-confidence, sexual inhibitions, and body disparagement as reasons why their sexual relationship was limited. Many women described their personal challenges associated with having sex or being intimate with their husband in the following statements:

a) I didn’t really want to have sex; b) We always had good relations, but it was really limited because I didn’t want him to touch me that much; c) If he did see me naked, I just wanted it to be over with, I was not all into it or anything; d) I had poor self-image and didn’t feel attractive, which inhibited me sexually; e) It wasn’t as good as it was and could have been because of my self-consciousness; f) Not feeling good about myself did create some problems with me personally as far as how I felt about myself, self-esteem, not feeling attractive physically; g) Frequency and desire was not there. I would find not him wanting to, but me not wanting to because I was embarrassed with myself; h) It was all me more than him; It wasn’t him thinking that I was gross and didn’t want anything to do with me, it was me thinking, and pushing him away. .

Based on these statements, sexual relationships were limited as a result of the wife’s inability to be comfortable with her body and sexuality. While this was the case for the majority of women, one woman reported that the limited amount of sex was as a result of her husband’s lack of
sexual desire. This woman reported that “I asked for it more and desired it more than he did; When I was big, it really turned him off that I kept getting bigger and he kept telling that he didn’t ever married a big woman, but I became a big woman”.

Regardless of why their sexual relationships were limited, the subcategory of “Limited in desire and frequency” offers information detailing women’s experiences of sex and intimacy before surgery. Similarly, subcategories associated with the category of “Affection” offer unique information regarding how women perceived their level of affection with their husbands before bariatric surgery.

Affection. The category of “Affection” was developed from the previous meaning of “level of affection.” Thus, the derived meaning label of “level of affection” was merely shortened from meaning to category. When asked about how they perceived affection in their marriage before surgery, the majority of women reported that they were highly satisfied with the amount of affection that was offered and expressed. These responses formed the subcategory of “Excellent levels of affection”. Quotes from participants supporting the development of this subcategory include:

a) We held hands and put arms around each other; He said I love you if you were as big as this house; b) We would kiss and hold hands all the time; c) We have always just touched and been on each other; d) We held hands, he fixed my coffee for me every morning. He was affectionate in his own ways.

However, since some women reported having a limited level of affection, the subcategory of “Limited levels of affection” was also organized. These women either attributed their own inability to receive affection due to lack of self-esteem or their husband’s inability to verbally or
non-verbally express affection as reasons for the limitations of affection. Direct statements explaining this subcategory include affection as

a) Fair, I mean, he was never the person to just spontaneously come up and hug and kiss me; I craved more; b) Not very much. We did not hold hands and kiss and things like that…no, no, no; c) I knew that if I was affection toward him, he would respond in a nice way to me, but I didn’t want to because I was just like ‘ugh’ about myself.

Decision-making. Unlike the previous categories that were developed identical to their meanings, the “decision making” category is a category that was organized by further examining the meanings and forming a new category. Specifically, this category was developed by grouping together the meanings and associated ideas of “Decision to have surgery” and “Support from husband in decision”. When asked about their decision to have surgery, most women reported various health and quality of life concerns as reasons for undergoing surgery. Additionally, when asked about the level of perceived support from their husband in the decision making process, most women reported that their husbands were initially reluctant and concerned with the decision. However, this initial lack of support did not impede the patient’s decision to undergo surgery. In fact, many of the women reported the importance of having surgery for individual reasons of personal health and quality of life. Since all of the responses from the meaning statements of “Decision to have surgery” and “Support from husband in decision” deal with the process of deciding to undergo bariatric surgery, the “Decision making” category was developed. Not only did participant responses guide the development of the “Decision making” category, they also determined the organization of its associated subcategories. Specifically, three subcategories were introduced based upon participant reports associated with their decision-making processes regarding bariatric surgery. First, all of the women reported the importance of
and ability to have full control in the decision to have surgery. In fact, the main advice offered to female patients considering bariatric surgery was the expressed importance of undergoing surgery for personal motivation. As a result, the subcategory of “Full control in decision to have surgery” was developed. Direct statements reinforcing the development of this subcategory include:

a) Do it for yourself; b) If you are doing it to hang on to your partner or you think that it is going to change something that might already be broke, it doesn’t work; c) Have goals in mind and what you want to accomplish, not what somebody else is expecting you to accomplish; d) It shouldn’t be the husband’s place to decide it if the woman has it or not because it is not about him; e) Definitely do it for yourself; If you are not doing it for herself, you are doing it for the wrong reason.

Another subcategory under the category of “Decision making” describes why participants decided to undergo bariatric surgery. Many women reported physical health and quality of life as major concerns motivating them to have surgery. For instance, three women stated that:

a) My doctor told me that if I continue the way I was, I would either be dead or housebound by 50; b) I wanted to enjoy my kids and husband. I went to the amusement park with my kids and I couldn’t fit the rides and that just really made me sad; c) Health issues, my doctor said I was a walking suicide at 37 years old.

From these statements, the subcategory regarding how participants decided on bariatric surgery as “Determined mainly by health related and quality of life issues” was developed.

The third subcategory associated with the “Decision-making” category describes how women perceived their husband’s role in decision to undergo bariatric surgery. Specifically, when asked about the level of support they received from husbands, many women reported a
lack of support during the initial stages of the decision making process. Examples of supporting statements from three participants that describe husbands’ lack of initial support include:

a) I don’t think he would have been as supportive if I did not do the research before hand; Not at first, he was not supportive; b) The only reason why he went along with it was because this is what I wanted and I researched it thoroughly; c) He thought it was another fad. It wasn’t until he knew I was serious about it when he became supportive.

Despite these reports of initial reluctance from husbands, however, all women still decided to undergo surgery. Consequently, the subcategory of “Decided to have surgery regardless of husband’s initial reluctance to her having surgery” was developed.

All ‘before surgery’ categories and subcategories present information relating to how participants perceived a variety of marital experiences before bariatric surgery. Through these reports, however, biological, psychological, and social experiences emerged. The next section describes in detail how each category and subcategory from the current study can be identified as a biological, psychological, or social experience. The complex interaction of these biopsychosocial experiences associated with before bariatric surgery is also portrayed.

**Biopsychosocial components of ‘before surgery’ categories and subcategories**

**Biological.** Upon examining the current study’s before surgical categories and subcategories, many participant experiences have a biological foundation. Specifically, as a result of being physically overweight or obese, many women report a variety of experiences before bariatric surgery. For instance, being obese caused major physical health and quality of life concerns and limitations. The majority of participants in the current study suffered from a variety of obesity related medical illnesses that threatened their life. Additionally, these ailments
limited the way in which they lived their life. Many women reported being unable to perform daily activities and thus, felt like they were missing out on various components of life. For instance, many women discussed not being able to play with their children. These concerns and limitations related to the biological nature of being obese served as major incentives during the decision making process. In fact, the majority of women decided on bariatric surgery as a method to lose weight since obesity had such a negative impact on their physical health and quality of life.

Many participants also reported that obesity negatively impacted their self-esteem, confidence, and body image. Thus, obesity served as a major biological basis impacting a variety of psychological experiences before bariatric surgery.

**Psychological.** Within the current study’s categorical and subcategorical findings, a persistent theme emerged regarding participant psychological experiences before surgery. Most of the women reported psychological difficulties as the main basis for the existence of other difficulties. Specifically, the majority of women attributed negative ‘before surgery’ experiences to their limited self-esteem, confidence, and negative body image. For instance, women’s psychological issues and concerns negatively impacted various marital components such as communication, time spent together, sex/intimacy, and affection. Thus, negative self-esteem and self-worth prevented many of the women from being able to fully participate in their marital relationship.

As obesity served as the major biological basis impacting a variety of psychological experiences before surgery, negative self-esteem served as the major psychological basis impacting a variety of social experiences before surgery. In that way, psychological factors associated with being obese limited a variety of social experiences before surgery.
Social. Emergent categories and subcategories in the current study mainly report the social experiences between husbands and wives before bariatric surgery. Certain marital components such as communication, time spent together, sex/intimacy, and affection were all reported as social experiences before surgery. For instance, some women reported having a limited level of shared affection with their husbands before bariatric surgery. Women attributed their own insecurities to this finding, but also attributed the marital relationship as reason for the lack of affection.

Biopsychosocial interaction. While all categories and subcategories can be identified as biological, psychological, or social in nature, the interdependent relationship between these components offers multifaceted information to the current findings. The biological, psychological, and social experiences associated with before surgery are so interrelated and connected that they cannot be viewed as independent. Thus, social experiences cannot be fully understood without the psychological reports. In turn, psychological factors are not sufficiently appreciated without examining biological experiences associated with before surgery. All work together to form a relationship where each is not simply reflection of biological factors (i.e. severity and comorbidities of obesity), psychological factors (i.e self-esteem), or social factors (i.e. various components to marital relationship). Rather, they interact with each other to form a complex relationship. Many participants conveyed this complex relationship in their responses to various before surgery experience. The following participant quotes from the study’s categories of 1) “Range of marital rates of satisfaction including strained, fine, good, or excellent”, 2) “Time spent together”, and 3) “Sex and intimacy”, reinforce the biopsychosocial relationship:

1a) Our relationship was kind’ve, somewhat strained because I didn’t feel a attractive; 1b) I may have put more into the loss of weight than he did.
2a) We spent time together at church, but we didn’t do, you know extracurricular things together; 2b) Not much, sometimes we would, but not very often. This was my choice because I didn’t like to go many places, which more than likely strained the relationship; 2c) We didn’t go out much primarily because of me being uncomfortable and me being the weight that I was at I was not, I didn’t like to do a whole lot, I didn’t like to put myself out there a lot. So, I would say that we didn’t do a whole lot because of my um, I guess my inability at the time is what you would call it.

3a) We didn’t have sex because I didn’t really want to; 3b) We always had good relations like that but it was really limited because I didn’t want him to touch me that much; 3c) I didn’t want him to see me. And if he did, I just wanted it to be over with. It wasn’t like I was all into it or nothing like that because of my poor self-image and not feeling attractive; 3d) It wasn’t where I would have liked it to have been. Probably because of my self-consciousness or whatever; 3e) It wasn’t as good as it was and could have been. I pretty much didn’t feel good about myself. I really didn’t have the desire to at all. But, I know that around that time I, everything as far as my hormones and my menstrual cycle was just so whacked out so because of my weight is why there wasn’t much of a desire there.

As participants reported a variety of biopsychosocial experiences before surgery, they also reported complex interactions between their biological, psychological, and social experiences after surgery. These categorical and subcategorical findings are presented next.
Development of ‘after surgery’ categories and subcategories

Regardless of reported pre-surgical marital satisfaction, all patients reported marriage as positive or with marked improvement. The first step in developing this category was examining the participant responses to the question regarding women’s overall perception of their marriage after bariatric surgery. Specifically, ideas associated with the meaning of “Relationship as positive/negative” were further examined. This meaning was developed from participant responses to the interview question that asked women to report their marriages after surgery. Typical answers to this question were either “positive” or “negative.” However, some women reported more in-depth information by comparing their relationship status to ‘before surgery’ rates of marital satisfaction. Specifically, many women reported experiencing marked improvement in their overall marital relationship following bariatric surgery. As a result, “Regardless of reported pre-surgical marital satisfaction, all patients reported marriage as positive or with marked improvement” category was developed. Direct quotes from participants that support the labeling of this category include “Overall, I think it is a lot more positive; The past year our relationship has grown tremendously; It is more positive than before surgery”.

As the data were analyzed, it seemed apparent that the level of marital satisfaction after surgery could be further explained and justified by examining other categorical and subcategorical findings. Specifically, answers to questions about their level of communication, time spent together, sex/intimacy, affection, changes in spouse, and changes in patient provided justification to their overall perception of their marital relationship after surgery.

Level of communication. The development of this category was not altered from meaning to category. When asked how they perceived their communication with their spouse after bariatric surgery, all participants described their level of communication as positive with marked
improvement. Most women attributed this change to their personal improvements in self-esteem, which in turn provided them with assertiveness and confidence to freely express themselves to their spouse. Some women also reported the significance of their husband’s ability to accommodate to this increase in their wives’ communicative abilities. Specifically, as wives altered the way they communicated with their husbands, many women reported that their husbands appropriately accommodated to these changes by increasing their level of communication. Based on these ideas, the subcategory of “Improved as a result of patient’s increased self-esteem and husband’s accommodations” was developed. Supporting quotes that reinforce the labeling of this subcategory include the following statements from six women:

a) I did not let him talk to me the way he used to; b) Because of my self-esteem, I have opened more to him; c) I think I just feel better about myself so I can talk about things now that I probably would not have talked about before. I feel like I deserve better now; d) The confidence from having the surgery and not feeling that you have to settle anymore helped my communication; e) He listens now to me when I talk; f) I can express that I don’t like that and it’s okay for me not to like it. I never feel like I cannot talk to him now.

From these reports, it seems apparent that many women experienced an improvement in spousal communication as a result of their own personal changes associated with having bariatric surgery. This was also the case for the next category of “Time spent together.”

Time spent together. This category was another category that was contingent on an earlier organized meaning. Thus, the derived meaning label of “time spent together” was not altered from meaning to category. One subcategory developed within this category that further explains how participants perceived time with spouse. Specifically, all women reported an increase in the
quality and quantity of time spent together with their husbands after bariatric surgery. Thus, participants not only reported spending more time with their husbands, they also described this shared time as more meaningful compared to time spent together before bariatric surgery. As a result, the subcategory of “Increase in quality and quantity” was organized. Quotes from this subcategory include:

a) We do baby oriented things together now, when they used to be baby activities only I would do; b) He wants to spent time with just me and get away and not tell anyone; c) I am more active, we do more things and we are out and about all the time; d) We walk together, we spend more time together; e) We definitely go off more, we go to the beach in the summer, I really enjoy going to theme parks; f) Now that I have the weight off, I can physically do more. I go to the pool and waterslides when I didn’t do that before; g) I can pack my weekends with my husband and just have a wonderful time since I am no longer a ‘slug’.

In many instances, women reported no longer being limited by weight related issues. Specifically, since women lost weight, they were physically able to participate in physical and leisure activities with their husbands. Additionally, women were also less likely to remain sedentary and more apt to participate in the outdoor activities that their husbands enjoyed.

Sex and intimacy. Similar to previous categories, “Sex and intimacy” is another derived label was not altered from meaning to category. Specific information detailing the nature of participant’s perceived sexual relationship with their spouse after surgery was organized into subcategories. In particular, while a few women described no change in their sexual relationship,
the majority of women reported an increase in sexual desire and frequency after bariatric surgery. As a result, the subcategories of “No change” and “Increase in sexual desire and frequency” were developed.

As previously described, sex was not an issue for some women before surgery because they had an established non-sexual relationship with spouse, or were physically unable to have sex because of medical illnesses not associated with bariatric surgery or obesity. Consequently, these same women reported similar experiences after bariatric surgery. Specifically, these women experienced no change in their sexual relationship with their spouse after surgery. Supporting statements from three different participants for the development of the “No change” subcategory include: “It’s been so many years, so no changes; The longer that I have been married the less important sex seems to be; We’ve been together so long that we don’t base our relationship on the sexual part where young couples would”.

The majority of participants, however, reported their sexual relationship as improved after bariatric surgery. Specifically, women reported an increase in the frequency and desire for sexual relations with their husbands. Women mainly attributed this increase to their own improvements in physical ability, self-esteem, and body image. Thus, women reported being more comfortable with their physical bodies and thus, reported a decrease in sexual inhibitions. Five different women described these changes regarding sex and intimacy in the following statements:

a) We have reversed roles where he wants it more than I do now; b) We flirt and tease more with each other about sexual related things; c) It is much better because I am more
flexible so, things aren’t always the same; d) I feel better about myself, which has helped with my inhibitions; e) I don’t care if he sees me naked now; I join him in the shower now, when I never did that before.

These reports reinforce the sub categorical development of “Increase in sexual desire and frequency.” Similarly, subcategories associated with the category of “Affection” offer unique information regarding how women perceived their level of affection with their husbands after bariatric surgery.

**Affection.** The category of “Affection” was developed from the previous meaning of “level of affection.” Thus, the label was shortened from meaning to category. As previously mentioned, the majority of women reported that they were highly satisfied with the amount of affection that was offered and expressed before surgery. As a result, these women reported no change in the level of shared affection after bariatric surgery. These findings helped in the development of the subcategory of “No change.” For instance, some women described that a) throughout it all, he comments to me all the time, before and after, he is very affectionate and very good, I guess you would say, b) He didn’t change that much because he would show me just as much if not more.”

However, the majority of women reported marked improvements in affection after surgery. Specifically, many participants reported an increase in their husband’s verbal and non-verbal modes of affection. From these reports, the subcategory of “Increase in husband’s verbal and nonverbal modes” was formulated. Women also reported improvements in their personal ability to receive affection from their husbands. Participants attributed improvements in self-confidence and ability to feel comfortable with receiving affection as reasons for the
improvement in shared affection after surgery. Direct statements from five women explaining this subcategory include the following:

a) He is a lot more affectionate with holding hands and such; b) We hold hands or we’ll lay next to each other more; c) He’ll hold my hand more in public, He loves to do that; d) We snuggle a lot, which is something we didn’t do in the past; e) I’m not insecure for him to affectionately touch me anymore.”

As participants reported change in husband’s level of affection, many women also perceived other changes occurring in their spouse after bariatric surgery.

*Change in spouse.* “Change in spouse” is another category that was derived from the organized meaning of “Change in partner.” Since all participants were married, the category label was altered to include the label of “spouse” as opposed to “partner”. This category represents the compelling finding that even though wives experienced bariatric surgery, their husbands also endured through some changes and transitions associated with bariatric surgery. Specific information detailing husbands’ change was organized into three subcategories of a) no change, b) more easygoing and supportive and c) increase in feelings of jealousy and over protectiveness.

Some women described seeing no change occurring in their husband after bariatric surgery. Although in the minority, these women stated “a) None, I didn’t notice any changes, I know that sounds crazy; b) No changes, not really” when asked if their partner changed at all since bariatric surgery. As a result, the subcategory of “No change” was developed. The majority of participants, however, perceived changes in their husbands after bariatric surgery. For instance, many women reported that their husbands seemed more easygoing and supportive. Thus, the subcategory of “More easygoing and supportive” was developed.
Supporting quotes from three different women reinforcing the development of this subcategory include descriptions of husbands as “a) more willing to do and compromise and do things he hadn’t done before and that kind of thing; b) more open and willing to listen to my point of view; c) more attentive to my needs and stuff.”

In contrast, many women in the current study reported that their husbands seemed more jealous and overprotective after bariatric surgery. Based on these reports, the subcategory of “Increase in feelings of jealousy and over protectiveness” was developed. When asked why they thought their husbands were more jealous after surgery, many women speculated that their husbands struggled with a) their own insecurities with weight or b) had a difficult time adjusting to the increase in attention their wives received from others. Many women provided statements supporting the development of this subcategory by describing the following:

a) He is very competitive and became jealous that I lost weight and lost weight on his own; b) Before he wasn’t jealous of me, as he is now. If somebody says something to me, I can tell that it is triggering something; c) We had some issues in the beginning because he was somewhat intimidated by the way I was turning out to look; d) Maybe a little bit self-conscious and insecure; e) His jealousy intensified because a lot more people were giving me compliments and heads were turning now; f) The main thing is that he is more, I don’t want to say that he is jealous because he is not jealous, but he is more protective of me; g) I don’t know, maybe there might be a little insecurity, because of the weight loss. So, he is a little more insecure now than he was before.

As participants observed and reported changes in their spouses after bariatric surgery, many women reported changes in themselves as a result of bariatric surgery and associated weight loss.
Change in patient. This category was developed from the previous meaning of “Changes in patient.” Thus, the label was not altered from meaning to category. Based on reports detailing how participants perceived changes in themselves after bariatric surgery, three subcategories were formulated. First, many women reported having a difficult time adjusting to the weight loss. Specifically, participants reported that their minds were unable to appropriately adjust to their thinner bodies. Even though they had lost a significant amount of weight, they still viewed themselves as obese. From these reports, the subcategory of “Experienced a brain/body disconnect” was formed. Statements from several different participants reinforcing the development of this subcategory include:

a) I have to get my brain to re-do itself; b) Took a long time for my brain to adjust to my body weight loss; c) It was almost like when you look in the mirror you think that you are still heavy and your only a size 2; d) Your body is saying one thing and your brain is saying another; e) The hardest part for me was the perception of seeing myself one way and having been that way for so long and not being that person anymore but still seeing the other one; f) Visualizing yourself in normal size clothing was hard to understand. All those years of going to a certain size, it is habit that I still grab the larger sizes when I shop; g) I can’t tell you how many times I have bought the bigger size pants because I can’t see myself as being that small yet.

Another subcategory relating to the category of “Change in patient” depicts the difficulty of adjusting to specific food restrictions associated with bariatric surgery. Specifically, some women reported having a difficult time with not being able to eat whatever and whenever they wanted, especially when they wanted to cope with their emotions by eating large amounts of food. Thus, the subcategory of “Emotional component of food” was developed. In these
instances, women discussed the emotional component of overeating as essential to their ability to cope. However, due to the biological restraints associated with bariatric surgery (i.e. dumping syndrome and severe nausea), participants were unable to cope with difficult times by overeating. Some interesting quotes that reinforce the development of the “Emotional component of food” subcategory include:

a) You have surgery on your stomach and not your brain, which is where my problem is; b) You can’t fix being overweight by surgery because it is a mental problem; c) Total complete change in mind frame regarding the food I eat; d) You can stop me from eating, but the emotional component is still there; e) When I am depressed or lonely, I want to snack even when I’m not hungry; f) I grieved for food, there is no doubt about it. When you have been used to eating whatever you want, whenever you want to eat it, and all of a sudden you can’t do it and you can’t do it for life, there is some psychological aspect to go along with that.

The last subcategory associated with the category of “Changes in patient” after bariatric surgery addresses the reported gains in career or education. For instance, some women reported that their “a) Job sales increased from having one unsuccessful store to four very successful stores; b) Were more efficient at work and therefore got promoted; c) Went back to school to finish my degree.” From these responses, the subcategory of “Career and educational gains” was developed.

Women mainly attributed these educational and career gains to their enhanced self-esteem and confidence. Thus, since they felt better about themselves, they had the courage to
apply for promotions, go back to school, or excel in their career. Additionally, women also reported experiencing less job discrimination as a reason for career advancement after bariatric surgery.

Other factors supporting marital stability or improvement after bariatric surgery. The development of the final category, “Other factors supporting marital stability or improvement” was mainly organized from the meaning and associated idea statements of “Anything else.” When asked if they had anything else to add to the interview, the majority of women discussed their opinions regarding what helped their marriage throughout the experience of undergoing bariatric surgery or what could have been done to make it better. For instance, a shared sense of spirituality along with open communication were two reoccurring issues that were reported to have helped their marriage successfully endure the challenges of bariatric surgery. Couples therapy before and after surgery was also suggested by participants as a way to help support marriages throughout the course of surgery and associated transitions. Overall, these responses focused on participant views of the positive features that helped or could have helped their marriages throughout bariatric surgery. Accordingly, the category of “Other factors supporting marital stability or improvement” was developed.

Not only did participant responses guide the development of the “Other factors supporting marital stability or improvement” category, they also determined the organization of its associated subcategories. Specifically, two subcategories of “Importance of pre and post-surgical couples therapy” and “Solid framework of open communication and spirituality” were introduced.

Many participants in the current study expressed the importance of and desire for couples therapy before and after bariatric surgery. Many stated that it would have been helpful for them
to have a professional help them transition through some of the experiences associated with bariatric surgery and associated weight loss. For instance, some women described that

a) It would have been nice to have pre and post-surgical therapy; b) Family therapy would have helped me; c) Fat people are going through a lot or they would not be fat, so having the opportunity to have therapy would be helpful; d) I would have like to have went through counseling before and even afterwards to know what was going on and how to explain the things that I was thinking and he was thinking.

Additionally, some women described the importance of open communication and a shared spiritual foundation in providing support to a marriage when a spouse endures bariatric surgery. As a result, the subcategory of “Solid framework of open communication and shared spirituality” was introduced. Direct quotes reinforcing the development of this subcategory include:

a) The reason that we made it through this transition is because of our love in God and belief in marriages and working for it to survive; b) We’ve always been involved in church and we’ve always relied on the Lord to help us through things; c) All you can do it trust in the Lord that things are going to be okay; d) I think that we endured this surgery and all the possible negative things that happen afterward has a lot to do with our ability to communicate and if you don’t put yourself in situations where you shouldn’t be, then it’s not going to be an issue; e) One thing that we are is very centered with God and church and our family and everything and that is a big thing”.

While the meaning statement of “Advice” was not transitioned into a final category, the ideas were included in the final organization of categories and subcategories. Specifically, the
majority of women when asked if they had any advice to offer other married women considering bariatric surgery, advised women to a) undergo surgery “for yourself, not other people”, b) seek couples therapy, c) be aware of the personal changes that will transpire, and d) keep communication open. Since these ideas were better represented in already established categories, they were grouped into respective categories (i.e. the advice to “seek couples therapy” was grouped into the category of “Supplementary information that supported patient’s marriage”). Since this was accomplished for all of the ideas relating to the “Advice” meaning statement, “Advice” was not organized into a category.

All ‘after surgery’ categories and subcategories present information relating to how participants perceived a variety of marital experiences after bariatric surgery. Through these reports, however, biological, psychological, and social experiences emerged. The next section describes in detail how each category and subcategory from the current study can be identified as a biological, psychological, or social experience. The complex interaction of these biopsychosocial experiences associated with after bariatric surgery is also portrayed.

Biopsychosocial components of ‘after surgery’ categories and subcategories

Biological. Upon examining the ‘after surgery’ categories and subcategories, it seems that many of the after surgery experiences have a biological foundation. Specifically, all women reported losing a significant amount of weight as a result of bariatric surgery. With a significant amount of weight gone, women were freed from some of the physical illnesses and limitations that caused distressed before surgery. As a result, many women described improvement in their level of physical activity and overall quality of life. For example, one woman eloquently reported this change by stating, “It is easier to be more active now. I am healthier, I feel better as far as I don’t get so tired and overworked. I look forward to the new adventures I’ll have every day.”
Weight loss associated with bariatric surgery also relieved many women from some of the psychological distresses they endured before surgery. In fact, women reported a variety of psychological experiences after bariatric surgery as a consequence to losing a significant amount of weight from surgery.

*Psychological.* Within the current study’s categorical and subcategorical findings, there is a persistent theme regarding the relevance and importance of participant psychological experiences after surgery. Specifically, many women offered obvious psychological experiences when they described personal changes in themselves as a result of bariatric surgery. In particular, reports of having a difficult time adjusting to the physical restrictions and sudden weight loss associated with bariatric surgery further represent the psychological component of bariatric surgery. Thus, many women reported having difficulty adjusting to different coping mechanisms (i.e. other than food), and to the new-found identity of a non-obese person. These experiences are psychological in nature because they deal with emotional development and cognitive capabilities.

Additionally, many women attributed their own psychological improvements as the main justification for a variety of ‘after surgery’ experiences. For instance, improvements in self-esteem, confidence, and body image all worked together to create various improvements in certain marital realms. Thus, increases in marital communication, time spent together, sex/intimacy, and affection were all explained by psychological improvements made by the patient.

As weight loss served as the major biological basis impacting a variety of psychological experiences after surgery, positive self-esteem and body image served as the major psychological basis impacting a variety of social experiences after surgery.
Social. Participants reported an array of social experiences after bariatric surgery. Categorical and subcategorical findings represent these social facets as mainly occurring within the marital realm. Regardless of pre-surgical reports of marital satisfaction, all women in the current study reported perceived improvements in their overall marriage following bariatric surgery and subsequent weight loss. In fact, some participants even reported a stronger connection with their husbands. Specifically, participants reported a variety of ‘after surgery’ experiences related to the marital realms of communication, time spent together, sex/intimacy, affection, and changes in spouse. While many reported their own self-improvements as an explanation for these marital changes, they also reported the relative importance of the husband’s ability to accommodate to post-surgical changes.

Another social component to the current study’s findings is the reported career and education gains experienced by participants after bariatric surgery. According to participants, as they lost weight, they noticed co-workers treating them with more respect. As a result, many attributed a decrease in job discrimination as an explanation to career advancement following bariatric surgery and associated weight loss. Specifically, one woman stated, “It makes me mad that people treat me with respect now because I am thinner, when they didn’t before. I didn’t change any, my mind has not changed. They just cannot detach the other.” Other women attributed self-esteem and increased energy as reasons why they achieved educational or career gains.

Biopsychosocial interaction. ‘After surgery’ categories and subcategories provide a variety of biological, psychological and social experiences occurring after bariatric surgery and associated weight loss. While all categories and subcategories can be identified as biological, psychological, or social in nature, the interdependent relationship between these components
offers multifaceted information to the current findings. For instance, the biological, psychological, and social experiences associated with before surgery are so interrelated and connected that they cannot be viewed as independent. All work together to form a relationship where each is not simply a reflection of biological factors (i.e. weight loss), psychological factors (i.e. improved self-esteem and body image), or social factors (i.e. improved marital relationship or career advancement). Rather, they interact with each other to form a complex relationship. Many participants reported this complex relationship in their responses to various after surgery experiences. The following quotes from the categories of 1) “Level of communication”, 2) “Time spent together”, 3) “Sex and intimacy”, 4) “Affection”, and 5) “Changes in spouse” reinforce this biopsychosocial relationship:

1a) Well, I never, I never pushed any body’s buttons. I was meek and mild and anything anybody ever said was okay. And then it got to where it wasn’t okay. Not with him or anybody; 1b) Even though I am not where I’m supposed to be weight wise, I am at a 14 now which is nice, instead of where I came from and that is confident enough for me to speak up.

2a) We are a lot better and that has a lot to do with my own personal welfare, plus I am more active; 2b) We do more things, we are out and about all the time; 2c) We do things with the kids, we play basketball with them, we are just doing family stuff that we didn’t do in the past; 2d) We walk together, we spend more time together and as a result we talk more. In the past, if he didn’t agree with me then it became an issue and became an argument. But, now it is a lot better because we spend a lot more time with the kids and each other.
3a) Sex is off the chain (sic) because I am more flexible, so it’s like okay, it’s not always the same. Especially immediately, when I first started, I mean it was really, we were always into it. Like I said, always a new position, a lot better; 3b) Now I want him to see and touch me and that is different; 3c) Because of my weight loss, I’m able to feel attractive again, which has had a tremendous effect because it’s increased my desire and has decreased my self-conscious level. I’m not embarrassed anymore, we are free!

4a) We snuggle a lot, which is something we didn’t do in the past. When we watch tv, I’ll lay up in his arms or something like that. I didn’t do that in the past. If we can keep the little one out of the bed (laughs).

5a) He is a little bit more attentive towards my needs and stuff. I don’t know if it was age or because of the weight loss. I don’t know if he is growing into knowing that that is what I need. I may have communicated that with him in some way. Probably so, because we have been talking about what each one of us needs. And um, I reckon he is trying to give me what I need.

As evident in the in-depth analysis of the various biological, psychological, social experiences associated with before and after surgical categories and subcategories, the biopsychosocial perspective is essential to the findings of the current study. Consequently, it also was essential to the development of the core category and final core story.

Development of core story

The core category or ‘explanatory whole’ (Strauss & Corbin, 1998, p. 146) for the current study is that despite the range of experiences, all women experienced a variety of
biopsychosocial components that impacted their marriage before and after bariatric surgery. Additionally, regardless of their marital status before surgery, all women reported an improvement in their overall marriage after surgery.

This core category was developed by first examining the categories and related subcategories and then introducing a broad enough statement to capture participant reports of their experiences before and after bariatric surgery. What remained constant while examining the categories and subcategories was that all of the women reported enduring some type of biological, psychological, or social experience related to bariatric surgery. Although the exact experiences varied amongst individuals, they all could be generally distinguished as biopsychosocial in nature. Additionally, each and every participant reported her marriage as improved after bariatric surgery. This occurred regardless of their pre-surgery report of marital satisfaction. Since these two statements were completely representative all of the participant responses, they were developed into the core category.

This core category served as a framework for the development of a ‘core story’ (Corbin & Strauss, 1990). In that way, the core story provides further details regarding the array of biopsychosocial experiences participants reported before and after bariatric surgery. In this study, the story is a three paragraph long narrative that captures the overall essence of women’s experiences before and after bariatric surgery. This core story is displayed in Table 3.

The current study’s core story is essentially the narrative form of the categorical and subcategorical findings. Since all patients discussed a variety of experiences before and after bariatric surgery, the first paragraph of the core story narrates ‘before surgery’ findings, while the second paragraph narrates ‘after surgery’ findings.
Even though most women reported their marriage as relatively positive before surgery (90%), they also reported a range of weight-related problems affecting various components of their marriage, including limited levels of communication, time spent together, sex/intimacy, and affection. Many of these problems were reported to be ultimately due to patient’s lack of self-esteem and confidence and had little or nothing to do with the husband. Despite this lack of esteem, all patients reported enough self-assuredness to confidently decide to have the surgery for themselves without the opinion or support from spouse, friends, or other family members. In fact, the majority of women stated the importance of undergoing surgery solely for individual desires of improved health and quality of life. This is especially relevant since most women did not initially receive any support from their husbands. It was only until husbands realized that their wives really wanted the surgery and were serious about the procedure that they became 100 percent supportive of the decision.

Regardless of the reported levels of marital satisfaction before surgery, all patients described improvements in their marriage after bariatric surgery. Certain improvements within the marital realms of communication, time spent together, sex/intimacy, and levels of affection were mainly attributed to wife’s increased self-esteem and husbands ability to adjust accordingly, along with pre-surgical frameworks of open communication and a shared spiritual foundation. Even though the patient was the only one physically undergoing surgery, her spouse also revealed noticeable changes after surgery. For instance, while the majority of women reported personal experiences of career/educational gains and difficulties coping with weight
loss and new found identity, they also described their husbands as more easy going and supportive but at times more jealous or overprotective.

Due to the various marital adjustments these patients reported having to make as a couple throughout the entire process of bariatric surgery, many reported the desire for and importance of pre and post-surgical couples therapy. That way, the various biopsychosocial experiences reported by these women could have been addressed and endured with less challenge to the marriage.

The first paragraph of the core story was developed by describing the list of all categories, along with some of the findings from subcategories. For example, the first sentence of “even though most women reported their marriage as relatively positive before surgery”, explained the categorical and subcategorical findings that many women reported their marriage as “good, excellent, or positive”. In some instances, specific subcategorical information was not included because it would have increased the length of the story and the true essence might have been lost in the words. For instance, the statement that women “reported a range of weight-related problems affecting various components of marriage, including limited levels of communication, time spent together, sex/intimacy, and affection” offered a brief overview of the categorical findings. Subcategorical information relating to each of these categories would have been unfavorable to the core story’s concise, yet informative intent. The last sentence in the first paragraph details the decision-making category by describing its associated subcategorical findings. It seemed important to report why women decided to undergo bariatric surgery because of the importance they placed on “doing it for yourself.”
The process of developing the second paragraph followed the same means as in the first paragraph. Thus, categories and subcategories were further detailed in narrative form. For instance, since all women reported their marriage as positive, it seemed important to include that as the initial sentence guiding the paragraph describing ‘after surgery’ findings. Following this sentence were narratives providing a brief overview of the categorical and subcategorical findings. For example, categories of “communication, time spent together, sex/intimacy, affection, and supplementary information” were all concisely described as improving after surgery. Specific details regarding the categories and related subcategories of “changes in patient” and “changes in spouse” were portrayed next in the core story. A short narrative describing these changes was necessary in order to fully understand the variety of experiences women endured with self and spouse after bariatric surgery.

The final paragraph of the core story relates the importance of couples therapy, along with an overview statement describing the core category. Overall, all of the women reported a variety of biological, psychological, or social experiences impacting their marriage before and after bariatric surgery. Since many of the women discussed the importance of couples therapy, the connection was made that couples therapy might have served as a benefit to the various biopsychosocial experiences of bariatric surgery.

Ensuring Rigor

The triangulated investigator, peer debriefer, reflective journal, audit trail, personal bias statement, and final participant end check all served to verify the trustworthiness of the findings in this study. These methods were employed throughout various times throughout the course of the current study to maintain credibility, transferability, dependability, and confirmability; all of which increase a study’s trustworthiness.
Credibility

In an effort to establish and maintain credibility, the current study employed methods of triangulated investigator and peer debriefing (Lincoln & Guba, 2000; Morrow, 2005).

Triangulated investigator

The triangulated investigator was used during the open, axial, and selective coding procedures to confirm or challenge the proposed ideas, meanings, categories, subcategories, and final narrative. Specifically, during the open coding procedure, my investigator received material for every set of three interview transcripts. He reviewed each transcript and extracted ideas. His ideas were then arranged and compared to the list of meanings devised by the primary investigator. Disagreements between meanings and concepts on our lists were resolved through a discussion of perceptions until we achieved complete agreement. This was done for every set of three transcripts. Hence, a total of four meetings between the triangulated investigator and myself occurred in order to achieve complete agreement regarding the final arrangement of ideas and meanings.

Investigator triangulation was also involved during the axial coding procedure. Specifically, the investigator was enlisted to confirm that every category accurately represented the subcategories under them and vice versa. In preparation for this step, the triangulator and I imitated a similar process that we did during the open coding procedure. Specifically, he was given the open coding list and was asked to match them to the provided list of categories for every set of three interview transcripts. He reviewed the ideas and meanings from the open coding list. Next, he was provided with the categories and subcategories developed by the primary investigator. Categories and subcategories developed by the triangulated investigator were then arranged and compared to the categories and subcategories devised by the primary investigator.
investigator. This was done for every set of three interviews. Hence, a total of four meetings between the triangulated investigator and myself occurred in order to achieve complete agreement regarding the final arrangement of categories and subcategories.

Upon finding a disagreement, we planned to introduce our thoughts and reasoning behind our decision and negotiate on categories and subcategories until we reached complete agreement. However, after he placed each subcategory under a category, and compared his list to mine, we were in complete agreement. As a result, we did not have to negotiate.

Lastly, my triangulated investigator was used throughout the development of the core story. In particular, the investigator read the completed core story and provided support and suggestions toward the end product. He examined the description to ensure that it fully represented all of the data that were organized up until that point (e.g., ideas and meanings from open coding and categories/subcategories from axial coding). Upon the third revision, there were no discrepancies between the investigator’s thoughts regarding the core story and my description of the phenomenon. As a result, the investigator and myself did not have to negotiate further on details of the core story.

Peer debriefing

The peer debriefer was also used throughout the current study’s data collection and analysis process to establish credibility. By reviewing the work before moving onto the next step in data collection and analysis, the peer debriefer helped me to investigate my biases and determine whether they were influencing my overall organization. In particular, she examined the proposed categories and subcategories to ensure that there were no discrepancies between them and that they were clearly and coherently written. She also reviewed the ideas and meanings in the open coding list alongside the categories and subcategories to ensure that they
were concise, yet representative of the original reports. She also examined the final core story while it was being developed and conferred the results when it was finished. Overall, the peer debriefer helped me maintain honesty about the meanings, categories, and basis of the core story, along with suggesting alternate language that helped to formulate a clear description of the experience. This method helped me to establish confidence that all the steps taken up to that point were sufficient and made in “good judgment.”

Transferability

Self-reflective journal

To build a case for transferability, I used my reflective journal to record my inner thoughts and feelings throughout the entire data collection and analysis process. Journal entries included documentation of times when I felt anxious to begin the data collection process, along with the range of emotions I experienced as the interviews transpired. For instance, after the second interview I reported feeling sorry for the women that I had spoken with. A direct quote from my journal illustrates:

After this interview, I found myself feeling bad for this patient. She was so overwhelmed with her extended family before the surgery. She let herself get stretched and taken advantage of in so many ways. I feel sad that she was unable to stand up for herself just because she was overweight. It is as if she didn’t feel that she was worth to have an opinion and stand up for herself just because she was an oversized woman.

In my reflective journal, I also notated times when I wanted to help these women therapeutically. At times, it was difficult for me to solely serve as the person asking the questions as I found myself wanting to get in an in-depth conversation with these women. I wanted to talk
with them in a therapeutic way with hopes of challenging their beliefs regarding the strong connection between weight loss and increase self-esteem and assertiveness.

Lastly, I also reflected upon my frustrations associated with the logistics of the entire data collection and analysis process. Specifically, I ran into some unexpected challenges and detailed my frustrations. For instance, problems with the audio equipment was notated in the following journal entry:

At this point, I should be interviewing again. Unfortunately, I am still awaiting the equipment for my phone service. I called the phone company today and after talking with four different people, I was told that there was a delay on my order. So, now I will not be able to receive the equipment until Thursday morning. I am SO FRUSTRATED!

Overall, this journal offered me a place to release the range of emotions I experienced as I worked to devise findings representative of the data. For example, during the final drafts of the story, I reflected a feeling of satisfaction, as I knew that I was capturing the experiences of the women in a meaningful and dynamic way. Thus, I was very proud of the efforts and diligence that went into writing a thorough yet concise description of women’s experience with their marriage before and after bariatric surgery. The complete journal is in Appendix D.

**Dependability**

*Audit trail*

The audit trail was used in the current study to increase the confirmability and dependability of the results. Overall, the audit trail includes detailed notes about the process and rationale behind the extraction of ideas, meanings, categories, subcategories, core category, and the final core story. The audit trail was also used to elucidate the investigator’s role in examining
and verifying the categories and subcategories, and the peer debriefer’s role in ensuring that there were no discrepancies between the open, axial, and selective coding list of findings. Specifically, they included a record of the number of drafts written, the main differences between those drafts, and the process of negotiation that occurred among the investigator, peer debriefer, and myself as we worked to develop the final story. For a complete account of this audit trail, please refer to Appendix E.

Confirmability

Acknowledging researcher bias

In an effort to establish confirmability for the current study, a researcher bias statement was completed whereby my biases were identified and sustained. This statement reads:

As far back as I can remember, I have always struggled with my weight. While I have never considered myself obese, I have struggled with various emotional challenges associated with being overweight, such as negative self-esteem and social inhibitions. As a result, I have always been able to empathize with other people who struggle with similar issues associated with weight.

During my clinical internship at Mercer University, I had the opportunity to collaborate with various medical and mental health professionals. Dr. Alan Williams, a psychologist at Mercer University, approached me one day and asked me if I was interested in helping him with a large study examining bariatric surgery. Several conversations later, we agreed that additional research should examine the role bariatric surgery has on marriage. Thus, my existing interest in obesity stemming from personal issues, along with an available data set provided the opportunity to conduct a study examining obesity, bariatric surgery, and marital relationships.
Overall, when considering the possibility of pre-conceived notions regarding the proposed study, I have an assumption that bariatric surgery will *(in some way)* impact the marital relationship between the patient and his or her spouse. This assumption stems from my marriage and family therapy training and knowledge of general systems theory, which embraces the notion of homeostasis. I have an assumption that couples create and maintain a working system that serves specific functions. Specific to this study, I have an assumption that obesity serves a particular function to the marital relationship. Additionally, I think that obesity is a relatively stable component to the marriage that if taken away, may create chaos to various components of a marital relationship. As a result, particular attention will be paid, when analyzing the data, to minimize any preconceived notions and not impose an a priori hypothesis on the experience. I will work to adequately represent the perspectives of the participants rather than operate under my own assumptions.

I am aware that outside my role as a researcher, I am especially sensitive to issues relevant to couples. Specifically, as a couples therapist from 2001 to 2007, I have been involved with different couples undergoing various obstacles. As a result of this close contact and intimate nature involved in couple therapy, I have become more aware and interested in couple issues. I feel strongly about the success of couple relationships and want to ensure that issues specific to marital relationships are well known and appropriately managed.

*Final end product*

Another way that confirmability was ensured in the current study was to “present the researcher’s interpretation to the participants to get their feedback” (Auerbach & Silverstein, 2006, p. 3). A final participant end check of the data was completed in an effort to ensure that the
researcher efficiently captured the realm of the interviewees’ experience(s). Specifically, upon completion of the core story, each participant was called and informed about the intention behind a core story. After the story was read to each participant, they were given the opportunity to provide feedback. This was helpful because it helped to refine and clarify findings. All women stated that the story represented their experience in some way. In fact, feedback from some of the participants describe the core story as “it was like you were talking all about me!”, “that was the way it was for me”, and “it sounds just like my life before bariatric surgery and after”. At the same time, they also offered constructive feedback regarding their thoughts on statements they thought deserved more attention. For instance, one woman stated that she wanted to make sure that I included the importance having the surgery for the patient without regard to husband. While this was included in the story, she wanted me to put more emphasis on it because it was essential to her experience. As a result, more focus was put on that statement in the core story.

Due to this final end check of the data with participants, further support was given to an already established category and related subcategory. In particular, during the third interview, information regarding the decision to undergo surgery and husband support of this decision was discussed. As a result, this topic was addressed in all remaining interviews. Since it was not explicitly discussed in the first three interviews, however, the final end check allowed the opportunity for all of the participants to confirm or deny the findings relating to women’s decision to undergo bariatric surgery, along with the perceived level of support from their husbands regarding this decision. Specifically, all women stated that they decided to have bariatric surgery for themselves because of health related and quality of life concerns. When asked about the support they received from husbands from this decision to have surgery, all reported that their husbands were not supportive and skeptical of their decision to undergo
bariatric surgery. In fact, most husbands did not initially support their wife’s decision to undergo surgery until the women made the effort to portray the importance of the surgery by a) researching the procedure, b) having several discussions with the medical staff, and c) communicating the importance of the procedure to her husband. In all of the reports, however, once he was able to see that she was really serious about the surgery and really wanted it, he supported her decision. Having the opportunity to go back to the participants during this final end check, to ask them questions regarding their decision to undergo surgery and the support they received from spouse, helped strengthen previous findings regarding this category and subcategory.
CHAPTER 5
Discussion

The purpose of this study was to provide the reader with comprehensive and rigorous findings that most appropriately describe the female patient’s perspective of her marriage before and after bariatric surgery. The results offer an insight into the common experiences women endure with their spouse before and after bariatric surgery. Similarities between my results and those existing in the literature lend a degree of support. Results regarding differences offer insight into the unique perceptions of women who endure bariatric surgery and associated weight loss.

In this section, the present study’s categories and subcategories will be presented and explained as they relate to the biopsychosocial perceptive. Previous qualitative and quantitative research regarding the impact bariatric surgery has on the individual and couple relationship will be presented in an effort to reinforce or challenge the findings of the current study. Unique findings will be explained using a variety of existing theories and hypotheses. This section begins with an outline of the results, highlighting their similarities and unique contributions to the literature and theory. Limitations to the current study and those inherent in qualitative methodology are then addressed. As a result of these limitations, a discussion of future research within this area of study follows. To conclude this section, clinical implications are then presented to help professionals discover ways to implement the study’s findings.
Biopsychosocial perspective

The purpose of the current work was to provide a comprehensive description regarding women’s perceived experiences of their marriages before and after bariatric surgery. Reports from participants offered a complex interaction between biological, psychological, and social factors associated with before and after experiences of bariatric surgery. Consequently, interpretations of the current study’s findings are presented and theorized in accordance with the biopsychosocial perspective. The main proponent guiding this perspective is that “there are no biological problems without psychosocial implications, and no psychosocial problems without biological implications” (McDaniel, Hepworth, & Doherty, 1992, p. 2). While the biopsychosocial model provides a framework for the conceptualization of the current study, other explanations are offered within the biological, psychological, and social experiences. For instance, many of the psychological changes reported by participants can be explained by pulling from elements of symbolic interactionism (Blumer, 1969). Specifically, the majority of women reported a variety of psychological experiences that impacted their marriage before and after bariatric surgery. By describing this phenomenon in accordance with symbolic interactionism, connection can be made between how the women in the current study interpreted the perceptions that others had of them. Additionally, how these interpretations impacted the way in which she treated herself and her spouse can also be discussed as they related to symbolic interactionism.

The social component within the biopsychosocial perspective is further elucidated by incorporating contextual factors, such as gender and systemic interactions, into the discussion of why and how participants reported a variety of social experiences before and after bariatric surgery. For instance, gender is proposed as a social construct impacting how women decided
upon having bariatric surgery. Additionally, systemic interactions between spouses are discussed as a way to further understand the complexity of spousal interaction.

Since findings from the current study are theorized and presented using the biopsychosocial framework, the following discussion section is divided results into three main categories of participant reports of a) biological experiences (before and after surgery), psychological experiences (before and after surgery), and c) social experiences (before and after surgery). Additional information provided by participants that did not necessarily fit these categories is discussed as supplemental information contributing to the current study.

*Before surgery biological experiences*

Several researchers have reported the negative impact obesity has on an individual’s physical health (Colditz, 1992; Klein et al., 2004; Modkad et al., 2003; Mokdad et al., 2004; United States Department of Health and Human Services, 2001). Certain illnesses such as diabetes, asthma, cardiovascular disease and certain types of cancers can all be associated with obesity. Among the findings from the current study, all of the women reported suffering from a range of obesity related illnesses and diseases including; high blood pressure, sleep apnea, asthma, high cholesterol, acid reflux, type II diabetes, hormonal fluctuations, arthritis, stroke, and cancer. The detrimental impact of these illnesses to the lives of these women was reported as significant. In fact, these illnesses impacted their lives so much that it was one of the most reported factors guiding their decision to have surgery. In particular, many of the women reported the desire to be healthier as the main determinant in undergoing bariatric surgery. One patient stated “my doctor said that I was a walking suicide and he didn’t know that I heard him say that. He said that and I was like, I am only 37 years old!” As a result, many of the women
realized this dreadful fate if they continued on the path they were on and, thus, decided to undergo surgery to become healthier.

The ability to be physically active and the preservation of quality of life was another other incentive for deciding to have bariatric surgery. Specifically, many of the women reported being physically limited or debilitated from excess weight and related ailments. For instance, several of the participants described not being able to participate in daily routine activities, such as running errands, playing with children, and sitting or standing. As a result, they decided to have surgery to increase their quality of life for themselves and for their family. For example, one patient described her incentive for undergoing surgery in the following statement: “That was one reason why I wanted to have the surgery was because I wanted to go to the amusement park. I went to the amusement park with my kids and I couldn’t fit in the rides and that just really made me sad”.

After surgery biological experiences

Due to the substantial amount of weight patients lose and maintain from bariatric surgery, it has become one of the most recognized and utilized treatment for obesity (National Institutes of Health, 1991; Sjostrom, 2000). Consistent with this research are findings from the current study that all patients lost between 100 to 162 pounds as a result of bariatric surgery. Findings also indicate agreement with previous research in that the majority of the pre-surgical obesity related illnesses decreased or became non-existent after bariatric surgery and subsequent weight loss (Kushner & Nobel, 2006; Mott, 2004; Sjostrom, 2004; Steinbrook, 2004). In fact, all but one of the patients described the absence of any obesity related illnesses or diseases post-surgery. One patient described her satisfaction with improved health by stating, “I am healthier, I
feel better as far as I don’t get so tired and I don’t get overworked and things like that. When I
wake up, I enjoy getting up and venturing out and seeing what I have to do that day”.

As a result of the improved health related to weight loss from bariatric surgery, many
women also described improvement in their level of physical activity and quality of life. For
instance, routine tasks such as going grocery shopping or playing with children on the floor were
no longer a problem for participants. One woman stated, “Before I was swollen; my feet were
swollen and I felt bad and didn’t do anything. Now, I go and do water rafting, all kinds of things
I couldn’t do because I was overweight”. This is consistent with previous researchers who report
that patients typically increase their level of physical activity through leisure or vigorous pursuits
(Ogden et al., 2005; Peace et al., 1989; Voelker, 2004). All participants reported the increase in
physical activity as positive and adding to their overall quality of life.

While these ‘after surgery’ findings are supported in part by the existing literature, there
are some aspects of this category that are unique. Specifically, all of the participants in the
current study not only lost a significant amount of weight as a result of bariatric surgery, but they
have also maintained it for two to three years. This contradicts previous research, which claims
that the majority of patients regain their weight between 12 to 15 months following bariatric
surgery (Hsu et al., 1998). Reasons as to why participants in the current study maintained their
weight loss can only be hypothesized. For instance, it is possible that the lack of post-surgical
complications supported the ability for participants to lose and maintain weight. In fact, only
three women reported suffering from minor surgery related complications, none of which
impacted their overall healing process. Additionally, since a minority of patients described their
marital relationship as strained before surgery, it may be that having a relatively stable marriage
before surgery helps the outcome of bariatric surgery. Regardless of the possible factors
explaining how participants maintained their bariatric surgery weight loss, the healthier outlook on life caused by weight loss and increase in physical activity may impact the patient’s psychological mind frame (Bocchieri et al., 2002). This was definitely the case in the current study as all patients reported undergoing various psychological transitions throughout the process of bariatric surgery.

Before surgery psychological experiences

Several researchers have reported that overweight individuals have increased rates of anxiety and depression, inadequate self-esteem, and body-image disparagement (Dallman et al., 2003; Kottke et al., 2003; Mussel et al., 1996; Simon et al., 2006; Stunkard et al., 2002; Sullivan et al., 1993; Wadden & Stunkard, 1985). These findings are reinforced with reports from the current study that all participants experienced a range of psychological concerns before bariatric surgery including depression, limited self-esteem and assertiveness, negative body image, and a variety of weight related inhibitions. For instance, one woman stated that “not feeling good about myself did create some problems with me personally as far as how I felt about myself, self-esteem, not feeling attractive physically”, while another said “I grossed myself out physically.” According to participants, these thoughts associated with being overweight impeded a variety of psychosocial components, especially within the marital relationship. These will be addressed in more detail in the ‘before surgery’ section of social experiences.

Despite reports of lack of self-esteem and assertiveness before bariatric surgery, the majority of participants reported enough confidence to make the decision to undergo surgery. In that way, all women felt that it was in their control to make the personal decision to have surgery. The fact that they received little to no initial support from their husbands did not impede the decision making process. Thus, his reluctance for surgery did not inform her decision to have
bariatric surgery. Rather, the majority of women were informed by their personal desires of better physical health and improved quality of life. One woman described this eloquently by stating “It is something that you personally want and you know, your spouse should be supportive of it, but don’t do it just for your spouse, do it for yourself.”

This finding regarding patient’s decision to have bariatric surgery for personal concerns relating to physical health and quality of life corresponds with previous research indicating that individuals decide on surgery because of the potential favorable impact it has on the patient’s emotional and physical well-being (Wysoker, 2005). However, there is no available research indicating the spouse’s role in the patient’s decision-making process. As a result, findings from the current study regarding a) husband’s initial reluctance to wife’s bariatric surgery, along with its b) relative insignificance on her final decision making process, are unique to the literature.

After surgery psychological experiences

Regardless of the decision-making processes guiding patients, all women in the current study reported experiencing psychological changes after bariatric surgery. A unique finding contributing to the literature regarding bariatric surgery and one of the most reported psychological facets of bariatric surgery and consequent weight loss was termed by patients as a “brain/body disconnect.” This disconnect was characterized by an inconsistency between the way women felt about their bodies versus the reality of their bodies and the way others viewed them. Reports from two different patients include, “It was almost like when you look in the mirror you think that you are still heavy and your only a size 2”, and “The hardest part for me was the perception of seeing myself one way and having been that way for so long and not being that person anymore but still seeing the other one”. Despite the significant weight loss, many women reported having difficulties with accepting this change and set in a “fat mind frame.” For
instance, many women reported purchasing or trying on clothes too big for them, only to discover that they did not fit.

Another psychological challenge experienced by women in the current study related to the connection between food and emotional fulfillment. As previous researchers have suggested, overeating or eating unhealthy foods may be emotionally satisfying for overweight individuals (Hsu et al., 1998). In fact, it may serve as a coping mechanism against life’s challenges and hardships. One participant in the current study reported her obesity as serving an emotional function in stating that “fat people are going through a lot or they would not be fat”. Due to the eating restraints associated with bariatric surgery, participants in the current study were required to alter their eating habits to healthier and smaller portions. Since many of the participants relied on food to help support them through adversity, they described having difficulty adjusting to the absence of food as a coping mechanism. Examples describing this difficulty include different participant reports of “You can stop me from eating, but the emotional component is still there. When I am depressed or lonely, I want to snack even when I’m not hungry” and “You can’t fix being overweight by surgery because it is a mental problem.”

Despite these psychological challenges, however, participants were still able to successfully achieve and maintain significant weight loss after bariatric surgery. Explanations regarding why these challenges did not limit their ability to lose weight or cause an increase in depression (Dubovsky et al., 1995; Hsu et al., 1996, 1997; Ryden et al., 1989) or anxiety (Bocchieri et al., 2002; Gentry et al., 1983) can only be speculated. For instance, it may be that these emotional issues were difficult but not problematic enough to completely sabotage the weight loss outcomes associated with bariatric surgery. Additionally, the positive psychological factors associated with having bariatric surgery may have overpowered any negative
psychological changes. This is a very strong argument considering the fact that the majority of women in the current study reported experiencing more positive psychological changes after bariatric surgery compared to negative psychological changes.

In accordance with previous research (Bocchieri et al., 2002; Hsu et al., 1998; Masheb et al., 2006; Peace et al., 1989; Solow, et al., 1974), findings from the current study indicate that women experienced an improvement in self-esteem, body image, and assertiveness after weight loss surgery. Specifically, many of the women reported feeling more physically attractive and self-confident because of the weight loss associated with bariatric surgery. While this was an internal change, this increase in self-esteem may have been based on reactions from others. This phenomenon can be explained by applying the theoretical framework of symbolic interactionism (SI) (Blumer, 1969). One of the major tenets guiding SI is that “one’s subjective interpretation of an object, situation, or concept plays an important, mediating role in linking one’s exposure to a stimulus (object, situation, etc.) and one’s reaction to it” (Hall, 2006, p. 1438). Based on this premise, a patient’s interpretation of what other’s think about of her weight loss (i.e. based on non-verbal and verbal behaviors) impacts the way she regards her weight loss. For instance, if people react more positively to her after surgery, by telling her how good she looks or treating her with more respect, the patient links these social interactive behaviors to her personal beliefs regarding weight loss. Since the patient views others treating her more positively as a result of losing weight, the end result is the perception that with weight loss comes improved self-esteem and self-respect. Thus, it may not be the physical weight loss that causes an increase in esteem and confidence, but rather, “the product of social interaction, developed and refined through an on-going process of participation in society” (Jeon, 2004, p. 250). One woman described this eloquently by stating that her self-image “has to do with people’s reactions with what you are
trying to achieve”. Another woman described the relationship between what she thought others were thought about her and her self-confidence to ask for a job promotion:

I just got a promotion! I would not have ever did that job the way that I did it begin 340 pounds. I would not have felt confident enough to stand in front of people and do what I needed to do and be strong. I would not have done that because I would have been self-conscious about somebody snickering at me. Even though I had the same brain that I had then, I still would not have been able to facilitate that to other people. They would not have seen how smart I was, they would have just saw the weight. Just like I saw the weight. And I have to admit that people treat me different because I am not heavy anymore.

Regardless of the process motivating a better acceptance of self, findings from the current study indicate the significance of self-improvement in a variety of social facets. Specifically, all participants reported various improvements in their marriage as a result of the increase in self-esteem and body image caused by bariatric surgery and consequent weight loss. In fact, participants reported a wide range of marital experiences with their spouse before and after bariatric surgery.

*Before surgery social experiences*

The majority of participants in the current study reported their overall marriage as satisfactory or positive before surgery. In fact, only two women reported their relationship as relatively strained or negative before having bariatric surgery. This contradicts existing research findings, which suggest that obese married individuals have higher rates of marital difficulty and divorce compared to non-obese individuals (Kolotkin et al., 2006; Sobal, 1984). It also contradicts the current theory that marriages are usually organized in response to or around
obesity (Doherty & Harkaway, 1990; Harkaway & Madsen, 1989). In fact, most of the women in the current study expressed obesity as a personal problem, not a marital problem. Many shared the philosophy behind one woman’s statement that her strained marriage was “mostly on my part though. Now that I am talking about this, I’m thinking about it and most of my unhappiness was brought on by me, when before I always thought it was him.”

Overall, current findings regarding female perceptions of marriage before surgery contradict existing evidence since most of the women reported having stable marriages before bariatric surgery. Additionally, women who reported a strained marriage stated that the source of negativity was oriented around personal dissatisfaction rather than the marital relationship. In fact, unhappiness with self was the main factor guiding participants’ decision to undergo bariatric surgery.

**Decision-making.** As previously described, participants in the current study decided on bariatric surgery as a way to achieve personal goals of improved physical health and quality of life. While this finding is supported by previous research (Wysoker, 2005), the social component to the decision making process discovered in the current study is unique to the literature. Specifically, when asked about the level of support received from husbands in their decision making process, many women reported an initial lack of support. According to participants, husbands did not provide support because they were not fully aware of the desire and importance she placed on surgery. Additionally, some men were so concerned about the risks associated with bariatric surgery that they were unable to recognize or appreciate the potential future benefits. In many instances, women had to demonstrate to their husbands that they were serious about having surgery before receiving support. Many reported having to provide proof that it was not another diet “fad” by showing him up to date research about the procedure and having several
discussions with the medical team performing the surgery. Once husbands were confident that their wives were serious about having surgery and realized how important it was to them, they were completely supportive of their wives decision.

The decision making process that participants experienced can be explained by considering the contextual factor of gender. First, all of the women in the current study reported undergoing bariatric surgery for themselves without the initial support from their husbands. Secondly, the majority of women who reported marital strains explained these difficulties occurring as a result of the various personal problems associated with obesity (i.e. lack of confidence, negative body-image, etc.). These findings may indicate that the responsibility of remedying the alleged problem of obesity fell on the women in the current study, not the husbands or the couple as a unit. Thus, obesity was viewed as her problem, one that she needed to resolve, with or without the support from her husband. In fact, one participant reported that her husband explicitly said:

This is your problem and I can’t take this anymore. I will be there to support you, but you’ve got to find out what you have to do to fix this because we can’t keep on like this. You’ve got to do something. Go and find out what you can do, what you are comfortable with, and do the research!

Due to the double standard regarding obesity and gender, along with the higher prevalence of social stigma attached to overweight women compared to overweight men, gender may explain the female-oriented responsibility for weight related issues. The fact that most of the available research examining obesity only involves women (Miller & Downey, 1999; Matz et al., 2002; Sarwer et al., 1998; Stunkard & Wadden, 1992) supports the current study’s idea that obesity is a woman’s problem and, thus, her responsibility.
While participants did not reportedly consider their marriage as a major decision making factor in undergoing bariatric surgery, they did however report a variety of ways obesity impacted their marriage. Since previous researchers examining bariatric surgery and marital relationships rarely considered pre-surgical factors, most of the ‘before surgery’ findings in the current study offer interesting information unique to existing literature. Specifically, unique reports from patients regarding a wide range of experiences within the marital realms of communication, time spent together, sex/intimacy, and affection were experienced before undergoing bariatric surgery.

**Communication.** The majority of women in the current study reported “strained” communication with their spouse before bariatric surgery. In fact, only one participant described it as “good.” Rather, most women shared the consensus that communication could have been better in relation to both quality and quantity. They also shared the notion that this lack of communication was mostly related to her inability to communicate her needs efficiently to her husband. Since many of the women reported lack of self-esteem and assertiveness, they did not feel comfortable expressing their thoughts, needs, and desires to their husbands. For instance, one woman reported being “meek and mild and anything he ever said was okay because I didn’t want to push his buttons.” While the finding regarding lack of self-esteem and assertiveness is consistent with previous research (Dallman et al., 2003; Kottke et al., 2003; Mussel et al., 1996; Simon et al., 2006; Stunkard et al., 2002; Sullivan et al., 1993; Wadden & Stunkard, 1985), the connection linking negative self-esteem to the inability to efficiently communicate with spouse is a unique finding to existing literature.

**Time spent together.** Limited levels of communication between spouses may have also been associated with the limited amount of time that some women reported spending with their
husbands. While some reported being completely satisfied with the amount of time spent together, most women perceived their time spent with their husband as limited in quality and quantity. Participants reported weight related issues as the primary reason they were limited in the amount of time they spent with their husband. For instance, many participants were forced to limit many outdoor activities with husband because of the physical constraints associated with being overweight. As a result, most women preferred sedentary activities as opposed to the physically strenuous activities their husbands preferred. Consequently, if time was spent together, it was spent going to dinner, watching a movie or staying at home watching television. In addition to the physical restraints caused by obesity, some of the women reported that being obese inhibited them socially and, thus, did not want to participate in many social activities with husband. This was eloquently portrayed in a statement from a participant; “We didn’t do too many things, too many fun things together because I didn’t like to put myself out there a lot; my inability at the time is what you would call it.”

Previous researchers have suggested that obese individuals endure a wide range of physical (Colditz, 1992; Klein et al., 2004; Modkad et al., 2003; Mokdad et al., 2004; United States Department of Health and Human Services, 2001) and social (Haas et al., 2003; Soball, 1984; Wadden & Stunkard, 1985) limitations and inhibitions. However, no studies have examined how these limitations impact the quantity and quality of time spent together with spouse. Consequently, this finding relating the obese partner’s limited physical and social factors to limited marital interactions provides a novel contribution to existing research examining obesity and marriage.

*Sex and intimacy.* For the majority of women in the current study, limited reports of sex and intimacy was a significant concern in their marriage before bariatric surgery. Personal issues
relating to negative body image and sexual inhibitions were the primary explanations for limited sexual desire and frequency. In this manner, marital problems were once again reported as a result of personal challenges associated with being obese. For instance, many of the women expressed feeling guilty, embarrassed, and disgusted by their bodies and consequently had no desire to be sexual with their husbands. In fact, one woman described her lack of desire for sex with her husband because she did not want him to see her “grotesque body.”

While the majority of women perceived themselves as unattractive and therefore not sexually aroused or desirous, most husbands expressed the opposite feeling regarding their wives’ weight and the desire to have sex. In fact, many women expressed their husbands as not caring about or even aware of their wives’ excess weight. They all still wanted to have sex with them and could not understand why the women did not desire sex. For instance, one woman reported that her husband “had a problem with the fact that I didn’t want to have sex that much. While he didn’t have a problem with the weight, he didn’t realize I was big until he saw a picture of me comparing then and now.”

This finding that most men were still physically attracted to their wives regardless of how much they weighed is not only unique to existing literature, but also contradicts socially accepted beliefs regarding being overweight and sexual attractiveness. Specifically, being thin is associated with higher levels of sexual attraction, especially when considering male sexual attraction to females (Ogden, 1992; Ogden & Mundry, 1996). The fact that most women in the current study perceived their husbands as being sexually attractive to them despite their excess weight, challenges commonly held ideals regarding thinness and sexual attraction.

Only one woman reported limited sex relationship as being attributed to husband’s lack of desire and attraction. She reported “wanting it a lot more than he did and asking for it more.”
While this was an important experience to include in the current findings, the woman who reported this information also shared that they were trying to get pregnant during this time. It is possible that this may have been the reason for his lack of sexual desire, rather than the proposed idea that he was not sexually attractive to her overweight body. Trying to get pregnant may have been the reason for his lack of desire due to the mechanical ways couples try to get pregnant. This was referenced in her statement that “we were trying to get pregnant also, which added stress.”

While most women in the current work reported sex and intimacy as an issue before surgery, two women reported sex as a non-issue before undergoing bariatric surgery. When asked to describe their sexual relationship with their husband before surgery, these women stated their marriage was non-sexual in nature. Explanations provided by participants regarding why these marriages were non-sexual included the perceptions that both husband and wife were not very sexual people. This was reported to be in part due to a) the longevity of the marriage, which made sex unimportant, or b) complicated non-bariatric surgery related illnesses that forced sexual abstinence.

What is interesting about these ‘before surgery’ sex/intimacy findings is that all describe a great amount of in-depth information regarding the variety of ways obesity impacts the sexual relationship of a marriage. Since most researchers have only examined sexual relations with spouse after surgery, all of the current findings provide notable contributions to existing literature regarding obesity and sexual desire and frequency in marriages.

Despite reports from participants that their sexual relationship was limited before surgery, the majority of women reported satisfactory levels of affection with their spouse. Thus, while personal factors of negative body image and sexual inhibitions associated with being obese
served as impediments to wives sexual relationship with spouse, they did not negatively impact the way in which the majority of participants offered or received affection from their husband. One woman exemplified this finding by stating that “the affection was still there, it’s just the physical end wasn’t as good as it could be”.

*Affection.* According to women in the current study, levels of affection shared with their husbands were generally perceived as satisfactory before bariatric surgery. In fact, most women reported an “excellent amount of shared affection”. Participants shared stories regarding the ways in which their husbands displayed verbal and nonverbal modes of affection. For instance, while one woman stated that her husband displayed his affection toward her by “fixing my coffee for me every morning,” another reported “always been affectionate with each other before the surgery by touching and always just being on each other”.

While satisfactory levels of affection were reported from most of the participants, some women reported limitations regarding the amount of affection shared with their husbands. Some of the women described this lack of affection as a result of their husband’s deficient expressions of affection. For instance, one woman reported “always craving more” from her husband, since he “was never the person to just spontaneously come up and hug and kiss me.” Other participants described the lack of affection as a result of the personal inability to be affectionate with their husband due to lack of self-confidence and body image disparity. One stated that she did not want to be physically affectionate with her husband because she knew that he would reciprocate the action. Since she felt uncomfortable with her body, she did not want him to touch her and fully grasp how overweight she was.

Since no existing studies have examined level of affection among obese women and their spouses before bariatric surgery, the current findings regarding marital affection are unique.
They are also interesting because they contradict currently held social beliefs and research findings that obese people are considered physically unattractive, lazy, and not worthy of attention from others, especially in the form of affection (Puhl & Brownell, 2001; Neumark-Sztainer, Story, & Faibisch, 1998).

After surgery social experiences

Regardless of pre-surgical reports of marital satisfaction, all women in the current study reported perceived improvements in their overall marriage following bariatric surgery and subsequent weight loss. In fact, not only did marriages remain in tact throughout the entire before and after procedure of bariatric surgery, participants even reported a stronger connection with their husbands. Since results from current studies indicate contradictory findings regarding the impact bariatric surgery has on marriage, current reports of marital improvement after bariatric surgery is consistent with, yet contraindicative of existing research. In that way, findings from the current study reinforce previous researchers who have discovered dramatic improvements in marital satisfaction following bariatric surgery (Camps, Zervos, Goode, & Rosemurgy 1996; Chandarana et al., 1990; Gahtan, Kurto, Powers, & Rosemurgy, 1992; Goble, Rand, & Kulda, 1986; Harris & Green, 1982; Hawke et al., 1990; Kinzl et al., 2001; Kulda & Rand, 1980; Larsen, 1990; Peace et al., 1989; Rand et al., 1982, Rand et al., 1984; Rand, MacGregor, & Hankins, 1986; Valley & Grace, 1987).

However, the current study’s finding of marital improvement after bariatric surgery contradicts previous research findings of increased rates of marital difficulty and divorce after bariatric surgery (Castelnuovo-Tedesco & Schiebel, 1976; Crisp, Kalucy, Pilkington, & Gazet, 1977; Kalucy & Crisp, 1974; Marshall & Neill, 1977; Neill, Marshall, & Yale, 1978; Rand, Kowalske, & Kulda, 1984; Solow, Silberfarb, & Swift, 1974). One possible explanation for
these contradictory findings may involve pre-surgical levels of overall marital satisfaction. For instance, it may be that post-surgical marital satisfaction has a great deal to do with the fact that the majority of participants in the current study perceived their overall marital relationship as fair to positive before surgery. At the same time, however, the few women who described their overall marriage as strained before surgery also reported their marriage as improved after surgery. Thus, regardless of the status of their relationship before surgery, all women reported an improvement in their marital status after surgery. This contradicts previous research that when the marriage is good before surgery, it will be better after; and when the marriage is unhealthy before surgery, it will be worse after surgery (Kinzl et al., 2001; Rand et al., 1982, Rand et al., 1984).

The majority of the women in the current study reported many personal challenges associated with being overweight before surgery. Participants viewed these personal issues as the main factor contributing to a variety of marital limitations. For instance, marriages described as sexually limited in quality and quantity were mainly attributed to the wife’s inhibitions and lack of confidence associated with being overweight. Similarly, many ‘after surgery’ reports relating to changes in the marriage are also attributed to personal changes made as a result of bariatric surgery and associated weight loss. Specifically, the majority of women report experiencing changes in partner, communication, time spent together, sex/intimacy, and level of affection as a consequence to personal changes made after bariatric surgery. Additional social changes including education and career enhancement were also reported as occurring after surgery.

Communication. All participants in the current study reported that marital communication either remained satisfactory or improved after bariatric surgery. One participant detailed her level of communication as “good before and good after”, while another reported “because of the
adjustment we had to undergo after bariatric surgery, I would say that our communication has gotten even better than before surgery.” Many women attributed this positive change in marital communication to their own change in personal factors of increase self-esteem and assertiveness. Certain examples directly from participant experiences, describe themselves as “less willing to back down”, and having “confidence and not feeling that you have to settle anymore”. By losing weight, women felt more confident in themselves and thus, more assertive in the way that they communicated with their husband. Many women reported being able to communicate more openly and directly to their husband.

As a result of the communication related changes made by the patient, many husbands accommodated nicely to this more assertive and direct way of communication. In fact, many women reported husband’s level of communication as improving after surgery. Specifically, participants stated that they noticed husbands listening more and being more accommodating to wives’ needs and desires. For instance, one woman expressed the feeling that “since I have opened up more and want to communicate, he is now trying harder.” As a result of these changes in communication, both husband and wife helped established a system of communication based on respect, openness, and compromise. Consequently, women reported not only an increase in the quality of communication, they also expressed an increase in the quantity, as they described, “talking a lot more and trying to be on the same accord for a change.”

While researchers have noted general marital improvements following bariatric surgery, the specific component of communication is unique to current literature. Possible explanations for this finding is that as women increased their self-assertiveness, they realized the importance of relating needs and desires to their husbands. This type of direct communication may have provided additional insight for the husband regarding his wife’s thoughts and needs. This
knowledge alone could have helped him in accommodating more to her needs. Hence, it may be that the improvement in communication resulted from a) the woman’s personal self-assertiveness and consequent increase in communicative abilities, b) the husband’s increase in attentiveness toward his wife, or from the c) systemic interaction between the two findings (a and b), marital communication improved after surgery.

_Time spent together._ As a result of the weight loss associated with bariatric surgery, all of the women in the current study described an increase in the quantity and quality of time spent together with husband. Women reported being able to be more active with their spouse since they no longer suffered from the physical limitations or social inhibitions associated with being obese. Many described having the energy to do more with husband by reporting, “I am more active, we do more things and we are out and about all the time,” or “We walk together, we spend more time together.”

Participants did not only describe spending more time together after surgery, they also stated that the quality of time improved. For instance, much of the time spent with husband before surgery was sedentary in nature. However, after surgery, participants reported a variety of activities that provided the couple with the opportunity to become closer with one another. For instance, rather than watching television in bed, participants reported going on romantic getaways and spending more time in the outdoors (i.e. camping, theme parks, and beach trips). One woman even reported taking an early retirement so that she could have more time to spend with her husband.

Although this finding regarding the quality and quantity of time spent together after surgery is supported by existing research (Goble et al., 1996; Rand et al., 1984), one unique component within this category emerged. In addition to the categorical findings regarding
improvement in the quality and quantity of time spent together with husband, participant experience in the current study also describe both husband and wife wanting to spend more time with their spouse. In that way, women not only had the physical capability to spend time with husband, they also had the desire. Participants also described noticing that their husband desired more time with them. For example, one woman described her perception that her husband liked spending more time with her by stating, “He wants to spend time with just me and get away and not tell anyone. Probably the first time he has ever suggested going to do something by ourselves with no other children or family members.” Desiring to spend more time with spouse after bariatric surgery is a unique component that adds to the existing literature regarding marital interaction following surgery.

In addition to desiring more time with husband, the majority of women in the current study also reported an increase in the frequency and desire to be sexual or intimate with their spouse.

Sex and intimacy. In accordance with previous research (Goble et al., 1986; Harris & Green, 1982; Rand et al., 1984; Rand et al., 1986; Ray et al., 2003), findings from the current study indicate a significant improvement in participant reports of sexual functioning and satisfaction. Most of the women indicated positive changes in self-esteem and body image as the main explanation for sexual improvement. Thus, weight loss associated with bariatric surgery helped many women feel better about the way they looked and, thus, helped with their inhibitions. One woman described her inhibitions after surgery by stating, “I don’t care if he sees me naked now; I join him in the shower now, when I never did that before.” Weight loss also helped them increase their physical stamina regarding sexual relations with spouse. For instance,
one woman described her sexual relationship as improving because she was more flexible and able to try sexual positions she had been physically limited to before surgery.

What is particularly interesting and unique to existing research is the current study’s specific finding regarding a reported increase in husband’s sexual desire after bariatric surgery. Many of the women reported noticing that as they wanted to have sex more, their husbands also wanted to have sex more often. This was particularly the case for the woman who reported a limited ‘before surgery’ sexual relationship as being attributed to husband’s lack of desire. After surgery, she reported a significant difference in his sexual desire by describing “reversed roles”, where “she had to turn him down now, when he turned her down before.”

Based on improvements in both husband’s and wife’s level of sexual desire, not only did the sexual frequency and desire increase, women also reported improved quality in their sexual relationship with their spouse. One woman eloquently summed this finding up by stating “It’s hard to explain, but it almost at a deeper level. It is nothing like we ever had; We have so much more appreciation for one another, we connect on a whole different level when we are intimate than we did before and it’s not just a matter of physical release.”

While these findings reinforce previous research examining the positive impact bariatric surgery has on sexual functioning and satisfaction, they also provide a more in-depth look into how and why these findings emerged. For instance, most available research reports patients’ weight loss and improved body image as the main explanation for improved sexual desire and frequency (Camps et al., 1996; Gahtan et al., 1992; Hafner et al., 1991; Kinzl et al., 2001; Peace et al., 1989; Rand et al., 1982; Solow et al., 1974). They do not take into consideration a) how the change in husband’s sexual desire impacts the sexual relationship, or b) what the combination of both partner’s increase in sexual desire and frequency does to the eventual
quality of the sexual relationship within marriages. This study reports findings not only explaining how the patient’s change in sexual desire impacted the sexual relationship in the marriage, but also provides personal narratives describing their husband’s change in sexual behavior. It is important to consider the husband’s change sexual behavior after surgery because it may help to explain the current study’s reports of improved quality of sex and intimacy after bariatric surgery. In that way, it is possible that women reported having a deeper intimate connection with their husband not only because of her increase in sexual desire, but in combination with her husband’s increase in sexual desire and frequency. Since both wanted each other more, the sexual connection they shared intensified after surgery.

Only two women reported no change in their sexual relationship with their husband after surgery. These were the same two women who described a non-sexual relationship before marriage in part due to a) the longevity of the marriage, which made sex unimportant, or b) complicated non-bariatric surgery related illnesses that forced sexual abstinence. In these instances, bariatric surgery did not alter sexual behavior. However, women who reported being unable to have sex with her husband due to medical illness, reported talking and flirting more with their husbands after surgery. Thus, while they was physically unable to improve on her sexual frequency, they were able alter the sexual communication with husbands.

**Affection.** Since many of the participants in the current study reported satisfactory levels of affection before bariatric surgery, many described no change in affection after surgery. For instance, one woman reported that “throughout it all, he commented to me all the time, before and after, he is very affectionate and very good,” while another stated that the shared affection with her husband “did not change that much because he would show me just as much if not more.”
The majority of women, however, reported an increase in the amount of affection shared with husband after bariatric surgery. Specifically, women reported noticing an increase in husband’s verbal and nonverbal modes of affection. Husbands offered more affection by offering compliments regarding their wives physical appearance, or by increasing physical contact through holding hands, hugging, or kissing. Women also reported being more apt to provide affection and better able to accept her husband’s affection after bariatric surgery. They mainly attributed this change in affection to their improved self-esteem and body image. Since they felt better about themselves, they felt more comfortable with being affectionate with their husband. In turn, he reciprocated the affection by offering her more affection.

Currently, there are no available research studies examining marital levels of affection after bariatric surgery. As a result, current findings regarding no change or improved affection offers a unique contribution to literature. Women not only reported improvement in the ways that they offered and received affection from their husbands; they also reported improvements in the variety of ways their husbands verbally and nonverbally expressed affection. In addition to these perceived differences in husband’s level of affection, women in the current study noticed other behavioral changes occurring in their husbands after bariatric surgery.

*Change in spouse.* A persistent theme in the findings of the current study is centered on women’s perception that most of the changes in their marriage after bariatric surgery was as a result of their personal improvement in physical health, self-esteem, and body-image. Thus, focusing solely on changes made in the patient as a result of bariatric surgery. However, women in the current study also reported behavioral changes in their spouses as a result of bariatric surgery. One reported change included husband’s being more “positive, supportive and
attentive” to their wife’s needs. For instance, one woman reported her husband as being “more willing to do and compromise and do things he hadn’t done before and that kind of thing.”

Scant research is available examining the impact bariatric surgery has on the spouse. Moreover, the research that is available has only reported negative reactive changes, such as fears of abandonment, insecurity (Bocchierringi et al., 2002; Hafner & Rogers, 1990; Neill et al., 1978) and jealousy (Ray et al., 2003). This finding provides a unique contribution to the existing research in that it provides evidence that a) spouses do undergo changes as a result of their partner’s bariatric surgery, and b) these changes can be positive in nature.

Other findings from the current study regarding spousal changes reinforce previous evidence, which suggest that spouses have a difficult time adjusting to the changes made in their partner after bariatric surgery. Specifically, some of the women reported their husbands as more “jealous or overprotective” of them after surgery. Husband’s insecurities regarding his own weight or the increased attention his wife received from others were explanations offered from women when asked why they thought their husbands were more jealous after surgery and associated weight loss. Researchers have discovered that spouses report an increase in jealousy as a result of not being able to appropriately adjust to the physical and psychological improvements made by their partner (Bocchierringi et al., 2002; Hafner & Rogers, 1990; Neill et al., 1978; Ray et al., 2003). Thus, this finding of spousal jealousy and overprotective feelings toward wife after they lose weight following bariatric surgery reinforces existing research.

The majority of reported changes in partner fell into one of these two categories of a) more open and supportive, or b) more jealous or overprotective. However, some women suggested that they did not notice any changes in their husband after bariatric surgery. If changes were noticed, participants did not attribute spousal changes to the surgery, but rather, attributed
them to “normal changes with age and stressors of life.” Another woman reported the reason why she did not notice any changes in her husband was because they were able to communicate throughout the entire progression of bariatric surgery.

What is interesting about this categorical finding of ‘change in spouse’ is the range of reported experiences. From positive change to negative change to no change at all, one has to wonder what made these experiences differ from one woman to another. Notions explaining these differences in experiences can only be speculated. For instance, knowledge of a variety of pre-surgical variables for the husband might provide information leading to a better understanding about his perceived behavioral changes (i.e. his level of self-confidence, his ability to cope, etc.). Additionally, the way in which the wife managed her personal adjustments after surgery may also provide an explanation to her husband’s reaction. For instance, if she did not appropriately handle the added attention from other men, her husband’s feelings of jealousy might have been fitting for the situation. These factors may explain the range of perceptions regarding spousal changes after bariatric surgery. However, since women in the current study did not detail why they thought their husband changed and husband’s were not offered the opportunity to describe why they changed, the provided explanations are just hypotheses. There may be other factors that more appropriately explain why spouses changed after surgery. It may be that husbands could not appropriate adjust to the unforeseen social changes made by their wives after bariatric surgery. For instance, husband’s jealousy may have increased as a result of the career or educational gains made by his wife.

Career/Educational. Some participants in the current study reported experiencing career or educational gains after bariatric surgery. They mainly attributed this improvement as a result of their increase in energy and self-confidence. For instance, one woman described having more
energy to be “more efficient at work and therefore got promoted.” Many of the women reported feeling more confident about their skills as an employee and applied for and received promotions. Others finally had enough confidence to admit that they were not satisfied in their current jobs and quit to pursue further educational goals or to spend more time with spouse and family.

This finding has been previously reported by several researchers (Bocchieri et al., 2002; Crisp et al., 1977; Herpertz et al., 2003; Kral et al., 1992; Rand & Macgregor, 1990; Solow, 1977). Whether due to the increase in participant levels of self-confidence and energy or because they no longer experienced job discrimination associated with being overweight, women in the current study felt it essential to describe these positive changes. Since educational or career changes were not directly addressed in the interview guide, this finding portrays the value of qualitative research. By allowing a participant to express her experiences after bariatric surgery, findings emerge that may have nothing to do with the original question. Although not anticipated, each response offers richness and depth to the variety of experiences participants endure after bariatric surgery. For instance, although not directly addressed in the interview guide, participants provided supplementary information regarding their views on what helped them maintain a successful marriage before and after bariatric surgery.

*Other factors supporting marital stability or improvement.* When asked if there was anything that the Interview Guide was missing that they thought was beneficial for researchers to know, many women reported their views regarding factors to successfully enduring bariatric surgery with husband. One of the most common responses made by participants included the importance of a shared spirituality. Participants attributed being able to successfully endure through the challenges associated with bariatric surgery and associated weight loss by being
involved in church with their husbands. In fact, one woman stated that the only reason why she and her husband made it through the various transitions associated with surgery, was “because of their love in God and belief in marriages and working for it to survive.”

Another factor women reported as contributing to marital stability or improvement after bariatric surgery was a framework of open communication. These women also attributed the success of their marriage as solely based on their ability to obtain or maintain a safe environment suitable for open communication. If this type of communication existed, one woman reported that all of the potential challenges bariatric surgery may impose on a marriage will “not be an issue.”

While some women were able to maintain this type of communication with their spouse before and after bariatric surgery, some were not able to communicate as efficiently as they would have liked to. As a result, they reported the desire for and importance of couples therapy before and after surgery. According to participants, therapy might have been beneficial because it could have served as a source of support. Additionally, therapy could have normalizing some of the systemic changes the couples were enduring as a result of bariatric surgery. One woman reported wanting therapy because it would have been nice “to know what was going on and how to explain the things that I was thinking and he was thinking.”

Overall, women reported the importance and desire for therapy because they experienced and successfully endured some of the potential limitations associated with bariatric surgery. As women reported experiencing limitations in their marriages before and after bariatric surgery, the current research also comes with limitations that serve to shape the outcome of the study and influence what one chooses to gain from the experience.
Limitations

In an effort to increase the methodological soundness within the current study, an in-depth analysis was utilized to establish a range of methodological criteria including credibility, transferability, dependability, and confirmability. However, regardless of the rigor and effort to establish a strong level of trustworthiness, limitations to this study may still exist. For instance, specific methodological limitations common to qualitative research may be present in the current study.

The first limitation inherent in all qualitative research that is especially relevant to the current study is that the research methodology is labor intensive (Fassinger, 2005). Having such an exhaustive research procedure may increase the chance for researcher fatigue whereby important aspects of the study may be overlooked. Additionally, researcher biases may not be as regulated and therefore get in the way of pure analysis. This may lead to another potential limitation of the current work of researcher bias.

Since the majority of the data collection and analysis procedure draws heavily on the conceptual skills of the researcher (Fassinger, 2005), there is no way to confirm that this study is completely free of researcher bias. Although methods of trustworthiness help to limit the possibility for misinterpretation, they cannot completely eliminate it. However, qualitative researchers openly admit that they are not value free researchers (Lincoln & Guba, 1985). They attempt to control their biases by owning and monitoring them throughout the course of the study.

Another limitation to the current study is that findings solely rely on the patient’s ability to use effective language that represents his or her experience (Polkinghorne, 2005). The length of time post-operation (i.e. between one to three years post-operation) may inhibit a patient’s
ability to recall and report his or her experiences as they occurred. Moreover, since “memories of past experiences may be colored by present mood and emotional state and can be influenced by suggestion” (Polkinghorne, 2005, p. 143), patient reports may not fully represent their experience as it actually occurred in the past. In particular, reports may be positively skewed since many women at the time of the interview were elated with the results of bariatric surgery. Additionally, patient reports may at times be extensive which may be difficult to report succinctly in the final core story (Fassinger, 2005). Thus, patient’s inability to completely recall specifics to her range of experiences along with difficulty in organizing those reports in a succinct way, all serve as possible limitations.

As in all qualitative research, the inability to generalize findings is another potential limitation to the current study. This is particularly relevant to the present study since some of the pre and post surgical variables reported by the participants did not confirm findings from previous research regarding obese individuals and bariatric surgery. For instance previous findings suggest that obese individuals have higher rates of marital discord compared to non-obese individuals (Kolotkin et al., 2006: Rand et al., 1982) and that patients tend to regain their weight between six months to a year after bariatric surgery (Brolin, Robertson, Kenler et al., 1994; Sugerman, Kellum, Engle et al., 1992; Yale & Weiler, 1991). However, participants in the current study generally did not report high rates of pre-surgical marital discord and did not regain any weight post-operation. Self-selection bias may explain why participants report positive outcome measures that are not representative of existing research. For instance, participants may have only volunteered information to the current study because they felt comfortable disclosing positive information about their marriages and weight loss. At the same time, if participants were not satisfied, they may not have wanted to discuss their personal concerns and struggles
regarding their marriages before and after bariatric surgery. This may have been the case for the one woman who did not agree to participate in the current study. Consequently, findings from the current study should be interpreted cautiously if the aim is to generalize to the general obese population seeking bariatric surgery.

According to Corbin and Strauss (1990), there is an increase in a study’s generalizability if the concepts are more abstract. However, one of the main purposes of grounded theory is to understand a specific experience under specific criteria. As a result, the goal of the current work is to deepen the understanding of patient experiences regarding bariatric surgery and marital relationship, rather than making claims about the distribution of their experience to a broader population (i.e. all bariatric surgical patients) (Polkinghorne, 2005, p. 140). As a result, rather than generalizability, the aim is to produce a body of work that is reproducible; that “given the theoretical perspective of the original researcher and following the same general rules for data collection and analysis, plus similar conditions, another investigator should be able to arrive at the same general scheme” (Corbin & Strauss, 1990, p. 15).

Future Research

Some of the limitations of the current study extend ideas for future research in this area. For instance, additional studies using a qualitative research methodology are needed to better understand the perceptions of women regarding their marriage before and after bariatric surgery. Specifically, it would be interesting to see if similar findings emerge by repeating the grounded theory approach used in the current study with other married women from who had bariatric surgery. By comparing these results to other women who have endured surgery, additional information could be offered regarding the unique and in-depth experiences women go through with their husbands before and after surgery.
It might also be beneficial to conduct research examining the different surgery related experiences married women endure versus single women. Various relational components, such as sex, might be rated differently for a single woman enduring bariatric surgery. Additionally, examining women in same-sex relationship might also offer unique experiences compared to married heterosexual women. In order to gain a more comprehensive understanding of what it might be like for all women to endure bariatric surgery, it is essential to gather experiences from women of various relational statuses.

Researchers may also want to compare women’s experiences of bariatric surgery to men’s experiences. This research would provide awareness into how gender may impact the way an individual endures bariatric surgery. Since there is a double standard regarding men and women and obesity, it would be interesting to see the differences between how a man experiences obesity and weight loss compared to how a woman experiences obesity and loses weight after bariatric surgery. It would be especially interesting to research how a married man’s perception would be different from a married woman’s perception of their marriage before and after surgery. Some of the contextual factors of gender discovered in the current study’s findings could be addressed in this type of research. For instance, the category of decision-making might offer different results when examining the factors determining the husband’s decision to undergo bariatric surgery.

While the current study addresses wives pre and post surgical experiences with their husbands, these experiences were only addressed after bariatric surgery was completed. As a result, it would be beneficial for future researchers to assess patients and their spouses before bariatric surgery and then again after surgery. That way, pre-surgical variables can be more efficiently compared to post-surgical variables. By conducting this type of longitudinal research,
specific pre and post surgical variables can be identified which will further contribute to the knowledge and understanding of the impact bariatric surgery has on patients and their spouses.

Since the current study only examines the marital relationship from the perspective of one spouse, future researchers should gather information from both husband and wife regarding their experiences before and after surgery. It would be interesting to gather this evidence and then compare how each spouse experienced the same event differently. For instance, the wife may report an increase in sex/intimacy, while the husband reports a decrease in sex/intimacy after bariatric surgery. Determining the inconsistencies in reports would offer great insight into how people perceive and experience similar events in completely different ways.

Since current evidence suggests that there is a reciprocal relationship between patients’ biological, psychological, and social experiences of bariatric surgery, there is a need for future studies that quantitatively assesses these variables. For instance, it would be beneficial to develop assessments that further examine some of the pre and post-operative marital variables discovered in the current study, such as communication, time spent together, sex/intimacy, affection, changes in partner, changes in patient, and decision-making process. This would help in determining the strength of these variables on various outcome measures of bariatric surgery (i.e. amount of weight loss, rates of marital satisfaction).

Since many women in the current study suggested the importance of pre and post couples therapy, it would be interesting for future researchers to determine the impact therapy has on various outcome measures associated with bariatric surgery. Therapy may serve to help couples transition through some of the emotional transitions a couple endures as a result of bariatric
surgery. It may also help the patient maintain his or her weight loss after surgery. Future research should therefore address these issues and determine what specific types of therapy are particularly helpful for couples when one spouse undergoes bariatric surgery.

Clinical Implications

What seems inherent in the findings of the current work is the value and importance of providing patients with an opportunity to express their concerns and feelings about bariatric surgery. The qualitative questioning offered patients the freedom to discuss and communicate their internal thoughts, concerns, and interests regarding all avenues and topics of conversation. As a result, findings provide valuable information that may help clinicians draw out richer narratives and probe into areas that previously may not have been considered as relevant to women’s experiences as they endure bariatric surgery, especially as it relates to their marriage. Thus, a recommendation based on the current findings is the need to educate mental and medical helping professionals on how to engage in an open dialogue with patients before and after bariatric surgery.

While there were common categories amongst participant experiences, no two narratives were exactly the same. Therefore, it may be helpful to know how to solicit the unique experiences of each patient, rather than operate under one’s own assumptions or only according to a structured set of criteria. By utilizing the findings of the current study, mental and medical health professionals are provided with possible questions to ask patients that may access the essence of their overall experience. Specifically, the categories and subcategories may serve as probing areas and as instruments of validation to women who have experienced bariatric surgery. For instance, since the current study revealed that many marital improvements were perceived to have occurred as a result of wives improved self-esteem, it may be important for clinicians to
address their client’s self-esteem as it relates to her marriage. By asking open ended questions based on the categories and subcategories, patients may have the opportunity to express their concerns, thoughts, and meanings in an open, supportive, and safe environment.

Findings from the current study regarding reports of various marital experiences before and after bariatric surgery also convey the importance of couple’s therapy. While one person undergoes surgery, it appears that both husband and wife endure the transition together. In fact, current findings suggest that the marital relationship changes as a result of the transformation brought upon by bariatric surgery. Thus, it would be beneficial for couples to participate in some type of couple’s therapy before and after one of the spouses has bariatric surgery.

Marital therapy before surgery would be helpful as it could provide the opportunity for couples to work through some of the weight related problems affecting their communication, time spent together, sex/intimacy, affection, and decision-making processes. First, therapy ‘before surgery’ could provide couples with the opportunity to discuss possible questions, fears, and preconceived notions about bariatric surgery. For instance, it could provide both partners the opportunity to discuss their thoughts about weight and how they perceive it as impacting or not impacting the marriage. Secondly, certain decision-making processes can also be identified in marital therapy. Rather than having the responsibility fall completely on the woman as reported in the current study, couples therapy could provide the opportunity for the husband and wife to openly discuss various options and make the decision together as a couple. Finally, the marital therapist can also normalize experiences related to bariatric surgery by offering clients knowledge of possible transformations the couple may endure as a result of bariatric surgery. That way, husband and wife are not only provided with the relieving sense that their experiences
are common, they are also prepared with the appropriate tools needed to successfully adjust to the variety of potential experiences after bariatric surgery.

In addition to before surgery couples therapy, marital therapy would also be beneficial for patients and their spouse as they endure some of the after surgery related marital changes. For instance, therapists could facilitate a discussion about each partner’s feelings regarding some of the unforeseen changes that have occurred as a consequence to bariatric surgery. By providing clients with the opportunity to discuss their feelings to one another in a supportive and open environment, couples may be more apt to successfully transition through this potentially awkward time. Therapists can also help couples discover why changes in their marriage have occurred as a result of bariatric surgery. Thus, determining some of the systemic dynamics oriented around bariatric surgery and consequent weight loss would be an especially helpful component for couples during marital therapy. Finally, therapists can also help couples by normalizing some of their challenges associated with bariatric surgery.

Based on the biopsychosocial findings of the current study, collaboration between medical and mental health professionals is essential. Patients and their spouses would benefit by having interdisciplinary teams work together to provide comprehensive medical and mental health care. That way, while the medical aspects of bariatric surgery are addressed (the bio part of biopsychosocial), certain psychological and social experiences that patients and their spouses endure before and after surgery can also be acknowledged and effectively resolved. Thus, an integrated multidisciplinary approach to patient care offers a conceptual model that considers and treats the biopsychosocial experiences associated with bariatric surgery.
Conclusion

The present study adds to the body of existing research examining bariatric surgery and marital relationships by offering in-depth accounts of women’s experiences with their husbands before and after bariatric surgery. While some of the categorical and subcategorical findings from this study are consistent with previous research, other findings provide a unique contribution to the literature regarding bariatric surgery and marital relationships. Overall, regardless of ‘before surgery’ experiences, all patients described improvements in their marriage after bariatric surgery. Certain improvements within the marital realms of communication, time spent together, sex/intimacy, and levels of affection were mainly attributed to wife’s increased self-esteem.

While the main purpose of the current study was to examine perceptions of marital relationships before and after bariatric surgery, emerging reports from participants did not exclusively focus on their marital experiences. Various biological and psychological experiences before and after surgery were also reported. More importantly, how these experiences connect with one another to form an interdependent relationship is the essential feature of the current study. Thus, findings from this study offer itself to the application of the biopsychosocial perspective.

While additional research is needed, the knowledge gained from the present study’s biopsychosocial findings not only informs future research, but it also emphasizes the importance of future collaboration between mental and medical professionals. Specifically, since many of the biological, psychological, and social experiences associated with before and after surgery are so interrelated and connected, it is important for helping professionals to examine how these
biopsychosocial experiences impact patient experiences of bariatric surgery, especially as they relate to marriage.
REFERENCES


couples training and partner cooperativeness in the behavioral treatment of obesity. *Behaviour Research and Therapy, 16*, 323-333.


APPENDIX A

Marital Relationship Before and After Bariatric Surgery Interview Guide

The following are open-ended questions intended on understanding your unique experience with bariatric surgery. Please feel free to answer in whatever way you choose. If at anytime you feel uncomfortable and want to stop, feel free to do so.

1. **How would you describe your relationship with your partner before surgery?**
   
a. How would you describe your level of communication before you had surgery?
   
b. How would you describe your time spent together as a couple before you had surgery?
   
c. How would you describe your intimacy level?
      
i. Some couples are saying that sex was a significant factor in their relationship? Do you feel comfortable talking about how it was sexually before the surgery?
      
   ii. How was your sexual relationship before you had surgery?
   
d. How would you describe the affection you all shared?
   
e. Overall, would you describe your relationship with your partner as positive or negative before the surgery?
   
f. What made you decide to have bariatric surgery?
   
g. Was your partner supportive of this decision?

2. **How would you describe your relationship with your partner after surgery?**
   
a. Has your communication changed at all since the surgery? How?
   
b. How has the time spent together changed since surgery?
c. Has your level of intimacy changed since the surgery?
   i. Has your sexual relationship changed since the surgery?
   ii. Has your affection toward your partner changed since the surgery?
   iii. Has your partner’s affection toward you changed since surgery?

d. Has your partner changed at all since you have had the surgery? How?

e. Overall, would you describe your relationship with your partner as positive or negative after the surgery?

f. Are you glad that you had the surgery?

g. Is your partner glad that you had the surgery?

3. Is there anything that I have not asked about that you think is an important question or comment to address at this time?

   a. Any unique results of the surgery you feel comfortable sharing?
   b. Any advice you have for women in relationships getting ready to have bariatric surgery?

**Demographic Questions**

Any pre-surgery obesity related medical complications/illnesses?
How are these complications/illnesses now that you have had bariatric surgery?
Did you suffer from any complications associated with bariatric surgery?
If so, what were they and how did they impact your healing process?
Current list of medications.
Amount of weight lost since surgery.
Age of patient
Age of husband
Ethnicity
Number and ages of children
Education level
Work Status
Did insurance cover this procedure?
APPENDIX B

Informational Letter

Dear :  

I am a graduate student under the direction of Lee Johnson, Ph.D. in the Department of Child
and Family Development at The University of Georgia. I invite you to participate in a research
study entitled Bariatric Surgery and Close Relationships. The purpose of this study is to explore
the lived experiences of patient relationships following bariatric surgery.

Your participation will involve open-ended questions about your experiences with your
partner following bariatric surgery and should only take about 45 minutes. Your involvement in
the study is voluntary, and you may choose not to participate or to stop at any time without
penalty or loss of benefits. No information about or provided by you during the research will be
shared with others without your written permission, except if it is necessary to protect your
welfare (for example, if you were injured and needed medical care) or if required by law. You
will be given an identifying number and this number will be assigned to the transcript of your
interview(s). After transcription, the audiotape of this interview will be erased. The results of the
research study may be published, but your name will not be used. In fact, the published results
will be presented in summary form only. Your identity will not be associated with your
responses in any published format.

The findings from this project may provide information on how close relationships are
impacted by bariatric surgery. No risk is expected but you may experience minimal discomfort
or stress when the researcher asks you questions about relevant experiences, opinions and
suggestions. If you need further clinical assistance, I will provide you with contact information of Dr. Alan Williams, the psychologist who assessed you during the pre-surgery interview.

If you have any questions about this research project, please feel free to call Nicole Childs at (706) 340-1834 or send an email to nicolemc@uga.edu. Questions or concerns about your rights as a research participant should be directed to The Chairperson, University of Georgia Institutional Review Board, 612 Boyd GSRC, Athens, Georgia 30602-7411; telephone (706) 542-3199; email address irb@uga.edu.

Thank you for your consideration!

Sincerely,

Nicole Childs, M.S.
APPENDIX C

Open Coding: Ideas and Meanings

BEFORE SURGERY

Relationship status
1. Um, good.
2. It’s been good.
3. Um, for the most part we were happy, yes.
4. It’s fine, I mean nothing has really change for us.
5. Um, fine.
6. Um, let me see, kind’ve somewhat strained because I didn’t feel attractive.
7. We had an excellent relationship; not very strenuous.
8. Well, we had a good relationship.
9. Great.

Communication
1. Never really communicated well.
2. On a scale from 1 to 10, I would rate it at a 5.
3. Always wished that we had a better communication.
4. Level of communication has been that way for the 21 years that I was married.
5. Um, we’ve always been just going going going.
6. Somehow managed to talk as we went.
7. Even though we didn’t talk a lot, we got messages to each other.
8. Other responsibilities did not allow me to talk a lot with my husband.
9. My husband resented me because of the responsibilities I had that did not allow me to spend time with him.
10. Communication was fair.
11. I was able to express, he has a hard time and still does.
12. I did a lot of talking and crying and he did a lot of sulking and withdrawing.
13. I didn’t want to push his buttons.
14. I was meek and mild and anything anybody ever said was okay.
15. Sure, we were able to talk with each other.
16. We talked and shared feelings all the time.
17. He knew a lot of the struggles I was going through and was always encouraging and nonjudgmental.
18. We were not able to talk to one another and open up.
19. Communicated through non-verbal cues, if we really did know what was going on with each other, which was difficult.
20. I mean, I would have to say it was pretty good.
21. We had pretty good communication,
22. I would have been more withholding just in expressing things just because I am like that, I tend to be like that with everyone.
23. Very open.
24. I always felt that I could communicate with my husband openly.

**Time spent together**
1. We spent time together only if I planned it.
2. Take yearly vacations and weekend getaways every now and then.
3. Pretty active during these vacations.
4. Did not spend a lot of time together at all.
5. We went our own separate ways.
6. We spent normal time together as far as we would go places or watch tv together and that kind’ve thing.
7. We’d have some dates like, dinner and a movie.
8. He likes the outdoors and I couldn’t stand to be outside because of shortness of breath and things like that that are associated with being overweight.
9. Wasn’t all him, there were factors that attributed to me being uncomfortable and being outside and so forth.
10. We spent more time together before surgery than we do now because my husband is older than me and didn’t mind me not wanting to do a lot because he didn’t.
11. Um, we just did everything together. We still do, it’s really the same.
12. We went on family vacations, etc. other than work we were together.
13. Um, the only time we spent together was at church.
14. We didn’t do, you know extracurricular activities together because I didn’t like to go to many places.
15. Sometimes we would go to an occasional movie, maybe out to eat or something.
16. I didn’t like to do many things, which more than likely strained my relationship with my husband.
17. Time spent together was mostly spent in my bedroom watching tv, never doing anything, we mostly didn’t go do anything, mostly.
18. He was not upset by us not going out and got used to me not wanting to do much of anything and therefore never asked.
19. We didn’t do a whole lot.
20. We spent a lot of time really at home.
21. We didn’t do too many things, too many fun things together.
22. We didn’t go out that much because I didn’t like to put myself out there a lot; my inability at the time is what you would call it.
23. Very good quality time; we have always been very close.
24. I couldn’t do a lot of the things I wanted to; anything that required a lot of walking or standing, I just was unable to do.
25. We worked so much that we didn’t do a lot together.
26. We didn’t do anything too extraneous, but we always make sure that we had special time with each other.

**Intimacy/Sexual relationship**
1. He never had a problem with my weight when it came to sex.
2. I had the problem.
3. I was ashamed of how I let it go that far.
4. Was not inhibited sexually because he is not a real sexual person. Has never been, even when I met him at 21.
5. Since he has never been sexual, it hasn’t changed for me if I was larger or smaller.
6. I got to the point because he wasn’t, I got to the point where I didn’t care whether we had sex or not.
7. Was not a factor in our relationship.
8. I have had several back surgeries and sex is not a priority.
9. He learned not to ask or care about it as much.
10. I wanted it a lot more than he did.
11. I asked for it more and desired it more than he did. From the time we got married it had been like this.
12. We were trying to get pregnant also, which added stress.
13. I’ve been married for 28 years and I don’t see any difference.
14. He is still attentive as far as complimentary, but he did that when I was big too.
15. When I was big, it really turned him off that I kept getting bigger and he kept telling that he didn’t ever married a big woman, but I became a big woman.
16. We didn’t have sex as often, but he didn’t make me feel that he wasn’t attracted to me, I just know he was by his comments he makes now after surgery.
17. No change.
18. I didn’t really want to have sex.
19. We always had good relations, but it was really limited because I didn’t want him to touch me that much.
20. I didn’t want him to see me.
21. If he did see me, I just wanted it to be over with, I was not all into it or anything.
22. I had poor self-image and didn’t feel attractive, which inhibited me sexually.
23. He had a problem with the fact that I didn’t want to have sex that much. He didn’t have a problem with the weight, he didn’t realize I was big until he saw a picture of me comparing then and now.
24. It wasn’t as good as it was and could have been because of my self-consciousness.
25. I didn’t feel good about myself and was sexually inhibited.
26. I really didn’t have the desire at all. Due to the excess weight, my hormones was just so whacked out which was why there wasn’t much of a desire there.
27. He knew that I was overweight, but he didn’t notice the extent of it, because he didn’t see that and he didn’t, he always positively commented on me.
28. Not feeling good about myself did create some problems with me personally as far as how I felt about myself, self-esteem, not feeling attractive physically.
29. We weren’t as sexually active during that time as we had been in our earlier marriage.
30. Frequency and desire was not there.
31. He was frustrated that we only had sex once a month and we would argue about it like any couple.
32. I would find not him wanting to, but me not wanting to because I was embarrassed with myself.
33. It was all me more than him.
34. I didn’t want to have sex because I knew that he would have to see me.
35. I never felt like he had a problem with my non-desire to have sex because he never said anything derogatory to me about it.
36. While I desired sex, it had to be under certain conditions (i.e. really dark so he couldn’t see my grotesque body).

Affection
1. We held hands and put arms around each other.
2. I would describe it as pretty well.
3. We were very affectionate. Before and after.
4. He said I love you if you were as big as this house.
5. Always encouraging.
6. Um, it was fair, I mean, he was never the person to just spontaneously come up and hug and kiss me.
7. I craved more.
8. We held hands, he fixed my coffee for me every morning. He was affectionate in his own ways.
9. Affection was not very much.
10. We did not hold hands and kiss and things like that...no, no, no.
11. We would kiss and hold hands all the time….that did not change at all!
12. Yeah, we have always been affectionate with each other before the surgery.
13. We have always just touched and been on each other.
14. The affection was still there, it’s just the physical end wasn’t as good as it could be.
15. We were very affectionate with each other before surgery, yeah, yeah, yeah.

Rate relationship as positive/negative
1. Negative: there were a lot of things that I wanted that he wasn’t willing or able to give.
2. I’d say positive: He is always encouraging and never made me feel bad at all.
3. I’m gonna have to say it was negative. Mostly on my part though. Now that I am talking about this, I’m thinking about it and most of my unhappiness was brought on by me when before I always thought it was him.
4. My relationship with my husband has always been good.
5. Very positive.
6. I wasn’t happy with myself which made the relationship not happy.
7. Positive
8. Positive

Decision to have surgery
1. Was totally mine.
2. I didn’t feel good about myself and wanted to do something to change it.
3. He loved me regardless of weight.
4. It never bothered him that I was overweight. He never showed it or even made any remarks.
5. My doctor told me that if I continue the way I would I would either be dead or housebound by 50.
6. Wanted to be more active with children and husband.
7. I wanted to enjoy my kids and husband. I went to the amusement park with my kids and I couldn’t fit the rides and that just really made me sad.
8. Health issues, my doctor said I was a walking suicide at 37 years old!
9. Health reasons.
10. I am 50 years old and I am not going to change, so wanted a drastic procedure.
11. All my life I yo yo’d and the only way for me to lose the weight is to exercise and physically I cannot exercise because of my back problems. Had to do something...
12. There wasn’t a real turning point; just considered my family background and all of my medical problems.
13. Dr. told me that if I didn’t lose the weight than I was going to die.
14. I grossed myself out physically and had to do something.

Support from Husband in Decision-making
1. He was supportive of me researching the idea and bringing him information before he was ever supportive of me actually doing it.
2. I don’t think he would have been as supportive if I did not do the research before hand.
3. Not at first, he was not supportive.
4. He was more scared than anything because it is quite a risk.
5. The only reason why he went along with it was because this is what I wanted and I researched it thoroughly.
6. He went to all of the meetings, seminars, and learned right along with me and he did not fall through one time and say that he didn’t want me to do it.
7. Not initially.
8. Only when I researched and he knew that I really wanted to do it, then he became 100% supportive.
9. He went to every doctors appointment with me and was supportive throughout the entire process.
10. Not at first. He was scared, it is a scary procedure.
11. He thought it was another fad. It wasn’t until he knew I was serious about it when he became supportive.

AFTER SURGERY

Communication
1. It was still good.
2. As the weight dropped off, he became a lot more complimentary and verbal.
3. He helped talk me through some of the negative people in my life that were holding me down.
4. He helped me face these people and get them out’ve my life.
5. I did not let him talk to me the way he used to.
6. I feel that now since I am a size 14, it is confident enough for me to speak up.
7. Communication about the same.
8. His level of communication always bothered me.
9. Because of my self-esteem, I have opened more to him.
10. I think I just feel better about myself so I can talk about things now that I probably would not have talked about before.
11. Communication is much better.
12. I don’t know if I would attribute it to the surgery, as much of having been together for so long now and you learn to compromise with each other.
13. I feel like I deserve better now.
14. The confidence from having the surgery and not feeling that you have to settle anymore helped my communication.
15. Less willing to back down.
16. Since I have opened up more and want to communicate, he is now trying harder. Was the best thing I have ever done for myself.
17. We make decisions about the baby together now. It was just me, but now we do it together.
18. I just talk to him about things now and I just make it plan that it is not just going to happen anymore if I don’t want it to.
19. He listens now to me when I talk. I don’t feel like I am going “wha wha wha wha”.
20. We are a lot better now and that has a lot to do with my own personal welfare.
21. We talk a lot more.
22. We try to be on the same accord for a change.
23. I can express that I don’t like that and it’s okay for me not to like it.
24. I feel more comfortable expressing myself because I feel more confident about myself.
25. I never feel like I cannot talk to him now.
26. Because of the adjustment we had to undergo (me wanting freedom and undergoing personal changes) I would say that our communication has gotten even better than before surgery.
27. Level of communication did not change; was good before and good after.
28. We have always been very communicative; we’ve always kept that up.
29. I don’t think that changed because we have always worked really hard on that.

**Time spent together**
1. We have a sick baby and cannot go out a lot. However, we do spend time taking the baby to the doctor together now.
2. We do baby oriented things together now, when they used to be baby activities only I would do.
3. We spend a lot of time together.
4. I spend more time with my family.
5. I don’t necessarily like doing outdoor activities with my husband, but I can now. I can breathe and I feel better so that has definitely impacted every aspect of what we are able to do and experience.
6. Probably the first time he has ever suggested going to do something by ourselves with no other children or family members.
7. He wants to spent time with just me and get away and not tell anyone.
8. I am more active, we do more things and we are out and about all the time.
9. We walk together, we spend more time together.
10. We spend a lot more time with the kids and each other.
11. We definitely go off more.
12. We go to the beach in the summer, I really enjoy going to theme parks.
13. It is easier to be more active now. I am healthier, I feel better as far as I don’t get so tired and overworked. I look forward to the new adventures I’ll have every day.
14. We bought a trailer so we are doing a lot of camping on weekends, which is something we weren’t able to do before the surgery.
15. Since the surgery, I took an early retirement and have more time to spent with my husband.
16. Now that I have the weight off, I can physically do more; go to the pool and waterslides when I didn’t do that before.

**Intimacy/Sexual relationship**
1. He finds me more attractive.
2. We have reversed roles where he wants it more than I do now.
3. His desire has increase a lot.
4. I have to turn him down now, when he turned me down before.
5. Sex was every now and then, but now it not ever because the non-bariatric surgical pain has escalated.
6. It’s been so many years, so no changes.
7. Even though I can’t have sex, we talk about it more now.
8. We flirt and tease more with each other about sexual related things.
9. The longer that I have been married the less important sex seems to be.
10. I feel more confident and more sexual I guess since I have had cosmetic surgery done because I don’t have sagging skin anymore.
11. I was real cognizant of my sagging skin before which inhibited me sexually.
12. To him, it didn’t bother him. He was still sexually attracted to me.
13. I think that even with the younger couples, younger than us, their sexual life is important to them as part of their relationship. We’ve been together so long that we don’t base our relationship on the sexual part where young couples would.
14. We have sex more, but he never made me feel like he wasn’t attracted to me before the surgery.
15. Oh, oh, it’s off the chain!
16. It is much better because I am more flexible so, things aren’t always the same.
17. It was great especially when I first started losing the weight. New positions, a lot better.
18. It’s hard to explain, but it almost at a deeper level. It is nothing like we ever had and we’ve been together for a long time.
19. We have so much more appreciation for one another I mean, we connect on a whole different level when we are intimate than we did before and it’s not just a matter of physical release.
20. I feel better about myself, which has helped with my inhibitions.
21. It’s better, but not great.
22. We have sex more often, but it is still not as often as he would like. But I am comfortable with my level of desire and frequency because it has increased since surgery.
23. I feel better about myself physically.
24. Better from my perspective because I like the way that I look better.
25. I’ve got a one in a million man who accepts me and loves me. I never felt like “oh god, you made yourself skinny now I want you more”; this was more me.
26. Now I want it morning, noon, night, daylight, I don’t care.
27. I don’t care if he sees me naked now; I join him in the shower now, when I never did that before.

**Affection**
1. He is a lot more affectionate with holding hands and such.
2. We have more encounters together. WE’ll hold hands or we’ll lay next to each other more.
4. He’ll hold my hand more in public. He loves to do that.
5. He’ll say “wow, you butt and legs are getting so small”.
6. He says I look really good.
7. I can hear the compliments now because I believe them more.
8. He makes more comments to me. He will comment on how small I am from behind.
9. We snuggle a lot, which is something we didn’t do in the past.
10. We lay with each other when we watch tv.
11. Always trying to get our babies out’ve the bed now so we can have time alone!
12. Throughout it all, he comments to me all the time, before and after, he is very affectionate and very good, I guess you would say (laughs).
13. We are still very affectionate with one another.
14. Didn’t change that much because he would show me just as much if not more.
15. I think he’s done more since the surgery, but I do not feel like I have gotten more love or won him because I know that he accepted me either way.
16. I get compliments you know when he sees the changes in me. Everyone likes to be noticed, you know?

**Changes in him**
1. More positive.
2. He has more pride when is is walking with me even though he doesn’t express it. I can sent it.
3. I catch him looking at me when I am dressing and he will look up and say how nice I look.
4. He has lost a lot of weight on his own.
5. He is very competitive and became jealous that I lost weight and lost weight on his own.
6. He cooks more now. Cooks what I am allowed to eat so I don’t get sick.
7. He is willing to do and compromise and do things he hadn’t done before and that kind of thing.
8. He is more open and willing to listen to my point of view.
9. Before he wasn’t jealous of me, as he is now. If somebody says something to me, I can tell that it is triggering something.
10. None. I can imagine though that it would if people didn’t have the communication that we had before surgery.
11. Because he was so supportive before surgery, I didn’t notice any changes, I know that sounds crazy!
12. We had some issues in the beginning because he was somewhat intimidated by the way I was turning out to look.
14. His jealousy intensified because a lot more people were giving me compliments and heads were turning now.
15. He is more attentive to my needs and stuff.
16. Since I am able to communicate my needs to him now, I reckon he is trying to give me what I need.
17. the main thing is that he is more, I don’t want to say that he is jealous because he is not jealous, but he is more protective of me.
18. He gets kind’ve skittish I something doesn’t look quite appropriate for me to wear out.
19. I don’t know, maybe there might be a little insecurity, because of the weight loss. So, he is a little more insecure now than he was before.
20. After surgery, I was diagnosed with cancer and he has been there for me through every doctor’s appointment and chemo treatment; very supportive and loving.
21. No changes, not really.
22. Normal changes with age and stressors of life, but nothing related to the surgery.
23. He is happy that I’m happy with the outcome of surgery.

Changes in patient
1. I have to get my brain to re-do itself.
2. Took a long time for my brain to adjust to my body weight loss.
3. It was almost like when you look in the mirror you think that you are still heavy and your only a size 2.
4. Your body is saying one thing and your brain is saying another.
5. Brain/body disconnect.
6. Biggest change was seeing my new body versus my old.
7. The hardest part for me was the perception of seeing myself one way and having been that way for so long and not being that person anymore but still seeing the other one.
8. Visualizing yourself in normal size clothing was hard to understand.
9. You have surgery on your stomach and not your brain…which is where my problem is.
10. There is a lot of change and it is all about me.
11. It is just my attitude, I feel younger, I look younger, I feel like I’ve got a life again.
12. My job sales increased from having 1 unsuccessful store to now I have 4 very successful stores.
13. It makes me mad that people treat me with respect now because I am thinner, when they didn’t before. I didn’t change any, my mind has not changed! My mind is still sharp, they just cannot detach the other.
14. You can’t fix being overweight by surgery because it is a mental problem.
15. All those years of going to a certain size, it is habit that I still grab the larger sizes when I shop.
16. Total complete change in mind frame regarding the food I eat.
17. I have lost 110 pounds, but I don’t see any difference in my body but everybody else does.
18. I still see the flab, but no one else does.
19. I can’t tell you how many times I have bought the bigger size pants because I can’t see myself as being that small yet.
20. It is a realization every time I put on the smaller size, wow…I am that small now?
21. You can stop me from eating, but the emotional component is still there. When I am depressed or lonely, I want to snack even when I’m not hungry.

22. I have more energy, I do more things.

23. I was more efficient at work and therefore got promoted.

24. I noticed that I got more respect at work. Even though I had the same brain that I had then. Others did not see how smart I was, all they saw was the weight.

25. I had to learn to deal with the attention I got from other males. I didn’t want the attention and wouldn’t even make eye contact. I didn’t know how to deal with that because I never got looks.

26. I went back to school to finish my degree.

27. I just kind’ve was experiencing changes with my body that I have never experienced; people were showing me attention that I hadn’t see before and I think that it just overwhelmed me and I think that I took advantage of it.

28. I had more of a desire for freedom then I had when I was younger or even before the surgery.

Rate relationship as positive/negative
   1. Positive
   2. It’s positive.
   3. Overall, I think it is a lot more positive.
   4. Positive.
   5. The past year our relationship has grown tremendously.
   6. For the first year and a half, it was negative, but since the last year and half, it is more positive than before surgery.
   7. Positive.

Advice
   1. Do it for yourself.
   2. If you are doing it to hang on to your partner or you think that it is going to change something that might already be broke, it doesn’t work.
   3. You set yourself up for even more disappointment from him and even set yourself up to fail.
   4. Have goals in mind and what you want to accomplish…not what somebody else is expecting you to accomplish.
   5. If they know they have any negative people in their life, to get them out as soon as possible before they have the surgery.
   6. Negative people can sabotage you in your goals for surgery.
   7. It will just be alright if the relationship is good. It will be fine. If they love one another then they will be fine.
   8. Either way the marriage will go through changes, but more so if the couple is young and sex is really important for them.
   9. It shouldn’t be the husband’s place to decide it if the woman has it or not because it is not about him.
   10. Not to change toward your mate. There is no reason to make him jealous, he has already accepted you the way you are before the surgery.
11. Be yourself, who you were before. Just because you lose weight doesn’t change who you are.
12. It is easier to just talk.
13. When you are upset, tell him.
14. I have had no complications or anything from this surgery and I can say that support from my husband and daughter helped that happen.
15. To make sure that her husband and herself get counseling because she is going to go through a transformation and he is going to have to understand that she is going to be looking different.
16. She has got to understand that she is going to be looking different and he may be feeling that she is going to leave him.
17. Your body is going to change, but not your mind set.
18. Make sure that their relationship with their spouse is strong before the surgery.
19. If there are any underlying problems, they will be surfaced after surgery.
20. Do it for yourself, not for other people.
21. It is something that you personally want and you know, your spouse has got to be supportive of it, but don’t do it just for your spouse, do it for yourself.
22. Keep your communication open and keep your man satisfied.
23. Definitely do it for yourself!
24. If she is not doing it for herself, she is doing it for the wrong reason. It is not a quick fix, it changes your eating habits and everything for life.
25. If you are not willing to change your life, you are going to gain weight back because your stomach can stretch back.

Anything Else?
1. I should have talked a lot more in my psychological evaluation.
2. Should have told him about the stressors in my life because I was going through so much at the time.
3. It would have been nice to have pre and post-surgical therapy.
4. Family therapy would have helped me.
5. Fat people are going through a lot or they would not be fat, so having the opportunity to have therapy would be helpful.
6. The reason why some couples do not have a difficult time with surgery and aftereffects is that the men were satisfied and secure with a larger wife. They were secure so that when the wife loses the weight, they are insecure people from the very beginning.
7. The reason that we made it through this transition is because of our love in God and belief in marriages and working for it to survive.
8. We’ve always been involved in church and we’ve always relied on the Lord to help us through things. Our pastor helped us through some of the adjustments we endured after surgery.
9. I would have like to have went through counseling before and even afterwards to know what was going on and how to explain the things that I was thinking and he was thinking, sort’ve thing.
10. All you can do it trust in the Lord that things are going to be okay.
11. I think that the success rate will not be as good if people are not having the surgery for themselves because it is a lifestyle change and it is a commitment.
12. I think that we endured this surgery and all the possible negative things that happen afterward has a lot to do with our ability to communicate and if you don’t put yourself in situations where you shouldn’t be, then it’s not going to be an issue.

13. On thing that we are is very centered with God and church and our family and everything and that is a big thing and you have to accept yourself and all and so, it all balances out.
APPENDIX D

Reflective Journal

June 20, 2007  5:00pm
I am so excited that I passed on my proposal and am really excited to get this project moving! I am really anticipating the responses from patients to better understand his/her experiences after bariatric surgery. During the proposal meeting, however, it was advised that I specify my participant pool a bit more. So… I plan on doing that tomorrow. In the meantime, I am thinking whether or not I should target male vs. female, relationship status, time out of surgical procedure. I have some ideas, but can’t really make any definite decisions until I look over the patient list that was provided for me from Dr. Williams. What is for certain, however, is that I have to get a hold of Dr. Williams so he can send me the newest list of patients. The list that I currently have is over a year old and I am thinking that he has more up to date patients that would fit the 6 months to one year inclusion criteria for this study. Until then, I plan on enjoying the evening and celebrating this step into the final step of completing this dissertation!

June 21, 2007  9:30 am
Today has been a good day as I was able to make some firm decisions on strict inclusion criteria for the study. Since my participant list is mainly female (only 7 males total), I am going to select only women for my study. All women must have had the Roux en Y procedure done. All must also have been in relationship for at least three years prior to having bariatric surgery. All heterosexual females. The only problem I am running into is the time lapse after surgery. Right now, the earliest participants I have on the list are people who last saw Dr. Williams during 2004. This is over three years ago! So, I emailed Dr. Williams and waiting for his more current up to date list of patients. I am dreadfully doing this, since he has a tendency to not respond to me for a long time without major effort on my part. But, need the information, so will do what it takes to get it.

June 22, 2007  9:00 am
After 2 emails to Dr. Williams, I phoned him via cell phone. He said that he “would do what he could, but was going on vacation for two weeks at 5:00pm this afternoon and will try to get to emailing the list”. I told him that if he did not, then I might be waiting for this list, which would slow down the entire data collection and analysis procedure. Again, he said that he would try. I have also contacted Trina to see if she has a transcription machine. She said that she thinks she does and that she thinks is phone recordable as well. Planned to meet her this afternoon to look it over to see if the machine is something I could use, since Rachel has Lee’s original transcription and phone recording machine.

June 22, 2007  5:15 pm
I guess Dr. Williams did not find it in his busy day to email the updated list. I am feeling a bit frustrated and down right now because I feel like this may put a huge damper on my timeline for
getting this completed. Plus, I am really excited about talking to people and may have to put this on hold now that I have to wait for a more updated list.

On the positive note, however, I met with Trina and discovered that the equipment she has is perfect for my study. I will be able to use this machine, pending I purchase some connection cables. This makes me really excited because I can at least start this process.

Since Lee is on vacation as of today, I emailed Stephanie to get her opinion on the fact that I do not have the most up to date list of participants. Awaiting to hear her response.

In the meantime, began adjusting the interview guide to incorporate the feedback that was given to me during the proposal meeting. This was not that difficult, since I took great notes during the meeting, I just adjusted the questionnaire accordingly.

June 25, 2007 12:00pm

Finished my edits on the interview guide and sent to Stephanie to await her feedback.

I went home to NC to start phoning patients, but feel like I am in limbo here. I don’t know if the interview guide is appropriate, plus am unsure if I should even begin this process with participants who are over 2 years out of surgery.

Today, I also got turned down for another job and am feeling down about that. Overall, today was a self-pity day where I am just overwhelmed at the not-knowing about so many things in my life. I really would like to know something so that I can begin to move on with this project. At least that would let me know that I am doing something, rather than just sitting here.

June 27, 2007 4:30 pm

Since I have not heard from anyone, I have decided to move on and do a few interviews. Lee and I discussed this and we both thought that it would be okay to start collecting data with the participants that are available. Worst case scenario is that I won’t be able to use them for the current study. Not a big deal. At least I will be getting the practice interviewing and at least I will feel like I am actively trying to make this move along as I intended.

Went to radio shack for the appropriate material for the audio recorder and transcription machine. From the advisement of an employee there, I purchase like 6 different cords that will hopefully work. ☺ Fingers crossed!

June 27, 2007 7:30pm

Guess what? The equipment didn’t work! Shocker! As a result, I emailed Rachel to see if she still has Lee’s equipment available for use. Maybe I will have a back up after all.

In the meantime, however, I need to go back to Radio Shack, return the items that do not work and get somebody who knows what they are talking about to help me. That will be a task in itself ☺.

June 28, 2007 4:30 pm

After going to radio shack, I now have the appropriate material to begin my phone calls! As a result, I went through my list of patients and created a spreadsheet that includes their names, phone numbers, date of evaluation, and blank spaces to note the status of the calling of patients.

Now that nothing is technically standing in my way of calling these patients, I am feeling anxious about phoning these participants. I’m not sure if it’s because in the back of my mind that this work may be for nothing (since they may be too far out after surgery). Mostly, flashbacks of working at First Citizens Bank as a collections agent are coming back to me. I used to call people
at night to tell them that they were late on paying their credit card off. I got many rude responses,
along with people hanging the phone up on my face. So, I am trying really hard to realize that I
am not calling these people to tell them bad new. I am just calling to get to know them a little
more, to get to know how they experienced their relationship after bariatric surgery.
Since I am still home in NC, I was able to chat with my mom about these feelings I was having.
She confirmed that it is a totally different situation and that “I’ve got to start sometime”.
She also reminded me that I am the type of person who dreads things, but once I get into it, I
love it and get energized by it. Kind’ve like working out. I dread doing it every morning, but
once I am at the gym, no one can stop me. So, I just decided to take the weekend off to collect
my thoughts so I can be 100% energized to begin the interview process Monday.

July 2, 2007   11:00am
Began calling participants! Unfortunately, went through 20 participants with no luck. They all
were either not home, answering machine, or disconnected numbers. However, family members
of three patients informed me that a later time would be more appropriate for me to call them
since they were at work. After hearing that, I realized that it would probably be better for me to
start calling people at or around 5:00pm, when people normally get home from work. So, going
to look for jobs in the meantime and wait for this evening to start phoning people again.

July 2, 2007   6:00 pm
Conducted my first interview! I am so excited! I feel like today was a good day because
something got accomplished. All of this waiting and now, even though a small step, I feel like
the process is beginning!
First of all, my feelings after this interview is that I cannot wait to conduct the next one! I really
feel that this project is going to be interesting. Even if it says some of the same things from
existing literature…it will be interesting to hear it straight from the patient’s mouth.
Another feeling I have after this interview is sadness. I feel sad that this one particular woman
felt so bad about herself that she was inhibited in so many different realms. Before the surgery
(and even after) she seems to be okay with settling for a lot in her relationship with her husband.
Her voice seemed to be a bit sad that her husband does not talk to her in the way that she would
like him to. However, at the same time, she seemed okay with it when she talked about it in
different realms (i.e. sexual and affection attention). Especially when she spoke of their sexual
relationship. She felt better about herself after the surgery that she had cosmetic surgery done to
help. That made her feel so much better, but made no difference for her husband. He liked her
the way she was before and after. Which I guess is good, but I would also want some added
attention after going through such a drastic procedure that changes my appearance entirely. I
would feel frustrated, like, “hello, do you notice any differences”. But, I guess that is just me. I
also get upset if my boyfriend doesn’t notice that I have different nail polish on 😊.
One thing that was really interesting about this interview was the fact that she talked about a
body disconnect with her brain and body. She felt that she was still overweight, when she wasn’t.
I thought it was interesting, because I remember watching Oprah and she had a guest on that
talked about this phenomenon exactly. Additionally, after I lost over 60 pounds a couple of years
ago, I feel that I experienced the same thing. Everyone was telling me how thin I was and I never
believed them because I still felt like I was overweight. Unfortunately, I now see where they
were coming from now that I have gained some of my weight back. I wonder if this will be
reinforced in future interviews. I look forward to conducting more interviews that will specifically address this phenomenon.

Also, as I closed the interview, I felt like when I asked if there was anything I was missing, was not necessarily the best question to get at unique responses. For instance, the woman in this interview said “no, I feel like you have done a good job”. I wonder if participant response may be biased by their desire to please the researcher, so I added in an advice question just to see how that was handled. I think it went over well, but will look more specifically at the response during transcription and analysis.

July 3, 2007  4:20pm
Today, I transcribed the interview from last night. After transcribing it, I looked over the document and notated ideas and/or themes that emerged. I took note of these and noticed that the advice question went over well because it got at something unique that was not otherwise asked about in the overall interview. I plan on adjusting the interview guide to include that in the questionnaire.

Additionally, I feel like the responses from my questions did not efficiently get at any specific changes the participant saw in her husband after surgery. As a result, I added that question in there.

Lastly, although the patient mentioned it in the interview, I did not specifically ask her why she decided on having bariatric surgery. So, I also added that into the interview guide.

After transcribing this interview, I began the open coding process by essentially making broad categories based upon the questions I asked. I filled these themes with 1). exact quotes from the participant or 2) close paraphrase of the patients original response.

July 5, 2007  7:00pm
Conducted the 2nd interview this evening. Feel really good about the information gained from this interview because while she answered the questions specifically from the interview, she also included information that I did not ask of her. I am hopeful that this information will add to the uniqueness and richness of the study.

However, after this interview, I also found myself feeling bad for this patient. She was so overwhelmed with her extended family before the surgery. She let herself get stretched and taken advantage of in so many ways. I feel sad that she was unable to stand up for herself just because she was overweight. It is as if she didn’t feel that she was worth to have an opinion and stand up for herself just because she was a big woman. It makes me sad because I can understand that feeling somewhat. For instance, since gaining some weight back, I feel like I am a much weaker person. Even though my mind has not changed any, I find myself not having the confidence to stick up for myself when appropriate.

Needless to say, my heart went out to this woman on a personal level. I also found myself going into therapist mode 😊. It has been about a year since I have conducted therapy and today I realized that I really miss being a therapist for people. Especially women struggling with the exact same issues these women are (i.e. self-esteem, confidence, body-image, inhibited self, etc..).

Another interesting thing that has emerged from the two interviews that I have to notate in this journal is the fact that both of these women so far have reported that their sister’s have become jealous of them as a result of surgery and associated weight loss. I just think that is sooooo ridiculous! How can your family be jealous of positive changes in you? I mean, I understand on a
professional level (i.e. change in homeostasis, etc.), but on a personal level that is just so unsettling. If my sister was unhealthily overweight to the point where she had to have surgery to help her lose weight, I would be nothing but happy for her weight loss success. It is just sad that these women didn’t have the support from their sisters. Luckily, they had the support from their husbands (which may have overridden the unsupportive behavior from their sisters).

July 6, 2007  8:00pm

Today, I transcribed and analyzed the second interview. It seems that many of the responses from #2 are falling under the themes and ideas of #1’s interview as well. For instance, both talk about being married for a long time and thus, sex and affection for one another is not that important, regardless of weight loss surgery. Both also speak about the importance of self-esteem in relation to being able to communicate to others. Both said that since they lost weight, they felt better about themselves. Since they felt better about themselves, they both felt more comfortable in telling people their wants and dislikes (whether to husband or other family members). In #2’s case, she even got rid of negative people in her life because she had the gained self-assertiveness to do so! However, one unique component to #2’s interview was jealousy on the husband’s part. This was an interesting finding! Her husband even lost weight as a result of his jealousy of his wife's weight loss. He was overweight so it worked out well for him, but I wonder how that made her feel. She reported being okay with it because now he cooks for them both. It seems that he has taken over control in that realm and she is totally satisfied with that.

July 9, 2007  4:30pm

Called many people today and only got a hold of one person who said to give her a call later on this evening. Arranged a time and will call her back. Once again, realized that these interviews should be conducted after people get home from work. I was so energized by the first two interviews that I didn’t want to wait.

July 9, 2007  9:30pm

I phoned #3 back this evening and conducted the interview with her. This woman’s responses were similar to the other women’s responses in that she talked about how her self-esteem helped her talk more to her husband, which caused him to open up more to him. She spent a lot of time talking about the benefits of being able to be active with her husband. He liked to do a lot of outdoor activity and she never did because of being overweight. Now that she doesn’t have the excess weight holding her down, she participates in a lot of activities with her husband and children. The only thing that made me feel unsettled was the fact that she thinks that her husband finds her more attractive now that she lost the weight. I realize that people are very visually oriented. However, it still hurts me to think that someone would be inhibited on attraction level because she is overweight. I just wonder how it would be if the tables were turned and he were overweight. It seems like there is a double standard for men and women when it comes to being overweight and level of attraction. But, again, she seems to be very satisfied with the changes and that is all that matters! However, if it were me, I would wonder how strong my bond is with my husband. I mean, if I had to fight to have sex with him when I was overweight, and then have to fight him off when I lost weight, I would be offended! It actually makes me mad to hear that happening.
You know, now that I think about it…her advice to other women was to do it for yourself and no body else. I wonder how much of that statement is true for her. I wonder how (maybe even subconsciously) she was impacted by her husband’s apathy and non-sexual appetite he had for her before the surgery. I really wonder how much of that impacted her decision to have the surgery. If she maybe once said to herself “I wonder if he would be more attracted to me, both sexually and emotionally, if I lost weight”. Plus, if she did think that….how did that make her feel? Less of person? Less worthy of attention? Less worthy of love? Less worthy of reciprocation in her marriage? So many questions…

Changing gears to a more technical thought… I really like the fact that I added in the question about how she sees the husband changing after surgery. She provided me with a great answer that I normally would not have gotten at in the interview if it were not asked.

July 10, 2007
Transcribed and analyze the #3 interview. Other than the thoughts I had yesterday regarding the interview (which emerged again while transcribing), I also notice a theme that all women so far have discussed which includes this body/brain disconnect. While they have lost weight, they have a mind frame of still being overweight. It is not until something obvious happens (i.e. trying on the big size and realizing that they are too big for it and must go down several sizes) that they realize that they are smaller than how they actually feel.

As a result of these overwhelming findings, I have added a question in the questionnaire that asks the patient to describe any personal changes she has undergone as a result of the weight loss surgery and associated weight loss. I added this so that it may illicit responses from patients that get at their personal struggles and/or adjustments as a result of surgery. Then hopefully, being able to connect how these personal struggles have impacted her relationship with her husband (if any).

I also added the question of “how did you decide to have bariatric surgery?” Most women eluded to this anyway, but wanted to make it explicit in my interview.

July 11, 2007 12:00pm
Began the axial coding procedure with the information gathered from my open coding themes and/or ideas. With this procedure, since I am supposed to organize categories and subcategories, I tried to take a step back from the data and look at it merely from an analytical standpoint. For each theme, I thought to myself, “what is a broad statement that describes these points?”. For some of the themes, they ranged from none to extreme thoughts. For those themes, I felt like I needed to divide into 2-3 categories with possible subcategories under them to ensure that nothing got lost in this condensing stage of analysis. For instance, since some people said that sex did not change at all before or after surgery, while others described drastic changes…I felt like I needed to include this range so that each experience got acknowledged as important and essential to the uniqueness of the overall findings of this study.

So far, this was the most difficult part of the data collection and analytic section. I think it was the most difficult because I just want to ensure that nothing gets lost between open and axial coding. I am so afraid that their voices become too much of my voice that this process was the most difficult. As a result, since my triangulated investigator was out of town, I contacted my peer debriefer and overviewed what I had thus come up with. She confirmed most of my categories, but also asked me a few questions that challenged me to divide some of the categories
up so that they contained additional subcategories. This was helpful for me to have a different perspective since I have been so immersed in this material for the past several days. Another reason why I also felt better after talking with her was that she reminded me that this is a continual process of analysis. So…even if it not perfect the first time, I will have several chances to change the categories/subcategories as I continue to test them out with each other, current data, my hypothesis, and future incoming data. This made me feel better because I can also adjust this section of the analysis.

July 11, 2007  10:00 pm
Conducted #4 and #5 interviews this evening. I feel really excited that I got two interviews done in one night! I was really not expecting to get a hold of anyone, which I would have been okay with since I really need to show my triangulated investigator (Lee) what I have done thus far with the interviews. However, I really felt confident in what I had done thus far, and just went ahead with the interviews anyway. I thought to myself, if I am that far off, then I will just discount these interviews and continue on with others in the future.

July 12, 2007  7:30
Am really glad that I conducted these interviews because not only did I find some unique discoveries, but I realized that I am not really that far off with the data collection and analysis completed thus far! While #4 was very short in her answers, I did receive the same message that although her husband never expressed it overtly to her, she felt like he was not as attracted to her and did not communicate with her as good as he did after the surgery. She kind’ve confused me in some of her responses because while she said that nothing changed, in the next few sentences, she said lots of things changed. As I remember, this kind’ve frustrated me during the interview. But after looking over the transcription, I think what she was trying to say was that she didn’t see much of a change in her relationship, even though she saw a significant change in her. She may not be the best systemic thinker there is ☺ However, she did notice that her husband became more jealous of her after the surgery. Another findings that had emerged in earlier interviews.

#5 reported almost no change whatsoever in her relationship with her husband after surgery. The only change that she really talked about was the brain/body disconnect. Once again, this theme has emerged before in previous interviews. So…I feel like the categories and subcategories are on the right track. I just overviewed them again and I feel like these two interviews can fall under most of the categories/subcategories that have already been developed. However, I did not completely analyze them yet, as I need to wait for Lee to confirm these cat/subcat. I am looking forward to conducting one more interview.

July 16, 2007   12:30 pm
Conducted one of the best interviews this evening! I really liked this woman and found myself connecting really well with her. She just so happened to be a counselor, so that might have been the connection I felt. Either way, she was a great person to talk to and very personal. She had a lot of information to offer and was really excited about the study. She noted the importance of it, which made me feel really good. To think that the information gained from these patients may help future patients adjust their marriages after bariatric surgery makes me feel really good!
At that point, I will stop my interviewing process so I can check in with my triangulated investigator to ensure that we are on the same page and that I am not just making these themes/ideas and categories/subcategories up in my head! 😊

**July 17, 2007 5:30 pm**

Finished up transcribing the last interview (#6) before I provide Lee with the data information tomorrow in our meeting. I feel really confident in these categories and subcategories gathered from interviews #1-3. I realize that they are the only beginning categories/sub and have a lot of arranging and analytical procedures to still endure.

I will wait for Lee’s feedback before I begin analyzing interviews #3-6. I want to do this so that if I am really far off with my cat/subcat., I can adjust them so that they are more appropriate for interviews 4-6.

Today, I also received Stephanie’s feedback regarding the interview guide. Luckily, most of her edits had been addressed in the already gathered interviews. While some questions were not specifically addressed, they somehow got answered throughout the progression of the interview. I feel really good about this. For the ones that may not have addressed some of the additions, they can always be addressed by calling the patients again. All women have been more than happy to volunteer to talk with me again in the future. Some even stated that they really are anticipating my findings!

**July 18, 2007 3:00 pm**

Today, I met with Lee and felt energized by his energy. He seemed excited that I had so much completed while he was gone on vacation. This helped me feel good about my work. This of course, energized me even more so.

During the meeting, I detailed to him the frustrations I ran into in trying to contact Dr. Williams about being able to receive the updated list of patients. We talked about how the patients I am talking to right now are between 1 year to 3 years after surgery. We discussed the benefits of that, along with the limitations. He suggested contacting the committee to ensure that they are okay with these adjustments to the participant pool.

Lee said that he would try to get me his feedback ASAP. Until then, I will order my phone service, since I do not have any in Athens, GA. All of the interviews thus far, were conducted at my parent’s house in North Carolina.

**July 19, 2007 10:00 am**

Ordered Vonage to be installed in my home so that I can have unlimited long distance service from my home. They said that it would only take 2 days to mail the equipment to my house. Thus, I look forward to being able to get back to interviewing Monday July 23. Until then, I am reviewing over my categories that I gave to Lee.

**July 20, 2007 2:00 pm**

Picked up the feedback from Lee in his mailbox this afternoon. Everything seems to be on track from his point of view. Thus, I plan on analyzing the next 3 interviews (#’s 4-6).

**July 22nd and 23rd, 2007**

First, I spent some time reviewing over the open and axial coding material to get a sense of what I had discovered thus far. This also was done so that I got oriented so that I could thus, take these themes and extract some similar concepts from the interviews 4-6. While most fell under the
already organized cat/subcat., some had to added because they were not explained yet from the interview 1-3. I noticed that most of the after surgery categories did not have to be altered any. However, some of the before surgery categories had to be somewhat adjusted, by altering the existing words or by adding an entire category or subcategory. So far, what seems to be consistent is that regardless of how things were before surgery most are showing positive changes in their relationship after surgery. This is interesting because according to research, if you have a good relationship before surgery then you will have a better relationship after. However, if you have a bad one, then you will have a worse relationship after surgery. So, far, this does not seem to be the case for these particular patients.

Once completed, I provided the new transcripts, open, and axial coding to Lee. As I wait for his feedback, I plan on continuing to review over the existing categories to see if I can make any alterations based upon the existing data, along with coming up with my own hypothesis.

**July 24th, 2007**

At this point, I should be interviewing again. Unfortunately, I am still awaiting the equipment for my phone service. I called vonage today and after talking with 4 different people, I was told that there was a delay on my order. So, now I will not be able to receive the equipment until Thursday morning. I am SOOOO FRUSTRATED! Technically, I need to wait for Lee’s feedback before I begin interviewing again, so it’s not the end of the world, but I hate waiting at this point. I am on a strict timeline and really do not want to sway away from it. Oh well, back to looking over the axial coding again!

**July 25, 2007  3:11 pm**

Still waiting for my phone material to make more interviews. While I am frustrated about this, I am trying to take this time to review more over the open and axial coding. Lee just finished reviewing over interviews #4-6, so that makes it even better because now I can specify the cat/subcategories even more as I wait for the telephone equipment. I love looking at the categories and seeing how I can blend them together, without losing patient stories. This is a challenge for me, but also fun, because there is a lot of satisfaction seeing all of this come together to really represent true stories of challenge and determination from not only the patient, but also her spouse.

**July 26, 2007 9:00 pm**

I finally received the phone material and was able to call several people on my list of potential participants. I got a hold of one woman and conducted the 7th interview. She reported having a difficult time with her husband for about a year and half right after surgery. With commitment in each other and faith in God, they overcame the challenges and are reportedly deeper and more intense and passionate with one another. I really enjoyed hearing this story of determination and success. They really tried to make it work and worked hard to keep their marriage. She went through some personal issues as a result of surgery, and felt more independence and wanted freedom from her spouse. I felt bad for her and wondered about all of the ways in which she limited herself due to her feelings associated with being overweight. Would she have married so young? Did she think he was her only option? I also wonder how he feels thinking about this. I wonder if he feels bad thinking that she settled to be with him only because she was big and did not feel she could get anyone else. What does that do to his self-esteem?
I guess this hit home for me because I am not married and am scared that if and when I do, I wonder if I will have the desire for independence. You know, I am independent and single now but yearn the connection and security of another person. However, I am afraid that once I get that in marriage, I will want what I have now. So, I could somewhat relate to her story as she wondered if she could have been in an entirely different situation if she just had the confidence. It also hits home for me because I feel that at times I limit myself because of my own insecurities about weight. I don’t like to do certain things, become very moody when I discuss or think about my weight and take this all out on my relationships with others. More importantly, I take it out on myself. What does that do for my self-esteem? You know, I hear these women and I feel bad for them because they talk about how they were so limited and didn’t have the confidence because they were overweight. I wonder, how could they let that impact them? They are more than just weight! They have a mind and personality in and of itself. However, I think I let myself do the same thing. I weigh myself down with my weight. At times, I let it control how I feel about myself. Especially how I feel in relation to others. Anyways, this interview kind’ve hit home for me and I thought it important to write these feelings down to make them overt.

July 27, 2007  6:30 pm
Today I spent time transcribing and open coding the 7th interview. Because I thought about this interview so much yesterday, coding it was easy. Plus, since the categories seem to just be reinforcing themselves, just putting the codes into their appropriate category is becoming easier and easier.

July 31, 2007  10:30 pm
Today I completed two interviews and feel really good about them! I am still overwhelmed at the support and encouraging words I am getting from participants about the study. Their volunteering to do this study makes me feel support and encouragement to keep going. It also makes me aware of the importance of this study and the potential to really have an impact on people contemplating bariatric surgery. These women have some interesting things to talk about and a lot of advice to offer. I think it is just awesome that they are willing to share it with me and with others.

One thing that I really want to express in this journal regards the unfortunate connection of women’s self-esteem and body image to amount of weight. I hear these women and I feel bad for them because they talk about how they were so limited and didn’t have the confidence because they were overweight. I wonder, how could they let that impact them? They are more than just weight! I find myself thinking about how I let my weight impact various aspects of my life and wonder if I put that much control on the amount that I weigh as my participants. Unfortunately, I find myself relating to some of their statements about social inhibitions caused by weight related concerns. Like they discussed, I find myself not asserting myself as much when I am not confident with my weight. When I lose weight, however, I increase my confidence and assertiveness. This makes me sad that so much weight is carried in weight!!!

August 1, 2007  10:00 pm
Today, I transcribed and open coded two interviews. I am really confident in the meanings/statements that have been organized. I feel this way because all of the information that I am getting from participants can be representative in all of the already organized meaning
statements. In that way, no new information is emerging from participant reports. This is refreshing because it reinforces my intentions of finding common themes, threads, categories, etc… for the current study.

**August 3, 2007 7:30 pm**
After transcribing and coding the final interview, I feel relieved! I am so excited about this work and really anticipate the next step in coding. I am stopping at 10, since no new information has really emerged from participants for at least 3-5 interviews back. Thus, the same information is being provided by participants that does not provide any new information from participant reports from the first 1-7 interviews.

**August 4, 2007 5:30**
Today, I did some research to get some examples of how previous grounded theory researchers have presented their findings. This was helpful because I realized that while most provide a descriptive detail of findings in results and discussion sections, they also provide either a model (similar to a structural equation model), or a model in tabular form. Since there are a lot of categories and subcategories in the findings of the study, I really think that it is necessary to provide both a model and table to fully represent the findings. Thus, I began today by drawing a model for before and after surgery findings. From this model, I created a table that detailed the model in tabular form.

I am impressed with these visual representations. I think that they will really help the study out and provide a clear, concise overview of the findings that readers will understand with great ease.

I am also a bit exhausted with this process. While it is very interesting to portray findings in tables and models, there is a lot of work to do with this. Not only do I need to provide figures and tables for these findings, but results and discussions about these results need to occur. Just seems like I will be saying the same thing over and over and over and over again. But, at the same time, rather be repetitive than not informative enough.

**August 6, 2007 3:30 pm**
From the figures that I devised a few days ago, I organized a core category. As mentioned in the paper, this is supposed to be a one-sentence description representative of the entire participant experiences. At first, I was pretty overwhelmed with this task. I mean, trying to organize several ideas/issues, meanings/concepts, categories/subcategories into one sentence!!! Just seemed like that was asking a lot. But, after examining my figures, two things emerged that was 100 percent representative of all of the women. 1. All reported some type of biological, psychological, or social experiences before and after surgery with their spouse, and they also 2. All reported improved marriages after surgery.

I was a bit surprised at how simple the formulation of this category was. Like I said before, I thought it was a bit daunting trying to get several experiences to be represented in one or two sentences. However, once I sat down and asked myself “what did everyone talk about in their interviews” or “what is the common thread holding all of these experiences together”, the answer seemed obvious.

**August 8, 2007 12:40 am**
As in the development of the core category, I was also nervous in the organization of the core story. In that way, I really was aware of how my biases and interpretations of the data impact the
final core story. I tried really hard to stick to the data represented to me in the categorical and subcategorical findings. One way I tried to not be so overwhelmed with the development of this story was to just go by category-by-category and just say out loud what each represented. As I talked, I wrote. I did this for the before surgery findings and then the after surgery findings. I then looked to see what I was missing in these sections and included them as the last few sentences in the core story. After these paragraphs were developed in really rough form, I revisited them to make edits in an effort to improve on grammar and to make them more succinct and representative of participant experiences.

I am pretty confident with this final story. I feel that while it may have some minor changes (mainly grammar or sentence structuring), I really feel that it details the essence of the variety of participant experiences with their spouses before and after bariatric surgery.

I feel relieved that the data coding process is almost done, but also wish that I could do more for the participants. Once again, my passion as a therapist to help people is coming into play again. I really wish that there were more clinical options open for overweight individuals as they decide whether or not they want to undergo bariatric surgery. Since obesity is strongly associated with a variety of emotional facets, I wonder if people would even need to undergo bariatric surgery if they had some psychological support. These are things that can be addressed in future research and clinical implications, I guess, but still bother me.

August 11, 2007 1:30 am
Completed the last final end product check with my participants and feel elated, relieved, and secure with my core story. I feel this way because other than a few minor edits to the core story, my core story was reinforced by all of the women. They all really felt that the end product was representative of their experience. I feel good knowing that despite some differences in experiences; all women felt that the core story represented their experience in some way. I also feel good because of the support offered by my participants. So many of the women were complimentary of the work that I did. While this was unnecessary, the verbal feedback felt nice to hear. It really helped to reinforce my passion for this subject and why I began it in the first place. In addition, it provides me with the passion to continue examining bariatric surgery in my future career.
APPENDIX E

Audit Trail

June 20: Now that I have passed the proposal meeting, I am ready to start this! As a result, I need to email Dr. Williams and ask him for an updated list of patients. I also need to make some adjustments to my paper to correlate the feedback offered during today’s proposal meeting. Today after the meeting, I made a list of all of the things I need to do in order to be able to start calling my participants.

June 21: Arranged the inclusion criteria for my participants and emailed these to Stephanie for her feedback. Inclusion criteria includes: All heterosexual women who have been in a marriage or relationship for at least 3 years prior to having surgery. Edited the interview questionnaire to include specific questions regarding how the relationships of my participants were before and after surgery. For instance, I added questions regarding level of communication, time spent together, sex/intimacy, and affection. I also changed the 3rd question to include anything the participant feels I might have left out that she thinks is important for me to know about bariatric surgery and close relationships. I also established demographic information needed from patient to include:

1. Amount of weight loss
2. Total weight loss goal
3. Obesity related illnesses associated with obesity
4. How these illnesses are now post-surgery
5. Any complications associated with surgery
6. Did these complications impede your healing process
7. List medications currently taking
8. Questions unanswered should be then answered by Dr. Williams questionnaire.

June 22: Got a hold of a transcription and audio recording machine. Purchased tapes and connection cable for the machine. Planning how I am going to make the phone calls considering I do not have long distance at my house.

June 25: Decided to go to NC to conduct my interviews. I tried to collect information tonight, but the cords that I purchased did not work properly. So back to radio shack.

July 2: Conducted the first interview. I think that it went pretty well. I added a question about any advice patients may have about what to tell a woman in a relationship getting ready to have bariatric surgery. I did this because I felt like there was something missing in the questionnaire that did not tap into some of the unique responses I may get from this question. Also, what I know about people too, is that they like to be the expert at whatever it is they are talking about. Since I am asking people to volunteer their time to tell me about their experience, I thought that would be a good question to put in there. They are the experts on this surgery because they had it and I want to make it known that I am aware of that and respect that. Also, women traditionally are very nurturing. If they feel like they are able to help others, I think they may be more
warranted to open up, rather than spend the entire time talking about themselves. By asking them to offer advice, they are telling me about their experience but from a non self-entitled way that many women may be against.

**July 3:** Transcribed interview #1. After transcribing, I analyzed the transcript through open coding. Since my questions are serving as the main themes for the current study, I just wrote down each question as a theme and carried over the responses under each theme. Some of the statements were so important that I wrote them down word for word from the participant’s mouth. These were statements that the essence of the answer would have gotten lost if I even attempted to paraphrase it.

**July 5:** Conducted interview #2. These interviews are taking approximately 20-30 minutes. After I ask my questions, I go through Dr. Williams questionnaire. When I ask them if there is anything else they want to tell me, they are telling me that I have covered a lot of information. They also seem excited that someone is asking them about their experience. This makes me feel really excited to conduct more interviews so that I can talk to more and more people about their experiences (this is talked about in more detail in my reflexive journal).

**July 6:** Transcribed and open coded interview #2. After placing the statements under the appropriate themes, I noticed that one comment from the interviewer was not able to go under a specific category. Therefore, I added a question regarding “any changes you have noticed in your partner after surgery?” I put this in because interviewer #2 reported that her husband became more jealous following surgery and her associated weight loss. By adding this question, it may spark other responses from wives regarding any behavioral changes that are not otherwise addressed in the interview.

**July 9:** Conducted interview #3. Realized that the decision making question was not overtly included in the interview, so adjusted the questionnaire to include the question of “how did you decide to have bariatric surgery?”

**July 10:** Transcribed and analyzed interview #3. One major theme that keeps emerging that is not necessarily addressed in my questionnaire is this body/brain disconnect. Specifically, this seems to be happening for all of my participants so far, where even though they have lost a lot of weight, they still feel like they are in the same overweight body they had before surgery. In order to open this up for future participants to freely express, I added in a question regarding “are you glad that you had surgery; why?” I think this is helpful because it gets at how they view themselves and it may even help them understand how a change in them, may be impacted a change in her spouse and her overall relationship.

**July 11:** Proceeded with axial coding. This was a little more difficult task because I needed to be able to paraphrase important statements from participants that allowed their voice to be included, while being able to separate data into bold categories and underlying categories that also capture their broad range of experiences. To begin the process, I just started from a very general level. For instance, the first three interviewers said that their relationship with their partner was “good” before surgery. Thus, my category for axial coding included “Many patients report their relationship with their partner as good before surgery”. This is a broad enough statement which
includes the data, but also can be adjusted in the future to be more specific. For extreme responses (i.e. some had no sexual changes, while others had significant sexual changes), I made each theme into 2-3 main categories with 2-4 subcategories which further described the category. That way, if the category is too broad, the subcategories make sure to specify what I mean by the category.

**July 11:** Went ahead and conducted interviews #4 and #5.

**July 12:** Transcribed and open coded #4. Afterwards, I transcribed and open coded #5. Reviewed over the open coded themes/ideas to see how they would match up to the axial coded categories and subcategories. However, I did not specifically take the next step to axial coding because I am waiting for my triangulated investigator to get back into town so he can look over my first 3 interviews, transcriptions, open coding, and axial coding material.

**July 16:** Conducted interview #6.

**July 17:** Transcribed interview #6. Met with Lee and provided him with the transcripts, open and axial coding material for interviews 1-3. Also received feedback regarding the interview guide from Stephanie. As a result, I took all of her suggestions and edited up the interview guide. Thankfully, most of her additions were somehow addressed in the interviews through some of the probing questions and just through the conversation. The thing that is really nice about her additions is that it provides me with specific questions that will get at specific responses that will really add to the richness and uniqueness of each participant’s experience. Plus, more demographic information was added to the questionnaire. For those patients that I have interviewed so far that I did not get the information for, they have already given me permission to phone them again in the future. This way, I can get any unanswered questions answered during that time.

**July 20:** Feedback from my triangulated investigator says that everything is a go! I looked over what I had done thus far to get a sense of where things were left off so that I can come into coding tomorrow with an oriented mindframe regarding the established categories and subcategories.

**July 22:** Since interviews #4 and #5 were already open coded, I open coded interview #6. Next, I axial coded these interviews. Essentially, what I did was read through the statements in the open coded themes and ideas and placed them in the appropriate categories and subcategories already created from previous interviews. Once that process was completed, I looked over the axial coded categories and subcategories to see if any could be adjusted. For instance, since the interviews 4-6 contained relationships that were reported to be “strained” before surgery, I altered the previous category to now contain a range of ways to describe her relationship from strained to good. By doing this, I am hoping to ensure that every experience is included in the findings, but also, relaying them in a condensed way that is easily reportable. I am also aware that these categories and subcategories are also going to change as the project progresses. For instance, I plan on looking over the axial coding material and condensing it even a bit more from the list I currently have. Especially after receiving feedback from Lee, this is on my plans of things to do.
After finishing axial coding for the interviews, I provided Lee with all of the material from interviews 4-6.

**July 24:** Per Lee’s suggestion, I emailed my committee members to make sure that the amount of time participants had after surgery was a bit longer than proposed. Rather than 6 months to a year, the list I have includes available participants 1 year to 3 years out of surgery. All but Stephanie responded that this was okay and to expect these kinds of changes. In fact, David said that being flexible is a part of conducting research.

**July 25:** Picked up Lee’s feedback from interviews 4-6. From his point of view, I am on the right track! So, today I reviewed over the axial coding material thus far, and compared it to all of the open coding material from ALL interviews conducted thus far. While most of the categories and subcategories remain, others were adjusted in an effort to increase the flow, and better represent the open coded themes and ideas.

**July 26:** Called several people on the list and was able to conduct the 7th interview. This interview took a little bit longer than the average because she mentioned an aspect of her relationship that I wanted to make sure I explored. I talk more about this interview in my reflexive journal, regarding what components I probed and what exactly we talked about.

**July 27:** Transcribed and open coded 7th interview.

**July 31:** Called several people on my list and was fortunate to conducted #8 and #9 interviews.

**August 1:** Transcribed and open coded #8 and #9 interviews.

**August 2:** Completed axial coding for interviews #7-9 and handed to Lee for feedback and review. Feel very confident in findings so far because the categories and subcategories are reinforcing themselves in the data and in the continuing data I am gathering.

**August 2:** Conducted interview #10.

**August 3:** Transcribed, open and axial coded #10, since it is probably the last one that will be completed.

**August 3-7:** Devised a model of the axial coding to help me move on to the next stage of coding of gathering a core category and story in selective coding. First, I drew the model with representations of squares and arrows, helping me to organize my thoughts regarding the variety of experiences endured in my patient reports. In order to make sure all experiences were represented, I had to see them all physically in front of me. Next, this model (before and after surgery) helped me create a table. Based on previous research, many grounded theorists represent categories and subcategories in table format. Thus, I took my picture and translated it into table form.

Visual tables and models also helped me conceptualize my thoughts regarding a core category and story. The core category was a relatively obvious few statement summary of all of the participant reports. What I tried to do for this was think to myself….what is the main
organization keeping all of these women’s reports linked together. Or another way I thought about it was, ‘regardless of the unique experiences gathered by participants, what is one or two statements that is totally representative of all of the participant experiences.’ Thus, I took a more general stance on the organization of the core category by stating that all the women experienced some type of biological, psychological, or social experience before and after bariatric surgery. Another common thread linking all participant experiences together was the fact that every one of them reported having a positive marriage after surgery. This occurred regardless of their pre-surgery marital status. I thought these two statements succinctly represented all of the women’s experiences.

The visual tables and models also brought categories and subcategories together, which provided me with the tools to summarize the table in paragraph form. This was a bit challenging, however. Trying to include all open and axial coding experiences in a few paragraphs was difficult. However, after completing this process, I feel that it really does a good thorough job in identifying a variety of patient experiences. Overall, I examined the models that I made and just explained in sentences what I saw in the models. For instance, all women described their marriage as positive after surgery. Arrows from this category explaining why these women explained their marriage as positive are displayed in the model (i.e. communication, time spent together, sex/intimacy, affection, change in spouses, change in patient, and other changes supporting positive marriage). This was a relatively simple way to organize a sentence explaining this.

I plan on continuing to revise this core story, going back to the data, calling the participants to get a final check, and getting recommendations and feedback from my triangulated investigator and my peer debriefer. All of this will help it flow and appropriately succinct all patient voices together.

August 8: Completed the first draft of the core category or selective coding. Today, I meet with Lee to go over this. Awaiting his feedback until further action is taken.

August 9: I called 4 participants tonight to complete the final end product check with them. During this process, I read them the final core story and asked them to provide any feedback or constructive criticism. So far, all of the women are supportive to the final story. Many of them said that the story is a perfect representation of their experiences. One woman said that she felt that I was “talking just about her.” When I asked if I was missing something in the story, everyone said that I got everything and was missing nothing. This made me feel pretty satisfied with the core story.

August 10: Tonight, I was able to get a hold of 3 more participants for the final end check. I received similar feedback tonight as last night in that many of the women were supportive of the final story. However, two things occurred that made me make some edits to the final core story. First, in the conversations last night and tonight, many of the women spoke about their decision to undergo surgery and the level of support they received from their husband. All of the women stated that they did not receive initial support from their husband. Only after the women provided their husband with information, research, or proof that she really wanted to have the surgery, the men finally supported them. Once husbands realized this, the women reported that they had 100% support from them. Since this emerged during this final end product, I felt it essential to
include it as a subcategory in the decision making category and felt it necessary to explain it further in the core story.

From these conversations with women during the final end product check, I was also explained the level of importance for patients undergoing bariatric surgery for themselves. Specifically, two women provided me with feedback to make it more clear that they think it is essential for patients to undergo bariatric surgery for themselves. As a result, I edited the first paragraph in the core story to better represent these participant experiences.

**August 11:** Spoke with last 3 participants and received 100% support for the core story.

**August 12-15:** Since I received support from participants and am waiting to receive final feedback from Lee and my peer debriefer, I felt it was appropriate to begin writing the results section for my paper. As I did this, some edits were made to the categories, subcategories, and final core story. Specifically, names of certain categories were altered to better represent the patient experiences. For instance, the category of ‘other changes supporting positive marriage’ was changed to ‘other factors supporting marital stability or improvement before and after bariatric surgery’. While this was a small change in wording, I felt that the latter version of the category was a better representation of the subcategories that explained this category. Other minor changes similar to this were done throughout the naming of categories and subcategories.

**August 15:** Received supportive feedback from Lee regarding the development of the core story. As a result, I can continue writing the Results section.
Figure Caption

Figure 1. Categories and subcategories explaining female perceptions of various marital components before bariatric surgery.
Marriage as strained, fine, or good

**Communication**
- Strained
  - Patients inability to freely express herself due to lack of self-esteem
- Good
- Limited

**Time Spent Together**
- Limited
- Satisfied

**Sex/Intimacy**
- Limited
  - Patients sexual inhibitions related to body image
  - Older husband matched sedentary lifestyle
- Non Issue
- Limited

**Affection**
- Limited
  - Husbands lack of desire (1)
- Excellent

**Decision Making**
- Her responsibility
  - Through non-verbal and verbal ways
  - Regardless of husbands initial reluctance
- Health
- Quality of life

**Sex/Intimacy**
- Patients inability to freely express herself due to lack of self-esteem
- Reported as main reason why overcame challenges post-op
- Quantity and quality limited by weight
- Like sedentary activities

**Affection**
- Non-sexual marriage
- Medical illness not related to BS
- Longevity of marriage

**Decision Making**
- Her responsibility
- Health
- Quality of life

**Communication**
- Strained
  - Patients inability to freely express herself due to lack of self-esteem
  - Husband liked outdoor activities
- Good
- Limited
  - Socially inhibited
  - Husband matched sedentary lifestyle
- Limited
- Satisfied
Figure 2. Categories and subcategories explaining female perceptions of various marital components after bariatric surgery.
Marriage as Positive

- Communication
  - Improved
    - Wife’s increase in self esteem and assertiveness
    - Wife’s increase in self esteem and assertiveness

- Time Spent Together
  - Increased in quality and quantity
    - Increase in quality and quantity
      - Non-sexual marriage

- Sex/Intimacy
  - No change
    - Increase in quality and quantity
      - Was always affectionate

- Affection
  - No change
    - Fathers increase in desire
    - Husband’s increase in nonverbal and verbal modes
    - Increased in jealousy
    - Increase in jealousy
    - Brain/body disconnect
    - More attention paid to wife
    - Emotional component of food

- Change in Spouse
  - No change
    - More supportive
    - Shared spirituality

- Change in Patient
  - More supportive

- Other factors promoting marital improvement
  - Shared spirituality
  - Career/educational gains
  - Pre and post couples therapy

Shared spirituality
Career/educational gains
Pre and post couples therapy