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COUPLES AND WEIGHT LOSS SURGERY: EXPERIENCING SUCCESS

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COUPLES AND WEIGHT LOSS SURGERY: EXPERIENCING SUCCESS

DISSERTATION

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the College of Agriculture, Food and Environment at the University of Kentucky

By
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2017

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ABSTRACT OF DISSERTATION

COUPLES AND WEIGHT LOSS SURGERY: EXPERIENCING SUCCESS

Bariatric surgery, also known as weight loss surgery (WLS) is an intervention for individuals who are suffering from obesity and weight-related health complications which often accompany being 100 pounds or more overweight (Smith et al., 2011). Even though bariatric surgery has been shown to be a life-saving and life-enhancing operation, efforts to seek out surgery options, qualify and prepare for the procedure, recover from surgery, and then adapt new routines to support surgery are challenging not only for the patient, but also for the people with whom the patient spends the most time—their romantic partners (Applegate & Friedman, 2008; Bylund, Benzein, & Carina, 2013; Moore & Cooper, 2016; Sarwer, Dilkis, & West-Smith, 2011).

This dissertation was a means to explore relational, food, and WLS success experiences that take place within couples when at least one person has had bariatric surgery. Comparisons between life before, during, and after WLS were discussed with focused attention given to relationship dynamics and daily food routines (Bocchieri, Meana, & Fisher, 2002). The couple’s definition of WLS success and the means by which they have been successful were launching points for more in-depth conversation. Data was generated through 2 interviews per couple (n = 11) with patients who met selection criteria for the study—committed long-term relationship and of the same residence for at least the past 5 years with at least 1 person having been successful with WLS. Success was defined by the WLS patient, however they had to be at least 2 years post-WLS, the critical time period where postoperative weight regain has been shown to occur, in order to participate (Magro et al., 2008; Ogden, Avenell, & Ellis, 2011; Pories et al., 2016). A thematic analysis with multiple rounds of coding was conducted after data saturation was met and couples indicated their agreeableness with results through a short, follow-up survey which also functioned as a form of member-checking.

Overall, couples’ relationship dynamics were characterized as secure and WLS gave them another way to give support, engage in teamwork, and ultimately become closer. Patients and spouses explained that they loved each other unconditionally, no matter what the patient weighed, and this had been the reality for their entire relationship. Thus, security was the theme for relationship dynamics with support, teamwork, and closer as subthemes. Spouses expressed their desire to help the WLS patient when it came to being open to change and then making necessary modifications in habits and lifestyle. The commitment to change happened before WLS and a mind-shift happened after WLS that enabled both people to adjust their thinking, consistently evaluate their routines, and continue to change their behaviors. As a result, commit and mind-shift were the themes and subsequent changes (diet, exercise, and mindsets) were the subthemes. A secure relationship and commitment to making “better choices” assisted the patient in experiencing WLS success and this meant that their spouse experienced success, too; “it’s our success together.” The theme for WLS success was follow-through and subthemes were results, comfort, happy, and freedom. Hope was also a by-product of success and it was the grand-theme of this study.

KEYWORDS: WLS Success, Relationship Dynamics, Qualitative
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12-04-2017
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COUPLES AND WEIGHT LOSS SURGERY: EXPERIENCING SUCCESS

By

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Dr. Nathan D. Wood
Director of Dissertation

Dr. Hyungsoo Kim
Director of Graduate Studies

(12-04-2017)
This dissertation is dedicated to the couples who bravely sought weight loss surgery and generously shared their stories with me. May we all forge ahead compassionately and well-equipped in supporting families who are seeking to fight obesity, gain new freedom, and achieve life-long success.
ACKNOWLEDGEMENTS

The following dissertation would not have been possible without the love and encouragement I received in my own battle against obesity from my parents, Wayne and Diane, and my closest, life-long friends—Sara, Christy, Amy, Ingrid, and Lana.

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During my first semester of doctoral work, I had to learn quickly how to make conceptual connections between scholars and make decisions about the trajectory of my own research career and for that, I will forever be grateful to Dr. Beth Goldstein who taught me how to read. Thank you, Dr. Goldstein, for mentoring me in qualitative methods since 2012, serving faithfully on my committee, and for being so steady!

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Chapter 1: Introduction

Body mass index (BMI) is a standard by which obesity is calculated through the use of a formula utilizing weight and height measurements; specially, weight in kilograms divided by height in meters squared (BMI = kg/m2) (Bray, 1978). A BMI of 30 or greater is indicative of obesity, 35 or greater is loosely defined as morbid obesity, a BMI of 40 or greater (approximately 100 pounds overweight or 50% above ideal body weight) is referred to as severe obesity, and a BMI of 50 or greater is known as “superobesity” (Biron et al., 2004; Bray, 1992; Smith, Schauer, & Nguyen, 2011). The Centers for Disease Control and Prevention (CDC) have been mapping obesity rates in the United States since 1985 when close to 20% of adults were overweight or obese. Obesity rates more than doubled and extreme obesity—BMIs greater than 40, quadrupled for adults in the United States from 1986-2000 (Sturm, 2003). Reports from 2013 indicate that one in three U.S. adults is obese (Ogden, Carroll, Kit, & Flegal, 2014).

The 1991 consensus conference for the National Institutes of Health (NIH) recognized bariatric surgery as an effective means for treating severe obesity—BMI of 40 or greater. According to Smith and colleagues (2011), weight loss surgery (WLS), also known as obesity surgery or bariatric surgery, “is widely accepted as the only known effective treatment for severe obesity” and it “is currently the best-established and most successful method for sustained weight loss in the morbidly obese” (p. 1010). Bariatric surgery was first introduced in the 1950s and “involves surgical manipulation of the gastrointestinal tract to induce long-term weight loss” (Smith et al., 2011, p. 1010). It has grown in popularity along with surgical, procedural, and technological advancements (Salameh, 2006).
Qualifying for bariatric surgery is an extensive process which will be discussed in greater detail later. Individuals seeking bariatric surgery are encouraged to have social support before, during, and after surgery to assist with surgery readiness, recovery, and adjustment (Applegate & Friedman, 2008; Meana & Ricciardi, 2008). Patients who are in committed relationships might be invited to bring their spouses or significant others to surgery seminars and preoperative appointments. The literature on WLS and marital relationships started in the 1980s, but it has been sparse and disjointed over the years (Canetti, Berry, & Elizur, 2009; Hafner & Rogers, 1990; Porter & Wampler, 2000; Rand, Kuldau, & Robbins, 1982; Pories et al., 2016). Results have varied in extremes ranging from WLS being linked to marital disruption and divorce or igniting marital intimacy and improving sexuality (Pories, et al., 2016; Porter & Wampler, 2000). Furthermore, marital satisfaction, stability, and quality have typically been assessed using just the patient’s perspective. This is problematic in that the spouse’s perspective is not included because it further perpetuates the idea that bariatric surgery impacts the patient only and it excludes half of the couple.

Ferriby and colleagues (2015) conducted a narrative review of couples and WLS literature since 1990 and found that only two empirical studies assessed spouses of bariatric surgery patients (Camp, Zervos, Goode, & Rosemurgy, 1996; Hafner & Rogers, 1990). Recently, couples were interviewed to describe what the experience of WLS was like for them (Pories et al., 2016). Given this dearth of research and the consistent rise of obesity and WLS in the US, it is necessary to investigate the phenomenon of weight loss through bariatric surgery from a family sciences perspective. Exploring romantic relationship dynamics throughout the bariatric surgery experience, changes in household
dynamics and recreation which accompany dietary restrictions, and the ways in which couples define WLS success will be the three focus areas for this dissertation. The following is a review of the WLS literature in conjunction with obesity trends, qualifying for WLS and predictors of WLS outcomes, rationale for investigating romantic relationships, dietary changes, and caregiving expressions before, during, and after surgery, and a plan for how research inquires will be answered through the use of qualitative methodology.

**Obesity**

According to the World Health Organization (WHO), worldwide obesity rates nearly doubled from 1980-2008. Many nations, both developed and developing, are battling obesity (Yen, Chen, & Eastwood, 2009). Obesity was declared a national epidemic in 2000 by the Centers for Disease Control and Prevention (CDC) and in 2001 United States Surgeon General David Satcher predicted that obesity-related deaths would surpass tobacco-related deaths if rates of obesity continued to escalate. Raising public awareness of the dangers of obesity, associated health risk factors, and means to reduce weight through diet and exercise have not been effective ways for decreasing national obesity rates given that reports from 2013 indicated that more than 33% of adults and 17% of children in the United States are obese (Ogden, Carroll, Kit, & Flegal, 2014).

Obesity categories of morbid, severe, and super as described by Bray (1978/1992) are often used interchangeably with classes of obesity (see Table 1). The NIH, National Heart, Lung, & Blood Institute, and the U.S. Department of Health and Human Services endorse another means of classifying obesity based on BMI as it relates to potential disease risks more likely to occur within a given range; Overweight (increased-risk), BMI
25.0-29.9, Class I (low-risk) obesity, BMI 30.0-34.9, Class II (moderate-risk) obesity, BMI 35.0-39.9, and Class III (high-risk) obesity, BMI greater than 40. Extreme obesity is a term that is used to indicate a BMI of 35 or higher and it “affects nearly every organ system and many aspects of the human experience” (Belle et al., 2007, p. 124). Whitlock and colleagues (2009) found that with a BMI of 40 to 45 life expectancy decreased by 8 to 10 years. Biron and colleagues (2004) explained that “the level at which obesity is called a disease is when BMI is greater than or equal to 40 or 35 if already accompanied by co-morbidities” (p. 160).

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<tr>
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<th>Bray’s categories</th>
<th>WHO classes</th>
<th>American Society for Metabolic and Bariatric Surgery (ASMBS)</th>
<th>WLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>25.0-29.9</td>
<td>Overweight</td>
<td>Overweight</td>
<td>Overweight</td>
<td>No</td>
</tr>
<tr>
<td>30-34.9</td>
<td>Obesity</td>
<td>Class I obesity</td>
<td>Class I, obesity</td>
<td>No, but up for discussion</td>
</tr>
<tr>
<td>35.0-39.9</td>
<td>Morbid obesity</td>
<td>Class II obesity</td>
<td>Class II, serious obesity</td>
<td>Yes, with a comorbidity</td>
</tr>
<tr>
<td>40 or greater</td>
<td>Severe obesity</td>
<td>Class III obesity</td>
<td>Class III, severe obesity</td>
<td>Yes</td>
</tr>
<tr>
<td>50 or greater</td>
<td>Super obesity</td>
<td>-----</td>
<td>-----</td>
<td>Yes</td>
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*Note: Adolescents and the elderly are given special consideration with WLS. Surgical safety concerns for adolescents have received some study (Varela, Hinojosa, & Nguyen, 2007). Amongst elderly patients, the benefits of surgery might not override the risks of surgery (Tariq & Chand, 2011).*
Following pressure from the medical community to claim a position and in conjunction with a preponderance of evidence as to the devastating health consequences and potential for disability or early death caused by morbid obesity, the American Medical Association (AMA) determined obesity to be a disease on June 18, 2013. Morton (2014b) explained that with this new declaration, health care providers and insurers, both private and public, would soon be responsible for covering medical weight loss services such as non-surgical weight loss programs and weight loss surgery (WLS). Terranova, Busetto, Vestri, and Zappa (2012) found that it is more cost-effective to cover WLS in the short-term than it is to treat weight-related comorbidities in the long-term, which also encourages healthcare insurers to cover WLS. The Affordable Care Act (ACA) in conjunction with the establishment of the first Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP), Morton (2014a) contends, will provide Medicare recipients who qualify for WLS an opportunity for surgical treatment of their obesity. However, WLS coverage is decided upon at a state rather than a federal level.

**Bariatric Surgery**

Bariatric surgery is an obesity intervention consisting of multiple types of procedures focused on rerouting the intestinal tract, decreasing the stomach volume, or restricting the amount of food that can pass through the end of the esophagus which attaches to the stomach (Salameh, 2006; Smith, Schauer, & Nguyen, 2011). Advances in medicine over the past six decades such as surgical stapling, laparoscopy (allowing for surgery to be a closed procedure rather than open, results in a shorter stay recovering in the hospital), and the Food and Drug Administration (FDA) approved banding devices
along with the establishment of the American Society of Metabolic and Bariatric Surgery (ASMBS) in 1983 have helped to establish and legitimize the branch of surgical weight loss as a viable option for the scholarship and treatment of obesity (Alley, Fenton, Harnisch, Tapper, Pfluke, & Peterson, 2012; Linton & James, 2009; Salameh, 2006; Smith et al., 2011). The creation of the MBSAQIP, an accrediting body that unites the ASMBS and the American College of Surgeons established in 2012, has criteria for practice required of surgical weight loss programs in order to receive distinction as a Center of Excellence (COE) thus increasing dissemination of evidenced-based standards such as having a multidisciplinary treatment team. “The accreditation process has been proven to save lives, lower complications, increase access, and decrease costs” (Morton, 2014a, p. 377).

Belle and colleagues (2007) explained that “bariatric surgical procedures that restrict stomach size or lead to altered absorption of nutrients are increasingly being performed to treat extreme obesity” (p. 117). This increase in bariatric surgeries began to occur most rapidly in the early 1990s when gastric bypass was first performed laparoscopically, a much safer alternative to what was once an open procedure which required days of hospitalization and a very large abdominal incision (Buchwald & Buchwald, 2002; Salameh, 2006; Smith et al., 2011; Tichansky, Madan, Ternovits, Fain, & Kitabchi, 2007). In 1995, fewer than 20,000 bariatric procedures were performed in the United States (Belle et al., 2007). Current estimates of bariatric surgery numbers, provided by the ASMBS, are 158,000 (in 2011), 173,000 (in 2012), 179,000 (in 2013), 193,000 (in 2014), 196,000 (in 2015), and 216,000 (in 2016). Tichansky and colleagues (2007) stated, “The growth of bariatric surgery has been remarkable” (p. 181). Smith and
colleagues (2011) deduced “because of the epidemic of obesity and development of the laparoscopic approach, bariatric procedures have increased exponentially in the past decade and are now among the more commonly performed gastrointestinal operations” (p. 1009).

Christou and colleagues (2004) conducted a 2-cohort study which compared health outcomes of individuals who received bariatric surgery (treatment group, n = 1035) with those who had not had surgery (control group, n = 5746). The groups were matched on age, gender, morbid obesity, and duration of follow-up over a span of 5 years. Findings indicated that “the mortality rate in the bariatric surgery cohort was 0.68% compared with 6.17% for controls” (Christou et al., 2004, p. 419). Research which indicates the positive and negative aspects of bariatric surgery as well as studies comparing short-term and long-term benefits of postoperative functioning are continuing to be generated at a rate similar to the burgeoning development of specific types of bariatric procedures (Alley et al., 2012; Benotti & Forse, 1995; Langer et al., 2005; Suter, Giusti, Heraief, Zysset, & Calmes, 2003). Changes in surgery are well-documented beginning in the 1950s when the first bariatric surgery was performed (Smith et al., 2011). Since then, procedures have continued to be perfected with advancements in technology and the obesity epidemic serving as catalysts for these changes to occur (Belle et al., 2007; Buchwald & Buchwald, 2002; Morton, 2014a). Bariatric specific training for doctors, nurses, registered dietitians, and behavioral therapists such as psychologists, social workers, and counselors have grown in availability. Best practices with regards to Centers of Excellence accreditation standards have also been a means for
field advancement and uniting weight-loss surgery professionals in the multidisciplinary treatment of obesity.

**Types of Procedures**

Today, there are multiple bariatric procedures from which to choose allowing surgeons and patients collaborative decision-making on the type of bariatric surgery that is best for the patient’s physiology and lifestyle (Alley et al., 2012; Smith et al., 2011). “Currently performed bariatric operations are either restrictive, limiting the amount of food ingested; malabsorptive, limiting the amount of nutrient absorbed; or a combination of both” (Salameh, 2006, p. 194). Improvement in the field has resulted in better understanding of how bariatric surgery works. More thorough information is provided to patients on what to eat, when to eat, and how to eat both before and after surgery in order to reduce discomfort, hospital readmission, dehydration, and vomiting or dumping-syndrome—a common side effect of bariatric surgery if the wrong type of food or amount is consumed too quickly (Morton, 2014a; Fujioka, 2005). The history of bariatric surgery is one of consistent change, which mirrors the continual increase in worldwide obesity trends.

The first bariatric surgery, the jejunoileal bypass (JIB), was performed in 1953 by a team from the University of Minnesota (Kremen, Linner, & Nelson, 1954; Linton & Shin, 2009). The JIB underwent several revisions and continued to be adjusted until a safer version, the biliopancreatic diversion (BPD), was developed in Italy (Scopinaro, Gianetta, Pandolfo et al., 1976). The BPD, modified over a decade later in Canada and the United States to the duodenal switch (DS), is still performed today (Buchwald & Buchwald, 2002). Hess and Hess (1998) later combined the BPD and duodenal switch
with some success, however Marceau and colleagues (2007) reported better outcomes and higher patient satisfaction with the DS.

Another type of bariatric surgery, the gastric bypass procedure, was introduced by Mason in 1967 (Mason & Ito, 1967). Mason eventually created the vertical banded gastroplasty (VBG) in 1982 as a means to prevent the stomach from stretching (Mason, 1982). After various modifications and techniques were applied to the gastric bypass procedure, most noteworthy being surgical staples, the Roux-en-Y technique, and the advent of laparoscopy, the laparoscopic Roux-en-Y gastric bypass (RYGB) was performed in 1994 (Wittgrove, Clark, & Tremblay, 1994). It was established as the “gold standard” for bariatric surgery in the late nineties and it has maintained that status ever since (Buchwald & Buchwald, 2002; Smith et al., 2011; Suter et al., 2003).

Laparoscopic adjustable gastric banding was added to the WLS options in 1993 and was preferred by patients who wanted a minimally invasive, reversible procedure (Salameh, 2006; Smith et al., 2011). The gastric band is essentially a silicone ring that is filled with a saline solution and is surgically placed right above the opening to the stomach. After surgery, patients routinely go to the doctor to have their bands adjusted. Saline is injected into the band through a port in the abdomen, thus tightening the ring and restricting the amount of food that passes through the esophagus. Band adjustments are recommended to occur once every six weeks or every two-three months until the expected amount of weight loss is reached (Alley et al., 2012; Smith et al., 2011). However, patient compliance with maintaining band adjustment appointments has been an issue for many patients (Shen, Dugay, Rajaram, Cabrera, Siegel, & Ren, 2004). This procedure has decreased in popularity due to weight-loss failure rates and post-operative
complications such as band slippage and band erosion (Suter, Calmes, Paroz, & Giusti, 2006).

The most recent bariatric operation to undergo extensive studies is the vertical sleeve gastrectomy (SG) or gastric sleeve which is a combination of several bariatric procedures (Aggarwal, Kini, & Herron, 2007; Alley, et al., 2012). This operation is unique in that a large part of the stomach is removed, rather than bypassed, and what remains is a sleeve. The hunger-regulating hormone ghrelin is mainly produced in the fundus, a part of the stomach that is cut out, and therefore many SG patients have had success with satiety (Langer, et al., 2005). In the United States, gastric bypass has been the most popular bariatric procedure for decades until 2013, when the gastric sleeve outnumbered gastric bypass surgeries (ASMBS). In 2015, gastric sleeves accounted for over half (53.8%) of the total of bariatric surgeries in the U.S. Gastric bypass (23.1%) was the second most common operation followed by the gastric-band (5.7%). The intragastric balloon is the latest type of bariatric procedure to receive FDA-approval in 2015, although it was temporarily approved with approval withdrawn in 1992 (Gleysteen, 2016).

Bariatric surgery has continued to be revised in order to reduce surgical complications, discomfort after surgery, dehydration, and severe nutritional malabsorption. Buchwald and Buchwald (2002) argued that “the richness and ingenuity displayed in the evolution of bariatric surgery gives ample testimony to the ever-increasing need for effective obesity management” (p. 714). Comparative studies between procedures continue to be generated and specific techniques associated with each procedure, including the use of robotics, demonstrate the ongoing, exhaustive efforts
for creating the best WLS operation possible for the treatment of obesity and obesity-related illnesses (Buchs et al., 2014; Leyba, Llopis, & Aulestia, 2014).

The Longitudinal Assessment of Bariatric Surgery (LABS), established by the National Institute of Diabetes and Digestive and Kidney Diseases, has facilitated nationwide research in the areas of short-term safety, long-term safety and efficacy, and patient-focused mechanisms for weight change (Belle et al., 2007). Research aimed at increasing WLS success through understanding the metabolic and anatomical ramifications of specific techniques are a key component of discussion amongst surgeons and marker of the history for this field especially in light of revisional bariatric surgery—having a second WLS when weight loss is inadequate, in the presence of weight regain, or for technical (surgical) complications (Buchwald & Buchwald, 2002; Christou, Look, & MacLean, 2006; Coakley et al., 2008; Gumbs, Pomp, Gagner, 2007). However, it has been argued that “as demand for bariatric surgery increases, so too will the need for revisional surgeries” (Lim, Liew, Talbot, Jorgensen, & Loi, 2009, p. 2009).

**WLS: Some Expectations**

Surgical intervention for obesity has proven to be an effective treatment for reduction in weight and other weight-related diseases such as type 2 diabetes mellitus (also known as adult-onset), sleep apnea, coronary artery disease, hypertension, hyperlipidemia, and arthritis at the weight-bearing joints (Smith et al., 2011). Mortality rates associated with surgery have dropped dramatically with the advent of laparoscopic procedures in the 1990s, thus surgery is safer and recovery is shorter in comparison to the earlier bariatric surgery decades which began in the 1950s (Belle et al., 2007; Salameh, 2006). Also, bariatric surgery has become more affordable, it is no longer an out-of-
pocket expense only procedure, and is therefore a more viable option for many suffering with morbid obesity (Morton, 2014b).

Celebrities who have publicly shared their weight loss surgery stories and reality television shows documenting before and after bariatric surgery experiences of individuals in their homes and communities have helped to raise awareness of this type of weight loss intervention. Buchwald and Buchwald (2002) explained that the internet has played a vital role in the dissemination of bariatric surgery knowledge and noted that their patients come for initial consultations already well-informed. Public perceptions of weight-loss surgery were recently assessed and results indicated that within the sample 23.4% of respondents believed that weight-loss surgery was an ineffective obesity intervention and 72% would not recommend surgery. Older respondents were more likely to expect that bariatric surgery would not be effective in treating obesity (Sikorski et al., 2013). The authors urged that communication efforts towards healthcare professionals and the general public continue in making available evidenced-based information about bariatric surgery. Public perceptions of obesity and weight-loss surgery might be a motivation for or against surgery. However, Munoz and colleagues (2007) found that 73% of bariatric patients sought surgery for current medical health problems, thus they expected for surgery to alleviate their weight-related illnesses. Furthermore, Applegate and Friedman (2008) explained that patients and their partners have expectations of how life will change after bariatric surgery in terms of weight loss and body shape.

**From Candidate to Patient: Bariatric Surgery Processes**
Individuals who are considering weight-loss surgery must go through an extensive process in order to qualify for this intervention (Linton & Shin, 2009; Smith et al., 2011). Introduction to these processes usually begins with an informational weight-loss surgery seminar that is conducted by a bariatric surgeon and several members of the bariatric program team such as a bariatric nurse, dietitian, and an office staff with medical billing expertise in weight-loss surgery. Seminar attendees may consist of family members, spouses, or friends who are seeking to learn more about surgery in order to help the potential bariatric patient make a decision about surgery or to show support.

Weight-loss seminars often occur in hospital conference rooms and are open and free to the public. Some bariatric programs will offer online seminars, which detail their program, give information about obesity and the different types of weight-loss surgery the surgeon performs, and list the required tests that must be completed in order to obtain medical clearance for surgery. Tariq and Chand (2011) explained that “presurgical evaluation is multidisciplinary and can be divided into 3 main components: surgical, medical, and psychological” (p. 229). However, there are some necessary requirements for weight-loss surgery, established by an NIH taskforce in 1991, that must be met before one can be considered for bariatric surgery candidacy.

**Medical and Surgical Qualifications**

BMI is the major qualifier for weight-loss surgery (ASMBS). Although a BMI of 30-34.9 is indicative of obesity, this does not meet the current requirement for surgery (NIH). Patients qualify if they have a BMI of 35-39.9 and a weight-related comorbidity such as diabetes, hypertension, or sleep apnea. Having a BMI of 40 or greater is considered severe obesity and therefore meets the qualification and endorsement of the
NIH for surgery. In addition to BMI, unsuccessful attempts at losing weight under medical supervision must be documented, but the length of documentation is predicated by the doctor and/or insurance company and could range between three months to one year (ASMBS). Once BMI and weight-history are considered, a referral from the patient’s primary care physician is made to the surgeon, and after an initial in-office surgical consultation, bariatric candidates go through a series of medical exams in order to establish if they are well enough for surgery. The discretion of the surgeon is utilized when making decisions about the types of tests, screenings, and questionnaires that are necessary for becoming a bariatric surgery candidate. Patients with a history of smoking, significant alcohol use, or other substance abuse problems could be disqualified from having bariatric surgery, but this is decided upon by institution, the bariatric management team, or surgeon (Tariq & Chand, 2011).

Because obesity is a disease which often impacts the respiratory and circulatory systems, doctors perform breathing tests to ensure that the potential candidate will be able to handle anesthesia. A sleep apnea test as well as an electrocardiogram to test the heart are also essential for determining fitness for surgery. Asthma is also a respiratory problem that requires monitoring especially if asthma-induced coughing is more likely to happen when patients are laying down. Patients with severe obesity could have trouble breathing when they are in a prone position, therefore weight reduction prior to surgery might be required in order to decrease the likelihood for a compromised airway in surgery (Alami et al., 2007; Smith et al., 2011). An endoscopy is a common procedure in order to better assess the patient’s anatomy and the appropriateness of the type of bariatric procedure especially when gastric reflux is present. However, Tariq and Chand
along with Gomez and colleagues (2014) debated the necessity of having a routine endoscopy prior to bariatric surgery and argued that the costs were greater than the benefits.

**Psychological Qualifications**

Individuals seeking bariatric surgery are often times required to meet with a surgeon, nurse, dietitian, and mental health clinician before being approved for surgery (Linton & James, 2009). Once again, the multidisciplinary approach is a means to assess if surgery is appropriate for the patient and to confirm that the patient still believes that surgery is their best option having been fully informed about the surgical procedure, potential risks, and necessary postoperative lifestyle changes (Dziurowicz-Kozlowska, Wierzbicki, Lisik, Wasiak, & Kosieradzki, 2006; Salameh, 2006). A psychological evaluation prior to surgery is required by most managed-care systems (Toussi, Fujoka, & Coleman, 2009; Sarwer, 2014). Furthermore, the mental health evaluation is a safeguard for those patients who are believed to have psychosocial limitations that would hinder their postoperative success, although evidenced-based predictions are lacking and debated (Ashton, Favretti, & Segato, 2008; Greenberg et al, 2005; Sarwer, 2014). While there has yet to be an established list of contraindicators for surgery, a survey of mental health professionals who evaluate bariatric surgery candidates indicated that they pay special attention to patients who have severe depression, schizophrenia, or a prior history of substance abuse (Fabricatore, Crerand, Wadden, Sarwer, & Krasucki, 2006).

The role of the mental health professional, considered to be integral to the bariatric team, is to assess the patient’s level of understanding about bariatric surgery and motivation for surgery as an additional means of informed consent (Munoz et al., 2007;
Walfish, Vance, & Fabricatore, 2007). Another function of the preoperative mental health or psychosocial evaluation is to ensure as much as possible that surgery is a good fit for the patient in relation to their cognitive capacity, mental health status, social support, and ability to comply with vital preoperative and postoperative orders (Dziurowicz-Kozlowska et al., 2006; Greenberg et al., 2005). Bariatric surgery is an intensive treatment that initially forces a drastic lifestyle change that can be emotionally stressful (van Hout & van Heck, 2009). Therefore, screening for depression, anxiety, and maladaptive eating behaviors i.e.) binge-eating disorder, night-eating, sweet-eating, emotional eating, or loss of control (LOC), is a safety precaution for the patient (Canetti, Berry, & Elizur, 2009; Dziurowicz-Kozlowska et al., 2006; Livhits et al., 2012; Robinson et al., 2014).

Mahony (2008) stated, “There are no empirically validated psycho-surgical risk factors,” which adds to some of the controversy surrounding the purpose of psychological testing (p. 607). However, it is known that “extreme obesity is accompanied by a substantial psychosocial burden” that ultimately impacts or limits overall quality of life (Kubik, Gill, Laffin, & Karmali, 2013; Sarwer, 2014, p. 389). Exploring the means by which WLS-seeking individuals cope with their obesity is a valuable surgical and psychological preoperative safeguard especially in the presence of binge-eating disorder.

Once the psychological testing is complete, the mental health evaluator recommends surgery, recommends surgery provisionally, or recommends denial of surgery. While it appears that psychologists and other mental health clinicians who are administering these evaluations are essentially WLS gatekeepers, Sogg and Mori (2004) disagree—“instead, psychologists are in the unique position of evaluating behavioral,
psychiatric, and emotional factors that may impact the ultimate success of the procedure” (p. 371). Benotti and Forse (1995) forewarned that “frequent psychological counseling is needed to assist in weight control and adjustment of eating habit” (p. 362). Thus, mental health evaluations prior to surgery also assist in psychological treatment planning should the initial assessment warrant that type of additional intervention. In the case of severe preoperative psychopathology, Kubik and colleagues (2013) demonstrate the necessity of a team-based approach “to maximize mental health gains after surgery” (p. 1).

**Surgery Approval: Final Preoperative Steps**

After having gained medical, surgical, and psychological clearance for bariatric surgery, the patient then becomes a bariatric candidate and begins intensive preparation for preoperative and postoperative life. “The goal of evaluating and counseling a patient on lifestyle choices (diet, physical activity, and behavior modification) is to identify and change those habits that may conflict with long-term weight maintenance after surgically induced weight loss” (Mrad, Stoklossa, & Birch, 2008, p. 570). Some surgical weight-loss programs require bariatric candidates to attend a bariatric surgery support group meeting prior to surgery and they highly recommend staying involved with the support group after surgery (Peacock & Zizzi, 2011; Song, Reinhardt, Buzdon, & Liao, 2008). Song and colleagues (2008) compared gastric bypass patients who attended more than 5 support group meetings with those who attended 5 or less and found that those who attended more than 5 support groups had significantly more weight loss 9-12 months after surgery. Providing bariatric patients with a support group is one of the requirements that must be met in order to earn a Center of Excellence status (Livhits et al., 2012).
More studies should explore the effectiveness of support group participation as a source of long-term WLS aftercare.

Proper diet and moderate physical activity must occur in order for the WLS to work long-term (Dziurowicz-Kozlowska et al., 2006). “Without changes to diet and exercise behaviors, weight losses achieved through surgical procedures may be short lived” (Peacock & Zizzi, 2011, p. 1950). Explanation to patients of surgery being a tool for weight loss or one component of the “multidisciplinary management of severe obesity” reinforce the idea that the treatment of obesity is a lifelong commitment to behavior change (Benotti & Forse, 1995, p. 361; Tariq & Chand, 2011). Therefore, patients know before surgery and then learn personally after surgery that individual postoperative outcomes are contingent upon the intensity with which one pursues and adopts health-enhancing daily habits.

**Bariatric Surgery Outcomes: Multidimensional**

Benefits of weight loss surgery are weight loss, reduction in weight-related comorbidities, increased mobility, and for some patients more energy and a feeling of having a second chance at life with the promise of a healthier future (Bocchieri, Meana, & Fisher, 2002; Natvik, Gjengedal, & Raheim, 2013; Smith et al., 2011). It is logical to conclude that bariatric surgeons would hope that all of their patients would experience these WLS benefits. One of the functions of the extensive weight loss surgery qualification process is to filter out patients who may be predisposed, be it their anatomy, behaviors, or psychological status, to having less than favorable WLS outcomes or could experience major distress living with an altered stomach (Sogg & Mori, 2004). Avoiding
hospital readmission after surgery or an additional bariatric surgery due to weight loss failure or weight regain is highly important (Sarwer, 2014).

Christou and colleagues (2006) found that significant weight regain after gastric bypass for severe obesity was associated with a decrease in patient reported quality of life in their 10 years retrospective study. Additionally, when followed for 10 years, failure rates (defined as a BMI of 35 or greater) of morbidly obese patients \( (n = 172) \) were 20.4\% and 34.9\% of super obese patients \( (n = 100) \). Another indicator of success is patient satisfaction which was found to be low in morbidly obese patients when their final BMI was greater than 35 and in super obese patients when their final BMI was greater than 40 (Biron et al., 2004; Christou et al., 2006).

Successful WLS is often defined as greater than 50% excess weight loss (EWL) which is calculated before surgery based on BMI recommendations (Livhits et al., 2012). While this is a very limited definition, Mrad and colleagues (2008) argue “the most important outcome after bariatric surgery is the long-term sustainability of the surgically induced weight loss” (p. 572). Others contend that “success following bariatric surgery should not only include weight loss and improvement or cure of co-morbid conditions, but also improvements in eating behaviors, psychosocial variables, and quality of life” (van Hout & van Heck, 2009, p. 10). Christou and colleagues (2006) modified Reinhold’s (1982) classification for evaluation of successful weight loss surgery results through including BMI. Outcomes were excellent when BMI was less than 30, good when BMI was 30-35, and failure when BMI was greater than 35, which is indicative of morbid obesity. Biron and colleagues (2004) argued “if the disease (obesity) is still present after surgery and continues to be an indication for further treatment, it is
consequently a non-cure” (p. 160). Thus, the inability to cure the patient’s obesity after surgery would be a failure.

Debate and interest has persisted within the field of bariatric surgery for identifying specific preoperative predictors for successful weight loss outcomes. For example, some evidence suggests that it is very important to assess preoperative eating behaviors in order to further prepare and educate patients for surgery. There is a strong association between postoperative dietary adherence and weight loss, thus modifying problematic eating behaviors prior to surgery would be advantageous for increasing WLS success (Peacock & Zizzi, 2011; Sarwer et al., 2008). Nevertheless, “failure to achieve successful weight loss after surgery is likely multi-factorial and involves provider level (technical factors, preoperative patient education) as well as patient level characteristics” (Livhits et al., 2012, p. 71).

Preoperative and postoperative behaviors have been studied in an attempt to identify actions that will increase WLS success. Robinson, Adler, Stevens, Darcy, Morton, and Safer (2014) summarized the bariatric surgery literature for successful gastric bypass weight loss outcomes into the following five domains: presurgical factors, postsurgical psychosocial factors (as indicative of attending WLS support groups), postsurgical eating patterns, postsurgical physical activity, and follow-up at postsurgical clinic. While these domains are limited to gastric bypass for the purposes of having a homogenous sample, it’s probable that findings would also inform patient care with other types of bariatric procedures with the exception of follow-up at postsurgical clinic. Shen and colleagues (2004) found that postsurgical office visits influenced the amount of weight loss in patients who had a gastric band, but weight loss was not associated with
follow-up clinic visits for patients who had gastric bypass. However, several studies since then have found evidence that suggests follow-up visits after gastric bypass impact postsurgical weight loss (Kim, Madan, & Fenton-Lee, 2014; Pontirolo et al., 2007).


Preoperative Circumstances

Waiting for bariatric surgery is an extensive process and during this time, patients are learning how to prepare for surgery, what will happen on the surgery day, and how best to manage their surgery recovery (i.e. pain, breathing, circulation, hydration, diet, and mobility). Patients work towards preparing for surgery through diet modifications that are recommended by their doctor and dietitian. Changes in diet are meant to assist in preoperative weight loss in order to decrease the likelihood of surgical complications, assess patient compliance, and to practice diet changes as a means to ease the abrupt adjustment that happens after surgery (Tariq & Chand, 2011). It has been speculated that if patients struggle significantly with diet modifications prior to surgery, that this could be problematic after surgery especially in the presence of an eating disorder (Sarwer et al., 2008).

Preoperative weight loss has been suggested as a strong predictor of successful postsurgical weight loss (Livhits et al., 2012). However, Mrad and colleagues (2008) found that preoperative weight loss did not predict successful early weight loss after surgery. They compared patients who had gained weight before surgery, maintained weight, and lost weight with their postoperative weight outcomes at 3 months, 6 months, 1 year, 18 months, and 24 months. Weight status before surgery did not influence postsurgery weight loss for women. However, gaining weight prior to surgery was associated with less weight loss after surgery for men. These findings were limited given the small sample size (n = 146; 23 men and 123 women) and inconsistencies in postoperative follow-up (135 at 3 months versus 38 at 2 years).
Noncompliance with behavioral recommendations after WLS is “pervasive” according to Elkins and colleagues (2005) as they found that the majority of their patients reported noncompliance in at least one area, most commonly lack of exercise and snacking, a year after surgery. Given that some people utilize food as a coping mechanism for stress, there is fear for the patient’s mental and emotional health that taking away their ability to cope with food through surgery, a “forced behavior modification,” could be detrimental to their well-being (Elkins et al., 2005, p. 549). Additionally, speculation has persisted that individuals who were accustomed to eating large amounts of food prior to surgery might struggle with adjusting to the forced restriction of this behavior after surgery.

In the absence of consuming high volumes of calorie dense foods, patients might replace this behavior with something else such as alcohol. This type of “symptom substitution” is lacking in empirical evidence and much of this worry becomes perpetuated by the media and anecdotal information (Sogg, 2007). However, some have argued against preoperative psychological testing because there is no evidence to support screening as a means of predicting postoperative outcomes (Ashton, Favretti, Segato, 2008). “Studies of psychosocial predictors of weight loss have been inconclusive” (Sarwer, Wadden, & Fabricatore, 2005, p. 642). Studies on WLS eating behaviors and psychosocial status are difficult to compare because of methodological problems, which contributes to some of the inconsistencies of findings within the WLS literature and might account for the variation in psychosocial screening requirements among surgery programs and evaluators (Fabricatore et al, 2006; Sarwer et al., 2008).
To date, a standard mental health evaluation or protocol for bariatric surgery is nonexistent although the general consensus among evaluators are to include identification of current lifestyle behaviors, psychological status, and systems of social and caregiving support (Fabricatore et al., 2006; Sogg & Mori, 2004). “Pre-surgery assessments that are currently utilized in GBP (gastric bypass) cast a wide and probably overinclusive net, and make predictions of outcome on a more-or-less subjective basis” (Lanyon & Maxwell, 2007, p. 322). The subjective nature of assessment connects to Ashton and colleagues (2008) claim that preoperative psychological testing is “another form of prejudice.” Even though psychologists and other mental health professionals who assess bariatric patients before they become candidates for surgery have sought to understand predictors for successful surgery, their primary objective is patient safety. Although a challenging, complex endeavor, determining psychological suitability of a patient seeking bariatric surgery is an important and ethical endeavor (Sogg & Mori, 2004).

Prediction efforts for WLS success have been complicated because each patient approaches and responds to surgery differently. There is no way to “know” based on the patient’s history or current health status how surgery will affect them. Additionally, a person’s context for daily living varies in family size, community health, location, and family dynamics which makes for a less than sterile environment to test prediction hypotheses. Selecting the “right” approach and study variables is challenging given the complexity of factors related to WLS and obesity. Nevertheless, two recent studies have isolated some predictor variables that could be utilized in future studies. Findings from a study that compared pre-surgical psychological evaluation items and demographic information with 5 years post-WLS outcomes found that adults who were older
experienced slower weight loss overtime (Marek, Ben-Porath, van Duleman, Ashton, & Heinburg, 2017). Additionally, findings indicated that those with a pre-surgical diagnosis of Binge Eating Disorder predicted higher BMI’s at 5 years post-WLS. This was also the case for scores that indicated emotional and behavioral dysfunction. Kulendran, Borovoi, Purkayastha, Darzi and Vlaev (2017) found that within a group of 45 patients who had WLS, high impulsivity scores, in both personality and behavior, were a significant predictor for less weight loss.

Obesity and surgical intervention are multidimensional. The history of WLS is dynamic and includes the efforts of bariatric surgeons seeking to adapt their methods to increase WLS success and reduce the obesity epidemic. Inconsistent and inconclusive findings for predicting WLS outcomes should be expected given this rapidly changing field, the complexity of the etiology of obesity, and the variability among WLS patients. Nevertheless, it is agreed upon that “psychosocial and behavioral variables play an important role in both the development and treatment of obesity” (Dziurowicz-Kozlowska et al., 2006, p. 196). Lanyon and Maxwell (2007) summarized the WLS literature about pre-surgery predictor variables into the following four general areas: “physical/medical health, psychological health, interpersonal support, and the presence of an eating disorder” (p. 322). Their 273-item interview and 5 psychological assessment instruments showed that individual variables did not contribute to surgical weight loss, but when the variables were tested collectively within the four general areas, all four were more effective at predicting.
Postsurgical Circumstances

Robinson and colleagues (2014) found that patients who reported the highest dietary adherence after gastric bypass surgery had the highest WLS success (92.6%). Of those who attended support groups, success rates for dietary adherence doubled. However, physical activity and postsurgical follow-up were not statistically significant variables for WLS success (e.g., ≥ 50% excess weight loss). These results were generated from patients 6 months after surgery and again at 12 months after surgery. It could be possible that physical activity and postsurgical follow-up have more of an impact on long term weight loss outcomes. Pontiroli and colleagues (2007) found that adherence to scheduled visits were positively related to weight loss at 12, 24, 36, and 48 months post-surgery and that percentage of attendance for follow-up appointments predicted weight loss at 48 months. Canetti, Berry, and Elizur (2009) found that emotional eating and neurotic predisposition (neuroticism, low self-esteem, and fear of intimacy) play a mediating role in quality of life outcomes one year after bariatric surgery. Aarts, Geenen, Gerdes, van de Laar, Brandjes, and Hinnen (2014) found that patients with attachment anxiety (fear of social rejection and abandonment) were less likely to adhere to dietary recommendations 6 months post-surgery and thus they had less weight loss in comparison to participants who did not have attachment anxiety.

These are just a few examples of the topics and areas of research for WLS outcomes. “Studies show great variation in outcomes, and, unfortunately, bariatric surgery does not lead to identical results in every patient” (van Hout & van Heck, 2009, p. 12). Additionally, there is variation between bariatric programs although efforts to have standards of practice and care have shown to improve surgery outcomes (Morton,
Greenberg and colleagues (2005) connect provider factors to patient factors in arguing that “A comprehensive multidisciplinary program that incorporates psychological and behavior change services can be of critical benefit in enhancing compliance, outcomes, and quality of life in WLS patients” (p. 244). Postsurgical weight loss is almost certain after surgery, but this window of rapid weight loss generally closes more quickly if the patient is noncompliant with dietary and behavioral recommendations (Mrad et al., 2008). Thus, surgery is not a stand-alone, “magic pill” treatment of obesity or guarantee for attaining and maintaining 50% or more of expected weight loss, which needs to be reiterated to patients before and after surgery through multidisciplinary care (Madan & Tichansky, 2005).

Elkins and colleagues (2005) explained, “Weight loss is almost completely assured during the first 3 months after the gastric bypass procedure. However, the more long-term outcome can vary a great deal” (p. 546-7). Of the three most commonly performed WLS in the United States, gastric bypass, gastric sleeve, and gastric band, the gastric bypass is the most aggressive surgical intervention and therefore generally yields the largest short-term weight loss (Smith et al., 2011). After WLS, the patient is responsible for adhering to postoperative recommendations. “Because of the importance of compliance with behavioral recommendations for the successful outcome of bariatric surgery, further research is warranted to further clarify the factors that impact long-term outcome and to design interventions to improve compliance” (Elkins et al., 2005, p. 546). Mechanisms that impact weight loss, weight loss maintenance, and weight regain are obvious areas of attention and focus within bariatric surgery intervention and research because the most prominent success outcome of WLS is weight loss.
There are many avenues of research focused on preoperative and postoperative factors that contribute to short-term and long-term WLS success and even the definition of WLS success is up for debate. Obesity is a complex disease; therefore, explanations for WLS outcomes will also be complex and multidimensional. Within a patient’s lifespan, they spend relatively little time preparing for WLS, recovering from WLS, meeting with their surgeon, and working with their bariatric multidisciplinary team. As a result, it would seem more beneficial to explore how WLS patients manage their adjustment to life after surgery and to learn more about the people with whom they spend the most time—their family.
Chapter 2: Family Relationships: Links to WLS Outcomes?

Whether or not surgery will be effectively integrated into postoperative daily living habits of proper nutrition, regular physical activity, maintaining postoperative doctor’s appointments, and attending support groups is difficult to predict before surgery. In the absence of surgical complications which may manifest during or after surgery, patient compliance will either reinforce surgery success or decrease the likelihood of reaching the expected percentage of weight loss or sustaining weight loss (Livhits et al., 2012). Family household members, particularly spouses and intimate partners, have the potential to contribute to the bariatric patient’s experience of surgery through helpful social support, assisting in medical treatment recall, and adjusting their daily habits to include proper nutrition and physical activity.

Social Support

Social support, both received and perceived, is a well-known factor that influences individual behavior modification efforts and adherence to treatment (Ell, 1996). “Social support is health-promoting because it facilitates healthier behaviors” (Uchino, 2006, p. 378). Families are natural sources of social support who are called upon to provide care for sick members especially during a life-threatening medical crisis or intensive intervention that requires an extensive recovery. Additionally, a moderating factor for patient adherence is social support, which DiMatteo (2004) defines in terms of practical, emotional, and unidimensional support.

Westmoreland and Wood (in review) explored spousal support before and shortly after WLS. Participants were interviewed three to six months after surgery and were asked to describe the things their husbands did that were helpful for surgery preparation.
and recovery. Similar to DiMatteo’s (2004) findings, three types of spousal support were described—instrumental, verbal, and relational. Patients explained that their spouses gave instrumental support in the form of transportation for preoperative medical testing when anesthesia was used and also before and after surgery.

Other types of instrumental or tangible support were acknowledged when spouses joined the bariatric patient in making diet and exercise changes, participated in WLS education, and provided high levels of caregiving on the surgery day. Caregiving also occurred once the patient came home as spouses made efforts to assist with pain management, following medical instructions, and domestic chores. Verbal support was experienced when spouses would express directly that they supported the patient or offer words of reassurance, encouragement, and pride in the patient’s progress. Finally, when instrumental and verbal support overlapped, a distinction of relational support was seen through the meaning of the spouse’s actions and words impacting their perceived levels of sharing the WLS journey. A collective sharing, changing, and new sense of loving were found within the marital relationship in such a noticeable way to the patient that they attributed WLS to improving their marriages, self-esteem, and appreciation for their spouses. Spouses were essentially medical and psychological extensions for WLS treatment as they provided physical help similar to nurses, affirmation and approval of the patient’s WLS decision, and an availability for assisting whenever the patient asked for attention.

Given that one of the qualifications for WLS is multiple failed attempts at weight loss, it is logical to conclude that bariatric patients might struggle to maintain their belief that surgery will work for them. This is especially true for obese individuals who have
felt the pain of weight stigma and the judgement that “fat is your fault” (Brun, McCarthy, McKenzie, & McGloin, 2013; Lewis, Thomas, Blood, Castle, Hyde, & Konesaroff, 2011). One of the potential benefits of having social support is that it increases a person’s sense of self-efficacy, the belief that one is capable of making changes. Within the public health literature, self-efficacy (an “intrapersonal resource”) is a key component of the transtheoretical model and social support (an “interpersonal process”) is a means by which individuals are encouraged to make healthy lifestyle choices (Turan et al., 2006, p. 1127; Wu & Chi, 2015). Thus, self-efficacy is enhanced when someone expresses encouragement and belief in a person’s ability to accomplish healthy behavior changes.

Umberson and Montez (2010) explain that “social support refers to the emotionally sustaining qualities of relationships (e.g., a sense that one is loved, cared for, and listened to)” (p. S56). Utilizing this definition of social support points to a critical source of social support—spouses and partners. Social support outside of a romantic partnership is valuable, however spouses have a prime position for offering a deeper level of love, care, and listening because of their relational commitment and ongoing, daily interactions. It is also plausible to contend that adherence to medical treatment is a side effect of relational support and those who are in satisfying martial and committed partner relationships are more likely to have quality social support in making the necessary adjustments for favorable WLS outcomes.

**Memory Recall: Surgery Aftermath**

Bariatric patients are required to meet many expectations before and after surgery, which can be overwhelming when trying to remember and precisely execute postoperative protocol. Checklists, educational materials, insurance requirements,
reminders, seminars, support groups, nutritional counseling, and multiple prescriptions could bombard the patient with information overload especially when the patient is recovering from surgery and under the influence of pain, pain medication, and surgery-related side effects such as fatigue and nausea. Rather than purposeful noncompliance, it could be that the patient simply forgets what they are supposed to do. The intensity with which they are to execute each component of the treatment in order to have the most favorable WLS outcomes may also be a barrier to accurate memory recall in that the level of treatment difficulty could increase forgetfulness.

Madan and Tichansky (2005) created a true/false test about bariatric surgery for patients to take one week before surgery and then again after surgery. They argued that patient education would improve compliance, but their hypothesis was patients would forget key educational components after surgery. Study findings supported their hypothesis and additional information gleaned was that test scores were lowest when tested greater than a year after surgery. In a similar study, Madan, Tichansky, and Taddeucci (2007) asked postoperative patients to list potential bariatric surgery complications. They were investigating to see if patients could recall more serious complications and found that one-third of patients did not list death, injury to the gastrointestinal tract, or a leak.

Memory recall after surgery is not unique to bariatric surgery however, the impact of forgetting recommendations means that bariatric patients are at risk for weight regain if they are unable to remember treatment specific steps for positive WLS outcomes. Depression could also inhibit accurate memory recall and multiple studies have found that obese individuals have higher rates of depression in comparison to non-obese peers.
(Kubik, Gill, Laffin, & Karmali, 2013; Tariq & Chand, 2011). DiMatteo (2004) argued that “Patient depression is strongly related to both social support and patient adherence, and may be a mediator between them” (p. 213). Furthermore, “Surgery is a threatening experience, with multiple stressful components—concerns about one’s physical condition, admission to a hospital, anticipation of painful procedures, worries about survival and recovery, and separation from family” (Kiecolt-Glaser, Page, Marucha, MacCallum, & Glaser, 1998, p. 1209). Because bariatric patients are more susceptible to depression and they are in a state of surgery-related stress, thus more prone to forget medical protocols, spouses and intimate partners could again serve as treatment team extenders who are responsible for remembering and assisting with bariatric surgery aftercare.

**Adjusting Habits at Home**

Sarwer and colleagues (2008) cited a study which found 9% of bypass patients and 25% of band patients failed to maintain at least a 5% reduction in preoperative weight 10 years after surgery explaining that “reasons for these suboptimal outcomes are not well understood” (p. 641). As a result, they sought to investigate predictors of weight loss following bariatric surgery and found that only three variables were statistically significantly associated with weight loss—gender (men), baseline cognitive restraint (measured before surgery), and dietary adherence (reported after surgery when patients returned to eating regular food). Gender and baseline cognitive restraint are not modifiable variables, however dietary adherence after surgery is changeable. Eating behaviors, many of which happen at home, are developed and maintained within the context of family life and interpersonal relationships (Denham, Manooghan, & Schuster,
While home habits related to diet are possible to change, change is difficult because “most people’s food and eating decisions are embedded in family food and eating subsystems and/or intimately connected to significant others” (Gillespie & Johnson-Askew, 2009, p. S-31).

Denham and colleagues (2007) found that within the context of diet-related changes after a diagnosis of type 2 diabetes mellitus, the 7th leading cause of early death and disability as well as a metabolic, weight-related disorder that many WLS patients have prior to surgery, household family members either supported or inhibited dietary changes necessary to managing diabetes (CDC, 2014). Assessment of family support is often a part of the preoperative psychosocial evaluation when qualifying for WLS as household members support, nothing, or sabotage behavior modification efforts of the bariatric patient and planning ahead, especially in the presence of an “intimate sabetour,” assists the patient to seek out support from other sources (Andrews, 1997; Applegate & Friedman, 2008; Sogg & Mori, 2004). Natvik and colleagues (2013) found that “there was a fine line between a relaxed way of enjoying nice food and a relapse into previous eating habits,” which was a point of tension for bariatric patients (n = 8) who gave an in-depth description of life after bariatric surgery (p. 1207). Bocchieri and colleagues (2002) explained that successfully negotiating tensions around WLS life changes could be a possible link to WLS outcomes.

Patient compliance is vital for WLS success and having social support is a crucial component for following through with health-related guidelines. Lanyon and Maxwell (2007) contended that “success after GBP requires major changes in eating behavior and in other aspects of lifestyle, and applicants differ in their ability to sustain these changes”
Having a spouse or partner who is actively engaged in helping the bariatric patient to adjust to restrictions after surgery and then integrate these changes into long-term habits is a form of social support that could be the difference maker for patient compliance and ultimately WLS success. Exploration of the potential difference spousal social support makes with medical compliance and memory recall of treatment guidelines after WLS as well as the couple’s definition of WLS success and other postoperative turning points that maintain the motivation for life-long obesity intervention will be discussion areas for this research endeavor.

**Intimate Partner Relationship Dynamics: A Storehouse of Interconnectedness**

Elkins and colleagues (2005) found that “noncompliance with behavioral recommendations is pervasive following bariatric surgery” (p. 546). Their study included 100 bypass patients who were followed for one year and surveyed 6 and 12 months after surgery. Noncompliance with medical treatment is not particularly unique to bariatric patients, however marriage has been found to be a unique link to health outcomes (Kiecolt-Glaser & Newton, 2001). Marital functioning may enhance or preclude health in that satisfying marriages serve as a buffer to stress and source of social support, but high conflict marriages create distress which ultimately decreases immune functioning and increases the risk for metabolic syndrome (Robles & Kiecolt-Glaser, 2003; Whisman & Uebelacker, 2012; Whitson & El-Sheikh, 2003). “Given that 65% of individuals seeking WLS are married, this is statistically an area of research that has the potential for significant impact for treatment-seeking WLS patients” (Feriby et al., 2015, p. 2441).

One of the seven major areas of assessment in the Boston Interview for WLS is “relationships and support system” (Sogg & Mori, 2004, p. 373). They explain that
spouses may react adversely to drastic weight changes. Additionally, Applegate and Friedman (2008) contend that spouses who were previous “eating buddies” with the bariatric patient might feel a sense of betrayal after WLS because they no longer have this point of connection. However, Pories and colleagues (2016) found WLS to be experienced as a joint journey in that couples \((n = 10)\) expressed a sense of being “in it together.” While the overarching findings were positive, it could be related to the timing of interviews being 3-10 months after surgery, a time that some refer to as the “honeymoon period” because weight loss is rapid which is highly reinforcing (Bocchieri et al., 2002). Conversely, the overarching theme of paradox was found in a study of 12 bypass patients who were 2 to 9 years postoperative (LePage, 2010). In a similar study, the idea of paradox was also found and explored in more depth with 8 patients who were 5 to 7 years out from bariatric surgery. The essential meaning of life after WLS was “totally changed, yet still the same” (Natvik et al., 2013).

While it might be difficult to make inferences between the quality of marriage and WLS outcomes, it is plausible that spouses and partners could be a missing treatment link or a treatment inhibitor for bariatric patients. Ferriby and colleagues (2015) stated, “the spouses and partners of patients may be an important resource that could enable positive behavior changes, better coping, and long-term weight loss and maintenance” (p. 2441). However, spouses being a positive resource may be contingent upon how obesity functions within the partnership. Porter and Wampler (2000) explained that sometimes obesity is both normalized and accepted by the couple or it is a source of contention between the couple. If obesity is not viewed as problematic, the non-operative spouse may not be willing to participate. However, if the spouse is supportive of the decision to
have WLS, they might be more likely to render their support through participating in postoperative lifestyle changes. Collateral weight loss for family members of WLS patients is an area of study that could shed more light on the impact of surgery on spouses and the impact of spouses on surgery, however that has yet to be thoroughly investigated and is beyond the scope of this study. Spousal concordance of lifestyle changes after surgery will be explored as well as the couples’ view of spousal contributions to WLS outcomes, how their relationship dynamics have generated interconnectedness between compliance and self-efficacy, and the role of obesity within the couple’s relationship history.

**Theoretical Considerations**

“Bariatric surgery is truly a multidisciplinary management paradigm with involvement of primary care providers, surgeons, bariatricians (medical physicians with expertise in bariatrics), psychologists, nutritionists, and other health care professionals” (Tariq & Chand, 2011, p. 229). However, this medical model perspective excludes the person who has the potential for playing the most significant role in the management of WLS—the patient’s spouse or intimate partner. The following two theories will provide a justification for including spouses as WLS treatment extenders: family systems theory and the life course perspective.

**Family Systems Theory**

From a family systems perspective, opting for surgery is an individual decision that effects the entire family/system. However, in the United States obesity is socially constructed as an individual choice rather than a combination of genetics, environment, and behaviors (Puhl & Brownell, 2003). Healthcare delivery systems also reinforce the
idea that obesity is an individual issue as they are focused on the patient therefore consideration for the patient’s household members is often lacking or non-existent. As a result, family members may be confused by or unsupportive of the bariatric patient’s decision to have elective surgery, which is especially problematic within marital and long-term committed romantic relationships. Porter and Wampler (2000) explained, “If being overweight is part of the dynamics of the marital system, weight loss challenges the systemic balance” (p. 36). Additionally, obesity may be normalized in a family and one member deciding to change their obesity-status through WLS could be perceived as unnecessary, disloyal to the family, or judgmental towards large bodies. McDaniel, Doherty, and Hepworth (2014) contend that “any discussion about health-related behavior is a discussion about family, because it is in families that we first learn health habits that we then practice throughout our lives” (p. 130).

Family systems theory is foundational for understanding family processes, routines, relational alliances within the system, and communication (Becvar & Becvar, 2005; White & Klein, 2002). It is a rich, descriptive theory that is interdisciplinary with multiple contributing pioneers originating from biology, anthropology, sociology, psychology, psychiatry, and linguistics (Becvar & Becvar, 2005). Family systems theory is not a traditional theory or model with one specific originator. This theory is comprised of multiple branches of science with specific assumptions or principles that guide how the theorist views family functioning and individual pathology. Ludwig von Bertalanffy was a biologist who first described general systems theory (GST) and how parts of a system, be it a machine or organism, work collectively towards one goal—maintaining
homeostasis through feedback loops. His scholarship on systems theory was applied to family in the 1960s (White & Klein, 2002).

Murray Bowen, a psychiatrist who was trained within a Freudian, psychoanalytic philosophy, applied GST to his work with hospitalized patients who had schizophrenia (Bowen, 1978). It was then that he noticed how families organized around a diagnosis in response to symptoms. These reactions were intensely emotional and he started to notice patterns around emotions and symptoms whereby these family relationships “maintained” the schizophrenic episodes. Bowen was moved in his understanding of schizophrenia as the behavioral data that was generated during this time of investigation pointed to the idea that the patient’s diagnosis was not simply an intrapsychic disorder, but rather symptoms were often fueled by the family’s anxiety or inability to “differentiate” themselves from the patient.

Salvador Minuchin also noticed similar family patterns around anorexia and looked at ways to disrupt family functioning between members who were enmeshed with one another to the point that the eating disorder became their family identity and way of relating (Minuchin, 1974). Minuchin is credited with structural family therapy as he explored pathology, family functioning, and alliances between subsystems—marital, parental, and sibling.

The individual who lives within a family is a member of a social system to which he must adapt…The individual responds to stresses in other parts of the system, to which he adapts; and he may contribute significantly to stressing other members of the system. The individual can be approached as a subsystem, or part, of the system, but the whole must be taken into account (Minuchin, 1974, p. 9).
Be it a psychiatric disorder, an eating disorder, an addiction, or in this current project, obesity, families work to maintain homeostasis even if the status quo is problematic for overall health. Bowen’s explanation of intergenerational influences on individual behavior is an important consideration for family daily living habits and Minuchin’s description of family interactions signaling disengagement or enmeshment are important to consider in the context of caregiving and support when a family member has a life-changing surgery. While many family systems are able to readjust during a crisis, there is a tendency to move back to old patterns after the crisis has ended. Moving from short-term adjustment during a disruption into long-term commitment for having a “new normal,” thus moving from adaptation to integration, is a huge leap for individuals and families. The drive for the system to default into old routines is especially salient when attempting to exchange unhealthy behaviors for a healthy lifestyle given that resistance to change is likely inevitable and change is challenging for some and scary for others.

Previous research within WLS literature have utilized family systems theory as a basis for their understanding and sensitivity to the complexity of the individual having WLS and how this impacts the family (Ferriby et al., 2015; Pories et al., 2016; Porter & Wampler, 2000). Additionally, how the family impacts the WLS patient has also been explored within a family system theory framework (Bylund, et al., 2013). Findings from these studies are neither exhaustive nor conclusive, they are a launching point for future research and a means by which to move beyond a medical model, individual patient focus. Collaborative healthcare such as medical family therapy has been a promising perspective for treating the whole family rather than the identified patient (McDaniel,
Within the context of the marital subsystem, couple-based interventions for medical problems are in the early stages of development and evaluation (Baucom, Porter, Kirby, & Hudepohl, 2012).

Surgical weight loss is a personal journey that impacts the people closest to the bariatric patient; for spouses, the impact is uniquely relational and not well understood. “Living with obesity and undergoing the life-changing procedure of gastric bypass surgery (GBP) requires a lifelong commitment from both the individual and the family as a whole” (Bylund et al., 2013, p. 152). If the family is unable to make this commitment, then the chances are that the system will revert back to homeostasis and in the case of the WLS patient loosing and maintaining their weight loss, another family member might “decide” to take their place. Applegate and Friedman (2008) noted that spouses of WLS patients either became involved in healthy lifestyle changes or they consumed the calories and gained the pounds that the patient had prior to surgery. Health gained by the bariatric patient with health compromised in their spouse has not been established within the literature although studies of health and lifestyle concordance for married couples has been well documented (Kiecolt-Glaser & Newton, 2001).

Lastly, it is very important to view the family as a system because the family has a history and a future with the bariatric patient. How they respond to the patient’s present situation or WLS crisis will generate either positive or negative momentum for the patient receiving the most benefit from a very painful, time-consuming, psychologically taxing operation. “Family is a promising entry point for improving bariatric surgery outcomes, because it is a mechanism that has been linked to physical activity, quality dietary intake, and weight” (Vidot, Prado, De La Cruz-Munoz, Cuesta, Spadolam &
Messiah, 2015, p. 457). Spouses have a great opportunity to model supportive behaviors and acceptance to the whole system.

**Life Course Perspective**

Given the complexity of obesity and WLS, Elder’s Life Course Perspective (LCP) provides a more thorough theoretical basis from which to glean understanding about interactions between the individual, their relationships, and choices within a human development context. The phenomenon of obesity is more easily understood utilizing life course principles as adults do not arrive at weight-related behaviors such as food choices and physical activity alone. Life course trajectories begin in childhood and create momentum for healthy or unhealthy lifestyles. Consequently, lessons learned in families are particularly salient in adulthood. Previous research has made a strong argument for utilizing life course principles within food-decision making practices and behaviors especially with the principles of human agency and time and place (Gillespie & Johnson-Askew, 2009; Sobal & Bisogni, 2009; Wethington & Johnson-Askew, 2009). For the purposes of this study, the following life course principles were used (Elder, Johnson, & Crosnoe, 2004):


2. “The Principle of Linked Lives: Lives are lived interdependently and socio-historical influences are expressed through this network of shared relationships” (p. 13).
The timing of making the decision to have WLS is important to consider as it helps to illumine the motivation for surgery and is an important point to consider when exploring behavior changes. “Except for those who live alone, the food we eat, the air we breathe, the recreational activities we perform, the neighborhood we live in, and the type of medical care we receive are all influenced by relationships within the household” (Wilson, 2002, p. 1158). This ecological perspective submits that health does not happen in isolation and within the family, individual choices have relational consequences.

The notion of linked lives highlights the power of interpersonal relationships for influencing personal choices. Couples merge their family of origin histories, past experiences, and shared lifestyle behaviors, thus linking their lives for the present and future. Couplehood is one of the strongest relationships of choice and is closely related to health outcomes (Kiecolt-Glaser & Newton, 2001). Marital distress has been shown to decrease health quality as this kind of stress is potent, but the consequences for poor marital quality differed based on age (Miller, Hollist, Olsen, & Law, 2013). Marital conflict is even more closely related to poor health outcomes such as increases in metabolic syndrome risks and decreases in immune functioning (Robles & Kiecolt-Glaser, 2003; Whisman & Uebelacker, 2012; Whitson & El-Sheikh, 2003). Markey, Markey, and Birch (2001) found that diet behaviors were similar between couples, however when there were reports of marital discord wives were more likely to have unhealthy eating behaviors.

Nevertheless, marriage remains an overall protective health factor as it provides a form of available social support, affection, accountability, and motivation for making better lifestyle choices (Lewis, McBride, Pollak, Puelo, Butterfield, & Emmons, 2006;
Meyler, Stimpson, & Peek, 2007; Umberson & Montez, 2010). In newly married couples, Bove, Sobal, and Rauschenbach (2003) found that one-year after marriage their diets had converged. Schafer and Keith (1990) discovered that couples were matched in weight during young and late adulthood which also yields evidence in shared lifestyle factors as influencing weight and hence health. Therefore, the linked lives of couples and decisions about weight and weight management should be discussed during bariatric surgery consultations and aftercare.

**Martial Subsystem and Linked Lives: Prevention of Weight Regain**

A potential “dark side” of bariatric surgery is weight regain. Surgery is seen as a last resort for weight loss and if it does not work, then the patient is left with their weight-related diseases, obesity, and limited options for obesity treatment. The threat of weight regain is real and has been substantiated in the literature (Christou et al., 2006; Magro et al., 2008; Sjostrom et al., 2004). For example, Odom and colleagues (2010) surveyed patients with a mean follow-up of 28 months after bariatric surgery. They found the following: “Of the 203 subjects who were included in the analysis, 160 (79%) reported weight regain. Of those who reported weight regain, 30 (15%) regained ≥ 15% of total weight lost, which we defined as “significant weight regain”” (p. 350). If psychological health is compromised prior to surgery, then surgical failure could potentially increase feelings of shame and depression.

“The bodily change after bariatric surgery is not entirely forced, meaning that the plasticity of the digestive tract eventually allows eating larger quantities and variations of food. Therefore, changing eating practices is considered critical for maintaining weight loss” (Sarwer, Dilks, & West-Smith, 2011, p. 1700). The marital subsystem and the
synchronous nature of couples’ matching and linking their lifestyles has great potential to be a weight regain prevention resource. Rather than seeking to predict who will be successful with bariatric surgery, it could be more beneficial to explore who is currently successful with bariatric surgery beyond the time period where weight regain is more likely to begin—18-24 months after surgery (Magro et al., 2008).
Chapter 3: Research Design

Mendenhall and Ballard (2014) explained, “Family characteristics and support have a significant impact on patients’ emotional coping, adherence to treatment regimens, and appropriate health behaviors” (p. 291). WLS is an intensive weight loss intervention that can be challenging for patients especially if they utilized food as a means to cope emotionally. There are also ridged guidelines to follow before, during, and after WLS. Patient’s health behaviors are often scrutinized prior to WLS, yet families either help to maintain problematic behaviors, they remain indifferent to changes, or they can choose to be supportive. As a result of the complex ways families help or hinder health-related lifestyles changes, three predominant research questions guided the direction of interview processes and data analyses; 1) Couple’s perceptions of their relationship dynamics as these relate to WLS, 2) Household changes to support the WLS patient, and 3) Definitions of WLS success.

For the purposes of this study, the following definition of patient adherence was utilized: “Adherence (or compliance) involves patient acceptance and follow-through with treatment recommendations” (DiMatteo, 2004, p. 207). Adherence to treatment regimens and ways intimate partners shape these behaviors are of particular interest to this researcher in addition to how the couple defines WLS success. As a result, WLS studies using grounded theory or phenomenology as a means to investigate lived experiences with bariatric surgery were vital for shaping the design of this study.

Family and Couples

Bylund and colleagues (2013) conducted family interviews with female and male patients (n = 9; 3 months post-surgery) and a family member in order to describe family
functioning before and after gastric bypass surgery. This was a new type of interview
design applied to WLS research in that previous studies were focused on the patient’s
perspective only (Bocchieri et al., 2002; LePage, 2010; Porter & Wampler, 2000). They
conducted two interviews per family and used a Gadamer-inspired hermeneutic method, a
phenomenological type of research design and analysis. They found that families were
experiencing a transition after surgery, which related to the following three themes:
“living in ambiguous family relationships, rewriting family patterns, and strengthening
family cohesion” (p. 154). Rewriting family patterns, which is of importance for this
study, was explained as “Families tried to introduce communal meals and started to
reflect on their own health habits” (p. 156). Surgery altering one person then marking a
change in the family pattern to the point of eliciting self-reflection in other members gets
at the core of family systems theory and family processes. Thus, an individual
experience with adjustment becomes a group effort or co-journey.

Pories and colleagues (2016) interviewed couples in order to glean an
understanding of the impact of bariatric surgery on the couple’s relationship. Their
design included purposeful sampling of female and male bariatric patients who were 3-10
months post-surgery and were in a committed relationship for at least one year. They
applied Colaizzi’s procedural steps of analysis for a phenomenological study in order to
glean a lived experience perspective from the couples (n = 10) and explore central
themes generated from an extensive review and analysis of the data. Their five themes
were increased relational intimacy, surgery as a “joint journey,” improvement in
emotional health, diet changes, and significant weight loss with less health problems and
renewed energy. Their study made an important contribution to the WLS literature because couples, rather than individuals, were interviewed.

In the same year, Moore and Cooper (2016) utilized phenomenology and family systems theory to explore intimate relationship processes after bariatric surgery. They interviewed men ($n = 20$; 6-30 months post-surgery), which was another important step in rounding the literature because the male bariatric patient perspective had not been solely investigated. The following three themes emerged from their study: “unintended consequences, intimacy as bittersweet, and inconsistent social support” (p. 500). The investigators noted the uniqueness of their themes in that experiences were not completely positive, neutral, or negative. These non-directional findings make sense when compared with previous life after bariatric surgery qualitative studies.

**Tension and Paradox**

Using a grounded theory approach, Bocchieri’s and colleagues (2002) found “rebirth and transformation” as the core process of life after bypass surgery. Female and male patients were interviewed or in focus groups ($n = 31$; 6 months to 9 years post-surgery). Tension-generating experiences were described repeatedly with self-processing, social relationships, and skills acquisition scenarios related to weight loss as patients found WLS to be a distinctive personal landmark in life before versus after surgery. These tensions were further explored by LePage (2010) in a phenomenological study (utilizing M. van Manen’s approach) with an initial interview and a follow-up interview from individuals, both women and men ($n = 12$; 2-9 years post-surgery). The following four themes emerged from LePage’s (2010) study: surgery as renewed hope, finding balance, filling the void, and transformation of self-image. From these four
themes, there was an overarching theme of paradox. Natvik and colleagues (2013)
extended this paradox finding through Giorgi’s method of phenomenological work and a
lifeworld approach. The essential meaning of life after WLS from female and male
patients ($n = 8$; 5-7 years post-surgery) was “totally changed, yet still the same.”

Ogden, Clement, and Aylwin (2006) sought to explore the impact of obesity
surgery on patients ($n = 15$; 4 months to 33 months post-surgery) using an interpretive
phenomenological analysis (IPA, Smith, 1996). They found a “paradox of control” in
that patients reasoned to have surgery because it was a means to give up their out-of-
control eating behaviors for a procedure that would subsequently control them. Clark and
colleagues (2014) surveyed WLS patients ($n = 361$; 81.1% females; 7.7 mean years since
surgery) and compared weight loss between the following four romantic relationship
groups: no relationship, new relationship, lost relationship, and maintainers. They found
and then surmised that “Long-term weight loss maintenance and relationship satisfaction
were strongly associated, suggesting that relationship quality may be important for
maintaining healthy behaviors related to weight maintenance” (p. 671-2). In light of
these findings of tension, paradox, and eating behaviors associated with life after bariatric
surgery, consideration for how these personal experiences spill over into relationship
processes and dynamics will be utilized within the semi-structured interviews for this
study.

**Context**

Tennessee is the target state for this study given that it has been within the top 10
most overweight and obese states since 1985 and today it is the 9th largest state in the
country with more than 30% of obese adults (CDC, 2015). Currently, it is 1 of 3 states
with the lowest level of physical activity as reported in the CDC’s State Indicator Report on Physical Activity, 2014 (Behavioral Risk Factor Surveillance System, 2011). The CDC’s Diabetes Report Card for 2012 indicates that Tennessee ranks 5\textsuperscript{th} in the highest number of reported cases of adults with diabetes and it is the highest ranked state for persons indicating that they have been told they have prediabetes (BRFSS and National Diabetes Surveillance System, 2010). The CDC’s State Indicator Report on Fruits and Vegetables for 2013 showed that 46.3\% of adults in Tennessee claimed that they consumed fruits less than 1 time per day and 25.4\% consumed vegetables less than 1 time daily (BRFSS, 2011). This places Tennessee as the 5\textsuperscript{th} worst state for fruits consumption and the 12\textsuperscript{th} worst state for vegetables consumption.

With Tennessee’s obesity, diabetes, physical inactivity, and poor nutrition status, in addition to state mandated medical and surgical weight loss interventions, it is an appropriate place from which to research postoperative success in bariatric patients. Obesity and diabetes are commonly associated with bariatric surgery candidates while having a balanced diet and regular physical activity are behaviors most closely associated with postoperative WLS guidelines for optimal weight loss. Thus, the state supports and maintains obesity, but is weak in regards to endorsing healthy weight lifestyles.

Tennessee is a geographically diverse state divided into West (Memphis), Middle (Nashville), South (Chattanooga), and East (Knoxville).

Bariatric patients and their spouses were recruited for this study by several key informants who are working in the field of WLS in Tennessee. A recruitment packet (see Appendix A) was given to these key informants and items included the following: a letter to the bariatric coordinator, a letter to patients (potential participants), a colorful
recruitment flyer with the researcher’s picture and the same study information that was included in the recruitment letter, and one consent form to show that the study had been approved by the researcher’s university. All items were approved by the Institutional Review Board (IRB) at the University of Kentucky (protocol #16-1024).

The search for preoperative WLS predictors and seeking to understand the key associations between behaviors and WLS outcomes, has been ongoing and inconclusive (Moore & Cooper, 2016). Vidot and colleagues (2015) have argued for a family-based approach to weight loss surgery given that “bariatric surgery must be partnered with postoperative lifestyle modifications for enduring weight loss and related health effects to be fully appreciated” (p. 452). They explain that lifestyle modification with healthy diet and regular physical activity would support positive WLS outcomes and possibly improve overall health for the non-operative family members. The focus of improving WLS treatment and intervention is also a means to prevent weight regain, which has been found to occur around 18-24 months after surgery (Magro et al., 2008). However, the WLS literature is lacking in consensus on what defines success and how patient’s experience life after surgery in the time that they are most likely going to stop losing weight or start to regain it (Magro et al., 2008; Mrad et al., 2008; Ogden et al., 2011). Therefore, a patient’s in-depth perspective of how they have been successful after surgery would be very beneficial for understanding this phenomenon.

Husserl’s phenomenology, a philosophy for appraising the experiences and social meaning of specific lived experiences, launched the understanding and subsequent design of phenomenological methods for several theorists such as Colaizzi and Giorgi (Porter, 1998). Porter (1998) explained that while there are multiple methodological frameworks
from which to choose in phenomenology, it is the researcher who is inspired by these philosophies that will subsequently provide research design guidance. This study will apply M. van Manen’s (1990) six activities of phenomenological work as described in the following by LePage (2010):

Turning to a phenomenon that seriously interests us and commits us to the world, investigating the experience as we live it rather than as we conceptualize it, reflecting on the essential themes that characterize the phenomenon, describing the phenomenon through the art of writing and rewriting, maintaining a strong and oriented pedagogical relation to the phenomenon, and balancing the research context by considering parts and whole (p. 58).

The researcher has been interested in the way that weight loss surgery impacts family relationships a family member started a bariatric program within their community in 2005. She has struggled with morbid obesity several times during adulthood and has a personal experience of losing large amounts of weight and then regaining it. She entered the field of bariatrics as an interested doctoral student in 2012 and conducted her own research through a qualitative study of middle-aged, married, female WLS patients who had surgery 3-6 months prior to being interviewed to discuss their experience of surgery-related spousal support (Westmoreland & Wood, in review). She is committed to helping grow the WLS literature through qualitative inquiry with patients as a means to assist bariatric candidates and their families in surgery preparation. Additionally, she would like to be involved in surgical aftercare through contributing her knowledge as a Licensed Marriage and Family Therapist especially within the realm of support groups. This
dissertation will be a means to inform bariatric professionals about marital and household dynamics that are experienced by the patient as contributing to their WLS success.

**Method**

**Sample**

Using purposeful sampling, the researcher interviewed 11 couples who met the following inclusion criteria: married or partnered and residing within the same household for the past 5 years, at least 1 person was 2 years or more post-WLS, and the bariatric patient identifies as having been successful with surgery. Participants were recruited from several key informants such as bariatric coordinators, administrators, nurses, WLS support group leaders, and surgeons who were practicing in Tennessee.

The majority of participants were middle-aged (43-59 years old), partners were (41-62 years old), and all couples had children (14-37 years old). Additionally, 6 couples had children living at home and 3 couples had grandchildren. Length of partnership ranged from 7-38 years and time since WLS ranged from 2-13 years. Of the 11 WLS patients, 4 had spouses who experienced improvements in their personal health such as significant weight loss (50 pounds), 4 had spouses who also underwent WLS (2 weeks to 2 years later), and 3 had spouses who were described as healthy throughout the entirety of their partnership. All participants were white, non-Hispanic and 10 couples were heterosexual with 1 lesbian couple (see Table 2 below for demographics). Of the 11 WLS patients, 1 spouse was against WLS and 2 were initially very hesitant to surgery. A unique feature of this sample is that 3 participants and 1 spouse (who also had WLS) are in the medical profession and work directly with WLS patients and 1 participant was a former nurse who had some contact with WLS patients.
### Table 2

**Sample Demographics**

<table>
<thead>
<tr>
<th>Couple</th>
<th>Age range at interview</th>
<th>Years together</th>
<th>Age at WLS</th>
<th>WLS procedure</th>
<th>Years since surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maria* and Moe</td>
<td>55-70</td>
<td>25</td>
<td>53</td>
<td>Sleeve</td>
<td>2</td>
</tr>
<tr>
<td>Stan* and Star*</td>
<td>40-54</td>
<td>18.5</td>
<td>42 and 35</td>
<td>GBP; GBP</td>
<td>12</td>
</tr>
<tr>
<td>Harriet* and Henry</td>
<td>40-54</td>
<td>18</td>
<td>41</td>
<td>Sleeve</td>
<td>2.5</td>
</tr>
<tr>
<td>Tammy* and Tommy*</td>
<td>40-54</td>
<td>19</td>
<td>46 and 43</td>
<td>Sleeve to GBP; Sleeve</td>
<td>5 and 3</td>
</tr>
<tr>
<td>Beth* and Buck</td>
<td>55-70</td>
<td>38</td>
<td>54</td>
<td>Band</td>
<td>5.5</td>
</tr>
<tr>
<td>Rosa* and Rico</td>
<td>40-54</td>
<td>13</td>
<td>43</td>
<td>Sleeve</td>
<td>2.5</td>
</tr>
<tr>
<td>Gaby* and Xena*</td>
<td>55-70</td>
<td>7</td>
<td>54 and 56</td>
<td>Sleeve; Sleeve</td>
<td>2 and 1</td>
</tr>
<tr>
<td>Elan* and Emmy</td>
<td>40-54</td>
<td>18</td>
<td>30</td>
<td>Switch</td>
<td>13</td>
</tr>
<tr>
<td>Jean* and Jim</td>
<td>40-54</td>
<td>24</td>
<td>38</td>
<td>Sleeve</td>
<td>9</td>
</tr>
<tr>
<td>Miles* and Milly*</td>
<td>55-70 &amp; 40-54</td>
<td>18</td>
<td>55 and 45</td>
<td>Sleeve; Sleeve</td>
<td>3 and 1</td>
</tr>
<tr>
<td>Callie* and Smokey</td>
<td>40-54</td>
<td>12</td>
<td>41</td>
<td>Sleeve; Sleeve</td>
<td>6</td>
</tr>
</tbody>
</table>

*Note:* WLS patients are denoted with a *. Surgery information was included for spouses/partners who became patients. However, the first patient was the person who met inclusion criteria for this study. Years together indicated years married or partnered and did not include dating. This researcher utilized the following condensed versions of WLS procedures: Sleeve (sleeve gastrectomy), GBP (gastric by-pass), Band (gastric band), and Switch (duodenal switch).
Procedure

The aim of this study was to learn from the couple’s perspective about WLS success in the timeframe after surgery where surgery generally stops working as evidenced by ceased weight loss or weight gain. Interviews occurred at an agreed upon time and location between the researcher and participating couple. All interviews were digitally audio-recorded and transcribed shortly after the interview took place. According to van Manen (1997), “phenomenology does not only explain what something is; it also explores what this phenomenon can mean by offering possible interpretations” (p. 360). As a result, couples were interviewed twice and these two interviews occurred within one to two weeks of each other, similar to Bylund and colleagues’ (2013) and LePage’s (2010) interview schedule.

Demographic data was received over the phone when scheduling the interviews. The main question of this study was “How do you, as a couple, define WLS success and what about your partnership has helped you to be successful?” The researcher asked questions related to the patient and their intimate partner as well as inquires related to changes in household habits that connected to WLS success. For the purposes of this study, the terms spouse and partner will be used interchangeably to denote the person within whom the patient has lived with and been in a committed romantic relationship. Because obesity and surgical weight loss are complex phenomena, it was vital to interview couples who had lived through these experiences as lives are linked and witnessed by each other. Both members of the couple have an individual and collective experience over time that contributes to the story of living with obesity and through WLS. Couples are also historians for each other and they help one another remember.
Patients and their partners were interviewed together twice for a total of 11 couples (22 individuals) and 22 interviews. It was important to interview couples more than once for several reasons. First, the researcher was seeking depth of specific information and therefore it was necessary to talk to couples more than one time. Couples were discussing their history, interactions with each other and the healthcare system, and their perceptions of self, one another, and WLS. These layers needed to be richly explored and could not be captured in a stand-alone interview (Hans & Coleman, 2009). Second, the researcher did a previous pilot study with female patients who were 3-6 months post WLS as a means to ascertain what patients believed their spouses did to support their WLS efforts. This study revealed that going for a second interview would have yielded more information and given the researcher a chance to ask follow-up questions related to the first interview. Lastly, allowing for a small break, one to two weeks, between the initial and final interview gave the researcher and couple time to ponder information gleaned from the initial interview and then a chance to respond to or further investigate these insights in the final interview. Many of the couples explained that they had never been asked WLS-related questions about their relationship and definitions of WLS success. Likewise, the researcher was impacted by the couple’s responses to questions. Meeting with couples twice in a short amount of time also gave the researcher a better picture of the couple and the second interview was more of a collaborative process given that the researcher and couple had already met and were somewhat familiar with each other. Couples were invited to ask questions of the researcher in both interviews and they did so more in the follow-up interview in comparison to the initial interview.
The following questions were posed in the first semi-structured interview, which lasted approximately one hour:

1) How did the decision to have bariatric surgery come about? Probe: What was the turning point that led to this decision?

2) Other than weight loss, what was your goal for surgery? Probe: How has your goal changed? As a couple, what are you doing to achieve this goal?

3) As a couple, what were some conversations you had about eating behaviors and family meals before surgery and after surgery? Probe: Describe a typical family meal.

4) What were the recommendations that the surgeon gave you on how to be successful with WLS? Probe: How do you define WLS success and what has made you successful?

5) How has WLS been a “joint journey?” Probe: What keeps you motivated to continue?

6) What advice would you give to the spouse of a WLS candidate?

7) As a couple, what has been your biggest WLS challenge? Probe: What has been the easiest part?

8) What has produced the most tension in life after WLS? Probe: What or who has helped you to navigate these tensions?

9) How have the ways you supported your spouse prior to surgery changed after surgery?

10) What advice were you given about supportive family behaviors and bariatric surgery?
The following questions were asked in a follow-up interview, which lasted approximately one hour:

1) Now that you’ve had some time to think about our previous conversation, how would you define WLS success? Probe: What does it mean to be successful?

2) In what ways does your spouse contribute to being successful? Probe: Is there anything more or less that you would like them to do?

3) As a couple, describe eating out prior to surgery and after surgery.

4) Some bariatric patients describe that WLS has strengthened, changed, or challenged their intimate partner relationships. In what ways has WLS impacted your relationship?

5) Having lived through bariatric surgery, would you do it again? Why or why not?

6) As a couple, what was the most challenging period or event after WLS and how did you manage it? Probe: How has this challenge persisted or changed over time?

7) What types of activities do you enjoy doing together and has that changed since surgery?

Questioned differed between the two interviews as a means to ascertain more information about the couple’s relationship, household changes, and definitions of WLS success. Some questions were repeated between the two interviews so that the couple would have more than one chance to respond and expand upon their initial answer.

Depth of experience was a major goal of the study therefore multiple questions were utilized in the interview in order to facilitate reflection and exercise cognitive and communicative processes. Questions posed to couples were in an open-ended format and
information from the initial interview was utilized in the follow-up interview when appropriate.

**Analysis**

Interview transcripts were analyzed by the researcher and two others analysts in order to determine when data saturation had been reached. This means that once there was no new information coming from the data or there was redundancy in relation to the phenomenon, interviews ceased (Sandelowski, 1995). Guest, Bunce, and Johnson (2006) conducted an extensive study of sixty in-depth interviews as a means to establish a guideline for establishing data saturation and found that this occurred within the first twelve interviews. Francis and colleagues (2010) also sought to find an adequate sample size for data saturation and concluded that this could be met with eight to twelve interviews. However, Moore and Cooper (2016) found informational redundancy in their study of men who had bariatric surgery after twenty interviews. In another obesity-related, phenomenological study, data saturation was arrived at by the ninth interview; however, the researchers decided to interview everyone who volunteered for the study for a total of eleven interviews (Grant & Boersma, 2005).

Saturation for this study was reached at the eleventh interview and once saturation was determined, several layers of systematic coding occurred—open, axial, and selective. Data was “shrunk” into themes and another peer review was incorporated to establish credibility and validity of findings (Coffey & Atkinson, 1996; Creswell, 2013). These codes were developed with consideration of the principles of timing and linked lives as described by Elder and colleagues (2003) in the Life Course Perspective and also Family Systems Theory. Utilizing theory as a source for analyzing and interpreting your data is
known as “theory/perspective triangulation” (Patton, 1999). The researcher kept a detailed record of themes that emerged from the data in addition to a memo of what she expected to find as a way to “interrogate the relationship” between what she hoped to learn from participants and what she actually encountered (Horvat, 2013, p. 109). A field log was utilized to demonstrate trustworthiness and function as another layer of data triangulation for cross-data validity checks (Patton, 1999).

Finally, the researcher incorporated two kinds of member checking to increase the credibility of findings--transcripts and review of study findings (Bocchieri et al., 2002; Pories et al., 2016). Participants were emailed a copy of their transcripts within a month of participating. From the interview data, multiple themes and subthemes emerged and these results were sent to the participants through a Qualtrics survey the researcher created (see Appendix B). The survey link was emailed to participants who were asked to rate how closely these findings related to their personal experiences. Couples were invited to review the results of the study and provide feedback. They were informed about this stage of the research process during both the initial and final interviews and all verbally agreed to participate. Of the 11 couples who were interviewed, 10 completed the member-checking survey. The researcher asked for couples to complete the survey together and they agreed to this stipulation. However, there is no way to know with certainty whether 10 individuals completed the survey or 10 couples.

The researcher selected two forms of member-checking because she wanted couples to respond to the research findings and the process of being interviewed. It was important for the researcher to showcase her findings to couples and ask them if their experience matched study findings and if they believed they were represented accurately.
At the end of the initial and final interview, the researcher explained the purpose of member checking as one of the ways to establish credibility of the data and validity of findings. Also, the researcher asked open-ended questions at the end of the survey about the interview process to assess how participants experienced being interviewed and ways that the interviewer could improve upon her presence in future studies. From the member-checking process, the researcher learned that couples had a positive experience being interviewed and they learned new things about each other. Additionally, patients were grateful for the opportunity to have WLS, thankful for a chance to reflect on their WLS journey, and glad that they were able to meet the researcher, contribute to her study, and share their story.

The researcher was pleased to have such a high response rate from the member check survey. She was also surprised by the information gleaned from this process. For example, one patient explained that she had no idea her WLS had such a profound impact on her partner’s decision to have WLS. Another patient explained that she became more aware of her spouse’s involvement in her WLS. Not only did the couples confirm and respond to study results, but they also encouraged the researcher to continue her work and help other people.

**Positionality**

Within qualitative research, the researcher is the instrument and thus efforts are made to “bracket” their personal experiences out of the study, which could influence or hinder the trustworthiness of data generation or analysis (Creswell, 2013). This is somewhat challenging given that interest in a field of study is often times generated from personal experience. Instead of bracketing, LeVasseur (2003) suggests having intentional
curiosity. In a recent qualitative WLS study, the primary investigator explained that he had experienced obesity and considered weight loss treatments, both surgical and nonsurgical (Moore & Cooper, 2016). This researcher has experienced morbid obesity multiple times and also contemplated weight loss surgery. She is currently at a normal weight, as designated by BMI standards, for the first time since she was a teenager. Her position within the research is one of empathy, compassion, and curiosity.

The researcher is from Tennessee and therefore has firsthand knowledge of the types of weight loss interventions available within the state. She has met several bariatric professionals from Tennessee at state and national conference on WLS. She is also a mental health clinician who has sought continuing education in the field of bariatric assessment and behavioral intervention. As a Licensed Marriage and Family Therapist (LMFT), she is skilled at recognizing couple’s relationship dynamics and documenting their story without evaluating it in order to have a “thick” description (Geertz, 1973).

**Researcher as Instrument**

It has been suggested that the researcher fundamentally impacts the data generation and analysis process (Coffey & Atkinson, 1996; Creswell, 2013; Glesne, 2006; Reissman, 2008). An important piece of documenting and understanding this dynamic is reflexive writing, which also assists in ongoing awareness of the researcher’s position or standpoint (Gilgun, 2012). The researcher used field notes to document her experiences at bariatric seminars, WLS support groups, when meeting with bariatric professionals, prior to participant interviews, following participant interviews, when listening to the interviews, and when discussing emerging themes while triangulating the data with other coders. Bloor and Wood (2006) define reflexivity as “awareness of the
self in a situation of action and of the role of the self in the situation” (p. 145). The researcher maintained awareness of her personal weight loss and weight gain experiences throughout the study as these informed her understanding of the phenomena under investigation.

**Contribution of Knowledge**

“Despite compelling evidence documenting reductions in health-related comorbidities and improved quality of life post-WLS, little is known about the significant relationships that patients have, namely how romantic relationships influence patient outcomes or change throughout the surgery process” (Ferriby et al., 2015, p. 2436). This study will address the aforementioned gap in the literature of couples’ WLS experiences. It is also unique in that the couples will define WLS success rather than the bariatric professionals who do not have an agreed upon measure for determining success (Biron et al., 2004; Christou et al., 2006; Mrad et al., 2008; Livhits et al., 2011).

Finally, the researcher is hopeful that this study will help to expand the small, but growing qualitative literature of individual, couple, and family perspectives on weight loss surgery. Specifically, this researcher has been inspired by the grounded theory approach to experiencing weight loss surgery that Bocchieri and colleagues (2002) utilized. Their core process of rebirth and transformation after surgery in addition to tension-generating moments offered great insight into the overall experience of life after WLS. Furthermore, the researcher was encouraged to see how tension-generating moments were also recognized in two subsequent qualitative studies and vetted out with greater attention to that of paradox (LePage, 2010) and “totally changed, yet still the same” (Natvik et al., 2013).
In regards to the experience of WLS for married and partnered individuals, the researcher was challenged to add to this specific literature given Ferriby and colleagues (2015) review of empirical studies since 1990. The researcher found one qualitative study of couples and WLS 3-6 months post-surgery from Pories and colleagues (2016) and one qualitative study of male WLS patients who were 6 to 31 months post-surgery (Moore & Copper, 2016). Both of these studies were phenomenological and consisted of one interview. This study will add another perspective and more depth to the WLS and romantic relationships phenomenology literature in that couples were interviewed twice on the basis of discussing their WLS success and were at least 2 years post-surgery (time since surgery ranged from 2-13 years).
Chapter 4: Results

Three predominant research questions guided the direction of interview processes and data analyses; 1) Couple’s perceptions of their relationship dynamics as these relate to WLS, 2) Household changes to support the WLS patient, and 3) Definitions of WLS success. One overarching, or grand theme of hope, crystalized as the data was generated, analyzed, and triangulated. Subsequent themes connected to each research question were as follows; 1) Security, 2) Commit and Mind-shift, and 3) Follow-through. A richer description of the grand theme and themes related to the research questions can be found below.

Hope

Experiencing WLS success gave couples a “hope of healthiness” [Henry, spouse]. Hope was demonstrated in the ways that WLS patients and their spouses frequently compared life before WLS and life after. Many utilized metaphors such as the “train” or “rollercoaster” that they were on before WLS that was headed towards disease, compromised health, and early death versus being on the “right train” or “right path” now filled with energy, fun, more togetherness, and freedom. Extending these metaphors, WLS was the means by which couples described getting off the rollercoaster, changing trains, or venturing onto a better path. “I think we got on a train track going the wrong way, then we got to the station, we changed to this one” [Smokey, spouse.]. His wife agreed with this and explained, “It’s (WLS) kind of put us on, from that train track that was leading to the wrong spot, to now we’re on that train track we feel like is going to the right spot” [Callie, patient].
Before WLS, life was burdensome and weight loss was a consistent feedback loop of defeat. Directly prior to WLS, life was miserable or headed towards misery and in a downward health spiral. After WLS, life was perceived as happier and weight loss was a steady feedback loop of achievement. Furthermore, most couples experienced a change in their relationship that they attributed to WLS such as feeling closer, stronger, and better. The overall experience of WLS was that surgery was a turning point for hope as well as a tool for making a life-long change for a higher quality of health and well-being.

**Before WLS: The Burden of Obesity**

The life before WLS, especially in terms of limited mobility and lack of energy, served as a motivator to have surgery given that obesity impacted patients on an individual, couple, and family level. The individual experience of obesity hurt their health and also their level of participation with their spouse, children, and grandchildren, thus a relational experience. Reflecting on these “wasted years” before WLS, a source of regret and sadness for some, was possible when juxtaposed with all the opportunities to engage in life now uninhibited by obesity and the fear that they could become sicker or die sooner. Major weight loss and feeling better was described to a patient by his surgeon prior to WLS as “Laying down a weight that you were never meant to carry” [Tommy, spouse turned patient]. In response to this the patient said, “And that’s more than just the physical weight, that’s the emotional burden and the stress and the discomfort of carrying that weight.”

Obesity was frustrating, depressing, aggravating, and for some a very sad time in their lives. Looking at before WLS pictures of a past self was met with mixed reactions as some were reminded of deep sadness or were embarrassed, some celebrated how far
they had come in reaching their WLS goals, some wanted to remember, and others wanted to forget. “That’s the hardest part is you want to forget, but you can’t forget because if you do forget, where’s your motivation? I think you lose the motivation if you forget” [Callie, patient]. At most interviews a before WLS picture was mentioned or shown to the researcher either with pride or as a trusting disclosure. One participant took a pre-WLS picture out of her billfold and when asked how much she looked at it gave the following response:

Quite often. And I show it to very few people, I don’t hardly show it to anybody that I’m not friends with or you know, you’re of course doing a study so I want you to know, but yeah, it’s something that I don’t share that with everybody cause not everybody needs to know that about me [Callie, patient].

Many patients and spouses described the patient’s condition before WLS as miserable, tired, and lacking motivation to move and fully participate in family life. Their self-esteem and self-perceptions were inhibited. “I felt a big sense of failure that I had allowed myself to get to that point (unable to lose weight) and that I couldn’t extricate myself from that by myself” [Milly, spouse turned patient]. Recognizing the role their choices played in weight gain added to their misery. “I found myself here and no one means to get into that kind of shape and getting yourself out of that shape is—it’s hard, it’s just a very difficult thing” [Jean, patient]. Others mentioned that obesity limited their parenting, recreational abilities, movement, communication, and intimacy, both physically and emotionally. “When you get to the point where your kids are getting the best of you because you just can’t physically move fast enough anymore, it’s serious” [Star, patient and spouse].
Obesity was life-threatening and scary as many reflected on their poor health and having watched a parent die early from cardiovascular disease or diabetes, conditions made worse from excessive weight. Obesity impeded hope for a future and hope in the present because many participants were sick as a result of their obesity. “Before, I was on 36 pills a day just to function…I just was walking around kind of in a fog—I wasn’t living, I was just walking around existing and doing what I had to do to survive” [Callie, patient]. Several participants were afraid they would die sooner rather than later if they did not lose weight. There fears were confirmed by high blood pressure, lack of energy, and doctor’s reports. One doctor explained to a participant that she could take her last breath at any moment and that she was a “ticking time bomb.” This fear was a motivator for surgery for some as well as a psychological burden.

Five years ago, we didn’t have much of a future in front of us, you know. And now I can see we HAVE a future in front of us because now we have hopes and dreams of doing things… I was frightened…I knew that we didn’t have much of a future if we didn’t (both have WLS) [Tammy, patient then spouse].

**Directly Proceeding WLS: Downward Spiral**

Obesity had a downward spiraling impact on patients in that their attempts at weight loss did not work and their weight-related diseases and issues were worsening. “I was not happy being overweight at all—it caused a lot of depression which just made the situation worse instead of better. And it was like, it was a terrible cycle” [Jean, patient]. Additionally, the researcher noticed participants describing feedback loops in their weight loss journeys; a negative feedback loop before WLS and a positive feedback loop
after WLS. These feedback loops also had relational components that were systemic in nature.

Patients recognized that their defeat and condition of obesity was not going to improve without a radical intervention. “I just realized I wasn’t gonna be able to lose it on my own, I’d gotten too big” [Elan, patient]. Others explained that they were becoming worse. “I knew that I wasn’t going to get any better, it was only going to go downhill from there” [Callie, patient]. Another couple described the patient’s eating habits as only getting worse. “She used to woof her food down—I mean that sounds bad, but she really did” [Henry, spouse]. “I mean and it actually progressively got worse…I mean it, the whole eating thing kept getting progressively worse for me” [Harriet, patient]. These explanations of “things getting worse” also had a tone of helplessness in that the decent, without a surgical intervention, was inevitable.

Doctors played a key role for several WLS patients in communicating the seriousness of their health trajectories when they informed patients that their health records were worsening. Two weeks before turning 34, Star met with her primary care physician who said, “You will be dead before you’re 37 because one or more of the things that are wrong with you right now is going to take you out” [Star, patient and spouse]. Another patient explained going for her annual visit with her primary care physician.

I was over the years trying to lose weight and I kept gaining weight. So, it was like, I think I was supposed to have lost weight and I came in and I had gained weight, I was at the highest weight, my blood pressure was out-of-control, my blood sugars—my A1C’s was the highest it had ever been [Maria, patient].
Beth described her experience with weight-related complications. “I was borderline diabetic, I had high cholesterol, my knees—I couldn’t hardly walk at all, I was a mess. I was a hormonal, physical—I was a mess” [Beth, patient].

After being in a pattern of losing some weight and then gaining it back, negativity and anger began to mount for one person to a point of being disgusted. “Mentally it was so maddening to know that I had not succeeded at this (losing weight without surgery). I didn’t like the almost seething anger at my own self” [Xena, spouse turned patient]. Another source of mental struggle was with weight gain. “In the past, if I had gained a couple of pounds, I would start to diet or something and then the next thing I would know, I would gain a couple more pounds and the harder I tried to lose weight, I’d start gaining” [Rosa, patient]. Xena and Rosa both described themselves as high-achievers, but losing weight was the one thing they could not do and for them, this was challenging mentally. “It (losing weight) was the one thing that I couldn’t do no matter how hard I tried…it was always the elusive goal, the fish that got away” [Rosa, patient].

In addition to physical and mental challenges related to weight loss, there were emotional challenges, too. One patient explained being restricted before WLS because she was ashamed for other people to see her and spent so much time thinking about getting the closest parking spot so she wouldn’t sweat as much, dressing in a way to hide her “fat rolls,” and making sure she would not fall when walking. Her spouse observed, “She would change clothes a lot when she would start to go somewhere, she’d get aggravated, sometimes mad. She’d change two or three outfits sometimes, she’d just be real agitated” [Henry, spouse]. She explained, “I really, honestly did not want to participate in anything because there were so many different things—I was
uncomfortable, I was embarrassed, I mean I didn’t physically, I didn’t feel like it. I was pushing myself at everything” [Harriet, patient].

Before WLS, participants expressed feeling physically miserable and “exhausted about living.” Some mentioned experiencing depression which lead to family disengagement, then moved towards missing out or “feeling like a hermit.” Exhaustion with additional feelings of guilt fed more failure with weight loss efforts and lead to their obesity getting worse which added more misery, thus continuing the defeat cycle. “I was really having a difficult time, just didn’t have a good quality of life, I mean I was really exhausted all of the time, I really secluded myself from a lot of things” [Harriet, patient]. Harriet later detailed being tired of living tired and “not being a part of our family.”

I just knew I was miserable—it would take me forever to get up in the morning, I mean, and I would do stuff, no one ever really knew, I was still functioning, I still went to work, but I mean it really took everything I had to get there just because I was exhausted and I just, I mean I was depressed and stuff like that [Harriet, patient].

What interrupted this negative feedback loop for many was declining health reflected in how they physically felt and in their lab reports, accumulated exhaustion, and the suggestion that it could all be stopped through a surgical intervention. While WLS seemed to be a radical intervention, patients expressed being at a point of desperation. “I did not want to leave my children without a mother…that was a scary moment when I saw that my blood pressure was actually that high—that was, that was crazy” [Tammy, patient then spouse]. After a few years of battling sleep apnea, her husband explained, “I just got tired of being fat, got tired of being fat and feeling like crap all the time”
[Tommy, spouse turned patient]. Tammy [patient] surmised, “It was just too much, it was too much on both of us, you know, it really was. I felt like I was as big around as I was tall.”

Similarly, another couple who both had WLS described being motivated to have surgery because of their children and because they had reached a point of being too big for conventional dieting to work. “None of the diets we tried had ever worked and we were that sick…the fact that we had children at home depending on us made it even more imperative (to have WLS)” [Star, patient and spouse]. Her husband explained his exhaustion and medication regimen to get through a day.

I was always in pain… I was tired and I mean seriously tired—I took meds to get up in the morning, I took meds to go to bed at night, I took meds because I had pain, I had to have a CPAP (continuous positive airway pressure machine for sleep apnea), I had to have metformin (for diabetes), I had to have a rescue inhaler [Stan, patient and spouse].

Stan’s quality of life was deteriorating and his wife was in the same situation. Star noticed that after age 30, she was “really sick” in that “this stuff started happening—the sleep apnea, the COPD, the congestive heart—it just, boom.” She detailed her difficult weight loss cycle.

I had lost that same 100 pounds over at least 6 times by the time I was 30, plus 10…that’s the cycle of obesity…I realized I wasn’t going to be able to get off more than 100 pounds by myself and it’s really getting out-of-control here [Star, patient and spouse].
Beyond a life-saving intervention, patients were also fed up with having the same struggle. One person explained, “At that point in time (when attending a WLS seminar), I was 54 years old and I’m like, “I’ve been struggling with this for almost 3 decades. And what am I waiting for?”” [Gaby, patient then partner]. Similarly, Rosa described, “You know, I spent 20-some years trying to lose the same weight over and over and over again, and never being successful at it when I could do everything else and I just felt like it (the extra weight) was in my way” [Rosa, patient]. This “terrible cycle” also had an impact on relational health.

**Relational Spillover**

Having a downward spiraling health trajectory as well as being in a never-ending negative feedback loop with weight loss had some relational consequences or spillover for participants. Milly, a spouse who had WLS two years after her husband, explained that she felt very disappointed in herself because she could not lose weight and that she carried this disappointment into her exchanges with others. “If I feel disappointed in myself, I tend to bring that frustration into my interaction with other people. Of course, since I have more interactions with him than with anybody else, then he can get the brunt of that” [Milly, spouse turned patient].

Similar to this mental disappointment, physical consequences from weight-related issues also impacted relational exchanges. A few spouses explained that the patient’s withdrawal when feeling exhausted or defeated about their weight had an influence on their mood, too. “What she was doing, that was bringing me down” [Smokey, spouse]. Withdrawal from physical and emotional distress was experienced as “putting up a wall” for Jim. He clarified that obesity was not the problem, but rather the unhappiness and
discontentment his wife felt as a result of being obese because “she wasn’t happy or content, so that drove a wedge with the fullness of our relationship” [Jim, spouse]. His wife said, “I was so miserable being overweight, I just was, but he was very good about loving me through that” [Jean, patient].

Jim and Jean briefly described the interplay of Jean’s depression and Jim recognizing her weight battle was his battle, too.

“She would put up walls in our relationship, you know just where she would go being depressed, or you know, not able to love herself that way (overweight)” [Jim, spouse].

“Lack of self-confidence” [Jean, patient].

“Which put up walls and she would keep me at a distance. And that would lead to counseling, then realize, you know, this is out of my control and it’s her battle, but at the same time it’s both of our battles” [Jim, spouse].

Jean had WLS nine years ago, has experienced WLS success, and has also recently had skin removal surgery. She explained, “probably the biggest stronghold I’ve had in my entire life is my weight” and how “putting that battle to bed, letting that stronghold being released…it was life-changing, life-altering” [Jean, patient].

**After WLS: Success**

A year after WLS and a significant amount of weight loss later, patients were feeling better, had more energy, said yes to new activities, were participating in family life, had success and new health, were happier and this feedback loop of achievement yielded hope. A participant who explained her condition prior to WLS as isolating, contrasted that with her post-WLS status. “I’m really in the moment and I wasn’t before.
I mean I’m totally in the moment…I’m not plagued with all these emotions…just stuff that bothered me before about myself” [Harriet, patient]. Another participant explained that before WLS, she knew how to count calories and exercise, but her efforts yielded little results and then she would give up. Yet after WLS, the “roadblock” to weight loss she experienced was gone. “Before, it never felt like anything worked and this (WLS) works” [Rosa, patient]. She said, “I was talking about the roadblock being moved out of the way and that’s a sense of hope and really like believing all the things that you think are gonna happen are really within your grasp” [Rosa, patient].

Ramifications for an individual “stronghold release” or a “roadblock removed” had relational spillover to spouses and partners. Once patients had WLS and were experiencing success, they began to live without a filter of weight-related mental disappointment, physical exhaustion, and emotional distress. Transitioning from a negative feedback loop of defeat to a positive feedback loop of achievement had relational spillover because when WLS patients became happier, so did their spouses. In response to his wife’s increased happiness after WLS, a spouse explained that his wife being happier made him happier; “being successful and feeling better and being happier, I mean that just rubs off on people” [Rico, spouse].

**WLS: A Turning Point and Tool**

The turning point for a different life trajectory, one infused with happy and hope, occurred when patients had WLS. Before WLS, there was defeat with weight loss, disease, and some depression. Directly prior to WLS, participants were in a downward spiral with their health and then WLS occurred. After WLS, couples experienced weight loss success and greatly improved overall health. The way that couples described WLS
as a tool was indicative of a turning point as this weight loss intervention signaled a before and after line of demarcation.

I think it’s (WLS) definitely a life-changing event. I mean I really think of the time before and the time after, I think there’s clearly a line there where things are definitely different in a lot of ways because of the surgery, especially if it’s successful, because a lot of things change and a lot of things change for the better [Rico, spouse].

Lifestyle habits and attitudes were different after WLS and one patient remarked, “My whole attitude has changed and it can be done and I wish I had had the surgery sooner” [Maria, patient]. WLS was the tool that enabled this point of turning away from “being in a fog” and turning towards “being present.” This change from “unspoken chaos” or “crazy” to calm and “having a better general outlook” gave couples control because their new tool for weight loss was actually working, unlike previous attempts at weight loss, and this gave them hope.

Every participant called WLS a “tool” of some sort—an amazing tool, a powerful tool, a miracle tool, “one of my tools” [Maria, patient], “a great tool in starting the weight loss journey” [Miles, patient then spouse], and “the tool that allowed me to be the person I always wanted to be” [Gaby, patient then partner]. Others explained that WLS was a jumpstart that enabled them to have a “new lease on life” [Callie, patient] and a “feeling of relief” [Xena, partner turned patient]. However, one participant did not share the same level of intensity about his before and after WLS contrast. “It wasn’t like our life was that bad, but it’s definitely a second chance at a different life…a limitless life” [Elan, patient]. He talked about how WLS recovery made their lives easier because he had
“endless energy.” He later expounded upon how his obesity limited what he was willing to do in his discretionary time. “It changed the way—it changed the perspective of what I was willing to do outside of work where I didn’t have control, probably more than anything” [Elan, patient].

Multiple times WLS was described as a life-changing event in that “a lot of things changed for the better” [Rico, spouse] and that WLS was “a way to start over and do it right this time” [Callie, patient]. One participant who was unique in that she had not struggled with obesity for most of her adult life said, “I feel like I’ve come back to who I was” [Milly, spouse turned patient]. Her husband, who was similar in that his obesity and comorbidities did not happen until he was middle-aged explained that WLS “is stimulating, it lifts you up, it reverses some aging and it reverses some disease process” [Miles, patient then spouse]. He mentioned feeling better physically having an impact on his quality of life, but for his wife who had WLS after him, he noticed that her body image improvements were the biggest change.

We’ve always been compassionate and close, uh, I think she just brightened up when she started seeing herself in a more positive light. She really, it’s like a dimmer switch, she just seemed a little brighter, just a little more bounce in her step. You could tell that she was feeling better about everything [Miles, patient then spouse].

Even when the spouse was perfectly healthy, WLS had an “us” component of impact. “It really has actually helped us, kind of like rejuvenated or changed our lives” [Harriet, patient].
This life-change was viewed as a blessing, benefit, door-opener, lifestyle change, life-expander, and life-enhancer. “I felt like it gave me life again and I feel like it did, you know, give us life again, too” [Callie, patient]. Several explained that WLS was life-saving and that it was their only chance at life given that their primary care physicians or bariatric surgeon told them that they would never live to see 40 years old. “Ultimately, it’s (WLS) my miracle—it’s the best thing I’ve ever done, the hardest thing I’ve ever done, but the best thing because otherwise, I wouldn’t still be here with him” [Star, patient and spouse]. Similarly, another patient surmised, “I would do it over a million times—it’s really the best, one of the best things that’s really happened. I mean it kind of just gave us back, it gave me back my life and made me feel better” [Harriet, patient].

A final indicator of WLS as a turning point was when gains in physical health yielded gains in relational health. One patient described how her not feeling well before WLS impeded her “being there” ability for her husband. “I was sick all the time and we had struggles with, you know, like everything else when you don’t feel good you’re not motivated to do things and you’re not motivated to be there for each other” [Callie, patient].

Merging the Before WLS and After WLS

Feeling great joy for new physical accomplishments post-WLS such as running a 5K, earning a role in a play that was normally given to someone much younger, and having the energy to enjoy a vacation for the first time with bike-riding and hiking was met with some sadness for previously missing out. Some participants explained that while they were happy with their success, they were sad for the years that they struggled and were miserable. The feeling of success gave them a means to see how much they had
suffered and what they had lost, an insight that most did not have prior to surgery because they had been overweight or obese for all of their adulthood. “I mourned for who I had not been and how much I had allowed my weight to take away from me” [Star, patient and spouse]. Later, her husband added, “I think the thing that I mourned was after I lost all that weight, I realized the irreparable damage I’d done to my body” [Stan, patient and spouse].

After decades of obesity, Stan mourned that he was unable to retire from his favorite career.

I would have finished my obligation, I would have done as much as I could, I would have walked out with my head held high, as a result of my weight, I was fired, I was forced out. There’s no glory in that and I’m not looking for glory, but that’s one of the things, that’s one of the checkmarks I can’t put “I did it,” because I didn’t [Stan, patient and spouse].

Obesity was an obstacle that kept participants from achieving some life goals they had set and it conditioned them at times to have low self-esteem, anger towards self, discontentment, deep disappointment, and gnawing guilt. Yet after years of weight loss failures followed by finally experiencing weight loss success and the accompanied positive consequences of better physical and emotional health, a noticeable hope permeated all of these discussions. This grand theme of hope, in addition to the rich description of life with obesity prior to surgery, were unexpected findings given that the scope of this study was on WLS success. However, household changes and perceptions of the couple’s relationship dynamics were within the scope of this study.
Couples naturally described their before in order to capture the changes they experienced after WLS. Still, the consistent thread in their before and after stories was the steady support and love (security) they received from their spouses and partners. Displays of loving acceptance and support prior to WLS were also experienced during and after WLS. “He loved me unconditionally and he has from the beginning” [Harriet, patient]. This type of relational security and guarantee of “always being there” had an impact on the perceptions of the couple’s relationship dynamic and also spilled over into household changes and WLS success. One patient explained that her husband joined her at the gym because he loves her. The secure relationship generated support for the patient which gave momentum for lifestyle changes that ultimately increased successful WLS outcomes. Results (see Table 3) from the original intent behind this study—to explore couple’s relationship dynamics, changes in household routine, and their definition of WLS success, follow.
Table 3

*Couples and WLS: Themes and subthemes*

<table>
<thead>
<tr>
<th>Topic 1: Couple dynamics</th>
<th>Theme(s)</th>
<th>Subthemes</th>
<th>Nuances and/or examples</th>
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<tr>
<td></td>
<td>Security: Always and unconditional</td>
<td>Support</td>
<td>Type and timing</td>
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<td>Teamwork</td>
<td>Effort, engagement, and cooperation</td>
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<td>Closer</td>
<td>Physically, more time together, and feeling better and happier</td>
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<th>Topic 2: Household changes</th>
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<td>Diet</td>
<td>Changes: Small, slow, big, fun, and hard</td>
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<td>Mind-shift (Intrapersonal)</td>
<td>Exercise</td>
<td>Patients leading, spouses leading, and partners cheering</td>
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<td></td>
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<td>Recreation</td>
<td>Cruising and swimming, hiking and biking, and camping and fishing</td>
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<th>Topic 3: WLS success</th>
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<td>Follow-through: Stages</td>
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*Note*: The grand theme of this study was hope, which was recognized within each research topic. Also, hope was evident when couples contrasted their lives before and after WLS and when they described WLS as a life-changing (turning point) event.
Perceptions of Couple’s Relationship Dynamics

Many WLS patients explained that their success was a result of the support they received from their spouse be it financial, emotional, practical, tangible, unspoken, mental, or spiritual. Exploring WLS success was the main goal of this study. Several WLS patients spoke about the sacrifice of time and money their spouses made in order to help them with surgery and recovery. They expressed feeling fortunate, lucky, and grateful to have a partner who was very supportive, encouraging, open and not negative, and good at “just being there.” Security was the theme for relationship dynamics that emerged from the data with the following three subthemes: support, teamwork, and closer.

Security: “We’ve just always been kind of the same stability”

When patients and spouses/partners utilized language such as partnership, always, being there, together, we, and unconditional, this signaled security in their relationship dynamics. “The way we ran our marriage before (WLS), everything was a partnership” [Star, patient and spouse]. Aside from WLS, another patient explained that “we’ve just always been kind of the same stability” [Harriet, patient]. At the root of partnership, was security and from that secure base blossomed “just being there” (support), involvement (teamwork), and growing closer together. WLS added a new element of hope to their secure partnership in that couples were hopeful that they would live a fuller life. Couples realized that health improvements, reduction in weight-related comorbidities, and enhancements in quality of life positively impacted their relationship dynamics thus creating more opportunities for closeness and togetherness. One spouse stated that WLS
strengthened their marriage because “it gives us something we can focus on, I mean, you know, we’re both doing it together” [Buck, spouse].

One of the most salient indicators of relationship security was seen in how couples explained the “always” and “unconditional” aspects of their relational dynamics. When describing spouses and partners as being consistently available and willing to help, these types of experiences came from relational security and stability. Thus, a secure relationship was a launching point for spouses and partners to receive and give assistance before, during, and after WLS. Participants explained that help was always present in their relationship. “He’s just been right there beside me willing to do whatever, umm, the whole time we’ve been together. So, I think, you know, I think we’re just lucky” [Tammy, patient then spouse].

He always does littles things…in our relationship… I mean we both just pick up the pieces where we need to be… I know I can always count on him…I mean, just totally, just really unconditional, I mean, love, support, all of it… I just really feel very privileged for that and appreciative [Harriet, patient].

Couples had a belief and an assurance that their spouse would give them what they needed because their relational history was one of security; “we both prop each other up when we need it, she’s always been there” [Tommy, spouse turned patient]. One spouse explained that his love for his wife was not contingent on her size meaning his feelings and acts of love towards her were secure. His wife said,

I couldn’t have made it without him—just his love and unconditional, I’ll cry, again, that unconditional love, support, the willingness financially to sacrifice for me and my happiness and I don’t think there’s many people as lucky as I am to
have a man like him…the way he took care of me it just really opened my eyes to,

I mean it was a true picture of love [Jean, patient].

This type of unconditional love was a hallmark of having security in their spouse and safety in their relationship. “He loved me unconditionally and he has from the beginning” [Harriet, patient]. Moreover, security motivated spouses to demonstrate their unconditional love through support.

Support

When asked what kind of advice they would give to the spouse of a WLS candidate, most everyone said, “Be supportive.” They explained that having support was key for WLS success, but that it was also a component of family life, marriage, and togetherness.

Our family that’s in the house with us, we’re very family-oriented and everyone is very, and that’s the thing is you need that, you know. And family members need to support the other family members especially when it comes to something like this (WLS) because it’s a hard thing, it’s not easy, and the more people that help you with it, the easier it is [Tommy, spouse turned patient].

Support was applied beyond WLS, too. “As with everything else, you have to support each other. If you don’t support each other, things are not going to go as well” [Rico, spouse]. “I try always to be supportive, we both try to be each other’s, you know, best cheerleader and supporter” [Milly, spouse turned patient].

Patients appreciated the support given to them with WLS, that their spouse had always been supportive of anything they wanted to do, and that their spouse knew them well enough to give them the type of support they needed. “You know, you get to know
what the person needs and even though you might not need it, you give that to them” [Xena, partner turned patient]. Participants often stated that consistent and available support was the “how to” for WLS success and the “how to” for having a good partnership/marriage.

**Types of support: Emotional and unspoken.** When asked to describe the type of support they gave or experienced, couples discussed being available to their spouse, helping them with ideas for weight loss such as hiring a personal trainer or meal-planning when they hit a plateau, giving compliments on new clothing and words of encouragement, going to counseling or support group together, and emotional support. For example, Jim and Jean dialogued about the importance of having emotional support indicating that this was the “right kind of support.”

“Sometimes there can be resentment or bitterness, you know, for that (weight) struggle and making sure that both partners are on board, that way post-surgery, not only being there for the recovery process, the physical side, but being there” [Jim, spouse]

“The emotional support is bigger than the physical support” [Jean, patient]

“The emotional support, they may fall back into some areas of struggling or thinking or not taking care of themselves or eating, encouraging and not beating them up,” [Jim, spouse]

“That’s big right there…he’s just always been very encouraging and telling me I’m beautiful regardless of where I was in my weight and encouraging me through the process and it would be really big to have that—the right kind of support, not someone that’s gonna beat you up, but someone that’s building you up” [Jean, patient].
Another type of support a few patients explained was “unspoken” or “unrecognized” support when they reflected upon their initial interview during the final interview. When asked how they contributed to the patient’s WLS success, one spouse explained in the initial interview that he bought his wife a smaller cake for her birthday rather than tempting her with a larger cake. The patient explained in the final interview that this action is what stuck out to her from their initial interview because she was unaware he intentionally bought her a smaller cake.

It’s just the things that you don’t really, the unspoken things that happen…you were really protective…I mean just very conscientious just about things…the support that you get that you don’t really think of it as support…that’s the thing I’m most appreciative about [Harriet, patient].

Similarly, another patient explained that what stuck out to him from their initial interview was also in terms of unidentified support. “Support—unrecognized support. I think we gave each other support—intended, some not welcomed, but not antagonistic” [Miles, patient then spouse]. When asked how his partner contributed to his WLS success he replied, “Just being there—being supportive, not um, never having a conversation about being overweight and I think we both always said that, “You don’t need to have that done, I like you like you are.”” Finally, he reflected why he believed he missed seeing the support his spouse gave him.

After surgery it’s like, “I really want to be successful.” And so, you may not, you may be so into what you’re doing that you don’t recognize that the other person is going out of their way to be supportive to you in their day-in and day-out dietary
habits and their compliments and their “You’re doing great” and morale and the whole deal, all the emotions [Miles, patient then spouse].

Finally, two patients explained that their spouse was supportive because they did not ask them questions about eating such as “Did you get enough to eat? Are you sure that’s enough? Do you want something else?” Keeping attention away from the tiny portions of food consumed post-surgery was experienced as encouragement. “She was always encouraging…sometimes not saying things is encouraging…there was never any pity or it would have driven me crazy after every meal…sometimes, you just need to be left alone” [Elan, patient]. Several times in their interviews Elan’s spouse explained that he worked hard and did all of it on his own. “I was never one that was part of the equation” [Emmy, spouse]. Along a similar line of unspoken or unrecognized support, Elan reflected the following:

Well, what she does and doesn’t know is that she cares so much about the way she looks…so, if she didn’t care about the way she looked, if she didn’t care about where she was headed, uh physically and the way she looked, then it’d be easier for me to say, “Well shit, I don’t care either.” But that’s never been an option for her.

Timing of support: Decisions, trust, and problem-solving. Support was mentioned when the spouse was present in times of high stress and support was especially helpful for the patient during specific instances before, during, and after WLS. Before WLS, patients involved their spouses to varying degrees in the decision-making process. The decision to have surgery was reached either independently by the patient and then told to the spouse or it was a collective decision. Some spouses attended WLS
seminars and doctor’s appointments with the patient or they counted on the patient to disseminate WLS information to them. One spouse expressed that attending the WLS seminar opened his eyes to the medical side of obesity and that he had some guilt for not understanding why his wife struggled so hard to lose weight. Conversely, another spouse who attended a WLS seminar saw his wife as “Twiggy” compared to the other attenders and this reaffirmed his belief that she did not need surgery. This spouse remained opposed to surgery even after seeing his wife be successful and happy with it, but he was supportive of her changing her life. “You were there and even though he wasn’t for the surgery, he was there and supporting for the lifestyle changes. You were never condescending or negative” [Maria, patient].

With every couple, the spouse or partner was with the WLS patient on the day of their surgery. This act of “being there” was expected in most cases, however, one patient was surprised her husband was there for the surgery and a few days after surgery to help her at home. She expressed in their initial interview that she was “grateful that he was there” and then explained in their final interview that his being there “set the tone for the whole thing because it establishes the trust and the partnership…it impressed me” [Rosa, patient]. Another patient explained feeling as though she was in an emotional fog for 30 days after surgery.

As you go through this, you don’t know how you’re going to react and a lot of things are emotional. There’s somedays I’d come home and I’d just be a crying mess and I wouldn’t even know why. And he just would let me get it out and do what I needed to do and the next day I was fine…that’s his support, he’s just there [Callie, patient].
After WLS, patients had instances of emotional difficulties, mental distress, and physical discomfort. What was helpful in these moments was when their spouse was available to listen, problem-solve, and encourage. For example, many patients explained that their spouses helped them with eating because at times they were unsure of how much to eat. Both the patient and the spouse were trying to learn how the patient should eat with their “new stomach” and both wanted to avoid painful consequences of over-eating or eating the wrong food. Additionally, spouses were helpful when the patient began to regain some weight and needed help getting “back on track.”

**Teamwork: “It is honestly a team effort.”**

Patients appreciated when partners participated with surgery lifestyle changes such as diet and exercise. Helping the patient make adjustments to portion sizes following surgery by offering to share a few bites of their meal with them or by switching to smaller plates in the home were noticeable indicators of “joining in.” These intentional ways of being helpful through assisting the patient with figuring out how to eat and to problem-solve with them in the event that the patient became sick or was not having the results they had hoped for was expressed multiple times as team work and joint effort.

**United efforts.** When a food decision was made that resulted in becoming sick, one patient expressed, “In our marriage, it’s ok for one of us to screw up, we’re human” [Stan, patient and spouse]. Later, his wife explained “We’re a team and we treat each other like adults—adults that we care about and we let each other mess up” [Star, patient and spouse]. This couple explained that they had been “food-shamed” before and after WLS and this gave them an understanding of one another as well as a determination to
focus on discussing food decisions in a manner of collaboration, accountability, and grace. They spoke about being there for one another especially when well-meaning “food-pushers” approached them at church functions or family gatherings and when the other person was feeling triggered to eat the wrong thing. Additionally, this couple had a lifestyle of speaking positively to one another about food given that they co-facilitate a bariatric support group. They also explained that they are “food addicts” and therefore they look for ways to protect themselves and each other.

This spirit of teamwork in how spouses treated one another was explained as a “general lifestyle” that existed in their relationship dynamics with any goal their partner was trying to reach. One couple, Rico and Rosa, had the following exchange:

“I mean I don’t know if it relates strictly to the surgery, I think it’s kind of a, just a general lifestyle, a general way of” [Rico, spouse]

“the way you treat each other” [Rosa, patient]

“yeah, how you treat each other, how you support each other, you know, we are together, it’s not she does this, I do that” [Rico, spouse]

“that’s true…I don’t think anything changed in the way that he was supportive after, I mean it’s always been that way and I think you’re right, I think it’s just in the relationship already, it’s already baked in or it’s not there” [Rosa, patient].

Outside of WLS teamwork, a few couples compared their WLS efforts to parenting especially when it came to having a “united front” and backing of one another. “We’ve been that couple that our kids have never been able to play us against each other because we’re always on the same page” [Tommy, spouse turned patient]. Skills couples
utilized in being a parenting team were also similar to those accessed for WLS preparation, recovery, and success.

**Engaged and cooperative.** Teamwork was also seen in togetherness and combined efforts such as “he jumped in…he was right there with me” [Tammy, patient then spouse] and “we do everything together” [Beth, patient]. Engagement and cooperation were two other noticeable aspects of teamwork efforts. Spouses and partners were engaged with WLS when they were proactive in their responses and behaviors with surgery recovery and adaptation and they were cooperative when WLS patients made a request and they met the request. These moments of engagement and cooperation were recognized in what the spouse/partner noticed about the WLS participant and how they involved themselves throughout the WLS process.

Several patients explained that their spouses would watch them eat and could recognize when the patient had had enough to eat. The spouse would notice a full signal such as a cough, sneeze, hiccup, eyes-watering, or a facial expression such as a turning up of the lip similar to gagging or disgust. By recognizing these non-verbal signs, the spouse was then able to tell the patient to stop eating and this helped them to avoid becoming sick. Spouses were upset when the patient experienced vomiting or pain from eating too much and some were very vigilant about warning the patient as soon as they saw the full signs as a means to prevent the patient from suffering.

When I was going through that first couple of stages after surgery, it was like he learned before me when I had enough. I was still learning and there were a couple of times he said, “Drop the fork. Step away from the plate” [Maria, patient].
This level of engagement and knowing was a means of protection for the patient. Couples explained that eating after surgery was at times trial-and-error, but they ate together and problem-solved in the event of digestive issues.

Couples also problem-solved about ways to “get back on track” in the event that they became lax with WLS behavior changes and saw some weight “creeping back up.” Several described this as “checks and balances,” “keeping each other in check,” and having the freedom to “call each other out” and “keep each other honest.” What was undergirding this kind of accountability and open communication was a spirit of cooperation.

I think as long as either, whichever one of us is on whichever side of that fence, cause we were both on both sides, as long as the one going through it feels like the other one is on their side and wants to help them, that they feel an attitude of cooperation—I think that’s the main thing [Milly, spouse turned patient].

One patient explained that being less vigilant was easier to do the further out she became from surgery and as a result, she has experienced some weight regain. However, her spouse demonstrated engagement by talking through it with her and walking with her.

When I’ve hit those times when I’ve put some weight back on, I mean I’ve had to re-evaluate and refocus. And he’s always, he’s there—I mean I talk it through with him and he’s there for me, he encourages me…there were times where he would—he could tell I was struggling and he would offer, “Let’s go for a walk together.” He would try to get me moving without being ugly about it [Jean, patient].
Accountability was especially evident when both persons had WLS. “If I fall off the bandwagon, she’s the one that hoists me back up” [Stan, patient and spouse]. This accountability was expressed through open communication and understanding. “We are able to tell each other because we know, I’m not belittling him and he’s not belittling me, we just love each other and want each other to be ok” [Tammy, patient then spouse]. Finally, several couples explained that holidays and vacations were critical moments for teamwork and how they were able to help each other out with food decisions.

**Delayed teamwork.** Conversely, teamwork was not always experienced right away. One spouse said he had to see the positive results of his wife’s WLS first before he would change his dietary habits and that his change was a gradual process. “We went through a period where we were distant with each other because of the differences and then I think after talking it through, it became our journey when he started to participate” [Callie, patient]. Working together on making healthy food choices came after this spouse saw his wife and neighbor be successful with WLS. Additionally, he was very motivated to change his diet after his doctor informed him that he was pre-diabetic. “Before all the WLS and everything, we mainly, you know we worked as a team, but we weren’t on the same team, if that makes any sense. Now that we’re doing similar things, we’re just—everything kind of interacts” [Callie, patient].

Another instance of delayed teamwork was when a spouse offered their help, but the WLS patient delayed in accepting the suggestion or disagreed with their recommendation. For example, several patients explained that they wanted to exercise, but they could not go to a gym with their spouse until they had lost a certain amount of weight first. Exercising at a gym was intimidating for some because of their size, joint
pain, or lack of weight-training know-how. However, once a certain amount of weight was lost and the patient became less limited in their mobility or reached a weight loss plateau, they were more willing and open to trying formal exercise. One spouse was especially proud of his wife for overcoming her fear of exercising in a group setting because she was able to be around other people rather than isolating. Teamwork was appreciated when accomplishing behavioral goals especially when the initial change was met with reluctance, resistance, or fear.

**Closer: “Full hugs”**

Three out of the four couples who both had WLS described the fun of being able to give one another a “full hug.” They all had mentioned ways of hugging each other prior to WLS such as grabbing each other’s shirts that were basically “compensation hugs.” One couple explained “We joke that we’re much closer as a couple and it’s a little tongue-and-cheek because we are literally able to physically get closer than we used to” [Star, patient and spouse]. “We used to A-line hug” [Stan, patient and spouse]. Another patient described her joy in being able to hug her spouse and be touching “from top to bottom.” She expressed that she shares her hug story all the time.

We were touching and that was, I mean that was huge, you know, to think, “We can put our arms around each other. We can put our arms around each other!” I mean that is, I mean that’s awesome when you couldn’t before because you’re so big around you can’t get around and now we don’t have that issue. It’s great, it is great [Tammy, patient then spouse].

Better sexual intimacy was mentioned by a few patients because they could physically get closer. Additionally, other patients described that an increase in their self-esteem and
gaining a more positive self-image after weight loss also made sex more enjoyable because they were less embarrassed to be without clothing in front of their spouse.

**More together time.** When it came to being relationally closer, a spouse who had WLS three years after his wife explained that going through the surgery gave them mutual understanding. “Us having each other and both having this and going through it together I think has been great because we both understand where the other one’s at” [Tommy, spouse turned patient]. For the couple who had WLS in the same month, doing the surgery together allowed them to rely on each other. “We spend even more time together because nobody gets it like we do…and he’s my best friend anyway so it’s not like it’s a hardship” [Star, patient and spouse]. Her husband then explained that WLS “cemented our relationship” [Stan, patient and spouse]. Thus, the experience of WLS was a catalyst for their increase in relational closeness.

In the event that the spouse also wanted to have better health, working on changing the same behaviors provided couples an opportunity to be together more. “We’ve changed, but we haven’t changed. It’s made us closer because we do more together…we were ok before, but it’s better now” [Callie, patient]. For many participants, a physical gain in health had a positive influence on relational health because having less obesity-related diseases gave them new strength and energy which enabled them to have the capacity to be more connected in their relationship thus their physical gain in health was a relational gain, too. “I think with the surgery because we physically feel better, it makes us better able to be reasonable and talk like grown-ups” [Star, patient and spouse].
**Feeling better and happier.** In addition to gains in physical health, some experienced gains in emotional well-being which also increased the relational closeness they had with their spouse. “I think when people feel better about themselves, then they—that makes a relationship stronger” [Miles, patient then spouse]. Henry and Harriet processed the effects of gains in happiness and energy that enabled family participation and how this yielded feeling closer.

“I think she’s happier with herself, so it makes the rest of us happier, much happier…she’s more eager to go places and stuff, too” [Henry, spouse]

“I think I have more, definitely have more energy than I used to…I am more content about things and I think it, for our relationship, I think that it has probably, I think it’s made it better in I’m not necessarily holding it back, holding our life back. Like, I’m not like a, you know, like a stump or something, like just there. I’m not that person like I was before…” [Harriet, patient].

“It makes me feel better when she does do stuff, yeah. It makes me feel closer to her, like she’s interested in being part of the family, so yeah, it makes you feel better” [Henry, spouse].

**Changes in Household Routines after WLS**

It was obvious to patients that their lifestyle after WLS was going to be radically different and that it had to remain different in order to reach and maintain their WLS goals. As a result, this created a unique opportunity for spouses to show that they were committed to helping the WLS patient even if that meant they would need to change their behaviors, too. “For me, it had to change; for him, it was an option” [Callie, patient]. These changes were often perceived as support, togetherness, helpful, and necessary for
the couple and WLS patient to function well and be successful. One of the things that enabled ongoing changes was recognizing that WLS was a tool or reset button for weight loss, but it was only a departure point of success and not a guarantee for success. WLS with necessary lifestyle changes were the components for success.

“You gotta look at it (WLS) as an aide or tool because you can’t do it (be successful) with just the surgery alone” [Maria, patient]. WLS was a source of potential energy for patients to be successful and their lifestyle changes transformed that potential into kinetic energy or movement towards success. Without engaging in the changes, WLS would not have been much of a turning point because success would have been compromised or unmet. Another patient explained that “surgery is a springboard for lifestyle change” [Mile, patient]. Thus, surgery enabled the changes and changes generated WLS success. “It’s a lifestyle change, you know you have the surgery and that gets you on that downward slope towards weight loss, but you really have to change your lifestyle” [Stan, patient and spouse].

Several patients and partners viewed WLS as an opportunity for the non-operative spouse to also evaluate their lifestyle choices around diet and exercise. They advised partners to “consider joining the journey with them (patients)…embrace the change as a positive thing for both people” [Miles, patient] and “embrace this (WLS) as a golden opportunity to examine your own eating habits” [Xena, partner turned patient]. Patients whose spouses also changed their lifestyles experienced less of a challenge when it came to changing themselves. “If he would have not been open to changing and wanting to change with me, I think it would have been a huge struggle. But he’s made it easier because he is open to the change” [Callie, patient].
Many spouses mentioned not wanting to make the WLS experience for their partner harder on them. “I would have never done anything to make your journey harder… it wasn’t hard to, at least in the home, make it a recovery/surgery-recovery friendly place” [Xena, partner turned patient]. Likewise, another spouse explained, “I’ll help him make his choices, I won’t make him doing what he wants to do difficult” [Milly, spouse turned patient]. This commitment in their relationship is what enabled them to make lifestyle changes alongside the patient. However, a precursor to observed household changes in routines was the mental shift or change in mindset about food, exercise, and recreation that had to occur prior to these changes happening for patients and most of the time for their spouses, too. Thus, commitment was the interpersonal component while “mind-shifts” were the intrapersonal component that formed the context for the visible changes in the home and away from the home. Commit and mind-shift were the themes for this part of the study and the subthemes were diet, exercise, and recreation.

**Commit: Interpersonal Component**

Marriage and partnership are foundationally based on commitment. It is this agreement within the relationship that was a strong component for supportive WLS-related actions. One patient connected spousal support to success and explained that supporting the patient was an aspect of commitment and an expectation.

If they (spouses) want them (patients) to succeed, then they need to change some things for that person—in support. It’s mainly about support whether it’s mental, physical, or emotional, it needs to be support because it’s (WLS) hard, it’s not only—it’s so mental, beyond the physical change and that’s hard enough to
handle, but I think that’s what I would tell somebody is just be that support, be that person that you said you were gonna be in sickness and in health because without that, you really, you can’t do it [Callie, patient].

Many couples described tales of spouses who sabotaged the WLS patient in their attitudes and behaviors especially at home. These stories came out of support groups, online WLS forums, and reality television shows. To counter these tales of antagonistic spouses who “wrecked their partner,” several participants used the language of commitment and support. “To be successful with this, then they have to do it together…your partner has to go through it with you and commit to doing it, like being supportive” [Gaby, patient then partner]. A spouse surmised “They have to almost be as committed as the person that’s doing it (having WLS)” [Buck, spouse]. Another spouse connected family involvement to success and commitment.

“You have to realize, you know, that it (WLS) is a family affair, a family decision because it involves everybody—if you want to be successful, it will involve everyone… it is a commitment that you’re making… it involves the whole family” [Rico, spouse].

Likewise, a patient commented, “Anything going on in my life affects him, anything going on in his life affects me, so, I mean when you’re a couple” [Jean, patient]. Her husband replied, “I think it’s got to be a partnership going through it (WLS)” [Jim, spouse]. Endeavoring to make surgery recovery and adjustment easier for the patient was ultimately a recognition that WLS does not happen only to the patient and it was also an indicator of family connectedness and loyalty. Hence, commitment to the patient produced commitment to the WLS process.
Another type of commitment to WLS was demonstrated when spouses became WLS patients. Of the 11 couples in this study, there were 4 couples who both had surgery. For 1 couple, having surgery together was their plan and their surgeries occurred weeks from each other. However, the other 3 couples had decided that the spouse would adopt the same behavioral changes as the patient in order to lose weight. In all 3 couples, some changes were made, however they were unable to be successful with losing weight. This was another experience of defeat, but simultaneously an indicator to the spouse that they needed to have surgery.

All 3 spouses turned patient explained how watching the patient be successful with WLS helped them in their WLS journey.

For me, this has really been an easy process, you know. Um, one having seen her go through it, two, we support each other very well and that’s why I said support is the most important thing for spouses, and the fact that I like meat, so, I’m all about some protein-rich food anyway. So, it makes it a little easier [Tommy, spouse turned patient].

A spouse explained that she made fewer errors in eating because she watched her husband go through WLS. Another admitted that she would have never had WLS had she not lived through it with her partner first and that watching her brave partner gave her the courage to have WLS. One patient was relieved when her spouse opted to having WLS, but the other two patients were surprised by the WLS decision. Spouses and partners who committed to helping WLS patients and then elected to have surgery themselves had the ultimate experience of joining the WLS journey. They offered a unique insight into the commit piece of WLS and were eager to share their WLS stories.
Mind-Shift: Intrapersonal Component

“I would describe it (WLS) as a life-long journey. I mean it’s not a cure (for obesity). We had to change our thinking, thinking patterns and thinking habits, and our lifestyle—it’s a lifestyle change” [Stan, patient and spouse]. This change in thinking meant that food was viewed as fuel rather than comfort, entertainment, pleasure, or celebration. Former thoughts about food and food habits were initially shaped in the patient’s and partner’s childhood.

Family-of-origin routines and rituals that centered around food, especially habits of consuming large quantities of food, were brought up by multiple participants.

We grew up on the wrong food, you had to eat everything on your plate, you couldn’t get up until your plate was—we grew up on all the wrong things. After 50 years of this, to change that mindset, wow. We still have a hard time [Beth, patient].

Traditions and celebrations were occasions when maintaining the mind-shift was challenging for patients. “I’m a good Italian and everything that my family is about revolves around food. You know you had a graduation, we have food. You have Christmas, you have a spread” [Maria, patient]. She further explained

There’s times where we still have big celebrations or whatever, but revolving everything around food is very difficult because that’s how I was brought up and lived all my life with. And I still want to do that and it’s a very hard mindset to change—where it’s ok to have a party and not be around food.

For both Beth and Maria, their mindsets had to be shifted in order to change their habits and meanings that informed their daily and celebratory practices.
Habits with food growing up were more about volume and less about nutrition for the majority of participants. Lack of knowledge with portion-control and misinformation related to fad-diets were common experiences for WLS patients in adulthood. Learning about proper nutrition and portion sizes was a process that started for some at the initial WLS seminar and was reinforced during visits with nutritionists and doctors as well as in support groups. These shifts in thinking about food happened in varying degrees before, during, and after WLS and ultimately assisted the patient and spouses in changing their diets.

“It (nutritional counseling) altered my perception of food so that I now see it as it’s component parts. I don’t see pizza, I see carbs and fats. I don’t see chicken salad, I see some protein in with greens” [Xena, partner turned patient]. This mind-shift was a perspective change that made a lasting impression in a way that re-trained their deeply-rooted family-of-origin renderings, though not without some struggle or “food mourning.” For some, this was an energizing mind-shift and for others they expressed not knowing about nutrition for years as a source of sadness and regret especially if they had “passed down” their food habits that led to WLS to their children. One patient and her spouse described their adult daughter’s super obesity and feeling helpless.

The mind-shift of eating for pleasure or entertainment versus eating for fuel, exercising as essential for health rather than a form of weight loss drudgery or punishment, and recreation as a means of togetherness were experiences that patients and their spouses had throughout the WLS journey. Thus, a change in mind beget a change in action and their relationship commitment drove assisting the WLS patient in being successful through partners being open to adopting some new behaviors, too.
Diet: Dinner and Date Night

Many WLS patients described hearing “horror stories” of spouses who still demanded that their wives cook the same food for them and their children that they made prior to WLS. Participants explained that they heard about women who were lonely because they were cooking two separate meals—one for the family and one for themselves. They would often eat in isolation in order to not be tempted by the family’s food or because the family had already eaten and were past dinner by the time the WLS patient had prepared her food. Participants heard these stories in support group, read about them in online forums, and saw them depicted on television. However, this was not the experience that participants had in this study as one spouse explained, “Well, I knew how hard it was, you know, to change. And me eating hamburgers and spaghetti and everything around us would make it even more hard. So, that’s why we both had to do it together” [Buck, spouse]. His wife also included,

I’m not gonna cook him all bad meals, I’m not gonna do it since I’ve had surgery.

So, if he wanted to remain the old way he was, he’d have to go get it cause I’m not gonna do it…as far as cooking the old way, I’m not gonna do it” [Beth, patient].

Patients and spouses were convinced that they would not sabotage WLS lifestyle changes by eating or preparing the wrong foods. This conviction and determination was often cited because they had put the time and money into having WLS, they had put their bodies through the pain of surgery, and they did not want to “screw it up” or fail.

Surgery was a tool or means for a lifestyle change, but surgery in isolation was not going to give them the long-term or permanent results that they wanted. Participants often
recounted how they ate before WLS versus after. For some, the changes were small, for one couple the changes were slow, for most the changes were big, but for all, the changes were essential for WLS success.

**Small changes.** Several WLS patients explained that they loved to cook. Others mentioned that they knew the “right” things to eat and cook, but they lacked the motivation to change prior to WLS because their weight loss efforts had always failed and their appetites or cravings steered their food decisions. “I always knew what the right thing to eat was, the hard part was doing the thing that was right and not eating stuff that was covered in cheese and sauce” [Gaby, patient then partner]. For those who enjoyed cooking and were familiar with healthy eating, the post-WLS diet adjustment was a few modifications rather than a complete diet overhaul. For example, reducing portion sizes, eating more protein, and cutting out high starch foods such as potatoes and bread or severely limiting these carbohydrates, were relatively easy changes.

Some couples were intentional about planning their meals prior to surgery and having a balance of different proteins. However, what changed for them was the focus on protein as the first and most important food to consider when creating a meal. Having pre-requisite skills with meal-planning meant that couples already had the “know-how” and WLS was a change in focus. “We’ve always done that (meal-planning), we’ve always been that way, but it’s kind of like it’s been reinforced after surgery” [Moe, spouse].

**Slow changes.** One couple explained that eating the same things was not always the case after WLS given that the spouse gradually, over the course of five years, made
diet changes. Little-by-little, small negotiations were made as well as compromises with grocery shopping, snacking, lunch-packing, dinner at home, dinner out, and dessert.

It was a struggle at first, because I mean she couldn’t eat—I want to eat some like chips or something and I knew she couldn’t have them. Or we go out to dinner and I wanted this and she couldn’t do this restaurant, you know, I was like (gives an exasperated sigh), but then I was like, “Well, ok. We need to come to a medium, see where we’re at.” And we found foods that we—that I enjoy, she enjoys [Smokey, spouse].

Callie described the process of how she and Smokey found a “happy medium” between what he wanted and what she needed.

He didn’t change everything all at the same time that I did, it was a gradual thing that he changed. There were times that I was cooking double means so it wasn’t that it happened overnight, it was that we went through the process and figured out how we could make it work. You know I couldn’t keep doing double meals…I felt like we needed to get everything on the same page…having a happy medium of how we can both eat what I’m cooking [Callie, patient].

Smokey explained that seeing the struggle his wife went through and watching her lose weight motivated him to change. I was like, “Well, I mean we can make this work. I mean, it’s no big deal. I mean, I can change, I can eat, you know, find stuff I’m sure I can eat that she can eat.”

**Big changes.** Multiple patients and spouses explained that before WLS they were driven by their food cravings, family-of-origin practices, desire for large quantities of food and fullness, convenience, impulses, and seeking out “comfort food” in times of
stress, anxiety, or grief. Some labeled themselves “emotional eaters” or “food addicts.” They described constant grazing such as snacking in between meals, before dinner, after dinner, or in the car. Volume and wants were the driving forces behind food decisions rather than nutrition and need.

How I used to be, which was basically to eat everything in sight, and then, you know, scheme for how I could get more. So, our food conversations before were more like, “What do you want on the pizza?” And I was always very focused on, “What do I want?” [Xena, partner turned spouses].

Xena later contrasted her food decisions as the following: “I had always been like, Oh, who cares about what’s in food, it matters what it is and whether I want it. So, everything (after WLS) became protein or not protein.”

Portion sizes were brought up by all participants and the means by which they changed from large to small portions by measuring their food, using smaller plates, eating more slowly, tracking their meals through food journaling, and splitting dinner when they were on a date night. “She’s eating less, I’m eating less, we’re just feeling a lot better. We’re not ordering big proportions” [Smokey, spouse]. One spouse contrasted the way his wife eats; “she eats small portions, she’ll kind of nibble on meals and stuff…before, you would get huge plates full of food and eat it before I could even sit down—she’d have the whole thing eaten and going back for more” [Henry, spouse]. A patient reflected, “I mean it shocks me now how much I used to eat, you know, be able to eat” [Rosa, patient]. Her husband explained, “Before, we were a lot more casual with the meals that we made and how much and what and when” [Rico, spouse].
Quantity was a big diet change after WLS as well as the quality of food consumed because patients knew they had to “make it count.” Several patients had “aha” moments after surgery when it came to feeding their children and grandchildren. Their gains in nutritional knowledge impacted the food they provided for their family. One patient explained, “It made me more health conscious…I started realizing like, what am I putting in this stuff (her son’s lunch), this is bad, like I felt like a horrible mother” [Harriet, patient].

There was also a sense of urgency and duty to provide their spouses, children, and grandchildren with healthy food. Being responsible for the family’s health was mentioned by several patients and this was explained as “nourish, nurturing, as a mother” [Beth, patient]. Big diet changes were met with some resistance from adult children and from children living in the home. “Within four months they had adjusted to it (diet changes), but they were used to eating like the children of fat people, they weren’t used to eating healthy, but they got used to it and liked it” [Star, patient and spouse].

Date nights were another area of diet changes experienced by couples especially with regards to portion control. Prior to WLS, food was a primary source of entertainment and the focus of a date. One spouse reflected that when planning a date prior to WLS, the plan centered around eating whereas now, activity or a task is the main focus and food is an afterthought. Many couples split an appetizer or an entrée for dinner and they leave satisfied and happy whereas before WLS, both had an appetizer, salad, entrée, and dessert in addition to bread. Splitting a meal was a big change for some and did not happen immediately in a few cases. “We kind of evolved into the let’s split an entrée thing because that’s asking each other for support” [Miles, patient]. Some
explained that prior to WLS, they never felt full and would typically stop for ice cream on the way home from their dinner date or snack on chips once they returned home. Although decreasing portion sizes was a big change, the rewards of a smaller bill and feeling “happy and satisfied” after dinner were mentioned by multiple couples.

**Fun changes.** Four patients who had WLS had spouses who were in need of making diet changes for health purposes; two spouses lost fifty pounds, one in conjunction with his wife’s post-surgery weight loss and the other spouse five years after his wife’s WLS success. All four had improvements in their cholesterol or blood pressure and one was no longer classified as pre-diabetic. Interestingly, all four of these spouses explained that they had better nutrition because their wives refused to cook for them differently than they cooked for themselves. All four appreciated the better gain in nutrition and several expressed that being the willing “guinea pig” for new bariatric friendly recipes was fun or “like a game” that you get pulled into.

For one family, if they like the food, the recipe is written down on an index card and put in a recipe box. Another patient enjoys sharing her recipes with others and has also given a cooking demonstration with her son at a WLS support group. Being able to cook appetizing and healthy food was especially important for patients who loved to cook prior to WLS and they explained that their spouses being open to new recipes was helpful and supportive. Finding healthier alternatives to food their family liked was motivating and experimenting in the kitchen was a source of learning that inspired the patient to keep trying for better nutrition. “If you don’t step out and learn, you’re not gonna stick with it (WLS program)” [Beth, patient].
**Hard changes.** Even in the midst of positive health gains associated with better nutrition for both the patient and the spouse, making consistent healthy food choices continues to be a source of struggle, battle, or challenge. Some explained that after WLS, their food cravings went away and so it was easier to control their portions and stick with their prescribed diets. However, once their stomachs healed and their physical hunger returned, they were less vigilant about food choices. “The further you get away from surgery the more prone you are to making some, maybe eating some empty calories” [Jean, patient]. Eating empty calories or sugar-filled foods for comfort was a hard habit to change.

Picking the right thing to eat every time you eat is truly the hardest thing. I mean you know what’s right, but your mind still wants those things that are your comfort… being able to override that, that’s the hard part for me [Tammy, patient then spouse].

A few patients explained that food was a “daily struggle” and linked this to how it functioned in their lives prior to surgery verses how it had to function in their lives afterwards in order to be successful. “It’s a daily choice of what you eat and what you do and how you think about it…it’s just, it’s a daily struggle and I get teared up with it, but it is, it’s a daily struggle” [Callie, patient]. These old habits were hard to change and the wanting to eat beyond sustenance were still present.

I still on a daily basis, I still struggle with food. All the same reasons that I had before about eating, that I would go to the pantry and look for food, I go there for the same reasons now. I just make a different choice and sometimes I do give in,
but it’s still a different choice than what I would have made whenever I was bigger [Harriet].

Another patient shared, “I mean once you get to the point where you realized why you got big, it had nothing to do with not eating quality, I just ate too much of everything...the hardest part was the changing of the habit” [Elan, patient].

Even in the midst of it being hard to make consistently right food choices, patients felt empowered and supported by their spouses and their WLS tool to change their diets and refocus when necessary. “The surgery’s not gonna change who I was, but I can change who I was, it’s like I said, “A tool that’s let me do it.” I just have to keep being vigilant about it, mindful about what I do” [Gaby, patient then partner]. Being mindful was also explained as awareness. “I don’t eat obviously as much as I used to, so, I’m a lot more aware of what I eat and how much I eat than I used to be” [Tommy, patient then spouse].

**Exercise: Healthy and Fit**

A few WLS patients explained that they were motivated to have surgery because they had always wanted to be fit. The extra weight they had carried restricted their mobility, put strain on their weight-bearing joints, and their overall lack of energy made it so that when they did start to exercise, their efforts were easily thwarted because results were slow and the process was too painful on their knees. “When you’re 250-300 pounds, putting your all into it (exercise) is not as easy as it is now, because when you’re heavy, it hurts. You don’t have the energy, you don’t have the breath, you don’t have the stamina” [Maria, patient]. Prior to WLS, it was impossible for Maria to give an “all out” effort with exercise. Gaby has a similar experience. “When I got older, I wanted to be
able to be fit, to exercise and not have it be hard, but when I was lugging around 160 extra pounds it was difficult to walk, it was difficult to climb stairs” [Gaby, patient]. Small modifications to exercise or movement such as walking were more manageable for WLS patients prior to surgery and weight loss.

Several WLS patients began to incorporate walking into their daily routines before WLS and a few spouses joined them. Most WLS patients were able to implement formal or organized exercise into their lifestyles after they had recovered from WLS and had experienced some weight loss. Weight loss was a means for patients to become more physically active, experience fitness success for the first time for those who had previously tried to exercise, but failed, and it was also a source of “taking things up a notch” whenever they hit a weight loss plateau. Weight loss meant patients had less weight on their joints and therefore less pain. They also had some gains in self-confidence. Feelings of embarrassment associated with a heavier weight, sweating, and general public perceptions of “fat people,” as well as “being intimidated” were prior hindrances to seeking out group fitness classes or going to a gym.

Being able to exercise was a source of success and a safeguard for weight regain or WLS failure. One patient explained that exercise was far more essential to maintaining her WLS success than diet.

I have a fear of getting out of the habit or routine, so I’m very focused (about working out five times a week) …Exercise for me is even bigger than the food because the food’s coming naturally for me as far as making healthier choices… I feel better when I’m exercising, like I’ve accomplished something, I have more energy and feel better about myself [Jean, patient].
For the patient who was the youngest when he had WLS, 30 years old, exercise was highly motivating as a competition to lose weight faster than anyone else, to gain strength and “do what the other guys my age were doing,” and to “be in the best total shape of my life when I hit 40,” [Elan, patient]. His wife had always been physically fit, but she incorporated new things into her fitness routine such as spinning/cycling after learning from Elan. Exercise was a shared experience with spouses in all cases be it that WLS patients were motivated by their spouses, spouses were motivated by WLS patients, or WLS patients were commended and complemented by their partners.

**Spouses leading the way.** Of the eleven WLS couples, five had spouses who were a “normal weight” as designated by BMI standards. These five spouses had never struggled with significant weight gain. Three spouses had maintained the same normal weight throughout their marriages by being selective about their diets and intentional about exercising, while two spouses had to recently modify their diets due to some aging and medical issues. All five spouses had modeled to the WLS patient caring for their bodies through exercise and most invited the WLS patient to join them in walking or going to the gym.

Walking was recommended to all WLS patients before and during WLS. Walking would enable patients to become more fit for surgery, lose the required pre-surgery weight, build up some endurance and muscle tone, and it was a means to prevent post-surgery complications in circulation and breathing such as blood clots and pneumonia. Spouses were motivated to walk with the WLS patients as a means of support, encouragement, and safety especially for the WLS patients who were completely sedentary before WLS. “He’s always worried about me, so, how I am and how I
feel...he wanted to make sure that I wasn’t going to pass out on him (while walking)” [Maria, patient]. Maria, explained that she could barely walk a mile without stopping or losing her breath, but the day before WLS she and her husband, Moe, walked three miles. A few weeks after surgery, they started walking together again, but this time they ventured beyond their neighborhood to a local greenway. Beyond the physical component of walking, Maria added, “We talk when we’re walking, it’s our time.” Another spouse explained that before WLS, walking was a quick “no” from his wife.

We went for a walk around the neighborhood a couple weeks ago. I used to ask her if she wanted to go for a walk or walk the dog and she would go, “No.” She would just be laying on the couch; “Nope.” Because I would always be trying to, you know, get her to do something, but she wouldn’t [Henry, spouse]. Henry later explained that his wife’s newfound willingness to move helps him to feel better.

After surgery recovery and losing most of her weight, Maria eventually added going to the gym. She called her spouse “My Mr. Exercise Man” and explained that a year after surgery, she was off her medicine for diabetes, but her weight loss had stopped. As a result, her husband encouraged her to go to the gym. “It was just an idea, you know, if you wanted to lose weight a little bit faster now, go to the gym” [Moe, spouse]. After hiring a personal trainer, Moe accompanied Maria to her session and noticed that the trainer should be doing more for Maria. Moe informed the employer and Maria was switched to a new trainer. Both were proud of the gains Maria was experiencing in endurance, strength, and flexibility and they shared a video Moe had taken with the researcher of Maria successfully utilizing a medicine ball with her trainer. While Moe
had always been physically fit, it was his expertise in exercise that helped Maria to find a fitness routine that enabled her to make progress with her weight loss and to experience exercise for the first time as fun.

Another spouse commented on the surprise he had with his wife’s mode of exercise. “The fact that she goes to an exercise class, that would be nothing she’d ever done, you know, corporate exercise…just the fact that she does that is huge” [Jim, spouse]. Weight loss plateaus and weight regain were mentioned by most participants. When these occurred, exercise was the solution. Having a spouse who was willing to walk with them and encouraged them to move “without being ugly about it,” negative, or “pushy” was appreciated.

**WLS patients leading the way.** Of the eleven WLS couples, four had spouses who were also inactive prior to WLS, two who eventually had WLS while the other two lost 50 pounds. WLS patients learned that, similar to diet, exercise was an important component to WLS. One spouse, who lost 50 pounds the same year his wife had WLS, followed her exercise routine as soon as she started. Their routine progressed from the surgeon recommended cardiac rehab program at the hospital prior to WLS, to walking, and to the gym. The patient was not surprised by her husband’s early adoption of exercising with her and linked his efforts of joining her as a result of loving her. He explained that his goal was “to lose weight and to help her and her goal was to help me, also—help each other” [Buck, spouse]. For the other spouse who lost 50 pounds, he was a late adopter of exercise and now he uses a pedometer to track his steps at work. His wife surmised, “I think we feed off each other, you know, trying to help each other out.
So, that’s a big thing if your spouse isn’t on board with it, I think it would be double struggle” [Calle, patient].

For the other two spouses who eventually had WLS, they walked with the WLS patient as a means of being supportive and they also lost a little bit of weight in the process. However, when they saw the gains in energy the WLS patient was experiencing in comparison to their labored breathing and knee pains, they recognized wanting to have surgery, too.

“We went for a hike and it was probably right around my peak weight loss. And it was just, we were hiking and it was just like” [Miles, patient].

“It was cake for him” [Milly, spouse turned patient].

“Not tired, not short of breath, not anything, just go” [Miles, patient].

“About halfway through the hike my knee started hurting and I was almost in tears by the end of it…but yeah, he did great! He did great on that hike” [Milly, spouse turned patient]. Later on, Milly explained that she had always been physically active, but her weight was becoming an issue with the intensity of activity she was seeking to perform.

**Partners cheering the way.** Of the eleven WLS couples, two had partners who were limited in mobility and both of these partners had also had WLS. One couple, Star and Stan, had WLS a few weeks apart and neither had been physically active in years. A few years after surgery and a significant amount of weight loss later, they were enjoying newfound exercises such as running, swimming, and ballroom dancing. They explained how gains in energy and feeling “hyper” gave them a desire to try new things and support the exercise of choice for the other person by at least trying it.
The other couple has had a different experience with exercise in that one partner, Gaby, is incredibly physically active while the other partner, Xena, is still experiencing daily post-WLS nausea and exercise aggravates these symptoms even more. Nevertheless, Xena expressed being very proud of the efforts her partner made in exercising, although at times, she felt left out. However, watching her partner have a physical and mental transformation about exercising was a turning point in her decision to have WLS. When she noticed that her partner was trying to find more ways to move, she was impressed by this change in thinking. This moment was when she recognized that she wanted a transformation that she called “a miracle” as well.

Recreation: “I mean, I’ll climb a tree”

Modifications in diet and exercise were daily choices, however, patients and spouses were able to experience new recreational fun mostly during vacations and weather-permitting. Although recreation has physical activity components, it was different from exercise in that recreation was associated with special occasions more in line with a planned celebration rather than a means to achieve or sustain a healthy lifestyle. Recreation were “aha” moments in that patients and spouses recognized and reaped the fruit of their WLS efforts—their meal-by-meal, step-by-step, choices enabled them to recreate in a new, more satisfying way. Their lifestyle change, weight loss, and gains in physical strength and stamina meant that recreation was possible and enjoyable.

Reflecting on life before WLS, one patient explained, “I didn’t realize I was living my life according to my weight…my weight was influencing my choices” [Stan, patient and spouse]. Another patient explained life after WLS; “I don't feel like there's anything I can't do, even with my grandchildren. I mean, I'll climb a tree, I don't care,
there’s nothing—I will do it” [Beth, patient]. Similarly, another patient explained recreation as a motivation to have WLS.

I just want to live a healthy life and not have to worry about it—play with my grandkids, so, and not have to worry about fitting into an airplane seat or fitting into an amusement ride or whatever I wanted to do [Maria, patient].

Overall, recreation was a means to experience life without weight-related limitations. Many patients and spouses expressed they could now do “whatever we want to do.”

Recreation functioned in three ways. First, it was a means to have fun and enjoy a new type of family togetherness. Several spouses explained that before WLS, going to the beach meant that the WLS patient was going to sit underneath an umbrella or sleep by the pool. Before WLS, having a sense of adventure or desire to explore their destination was limited. While some WLS patients were able to hike or bike before surgery, after surgery they could hike or bike for miles without feeling exhausted or miserable.

Secondly, recreation was a replacement behavior for those who previously used food for entertainment. Third, for those who were planning for retirement, recreation gave them a new vision and hope for aging without the limits of their obesity and obesity-related issues.

**Vacation: Cruising and swimming.** In their initial interview, Callie and Smokey explained that WLS was life-changing. They explained this in more depth in their final interview. “Everything changed for us. We got more active, we started getting out more with our friends, we started doing more fun things. You know when you’re in that rut, you become homebodies to some extent” Callie, patient]. When asked what types of activities they enjoyed doing together after WLS, Smokey, immediately replied,
“Vacations and I love em’.” His wife said, “Yeah, we love to go to the beach or go on cruises” [Callie, patient]. Smokey elaborated,

If she didn’t have surgery, she’d probably just stay in the room or something. I’d look outside and say, “You wanna go outside?” And she’d say, “Oh no, I don’t feel good,” (imitates Callie in a slow, tired voice). But now it’s like, “You wanna go?!” She’s like, “Yeah, ok! Let me get a shower [Smokey, spouse].

Callie’s gain in energy was reflected in Smokey’s voice similarly to when Henry impersonated Harriet’s expected, “Nope” whenever he invited her to walk their dog prior to WLS.

Henry and Harriet compared and contrasted going to the beach and even though Harriet had always loved the beach, she was now able to join her family in the water, rather than be confined to her umbrella.

“I would not really go out in the water, like we’ve done that a lot more if we go to the ocean” [Harriet, patient].

“And she would sit on the beach under the umbrella” [Henry, spouse].

“We get out, we float, and we’re out there forever and like, together, like we never would do that before” [Harriet, patient].

Another aspect of vacationing was seat-size and traveling. A few patients mentioned being too large to ride on amusement park rides. They explained feeling physically uncomfortable and cramped in “normal-sized” seats on rides, in theaters, and on airplanes. Multiple patients detailed the annoyance and at times embarrassment associated with needing a seatbelt extender. A spouse explained their plane-riding experience as the following:
You don’t have to ask for a belt extension, not that it ever bothered me, it bothered you when we went on an airplane, it never bothered me, you just felt bad, like you were crowding me. And I never, you know, I just sat in the middle, it wasn’t a big deal, but it bothered you [Emmy, spouse].

Emmy then mentioned that they can go horse-back riding now to which her spouse responded, “We can do whatever” [Elan, patient]. He explained, “I mean just the regular physical stuff, I mean it wasn’t like I was gonna go bungee jumping or ziplining, but I mean now it’s just whatever.” “You don’t have to think about it” [Emmy, spouse]. “Yeah” [Elan, patient].

**Scaling new heights: Hiking and biking.** Some patients and spouses recreated prior to WLS, but it was challenging. Rosa and Rico talked about how they always liked hiking and bike-riding, but “the biggest (post-WLS) difference is that it is easier and more enjoyable” [Rico, spouse]. Rosa explained, “I never really let it (extra weight) get in my way (of recreating),” but now she has an easier time.

My stamina and everything is a lot better...like a really steep incline or something, I would be out-of-breath and I used to have a lot of pain in my shins when I was heavy, too. I don’t have that anymore, of course it’s a little easier cause I’m not as much to haul up a hill” [Rosa, patient].

Another couple discussed the distance they were able to ride on a family vacation. This was especially important because prior to WLS, the patient was sedentary and unable to ride bikes with her husband and son.
“It’s like when we went to Tybee Island one weekend and we rode bikes, we rented bikes all three of us and how far did we go? Like sixteen miles or something” [Henry, spouse].

“In one day, yeah, one day we rode sixteen miles” [Harriet, patient].

“She would have never done that before, so, that was fun” [Henry, spouse].

WLS success yielded recreational fun on vacation and in daily life that was new to families and also an indicator of WLS success. Additionally, an increase in stamina gave couples a new vision for planning how they would recreate in retirement.

**Bucket list items: Camping and fishing.** Two couples in this study mentioned how they had always wanted to go camping, but their weight inhibited them from being able to move and endure the outdoor elements. After WLS, both couples bought campers and both explained their plans for more camping and retirement and how they were unable to have these dreams prior to WLS.

“Our camping trip last summer, as long as she and I have been together I’ve been trying to get her off to the Rockies because I was stationed at Fort Carson, I love it out there. And uh, so we finally got to do that” [Tommy, spouse turned patient].

“We spent our anniversary in Montana” [Tammy, patient].

“That was on her bucket list, was to go to Montana. So, we spent our anniversary in Montana” [Tommy, spouse turned patient].

“Now if he was 347 pounds and I was 280 pounds” [Tammy, patient].

“We would have--there’s no way we would have been able to drive across the country, there’s no way we would have been able to do that” [Tommy, spouse turned patient].
“No. And packing up a camper and move to the next spot and pack up the camper and move to the next spot, we'd never make it, we'd never make it--we wouldn't have, he wouldn't have been able to stay awake long enough to drive that far and I would have been too exhausted because I was too big to do it. And so now we want to take our camper to all the states we can get it to, you know?” [Tammy, patient].

Beth and Buck, who were now on their third camper, talked about recreation in terms of camping and fishing. “We do anything activity-wise, hike, camp, anything, bike, walk” [Beth, patient]. “Fishing. I fish, she lays back” [Buck, spouse]. “I lay in the sun (both laugh)” [Beth, patient]. When asked if they did this before surgery, Beth emphatically replied, “No! No, we were too fat, we were miserable, it's too hot when you're fat. You can't get out there in that sun, you're like, well, you can't breathe. So, no, we didn't do all of that” [Beth, patient].

Recreation for replacement: “Relearn doing something else.” Recreation was a means to enjoy old and new activities without the burden of extra weight, aching joints, or profuse sweating. For one couple, it was utilized as a replacement for food-centric routines. Miles explained how food was an enjoyable “activity.” “You eat, obviously, it gives you pleasure, it releases neurotransmitters and you have pleasure and that was one of the big things post-op, well, we have to relearn doing something else,” [Miles, patient then spouse]. When asked what they replaced food with, Miles responded “Activity, you know, concerts, um, hiking, ballgames, any social outlet of some kind. And it worked really well and we continue to do that” [Miles, patient then spouse].

Diet and exercise changes in daily life gave couples the ability to recreate and recreation was a way to enjoy togetherness outside of food-based dates and destinations.
Recreation motivated patients and partners to continue in their WLS efforts because now they could do “whatever we want.” Celebrating a wedding anniversary by taking a camping trip rather than eating a large amount of food, biking 16 miles on vacation rather than sitting under an umbrella, and walking a greenway rather than staying on the couch at home were indicators of WLS success and joint milestones for couples.

**Defining WLS Success: Goals, Milestones, and Metaphors**

Motivation for having WLS consisted of desiring to succeed at losing weight and maintaining that weight loss, both of which had become impossible tasks prior to WLS. For patients with weight-related diseases, remediation of these illnesses or a decrease in medication for treating these ailments were also reasons to have WLS as well as indicators of success. In the short-term, weight and health status, measured through the use of a scale or a medical evaluation, were early indicators that surgery was successful. Maintaining this short-term success when reaching WLS anniversaries the first two years after surgery was a big win, but carrying success into the long-term was an even larger, more nuanced victory. Beyond the scale, patients gauged their success on how they felt as explained by Tommy when he was asked to define WLS success. “I think that’s a qualitative thing cause success is defined by the person. For me, success is feeling better and not being as tired at the end of the day and you know, not having people dismiss me” [Tommy, spouse turned patient].

Overall, participants believed that they were successful as long as they continued in their WLS practices such as following-through with the WLS program, being mindful about diet and exercise choices, using surgery as a tool, and keeping a sense of control rather than guilt over their weight struggles. Even when the scale was not exactly where
they wanted it to be, patients still felt successful as long as they were fighting and trying. “I do believe you haven’t lost if you’re still trying” [Xena, partner turned patient]. Still fighting and still trying meant that patients were engaged in following-through with their WLS efforts and follow-through was the only way that patients could be successful. Thus, follow-through was the theme for success and it was linked to the following four subthemes: health (results), appearance (comfortable), satisfaction (control), and freedom (long-term health).

Follow-Through: “I owned it.”

Follow-through for WLS patients was about “sticking to the program” by keeping to the surgical guidelines they received from their WLS center. Spouses were an important source of support in complying with the guidelines, but they also served as a witness to the WLS patient’s follow-through and struggle. One spouse commented, “It (WLS) works if you, if you’re motivated and you stick with the rules—it does work” [Rico, spouse] and another spouse observed, “He was working out twice a day, I mean he was putting the work in to get it there. It (success) didn’t just happen” [Emmy, spouse]. Generally, follow-through was labeled as adhering to the prescribed plan from the WLS center and “doing your part” rather than relying solely on surgery for WLS success. Follow-through had different challenges and nuances related to specific time stages after surgery—recovery, adjustment/adaptation, and maintenance.

Follow-through in WLS recovery and short-term success was experienced as immediate, fun, and automatic because right after surgery weight loss occurred easily and some weight-related comorbidities were quickly resolved. For example, one patient explained that she woke up in the surgery recovery room no longer diabetic. Yet, follow-
through in WLS adjustment and adaptation linked to long-term success in maintenance was experienced as hard, a struggle, a battle, and a daily decision to engage in WLS efforts to maintain healthy habits. Embracing this expected WLS aftermath was linked to a refocus and spousal support. “You have to refocus for long-term success, um, the short-term success takes care of itself” [Jean, patient]. A patient who was still successful 12 years after WLS expressed frustration in people who claim WLS does not work. “The surgery never fails, your follow-through is what fails…my follow-through would not have been nearly as strong as it is, lasted as long as it has if I hadn’t had a partner going through it with me” [Star, patient and spouse].

**WLS recovery and WLS adaptation.** Patients described several stages of post-surgery life. First, there was WLS recovery which was a time to recuperate from surgery and work through some side effects such as nausea and pain. This was when losing weight was the most rapid and easiest. Then, there was WLS adaptation and adjustment, still a time of weight loss, but more about making behavioral changes to support WLS. Lastly, there was WLS maintenance where weight loss was minimal and the highest amount of energy and planning had to be executed in order for patients to maintain their WLS success.

Patients explained that right after surgery they were physically unable to eat. Given that their stomachs had been reduced, bypassed, re-routed, or restricted from receiving food, patients experienced new digestive sensations such as being full, satisfied, “free from hunger,” nauseous at the sight or thought of food, or not wanting food. This “honeymoon” period gave patients a chance to recover from WLS and experience success
in weight loss. Stan and Star labeled the first 6-9 months after surgery as the “golden window” because they lost weight automatically.

No matter how you eat right after surgery, you’re going to lose a considerable amount of weight no matter what kind of food…what people don’t realize is you have a 6, maybe 9-month window when that happens just because you physically can’t (overeat) [Star, patient and spouse].

Her husband replied that this time was “glorious” because “you can even cheat and you still lose weight” [Stan, patient and spouse]. During this recovery time, patients lost the bulk of their weight so it appeared that their surgery was working or “doing the work for them.”

These immediate results from surgery were encouraging, but also a risk in that a few patients were surprised when their weight loss stopped even though they hadn’t reached their desired weight. In these instances, some patients engaged in a higher intensity with exercise. Another couple, Elan and Emmy, explained the short-term dynamic of WLS results and that WLS centers do not capitalize on the time immediately after surgery. “I think that surgeons do a dis-service to their patients by not pushing them harder in the first four months. Letting the surgery be successful instead of letting the person be successful” [Elan, patient]. “And pushing them from the get-go before they even have surgery to hit certain goals and learn what those goals are and that it's not going to be easy” [Emmy].

There was a risk in assuming WLS was the solution rather than a tool and this is where many patients believed WLS failure began—a faulty assumption and a refusal to follow-through with the pre-operative instructions of diet, exercise, support groups, and
follow-up with your surgeon. For some, the surgery “wearing off” was expected because they knew people who were unsuccessful with WLS. Seeing others who were unsuccessful was a source of warning and a form of motivation to be careful lest they have the same fate. Given that their surgeons told them WLS was a “tool,” they explained the necessity and at times struggle with following through—using their tool as instructed. “Choosing what and how much you put in your mouth every day is hard work” [Tammy, patient].

Once food cravings returned, the surgery-related nausea subsided, and life was less about WLS because they were past recovery, it became time for the patient to “work” their surgery.

The surgery and the way the inflammation and the things inside your body, you just can’t eat, I mean you can’t physically eat too much. But the further you get away from surgery that changes—there’s no doubt about it that that changes. So then, it becomes even more on you and less about what the surgeon did. And it becomes more about you deciding you want this to be a long-term thing” [Jean, patient].

Thus, WLS recovery was different from WLS adjustment because this was when learning and practicing new health habits became essential for long-term WLS success. Patients described being mindful, vigilant, and aware of the choices they made that lead to their obesity.

I owned it, I was not in denial. I mean I knew I gained the weight, I knew why I gained the weight…I ate in depression, I ate just to eat, I ate cause I liked to eat.
And then as the eating went up, the activity went down, I just gained weight all the way through (prior to WLS) [Elan, patient].

All the patients in this study were beyond WLS recovery and adaptation or adjustment because they had to be at least two years post-surgery in WLS maintenance as indicated by their bariatric surgeon. Two partners turned patients who were only a year post-surgery shared their surgery experiences, but their partners were the focus of inquiry. Patients in this study did not differ in their WLS success behaviors, however the time lapse since surgery remained a finding of interest given that they fell into the following time categories: More than a decade post-WLS (3 patients), 5-9 years post-WLS (4 patients), and less than 5 years post-WLS (5 patients).

**More than a decade.** For Elan, the participant who had the highest BMI at surgery and was the youngest WLS patient in this sample, “owning” the choices he made prior to WLS was a component of his intensity with surgery follow-through. “I owned it. I mean I just knew that I, I knew I wanted to do it and then I, I mean I wasn’t gonna go at it half-ass” [Elan, patient]. Several other patients also shared this sentiment in that they wanted to try their hardest to be successful with WLS. They recognized that weight loss during WLS recovery was going to be different than WLS adaptation or maintenance. Reorienting their thinking about WLS in this stage was a process that came with hindsight. Elan was the furthest patient out from surgery, 13 years, while Stan and Star were the second furthest out from surgery, 12 years. The perspective they had being more than a decade out from surgery had an additional “balm of time” layer as described by Star and Stan. “I think right after you have surgery you’re real aware of everything you’re doing. You remember every bite of food because you’re not eating for pleasure,
you’re eating for fuel, but then 3-4 years down the road, life happens” [Stan, patient and spouse].

Life happens was mentioned by multiple participants who were caregiving for their parents, buried a parent, in stressful situations with their adolescent children, had a spouse with a newly diagnosed serious and potentially fatal medical condition, or were in need of more surgery after WLS—emergency gallbladder removal, skin removal, or WLS revision. Challenges that came with different stages of child-rearing and required a specific type of parental energy or attention were also mentioned as well as unexpected events that complicated parenting such as a special needs diagnosis, mental health diagnosis, or a car wreck. These life happenings were mostly mentioned by patients who were 5 or more years post-WLS because they had to make a conscious decision not to revert back to old habits that would impact their WLS success.

Seasons of grief that pre-WLS would have been handled with eating comfort foods, eating too much food, or withdrawing from all physical activity were approached with a determination to remain mindful about habits and a reliance on spouses for accountability. Star explained that she had extreme grief when her parents died to the point that she was very forgetful when it came to eating. Her spouse helped in that “he supported me by watching what I was eating during that time and reminding me of what I had eaten” (Star, patient and spouse). She later mentioned “having that battle buddy seems to make the whole difference.”

5-9 years post-WLS. All participants explained that they had taken personal liberties to be less lenient on some WLS recommendations especially when it came to drinking liquid calories like sweetened tea and alcohol and consuming “slider foods”
such as chips, crackers, and soup. Being less rigid about their diets and exercise routines was attributed to “being human” because “life happens.” For patients who were 5-9 years out from surgery, their follow-through efforts had to be readjusted or refocused because these 4 patients had experienced some weight regain that they attributed to being less vigilant with their diet and exercise routines. When asked to define WLS, Callie replied, “Is it ever success? I mean, it’s success along the way” [Callie, patient]. Patients in this time period after WLS explained that their follow-through had to be consistent in order to maintain a certain weight and that they were still learning.

Non-operative spouses mentioned that their partners “looked good” and this was an indicator of WLS success. While patients thanked their partners for the compliment, they did not always agree with it because they believed their follow-through could be better. When asked, “How do you define WLS success?” Smokey replied, “Look at her, she looks good.” Then Callie replied, “Well, thank you, but I don’t feel like I’m successful yet. I feel like I’m still in the process, it’s always a process. I’ve held my weight down, but I’m not done yet, I have to keep going.” Patients utilized language around WLS being a process, the work never being finished, “trying to get that swing back” or “getting back on track” after gaining some weight, and having a struggle that was sometimes seasonal, daily, or meal-by-meal.

I’m not always successful everyday with every bite that I take, but so far, you know, this is, I mean that is success is to say you know hey, I have to pick myself up you know maybe once a day, maybe moment-by-moment at times when things are heavy, but I think that’s huge when you can say, “I’m still fighting” [Tammy, patient].
For patients who were 5-9 years from surgery, follow-through efforts or not giving up in addition to maintaining most of their weight loss was WLS success.

**Less than 5 years post-WLS.** For patients who were less than 5 years post-WLS, follow-through and weight were closely associated. They explained the process of trying to figure out where their weight should be and how to lose the last bit of weight in order to reach their goal weight. For all five patients in this time period, outside help was required be it a nutritionist, a personal trainer, or support group. One person explained that he had pressed the “pause button” with his weight loss due to time constraints with recently going back to college and high family needs. However, he considered himself successful in that “I’m not at my goal, but I’m not moving in the wrong direction either, so kind of homeostasis right now” [Tommy, spouse turned patient] to which his wife expressed him being “a long ways from where you were when you started” [Tammy, patient].

Being in maintenance meant that patients were engaged in a different kind of WLS struggle because they were trying to hit their “natural sweet spot” with weight. Two of the patients in this category were at one point below the weight they had hoped to reach post-WLS and one explained feeling a strong sense of fear or being out-of-control because she did not know where it (her weight) was going. “I kept losing weight and actually, I started freaking out” [Harriet, patient]. Both were relieved to shop in a “normal” store, but when they tried on sizes that were below normal, they were concerned that they had gone “too far” with their weight loss. “If I lost any more weight I was gonna have to shop at special stores again and I didn’t want to shop in special stores I wanted to shop in regular stores” [Rose, patient].
Patients who were in the newest phase of maintenance were more likely to be involved in support groups and actively learning about nutrition and exercise. “There’s different tricks to make it (meal-planning/food-tracking) easier for you and you have to change it up every once-in-a-while” [Gaby, patient]. Several patients were novices when it came to intensive physical activity such as running and weight-lifting. They utilized exercise to lose weight or maintain their weight-loss, an important piece of follow-through, but also an indicator of WLS success when gains in mobility and stamina were achieved. For those who were not physically active yet or who had been, but stopped for work-related reasons, they explained their desire to exercise and plan to engage in it once things in their lives calmed down a bit.

Spouses and follow-through. Spouses and partners in this study contributed to WLS success when they supported the patient in their WLS follow-through and remained cognizant of the patient’s efforts to be successful. Participating in the follow-through was explained by one spouse as having shared goals and an important piece of togetherness in marriage. “Well, you’re not gonna stay married for 38 years if you don’t have things in common. So, you have to think alike and have the same goals and push for that” [Buck, spouse]. Participating in follow-through was also related to the goal of being happy as a couple. “If you want to be happy as a couple and that’s one of your goals, if you want to continue to be happy, then you have to go through these things together” [Gaby, patient].

Follow-through or “doing your part” with WLS was an indicator of WLS success and it was the only way to be successful. “To be successful long-term you’ve got to do it all—you’ve got to eat the right foods, you’ve got to exercise” [Maria, patient]. Star
added, “The people I think who succeed the best stay in support groups and do all the aftercare and keep seeing their doctors, go back to the nutritionist, and we’ve done all that together.” Follow-through was the means to success and it enabled patients to experience the WLS results they had hoped for in terms of their physical, emotional, mental, and long-term health.

**Tangible Results**

When asked how they defined WLS success, Jim quickly replied, “I mean obviously, results.” He explained that weight loss was the obvious reason for WLS and that losing the weight was an obvious indicator of success. Several participants added “long-term weight loss” to their definition of success. Other results or indicators of success related to weight involved being healthy, getting off of medication, correcting co-morbidities, being fit, and having more energy, but in order for these things to happen, the individual had to lose weight first.

A major qualifier for WLS was proven attempts to lose weight with documented failure. Weight loss was an unattainable goal and one patient described it as a huge roadblock. “I felt like if I set a goal, I could get to it, any goal that I set it didn’t matter what it was, but with weight loss I could never do that…it was just a huge roadblock” [Rosa, patient]. All explained that their weight just “fell off” and was especially rapid in the first year after WLS. “It was fun that first year or whatever when I’m constantly losing weight, I mean that was a lot of fun after a battle for so long…that weight’s just pouring off of you was the best part of it” [Jean, patient]. Many patients recounted crying in excitement and relief for reaching a weight they had never seen as an adult or had not seen in a long time. A couple recounted the moment when success was first experienced.
“Probably the single biggest moment during her weight loss right after surgery was when she got below 200 pounds for the first time--that was, uh, she cried. That was a real” [Tommy, spouse turned patient].

“Yeah, because I hadn't seen that in a long, long time” [Tammy, patient].

“And so, that morning she was very happy with that” [Tommy].

“Cause I was, I mean and that was a struggle to get there…I just got on the scale one day and it was like there it is, 199 and it was just like, "AHHHH!!!" You know it was, that was an achievement” [Tammy].

“It will probably be the breakthrough moment after her surgery when it just finally, when she felt like she was succeeding” [Tommy].

“Mm-hmm, when I hit that moment, yeah” [Tammy].

For each couple, weight loss was part of their success definition, but it was also paired with a feeling or an accomplishment such as maintaining their weight loss or conquering their weight-related health issues. “I’m not gaining weight back and that’s—maintaining is still success. It may not be the goal, but it’s still success, it’s still fighting” [Tommy, spouse turned patient]. Another patient explained the difference in measurable versus subjective success.

Being within a normal BMI, I would consider that, you know, something measurable as a sign of success. Being able to enjoy your lifestyle in the way that you want to is a subjective measure that each person has to answer for themselves” [Milly, spouse turned patient].

Reaching numerical weight loss goals was important for some patients, but others did not set a specific weight goal. For example, one patient said that her goal for WLS
was to lose enough weight in order to resolve her type 2 diabetes. She explained that her surgeon was in agreement with this and that resolving the diabetes was her surgeon’s definition of success. Likewise, another patient said, “Most of the patients, including myself, have significant co-morbidities and if you’re able to correct those or lessen those as a result of having WLS then I think that would be defined as a significant success” [Miles, patient]. Weight was a consideration for WLS success definitions, but it was not the only factor.

Correcting weight-related co-morbidities with weight loss improved patient’s physical health, removed or decreased the use of medication related to treating the disease, and also increased their energy. Having this increase in energy also enabled patients to participate in physical activity or reach fitness-related goals which added to their experience of success and WLS follow-through as well as feeling more comfortable in their bodies.

Appearance: “Being comfortable in your own skin”

Many patients described their pre-WLS bodies as uncomfortable because they felt restricted in their movements, cramped in “normal-sized” seats, and embarrassed in the public gaze. They described a motivation for having WLS as “being comfortable in your own skin,” a physical and emotional measure of WLS success. When asked to describe when she knew she had reached this kind of comfort, Harriet detailed the following:

I think it was probably around the 150-mark where I did not feel uncomfortable in clothing and I did not feel, I didn't feel uncomfortable getting in my car and getting out of it, there wasn't any effort in walking, I didn't feel any effort in getting up from like sitting down or tying my shoe or there was nothing, I mean I
felt like I thought I always should have felt… I was always so worried about, it really kind of just put a negative impact on so many things in my life because all I could ever think about was, you know, issues that I was having or being uncomfortable and maybe not being accepted or somebody looking at me [Harriet, patient].

Being comfortable in your own skin was also expressed as having self-confidence, “feeling better about myself,” and having overall contentment with your appearance.

Outward appearance and movement were the two most talked about experiences of WLS comfort and success. Indicators of comfort were distinguished by effortless, every day movements that prior to WLS were impossible to maneuver or very difficult. These “non-scale victories” were often celebrated by Xena who made it a point to “celebrate the little things.” Like Harriet, she noticed when she could buckle her seat built with one hand and in one fluid movement and that she was able to get in and out of bed quickly. “Every day I try to think of something that makes me very happy…I weigh 103 pounds less than I did before surgery so, there’s lots of room in my chair—I can sit sideways in my chair now” [Xena, partner turned patient]. Star recounted the first time she was able to cross her legs while sitting, something that was impossible to do when she was over 400 pounds.

The first time I crossed my legs in nearly 20 years, I was running a ladies’ choir rehearsal and I had them all gathered around (the piano) plunking out parts and without thinking I crossed my legs and then all of a sudden, I was like, “Well, would you look at that?!” And I started crying…And then the sudden realization
that I wasn’t limited to just two octaves on the piano, but once I could reach the whole thing now, that was a sign of success [Star, patient and spouse].

Sitting was an uncomfortable experience for patients especially when the space was limited and public. Patients talked about airplane seats, desk chairs, patio furniture, auditorium seats, and toilet stalls/seats as a source of physical pain and emotional embarrassment especially if they broke a chair or became stuck. “An extra 100 pounds will definitely compromise your movement in many, many ways—dozens and dozens of little ways that you don’t even really think about—getting up and down from the toilet is much easier, you know?” [Xena, partner turned patient].

There was a dread before WLS that patients discussed when they were going to attend an event or travel to a place that required them to sit in a confining seat or dress for a nice occasion. Gaby compared two such events in her son’s life.

When my son got engaged (recently) I was really happy for him, but I remember one of the--one feeling that I had was such a feeling of relief that for the first time in my life I was facing a huge thing that was coming up and the first thought that I had wasn't, "How can I lose enough weight before this happens?" And I think about that because that's the way everything was--I remember when my younger son was in a show at school, I remember thinking, "I'm not gonna be able to sit in the seats," the seats were very narrow in the auditorium and I wanted to go see the show, but I remember just sitting there thinking about just how darned uncomfortable they were and it was--it would kind of be, like, "Could I get into it? Could I actually, literally fit my fat butt into those seats?" And, you know, that was always a consideration [Gaby, patient].
Gaby experienced relief and achieved the mobility she had hoped for in her post-WLS body. “My goals were always to be more mobile and to be able to be physically active, you know. And to be able to exercise and to run and to also, to take up less space in the world” [Gaby, patient]. Beyond physical comfort in their own skin, patients discussed appearance-related comfort that they encountered through the remarks by others on their outward changes.

Patients were often unrecognizable to many family members and past acquaintances. Several patients described “run-ins” with people who were “wowed” by their physical transformations and inquisitive as to how they lost weight. These instances were markers of WLS success met with congratulatory remarks that encouraged and motivated the patient to continue their lifestyle changes. Compliments from relatives, friends, co-workers, and past acquaintances were outward confirmations of WLS success, yet compliments from spouses and partners meant the most to patients. For example, many patients were happy about being able to shop for clothes in a regular store because there were more choices, they had new options to dress for style rather than dressing to conceal or hide their size, and it was more convenient. Henry commented that his wife is now “more stylish” to which she replied, “that was really nice…that was kind of like a you did it, I mean that’s another thing of like a measurement of success in a way” [Harriet, patient]. As Harriet recounted “all those little niceties or all those comments along the way” Henry said, “I didn’t know it meant that much to her until now. I didn’t even realize I did any of that really.”

Feeling comfortable in their own skin was a process for many patients. Several patients mentioned going to therapy for help with obesity-related problems around
behavior changes and self-perception. Being content with herself and having self-confidence was especially difficult for Jean because of the years prior to surgery that she battled with her weight and low self-image. “The biggest thing is the insecurity is embedded in my brain” [Jean, patient]. She connected “venturing out in how I dress” as a means to help her self-confidence. Her husband reflected that Jean no longer sits on the couch with a pillow over her stomach and this indicates to him that she is comfortable in her own skin. He explained, “I hated to see that struggle…it’s so refreshing for me to see my wife sit down like this (shows an open posture) …those are the little things to me that is so rewarding cause she's free from that, you know” [Jim, spouse]. Jean confirmed that she always sat with a pillow to hide. Jean also attributed exercise as helping with her self-confidence and feeling better. Running a race, participating in a weekly group fitness class, exploring the greenway near their house, being able to do push-ups and sit-ups, and “having abs” greatly enhanced her overall well-being and contentment with her appearance.

Increased mobility meant that patients could exercise more and this helped them to feel successful and maintain their success. Exercise was a confidence-builder and being able to sit and shop comfortably was a reward for their follow-through and an indicator of success. Feeling comfortable in their own skin after years of feeling intense physical and emotional discomfort was an outcome to utilizing their WLS tool appropriately. Having more options with movement and self-presentation assisted patients with increasing their happiness. “The success is for her to be happy. If she’s happy in her skin, she’s happy the way she feels, then that for me is success. I mean that’s really, that was the whole role of the surgery” [Rico, spouse].
Satisfied: From Cravings to Control

Several patients mentioned that prior to WLS they were “always hungry.” Living in a constant state of hunger, consistently craving or wanting foods that were high in carbohydrates and sugars, and snacking before and after dinner because their meal did not satisfy their hunger was a frustrating way to live. Having a desire to be satiated or “free from want” was another motivator to pursue WLS and reaching this goal was also an indicator of success. One patient described her post-WLS diet as “blissful” because “I’m free of having to think about food or deal with it” [Xena, partner turned patient]. Another patient also enjoyed being free from thinking about food and impulse-buying.

I don't have to think about what I'm doing for lunch, you know I just, it's just one less thing I have to think about… sticking with protein shakes at work is good for me because I don't have that, I'm not impulse-grabbing, you know, what I think I want to eat at the convenience store or you know, buying something that I shouldn't eat at a fast food restaurant [Tommy, spouse turned patient].

It was the drive to satisfy their appetites and cravings prior to surgery that contributed to their obesity and being free from this allowed them to experience satisfaction.

Patients were relieved after surgery when their hunger was gone and they described feeling happy because they were full and satisfied after a meal. Feeling satisfied was a welcomed feeling, but also surprising given that they were satiated with a small portion of food whereas before WLS a large portion of food still wasn’t enough to satisfy their hunger. This felt change was a noticeable change for family members.

I remember we went to eat with my daughter and I wanted a taste of a taco. Well, it came with like three or four and I had half of one. My daughter remarked, "I
don't think I've ever seen you eat a half of a taco before.” And I said, "I'm stuffed!” And I was happy and satisfied [Mile, patient].

Feeling satisfied also helped patients with portion control, a commonly discussed aspect of WLS success. “The capability of being satisfied with small amounts of food” [Miles, patient] also gave them a sense of mastery over their “hunger-drive” and a way to control their food portions.

Prior to WLS, patients expressed that their food cravings influenced their food decisions, but after WLS they gained a new sense of control. Now in WLS maintenance, a few patients mentioned that their hunger had returned, but they had learned how to live with their cravings in a way that did not derail their WLS success or impeded their follow-through. When “head-hunger” returned, Gaby sought out assistance from an online support group in order to make a few diet changes. She also found some help in reading a few WLS blogs and a book from a WLS patient who especially struggled with hunger in WLS maintenance. Gaining this kind of support helped Gaby to normalize her experience and try a few new things to help curb her appetite. In comparison to pre-WLS, she explained, “I don’t get controlled by my hunger as much” [Gaby, patient].

Food journaling/tracking, weighing food with a scale, and using a bowl instead of eating directly from the bag to portion out snacks were other practices patients used for portion control. These practices were a means for patients to control their eating rather than relying on WLS. Prior to WLS, patients felt controlled by their hunger. During WLS recovery, their hunger was gone and in WLS adjustment they were still very motivated to stick with their prescribed diets even if the urge to snack crept in. Snacking between meals was strongly advised against by doctors, nurses, and nutritionists, so
patients knew prior to surgery that snacking was not “allowed.” This was relatively easy to do when their hunger was absent. However, in WLS maintenance their stomachs were healed from surgery and with that, some experienced an unexpected return of hunger and cravings. This was especially troublesome for Gaby who described her obesity as an addiction.

I mean I'm two years and a month and a half out, you know, and I, like a couple weeks ago I started feeling like I was really hungry a lot, and I was scared that I was like, "Oh no, I'm gonna be a slave to my addiction again," or whatever. And then I kind of just tried to manage it and do something different [Gaby, patient].

Rosa also expressed some fears with gaining back her weight, however keeping a record of (tracking) everything she ate and drank helped her to have a visual of what she was consuming and to feel in control. She explained tracking everything for the last three years “religiously” and that having this kind of evidence also motivated her. Additionally, she linked food tracking to helping her have a sense of control which helped her to feel and be successful.

The fear that the weight will come back isn't gone. I mean, every day I think about it, like that's why I continue to track things and I'll never stop because I feel like that's the key for me and if I stop tracking that's when I'm gonna go off the rails [Gaby, patient].

Feeling satisfied after eating a small portion gave patients a satisfaction from their hunger that they had tried unsuccessfully for years to gratify. Being less controlled by cravings when it came to making food decisions also enhanced their sense of control as well as their self-efficacy when it came to applying portion control practices they were
instructed on by their WLS center. Feeling satisfied was an indicator of WLS success that was an important piece of WLS maintenance because it motivated them to stay committed and faithful to the WLS program, to reach out for help when they were struggling, and to essentially control their weight. “My weight was such an albatross around my neck for so much of my life, it defined so many things about what I would and would not do and you know, basically, I would have been free” [Gaby, patient]. The physical, emotional, and mental health impact of having obesity restricted many patients and being free from their excess weight, accompanying co-morbidities, and food cravings was experienced as WLS success, but ultimately freedom.

**Freedom: From Chaos to Calm**

When asked to describe WLS success Beth said, “Wow, healthy! Fun, you get to buy pretty clothes” [Beth, patient]. Her spouse replied, “Freedom” [Buck, spouse]. Buck lost 50 pounds during the first year of his wife’s WLS. He immediately joined her preoperative efforts to be physically active and has continued to support her by accompanying her to the gym and changing his diet. He explained gaining freedom from his cravings similarly to when he and his wife quite smoking after 30 years.

“Well, you're a slave to food whenever, I mean when you are fat, that's all you've got to do is eat. So, it's kind of like smoking. We smoked for several years, too” [Buck, spouse].

“30 years” [Beth, patient].

“Yeah, so, we kicked that habit. After the cravings went away, I mean you felt free, you didn't have to go out and stand in the rain and smoke and all that. And eating is the same way, I mean, I can bypass a hamburger joint now and not have to think about it.
So, that's freedom, where you don't have to think about it, so--and it's not on the front of my brain anymore” [Buck].

Freedom was experienced as moving from chaos to control. Patients had felt out-of-control with their health because they were unable to lose weight, have energy, or experience success. They explained that their bodies, emotions, and cravings dictated their decisions and negatively influenced their quality of life. Harriet explained that she did not know she had chaos in her life until it was gone, which occurred a year after surgery.

All those different feelings that were associated with all the weight and how I was feeling physically, really, all that has dissipated, I mean it’s really gone…all those things are gone and they, they don’t create that chaos in your life or the unspoken chaos that um, probably families and relationships don’t really even know that exist [Harriet, patient].

Harriet’s “unspoken chaos” was detailed as occurring in her mind. However, Beth and Buck explained their chaos was “crazy” because of their eating habits and schedules. They were now experiencing a new sense of self-control that was related to Buck’s previously described “freedom.”

“Instead of just being so crazy and just eating everything and going, I mean we try to control it, be calmer, do what's better, go to church more, you know, be closer to God--everything just be in control. And that's helped our marriage and we work at it. You know, we're not perfect” [Beth, patient].

“We felt out-of-control” [Buck, spouse].
“That's right. I for one was out-of-control, I was crazy--going everywhere, going to ballgames, you know, it was just crazy, crazy world. You know you're young and you're doing what everybody else is doing” [Beth, patient].

This shift from “crazy” to calm impacted “everything” for Beth and Buck. Rosa had a similar experience. “For me, it goes back to having a feeling of control or at least a better feeling of control about where you’re going in life” [Rosa, patient]. Gains in control permeated other life aspects in that several patients and spouses made career changes after having lost weight, thus having a freedom to pursue a better job or go back to school because they now had the energy and drive to do it. This was another aspect of success for couples. When asked to give examples of noticeable success, Smokey commented on his wife’s weight loss and his own, while Callie quickly interjected about his new job. “Well, I mean seeing what she's lost then seeing what I've (lost), you know, doing right now. You know, eating healthier and all that it's kind of fun” [Smokey, spouse]. “Well, it's also, he just accepted a new job that he'll be starting next month. So, it's (losing 50 pounds) given him more confidence, I think” [Callie, patient].

**Freedom to pursue new experiences.** Freedom to take career risks was something new that couples experienced after weight loss. Additionally, they sought out new experiences and for Elan, he explained that after having lost weight, he was more open-minded.

I think it (weight loss), an ancillary way it probably changed, I’d say we probably have different friends and different things now than we may have had if I hadn’t done it (WLS) because of being willing to go and be a part of and meet new people outside of work whether it be—I don’t think we would have had as near as
much open-mindedness at the new church if I had been big at the time [Elan, patient].

Prior to WLS, Elan’s weight controlled what he would do away from home and work. Some patients mentioned their weight was also a deciding factor in what they pursued outside of home and work, two places where they believed they had a level of control. Before WLS patients explained “eating whatever” and this shifted to “doing whatever” after WLS. Once couples were free from their weight restrictions, both the physical burden and the social stigma they encountered from being a big person, they were more willing to try new things and meet new people. One patient shared that she joined several obesity awareness groups, which lead to her attending a national conference about weight in addition to giving her support politically during a recent healthcare reform day at her state’s capital. She explained that prior to WLS she would have never had the confidence to serve as an advocate for those battling obesity, but she now has the freedom to meet new people and go new places. Patients were compelled in other ways to help others through leading support groups and being willing to share their WLS story with family, friends, acquaintances, and strangers.

Newfound freedom and gains in health were described in the context of comparing life before and after WLS. “After I lost all my weight, I felt better than I had my entire adult life—I felt better at 36 than I did at 18” [Star, patient and spouse]. Patients exchanged their pre-WLS health that was complicated by weight for present and long-term health marked by victory.

Being obese or having obesity, if it’s a disease, was always something that I felt like I could not escape, you know. And now, I feel like I can manage it and
having this surgery has given me the tool that I needed and it’s not the only tool, but it’s the tool that let me get to the point where I can conquer the rest of it…I think that that was something I never was able to do before in my adult life, I never was able to handle it [Gaby, patient].

Victory and success were also experienced because patients had a tool that worked that also enabled them to let go of guilt.

**Freedom from guilt.** Several participants encountered times where they stumbled with their follow-through, but instead of feeling guilt, they were able to give themselves grace and execute a different approach the next day. Rather than “getting stuck” or “beating myself up” their perspective shifted to making a better choice with the next meal. Rosa explained that she is happier with herself and this has helped her guilt to go away.

I'm happier with myself, so, I'm just happier in general. I mean I'm not an unhappy person, I never really have been, but happier, you know, I'm not concerned about those things anymore and they're not, you know, I don't, you get guilt if you ate something you shouldn't have eaten or you didn't exercise that day or, you know, there's a million reasons to get down on, be your own worst enemy, but all that's gone, it's just gone. Yeah, I don't worry about any of that stuff anymore [Rosa, patient].

Self-policing before WLS produced shame and guilt when participants struggled with their diet and exercise choices as well as their outward appearances and weight-related physical restrictions. This “unspoken chaos” as described by Harriet was gone after she was successful with WLS and having this negativity gone gave patients a sense
of freedom. Thus, WLS success was realized when patients were free from self-deprecating internal dialogues about their health, habits, and bodies. In contrast to success, Rosa explained, “If you feel bad that you have another 10 pounds to lose and you go back to that being hard on yourself for eating the wrong thing or whatever, then maybe that's not quite success.”

Another patient added that prior to WLS, she never gave herself time to be successful with a diet or exercise regimen and she would give up after a month. Gaby described getting the proper “gear” to start walking prior to WLS. Purchasing the right shoes and comfortable clothing as well as keeping a level of consistency with walking was an investment Gaby made because she wanted to be surgery-ready. This change before surgery made it easier for her to continue after she was recovered from surgery. With the tool of WLS and the rapid weight loss, Gaby was able to meet one of her WLS goals—to be physically active. “I never gave myself time before (with exercise), I never gave myself time to be successful…I never had the chance to experience the success of doing it slowly over time and actually achieving a degree of proficiency at something” [Gaby, patient].

Collateral benefits. Freedom from chaos, freedom to pursue new experiences, and freedom from guilt were markers of WLS success for patients. These freedoms impacted their spouses and partners who were able to witness the gains in physical, emotional, mental, and long-term health of WLS patients. Collateral benefits of WLS for spouses and partners included gains in their health such as better nutrition and weight loss as well as gains in their happiness and relational connectedness to the patient. Spouses and partners experienced WLS success by means of living with someone who went
through a radical weight loss intervention with a clear before and after. Patients went from always being hindered from reaching weight loss goals, never feeling comfortable, and having persistent, insatiable hunger to having their weight loss roadblock removed, being comfortable in their own skin, and feeling satisfied with food.

Xena, a WLS partner turned patient, explained that what she saw in her partner who had WLS was a physical and mental transformation and that she longed for this “miracle,” too. She explained that she wanted to exchange her “old script” of being driven by her appetite and wants for a new script. “My script now is to just celebrate the little things and to be so grateful to my past self whose mindset I no longer have, but who went from the before to the now” [Xena, partner turned patient]. Celebrating was a shared experience as another spouse reflected, “It’s our success together” [Tommy, spouse turned patient]. In terms of WLS, Tommy explained, “It’s all been hard, but none of it’s been hard because we haven’t had to do any of it alone.”

**Negative Case Analysis**

There were 11 couples in this study, 10 who interacted very similarly. These couples appeared warm, affirming, and genuinely attentive to one another. They expressed high levels of positive sentiment toward each other and about their relationship. They actively listened while the other one talked during the interviews. Their interactions and communication styles were consistent with Gottman’s (1993) description of “validating couples,” one of the three types of “stable” couples he proposed for marital typologies; avoidant and volatile patterns being the other two stable relational patterns. Gottman’s “hostile” relational style, characterized by criticism, defensiveness, contempt, belligerence, and stonewalling, was predictive of divorce.
Gottman (1993) utilized observational data in order to classify couples. Such measures were not utilized in this study and classifying couples as either stable or unstable is beyond the scope of this study especially given that Gottman’s (1993) aim was towards marital stability in relation to predicting divorce. Yet, the ideas from Gottman’s work resonated with the researcher when reasoning through this unexpected finding—how one couple stood out from the rest.

When considering the 10 validating couples, Elan and Emmy were strikingly different in their interactions with each other and with the interviewer. This was also noticed and mentioned by one of the coders who was unaware of the researcher’s experiences during the interviews. This couple was most like Gottman’s volatile style (high disagreement and individuality) within the stable group, but also like Gottman’s “hostile” relational style in the unstable group given the lack of positive sentiment and presence of defensiveness (Gottman, 1993). Generally, their affect was negative and they did not talk about their relationship in terms of security and unconditional love like the other 10 couples nor did they describe WLS as a “joint journey.” Friendship and shared experiences were typical of validating couples, however “thriving on conflict” was a hallmark of volatile couples similar to that of Elan and Emmy who quickly expressed their disagreement with the other person’s answers in their interviews (Gottman, 1993, p. 13).

The place of agreement for Elan and Emmy was that WLS was a solo experience. Emmy said, “I was never one that was part of the equation” [Emmy, spouse]. Elan explained that he did not want his WLS to affect his family nor did he want his children to miss out on having pizza just because their dad could not. Additionally, Elan did not
experience WLS as a life-changing experience because “life wasn’t all that bad before.” He viewed WLS as a “second chance at a different kind of life.” Similar to the other WLS patients, Elan explained that Emmy was encouraging, but when asked to describe what Emmy did that was encouraging, Elan’s experience was quite different. Elan found it encouraging that Emmy said nothing about his WLS or his weight loss. He liked that she did not draw any attention to his eating habits and how she maintained her weight was a motivator for him to maintain his over the years. Similar to other participants in the study, Elan wanted to become physically fit, but he was motivated to compete with another WLS patient in how quickly he lost weight. He explained that once he heard of the time period it took another man who had the same procedure with the same doctor to lose his excess weight, he wanted to beat his record.

Well, there was another guy a little older than me that had done it that had lost it all in like, you know, his I think 15 months or so. So, then I had a goal. So, then once I started it, it was just a, it was a slaughter. I mean it was so fast Elan lost 250 pounds in 10 months and he had skin removal surgery exactly one year from his WLS.

With relationship dynamics related to WLS, Elan explained that Emmy was encouraging, but security, support, teamwork, and being closer were not discussed. Elan talked about the personal changes he made in his exercise and dieting habits, but this was not a change in their household. Emmy mentioned that Elan could now shop for clothes in a “regular” store and that “that's the funnest thing now--getting to go wherever we want.” As far as WLS success, Elan and Emmy mentioned keeping the weight off long-term and maintaining progress just like the other participants in this study, however Elan
added that in order to be successful with WLS you had to “own” your behaviors that lead
to you needing a surgical weight loss intervention. For Elan, the truest indicator of
“owning it” was skin removal surgery. “If you don’t ever get to the point that you need
skin removal or you talk yourself, ‘Oh, I’m fine without it,’ that means you still don’t own
it.”

Elan labeled his life as “limitless” which was similar to the subtheme of freedom
and he also enjoyed the other elements of WLS success that were described by patients in
terms of weight loss, gains in health and mobility, and being mindful about his portions.
However, his experience of WLS was very different in that he did not need his spouse in
order succeed, but he did understand that overall, spouses could influence WLS failure.

I think the most important thing is just people have to realize that it's their--it's
them. I mean she couldn't have made--she could have made it harder for me, but
she couldn't make--your spouse can't make you successful, I just don't think. I
think your spouse can make it harder on you.

Elan also assumed his story would be different from most WLS patients because Emmy
was a “normal” weight and that most always weight is a “joint problem.” He could see
where WLS would need to be a “joint journey” if weight was a “joint problem” because
“it does have to be a joint thing because if you, I mean, you can wreck your partner.”

Lastly, Elan and Emmy processed WLS not as a turning point or life-changing
event, but rather they viewed it as one component out of several within a season of their
lives that was spent in heavy child-rearing (two toddlers and one newly diagnosed with
autism) as well as being young and newly married. When asked about their WLS
experiences, they usually gave examples related to their children’s activities or needs as a
higher priority than focusing on Elan’s surgery. Unlike the other WLS patients who explained that if they had it to do over again they would still opt for WLS, Elan believed that he could have lost the weight without WLS. This was remarkably different from the other participants, especially those who expressed high levels of gratefulness for their surgery. In summary, Elan and Emmy were distinguished from the other couples within this study given their communication style and WLS reflections.

A Comment on Gender

According to the American Society for Metabolic and Bariatric Surgery, 80% of WLS patients are female, which was almost reflected in the study sample. There were 11 couples in this study (22 individuals) and 4 couples consisted of both people having WLS. However, 15 out of the 22 individuals had WLS and of those 15, there were 4 males (26% male). Of the 11 couples, Elan and Emmy were the only one who had just the male undergo WLS (Emmy was a normal weight). However, Miles had surgery two years before Milly, Star and Stan both had surgery within the same month, and Tommy had surgery two years after Tammy. Given that this study was a phenomenology and not a grounded study and a gender analysis was not part of the 3 main research questions, the researcher is only commenting on gender not making conclusive remarks.

There were four specific areas where WLS experiences appeared to be gendered. First, several women expressed feeling “lucky” or fortunate that they had a spouse who would care for them when they were hospitalized, sick, or in need of reassurance. The attention they received endeared them to their spouses as Tammy explained, “he’s my knight in shining armor.” When male patients were cared for by their female partners, they did not give them special commendations for being thoughtful, nurturing, and
loving. They noticed and appreciated support and accountability from their partners, yet they were not surprised by the support they received, but rather expected it.

Second, body image prior to WLS and after WLS was mentioned by female patients as an area of struggle and a barrier at times to physical intimacy. Several mentioned having a desire “to be comfortable in my own skin” as a goal prior to WLS and an indicator of success afterwards. Yet, the male WLS patients did not express the embarrassment or shame for their pre-WLS bodies or the mental battle of believing they would maintain their WLS success. Third, a few women in this study connected their roles as mothers to obesity-related habits. They expressed regret for feeding their children the wrong food prior to WLS, teaching them the wrong habits, and watching them launch into adulthood obese. They desired to feed their families healthy food now. Harriet explained packing her son’s lunch one day and feeling “like a terrible mother” for the foods she provided for him. Beth and Maria wanted to find recipes their families enjoyed because food was a source of nurturing and “being a good mother.”

Finally, the one person in this study who had the most extreme WLS procedure, was male and he explained that he opted for an aggressive surgery and after surgery, “it was a slaughter.” He was highly motivated by competition when it came to losing weight faster than someone else who had the same procedure and being just as fit as the guys his age and younger. He was the most intense participant in this study when it came to exercising—opting for the most physically demanding types of workouts often times twice a day. His concern post-WLS was that he did not want it to affect his family, unlike the women in this study who felt responsible for their family’s health.
Chapter 5: Discussion

There is certainly a financial and personal cost to engaging in any type of weight loss intervention. Weight loss programs often include costs to the consumer that involve dietary supplements and vitamins, packaged foods and protein powders, diet and exercise professionals, and program or membership fees. These costs are a reality for WLS patients, too, as well as medical co-payments for doctor’s appointments and out-of-pocket expenses such as the preoperative psychological evaluation and other medical tests that indicate the appropriateness for WLS to insurance companies as well as the surgeon. Given this huge investment in time, money, and energy as well as the stress of undergoing a surgical operation, patients and their spouses and partners in this study dedicated efforts to understanding WLS and being prepared for surgery. Some participants gave great consideration to life after surgery, while others were focused solely on changing the trajectory of their lives from early disability and death to living a full and healthy life.

Participants explained they had life goals that they believed were within their reach if they had WLS and were able to lose weight, correct their weight-related comorbidities, change their eating habits, and ultimately, increase their happiness and confidence. Within the WLS literature, efforts have been made to predict who will be successful with surgery, yet a definition for what constitutes success has not been established (Biron, et al., 2004). The rationale for determining preoperative predictors of WLS success, the multi-dimensional aspects of WLS success as described by participants, and recommendations that patients and spouses/partners made to the WLS community are implications that came to the forefront of study findings.
Preoperative Predictors

Predicting who will be successful with WLS and who will not has been an area of pursuit within the WLS literature. Given that WLS is still an elective procedure and there is imminent risk to the patient should they cease from following the surgeon’s post-operative recovery prescriptions, WLS success predictors are important to identify. Because WLS is a radical weight loss intervention with detailed guidelines for patients to adhere to before and especially after surgery, researchers have been looking for preoperative success indicators beyond demographics to psychological and behavioral components (Tariq and Chand, 2011).

Thus far, researchers have focused on preoperative factors such as weight (obesity category), weight history, age, gender, psychological status, and substance abuse histories in hopes that they could find a variable that distinguishes a WLS candidate who is more likely to succeed from a candidate who is more likely to fail (Elkins et al., 2005; Kim et al., 2014; Livhits et al., 2012; Mrad et al., 2008; Pontirolo et al., 2007; Robinson et al., 2014; Sarwer et al., 2008; Shen et al., 2004). If a candidate appears to be “noncompliant” with medical instructions before surgery, expectations are that they will repeat the behaviors that “lead” to their obesity and thus their noncompliance will result in WLS failure. Even though “success” without changing behaviors is often achieved in the short-term, without changes in diet and exercise, WLS achievements will not be sustained (Peacock & Zizzi, 2011). Yet, it is especially challenging, and according to Biron and colleagues (2004) a “subject of controversy,” to assess post-WLS results given that “there is no consensus as to what constitutes success or failure” (p. 160). Thus, a major goal of this study was to add the voice of WLS patients to the WLS success dilemma.
Within the current study, several WLS patients and their spouses reflected on the time prior to WLS and how they knew (predicted) they would be successful with WLS because they were determined to make it work. They explained that once they (the patient) set their minds to something, success was essentially a guarantee. This was interesting given that previous attempts at weight loss resulted in failure, yet the confidence they exuded with being successful despite their past was noticeable. Measuring confidence and mindset may be possible from a self-efficacy perspective and could be a way to treatment plan for the patient especially if they experience weight regain or struggle with being successful. In spite of many attempts at predicting success and operationalizing success, the mystery persists as to who will be successful with WLS and how to define success. Patients within this study were successful by their own assessment and findings indicated that couples’ experiences of success were multidimensional and went far beyond numbers on a scale.

Success Revisited

Within the WLS literature, the researcher found three definitions for WLS success. Livhits and colleagues (2012) viewed success as greater than 50% of excess weight loss. Another group of researchers focused on weight loss maintenance as the most important feature of success as they were concerned with weight loss recidivism, also known as weight regain, following bariatric surgery (Mrad et al, 2008). Finally, van Hout and van Heck (2009) believe that success should include the following components: weight loss, relief from weight-related comorbidities, better eating behaviors, improvement in psychosocial variables, and a better quality of life. This expansion of WLS success beyond BMI or weight loss maintenance is a means to evaluate bariatric
surgery through a broader lens, which is similar to the etiology of obesity discussion of genetics, environment, and behaviors predisposing and contributing to a person becoming obese. Biron and colleagues (2004) argue that if obesity is still present after WLS, then the surgery was a “non-cure” for the disease. Thus, from this perspective, obesity is an indicator of non-success or WLS failure.

“The most important outcome after bariatric surgery is the long-term sustainability of the surgically induced weight loss” (Mrad et al., 2008, p. 572). Patients and spouses in this study also held to this belief and a few adamantly proclaimed that if weight loss was not maintained in the long-term, then you were not successful. Four participants mentioned that at one point it was necessary for them to gain back a little bit of their weight because they had become “too skinny” and were concerned by being at the lowest end of the “normal” weight range per BMI standards. There was a desire to find a weight “sweet spot,” a place that the patient felt met their goals, was sustainable in the long-term, and was reasonable for their height and bone structure. Maintaining a weight range, sometimes established by their surgeon, was preferable, too.

Beyond WLS maintenance, patients experienced success similarly to van Hout and van Heck’s (2009) broad definition in that their well-being, health, and quality of life was greatly improved, which was not connected solely to their present weight. This became clear to the researcher after meeting with her first four couples given that only one patient out of six was actually successful according to the “normal” range within BMI classifications. The other five patients were still considered obese, although they were in the lowest category of obesity whereas prior to surgery they were morbidly or super obese. Looking at how far they had come in their weight loss was part of their
success definition in that they were no longer in a place of compromised health or danger due to their excess weight. More specifically, they were happy with “only” being 40 pounds overweight given that they were 100-250 pounds overweight prior to surgery. BMI was an indicator of success for several patients, but overall weight was a point of celebration based on relativity—the distance between their pre-surgery weight and their post-surgery weight.

For participants in this study, being able to maintain weight loss mattered to patients more than their specific weight, which also contributed to improvements in their self-esteem, body image, and overall well-being. These improvements enhanced their self-confidence and this allowed some patients to be able to take risks that they would not have entertained prior to surgery. Patients who had fitness-related goals prior to WLS were able to achieve these goals and create new ones. After losing weight, several patients changed their careers, took a promotion, or pursued an advanced degree. Being more open-minded and having a “better attitude” was an experience that patients and spouses found to be meaningful and a sign that their physical transformation was also a mental and relational one, too. WLS success was achieved through utilizing WLS as instructed, continuously engaging in lifestyle changes related to maintaining success, and having a supportive spouse/partner who joined with the patient in various ways.

**Success: Multidimensional**

Participants in this study explained that they had goals for WLS. Once these goals were met after WLS, some felt successful. Thus, having specified preoperative goals, meeting them, and subsequently feeling better were experiences of success that were intensified as patients had unexpected physical benefits after surgery such as
increased energy and less joint and back pain. Couples explained that the patient had a more positive outlook on self and life and they were noticeably happier. Reaching a weight goal or coming off of weight-related medications, as well as sleeping without assistance and “losing” their diabetes and hypertension diagnoses were medical victories often associated with weight loss. Shopping in a “regular” store, being able to reach fitness goals, feeling comfortable at the gym, riding on an airplane without a seatbelt extender, and being free of the insatiable appetite for food were personal victories beyond the scale. Patients expressed gratitude and surprise in that they could set new goals and thus continue to experience new aspects of success.

While success was multi-dimensional, it was also nuanced and evolving. Prior to surgery, some patients were aware that they could fail at WLS because they had seen friends and co-workers as well as celebrities gain back all of their pre-WLS weight. Patients and their spouses and partners were well aware of weight regain and a few were humbled by the challenge of maintaining their weight loss especially when it had been over five years since surgery. A common thread throughout the interviews within this study was that the struggle to maintain WLS success persisted at varying degrees, however living with obesity prior to surgery and having weight regain after surgery was also problematic. Long-term and short-term weight loss outcomes are one measure of WLS success and important to consider within prediction studies and for WLS aftercare. However, rather than focusing on predicting success or patient compliance, this researcher started with patients who were already successful long-term in order to glean from their experiences a definition of WLS success and learn how they were successful.
Patients in this study were determined to succeed, however having help from their spouses and partners was key to their success for many and appreciated by all.

A final dimension of WLS success was when spouses and partners also experienced success. Living with a WLS patient gave them an opportunity to evaluate their own eating and lifestyle habits and make a decision to join the WLS patient in their efforts to become healthy. Couples were surprised by the “success together” aspects of WLS recovery, adjustment, and maintenance because the shared experience of WLS, given that surgery is an individual endeavor, was mostly experienced as a couple. Mendenhall and Ballard (2014) recognized that “family characteristics and support have a significant impact on patients’ emotional coping, adherence to treatment regimens, and appropriate health behaviors” (p. 291). However, this loop of support as it relates to the patient also positively impacted the couple subsystem.

**Success: Thematic Comparisons**

As mentioned previously, couples and weight loss surgery literature has been sparse and disjointed over the last several decades (Ferriby et al., 2015). This is not surprising given the complexity of obesity and the challenges of remediating the disease especially after a long history of weight loss failure followed by a radical weight loss intervention—bariatric surgery. Some efforts have been made to understand the individual experiences of WLS and findings between qualitative studies of WLS experiences indicate that there is tension in the transformation, both interpersonal and intrapersonal, and a surprising paradox of the life before and after WLS being very different and still the same (Bocchieri, et al., 2002; LePage, 2010; Natvik et al., 2013). Tension and paradox may have an impact on WLS success for individuals and families.
Within this study, tension and paradox were recognized in patient’s struggle to maintain their WLS success. Several patients became tearful when they described weight loss maintenance as a “daily battle” and a “life-long struggle.” A few also labeled themselves as “food addicts” which seemed to be helpful at times in normalizing the struggle, empowering when it came to being vigilant about their follow-through, and saddening when they wished for their struggles to end. Yet, making the choice to continue in WLS follow-through was an indicator of WLS success despite their feelings of conflict and the numbers on the scale. Patients explained that gaining back some weight or becoming less focused with their WLS follow-through was not indicative of failure, yet giving up completely or refusing to try would be failing.

The theme of “follow-through” as it relates to WLS success in this study adds another dimension to the previous WLS tension and paradox findings because it normalizes the struggle and reframes it. For example, several patients recounted times that they shared their experiences with people who were contemplating having WLS. They made sure to tell people that surgery was “just a tool,” that the battle against their old eating habits would come back eventually, and that they would mourn food. They found it imperative to warn people that WLS was hard work. LePage (2010) established “paradox” as the overall theme for her study, yet “renewed hope” was a sub-finding. Hope was the grand theme of this study and having hope enabled WLS patients to persist in their follow-through, commit to new weight loss and family routines, and take solace in the security of their relationship with their spouse or partner who remained loving and supportive of the patient’s life goals before, during, and after WLS. Thus, WLS success was vetted and experienced by the patient individually and with their spouse/partner.
Partners and spouses were generally sensitive to the lifelong and daily battle that many patients experienced with their weight as well as post-WLS recognitions of obesity-related “unspoken chaos,” ongoing insecurities, times of mourning “who I should have been all along” after achieving WLS success, and additional elements of WLS-related tensions and paradox (Bocchieri, et al., 2002; LePage, 2010; Natvik et al., 2013).

Partners and spouses were a witness to the battle, at times a “battle buddy,” and a source of support for the weight loss struggle. Relationship dynamics of teamwork aided lifestyle changes that enhanced WLS success, which was most closely related to the following 5 themes in a recent study of couples’ experiences following bariatric surgery:

Theme 1 Greater intimacy in the relationship; Theme 2 Joint journey, a sense of being ‘in it together;’ Theme 3 Significant change in emotional health; Theme 4 Change in eating habits; Theme 5 Significant weight loss, fewer health problems, and more energy (Pories et al., 2016, p. 57).

All five of these themes were apparent in the grand theme, themes, and subthemes of this study and specific instances of these overlaps are discussed below.

WLS was a shared experience that involved teamwork at the most and witnessing the patient’s efforts at the least. Beth’s experience was similar to the “joint journey: a sense of being in it together” and “change in eating habits” themes 2 and 4 of Pories and colleagues’ couples and WLS study (2016). Another spouse acknowledged that “the surgery doesn’t change the way you think” and when his wife, Jean, was struggling in her journey both physically and emotionally, he made sure to actively listen and refrain from voicing his fear of her falling back into old habits. This spouse explained that even though he had never struggled with weight or had anyone in his family-of-origin struggle,
his wife’s battle was still his battle, too. Jean felt closer to Jim once she recognized that weight-related insecurities were “embedded in my brain,” thus themes 1 and 3, greater intimacy and significant change in emotional health, were evident for this couple. Spouses who were there for the patient when they struggled offered them a “safe place to land” and may have been a safety measure of accountability. Patients in this study often commented on how challenging and for some, impossible WLS success would have been as a single person or with a non-participatory or sabotaging spouse.

Success was also recognized in how patients felt in their bodies, specifically with increases in energy which enhanced their engagement in family life activities, increased their productivity at work, and allowed them to exercise in new ways. Several patients explained that they were better parents because they had the energy to effectively intervene when their children were fighting and they had the mobility to participate in family recreation. For multiple patients, gains in energy enabled them to take job promotions, pursue new careers, and go back to school. Relationally, energy gave patients more time to visit with family and a heightened capacity to interact meaningfully with their spouses rather than going to bed early or watching television. Energy allowed patients to exercise more intensely which was important for emotional health, especially confidence boasting, and weight loss. Significant weight loss was essential for the remediation of weight-related health problems and energy “fueled” efforts to lose weight and maintain weight loss.

Hence, Pories and colleagues’ (2016) theme 5, “significant weight loss, fewer health problems, and more energy” was experienced by all patients and many spouses in this study (p. 57). Patients having more energy was linked to all three major aspects of
the current study because relationship dynamics, changes in household routines, and WLS success were influenced by the patient’s increased vigor and willingness to participate in more aspects of family life. Energy to walk with their spouse regularly, enjoy all aspects of vacationing and recreating, and being less hindered from weight-related depression established a new level of hope for couples and more chances to grow closer physically and relationally. Overall, intimacy was greater in quality and quantity which some explained was a result of having the energy and mobility for sexual activity and others mentioned being related to feeling better in their post-WLS bodies because they were more accepting of their size and less apprehensive about being naked.

“Greater intimacy in the relationship” was theme 1 for Pories and colleagues (2016) and it was also an experience of many couples in this study. It is important to note that Pories and colleagues (2016) interviewed patients and partners 3-10 months after surgery, but couples in the current study were 2-13 years post-surgery. Being in WLS recovery and adjustment stages is a unique window of time where surgery is still fresh and thus efforts to assist the patient would naturally enhance intimacy and deep feelings of being cared for and appreciated. In the current study, greater intimacy for the couple could subsequently be an indicator of WLS success that is a dynamic process of weight loss, joint journeying and teamwork, better emotional health, and gains in freedom related to weight loss. Greater intimacy in this study could also be related to weathering other life challenges together or growing closer as a result of more years of partnership, WLS being just one facet of their gains in intimacy. It is important to recognize that greater intimacy can be a byproduct of WLS success because patients feel better about themselves and this can position them to treating their partners better.
Nevertheless, greater intimacy is not always a guarantee nor is it necessary for positive WLS follow-through habits. Yet, receiving social support from a family member or friend communicates care for the person and may be a buffer for the post-WLS tension and paradox stressors. Enhancing a patient’s self-efficacy is more likely accomplished through the people with whom the patient is most loved by and is important for WLS professionals to consider because self-efficacy generates momentum for sustaining long-term weight loss, the ultimate WLS success outcome.

**Recommendations for WLS Professionals**

One of the spouses of a WLS patient recommended that WLS candidates who are in committed, romantic relationships should undergo a marital assessment prior to the candidate becoming a patient. He believed that couples should go to marriage counseling to assess “where they’re at in the relationship” before WLS given how much he was impacted by his wife’s weight-associated unhappiness and battle [Jim, spouse]. A marital assessment could launch into an additional layer of informed consent since spouses and partners are often caregivers during surgery and illnesses. Evaluating the patient’s support system at home prior to surgery happens in some preoperative psychosocial assessments. Since surgical compliance is emphasized to patients, it makes sense to incorporate a measure of support for adherence. DiMatteo (2004) explained that “adherence (or compliance) involves patient acceptance and follow-through with treatment recommendations” (p. 207).

Follow-through was the theme for WLS success in this study. When patients were following-through with treatment recommendations, they felt successful. Follow-through and adherence to WLS program guidelines beget success and spouses and
partners in this study desired for the patient to be successful. Some spouses easily verbalized how they contributed to the patient’s WLS success, while other spouses replied that it was just “their job” to support the patient in all of their life goals, WLS being just one of them. One spouse did not see how he contributed to his wife being successful until he began to list all the things he did to support her. Walking with her, encouraging her to change her exercise routine, being vigilant at meal time as to how much food she consumed so as to not overeat and become sick, and making suggestions were features of his contributions to her evolving success and follow-through. His wife expanded several times on the contributions he made to her WLS and later, he suggested that there be family WLS support groups so that spouses were given instructions on how to be supportive of the WLS patient.

Another spouse, Milly, suggested having a pamphlet available to spouses of WLS patients informing them about surgery expectations, suggesting specific ways to be supportive, and preparing them for some of the emotions the WLS patient may feel. She detailed her rationale for this as the following:

Give them (spouses of WLS patient) a starting point (through a pamphlet) because those two people have been in a cycle that's probably been going on, a dynamic that's been going on for years and years and one person's trying to break the cycle and a lot of people, you know, people are naturally resistant to change, the other person may not want to change, may feel threatened by the changes, and they need to understand that it's not something to feel threatened about [Milly, spouse turned patient].
Milly was essentially explaining that when homeostasis is disrupted within the family, in this case through one person having WLS, that their spouse may be confused by the changes and unsure of what to do.

**Theoretical Understandings**

When it comes to couples and weight loss surgery, the literature, which began in the early 80s, has been sparse and disjointed (Ferriby et al, 2015). Additionally, studies have been difficult to compare due to different research designs and patient samples based on the type of WLS procedure. Some studies have been quantitative, qualitative, or narrative and within the qualitative studies, inclusion criteria have been based on perspective (patient and couple), WLS procedure, and time since surgery. Theories guiding qualitative studies have also ranged from Bocchieri and colleagues’ (2002) grounded theory approach to several recent phenomenological studies (LePage, 2010; Moore & Cooper, 2016; Natvik et al., 2013; Natvik et al., 2014; Pories et al., 2016). The most recent phenomenological study of couples and WLS was unique in that the researcher interviewed male partners of WLS patients only in order to learn about partner-specific experiences of WLS (Wallwork, Tremblay, Chi, & Sockalingam, 2017; Westmoreland & Wood, in review).

The one finding that connects all of these previous studies, including this current study, is that WLS is an experience that impacts not only the patient, but also their romantic partners. The degree of impact on spouses and partners varies based on their level of participation with surgery preparation, recovery, adjustment, and maintenance. Nevertheless, the patient’s changes in physiology as the result of surgery give them a tool for weight loss that interrupts their daily living habits and for many their mental,
emotional, and relational processes, especially when they have been successful. The clear line of demarcation in life before and after WLS mentioned by patients and spouses also suggests that surgery has a ripple effect beyond the patient. This life-saving, life-enhancing, life-altering turning point as well as relational consequences of WLS is important to consider within family and lifespan human development theories; specifically, family systems theory and the Life Course Perspective.

**Family Systems Theory**

Homeostasis is a component of family systems theory that is closely related to couples and WLS. Most patients had been obese for the entirety of their relationship, including their earliest stages of dating. When patients underwent WLS, they were disrupting the way things had always been in their partnership. While the gains in health were positive, the surgical intervention was not always an easy decision nor was surgery recovery. Behavioral changes were necessary for WLS success and noticed by spouses and partners. These changes were reflected in the patient’s weight loss and gains in self-confidence. As mentioned previously, the patient’s changes often times beget changes for the spousal system. Therefore, patients and partners created a new homeostasis.

Another component of family systems theory that was evident in findings from this study was in the “joint journey” aspects of diet, exercise, and recreation. Overall, most patients and spouses experienced WLS as a “joint journey,” which highlights the spousal subsystem dynamic within family systems theory. The spousal subsystem “operated” together through a collective commitment to the relationship and the accompanying WLS mind-shift. Thus, the subsystem exerted efforts which assisted the patient in being successful and this demonstrates the system’s recalibration for one part
(the patient). Relational dynamics and components of collaboration were noticed in the language used by couples such as “our success together” and “we are a team.” Again, the family system was impacted by one person’s decision, yet it was the system that interacted to help the person to be successful.

**The Life Course Perspective**

Human development is influenced by location, resources, biology, and relationships. There are multiple theories for human development and the theory that was utilized within this study was Elder’s Life Course Perspective. There are 5 principles to this theory, however one was especially pertinent to this research design and subsequent findings. The principle of “linked lives” explains that a person’s life is lived interdependently of others, thus their life is linked to many lives (Elder, Johnson, and Crosnoe, 2004). Couples in this study could articulate the history they shared with one another and the key people of influence within their lives and this partner’s, which included their upbringing. Spouses and partners mentioned the patient’s parents and siblings in a way that “explained” the patient’s obesity. Often times they defended the patient when recounting the resistance their family members had to WLS or the times that their siblings or children were hostile about WLS even after the patient had the procedure and was successful. This linking of stories showed compassion and attentiveness towards the patient and how the patient’s history impacted them and their relationship.

Another aspect of linked lives was noticed when patients were able to rely on their spouses and partners for support. Not only did history inform their present behaviors, but also how the patient was feeling showed that their life was linked to their spouse in a unique and powerful way. Often the lives that are linked to one another are
established through biology, but spousal relationships are one of choice and commitment rather than shared genetics. The care for the patient demonstrated by their spouse or partner was tangible, verbal, and emotional and because their lives were linked, they were predisposed to be supportive in a way that launched the patient into success and ultimately strengthened the couples’ link.

**Future Directions**

Couples in this study were eager to give advice to other WLS patients and couples. They were also eager to make recommendations about how patient and family education prior to surgery could be changed as well as how they would have liked for the aftercare support from their surgeon’s office to be improved. Some participants were dissatisfied by the support group content and facilitation from their WLS providers, while others found ways to glean support from online communities. A few patients in this study did not participate in any type of support group and expressed disinterest for engaging in that type of aftercare. Within the WLS literature, there is a need for in-depth support group studies especially in the areas of group dynamics and matters of support group design such as curriculum, purpose, and attendance. Connecting these support group features back to WLS outcomes would be useful for designing evidenced-based practices for WLS success.

Another important area for future directions is within spousal concordance of health behaviors (Meyler, Stimpson, & Peek, 2007). Within this study, 6 patients out of 11 had spouses or partners who were also obese. These spouses either had WLS or lost 50 pounds after the patient had WLS. Additionally, 2 patients had spouses that benefitted for the patient’s change in eating habits given that their overall health improved, too.
Only 3 out of the 11 WLS patients in this study had spouses who were completely healthy during their entire partnership, which is not surprising given that 1 out of 3 adults in the United States is obese. Thus, the impact on a family’s health before and after WLS should be considered in future WLS studies. Several patients in this study refused to cool separate meals for their spouses and children, which was initially a safety precaution for the patient to maintain their prescribed diet. However, this decision had a positive impact on the family’s health and a “collateral benefit” as labeled by one participant.

The WLS literature related to lived experiences needs to continue in order to account for the various nuances and contexts for WLS outcomes. For example, if obesity “runs” in families similar to other diseases, then treating the whole family with WLS and aftercare would be essential for disrupting this family legacy. Children, parents, and grandparents within the same family who are all overweight or obese could benefit greatly from one person in the family having WLS if all agreed to support the patient by adopting successful WLS behaviors. Within families, there is natural social support, but also natural sabotage to oppose changes. Family therapists are well-equipped to notice these dynamics and could be very important support staff for WLS programs.

Finally, efforts need to continue towards gaining a richer description of WLS success and failure. WLS is not all positive, it does not always enhance your romantic relationships, intimacy, and sex-life, nor is it all negative in terms of ending a marriage or complicating all friendships. Not only is there a continuum of success and failure between patients, the same patient can also have time periods of success and failure. One patient explained that she had gained back approximately 30 pounds, refocused, and then lost the weight. Thus, she was successful, unsuccessful, and then successful again.
Many patients described a battle to adhere to post-surgery guidelines and that feeling of stress was humbling and at times defeating. Perhaps success and failure is too dichotomous and narrow especially given the multiple success indicators in weight, health, attitude, and freedom that patients and spouses encountered. One participant remarked, “Is it ever success? I mean, it’s success along the way” [Callie, patient].

There are many aspects surrounding bariatric surgery that have yet to be demystified such as the impact of WLS on marital relationships. The surgical success of WLS is remarkable, however factors that affect the patient’s experience of WLS need to continue to be explored. Families could be predictor “variables” for WLS outcomes, thus impeding or progressing the patient’s WLS journey. The researcher is hopeful that efforts will persist in learning more about the family experience of WLS given that there have been 3 studies addressing couple and partner experiences of WLS within the last 2 years (Moore & Cooper, 2016; Pories et al., 2016; Wallwork et al., 2017). These findings could inform aftercare practices of WLS support staff, serve as a weight-regain safeguard, and facilitate a “stronghold release” for patients who have battled with obesity and finally have an opportunity to live out their lives with a higher quality and in a new freedom.

**Summary**

Rather than asking couples to describe their relationship, they were asked to give their opinion to specific research findings related to couples and WLS. The researcher explained that one study found couples and WLS to be a “joint journey” while another study explored the impact of WLS on marital relationships. They were also asked to provide advice for the spouse of a WLS candidate, someone preparing to have surgery.
This prompt spilled over into the things that the patient appreciated about their spouse in terms of support and care. Ideas around teamwork and togetherness cut across all interviews as well as encouragement, accountability, and how their relationship has “always” functioned and been beneficial to their personal well-being with surgery serving as another life milestone that brought them closer.

With each area of discussion, couples explained their experiences and understandings by comparing life before WLS and life after WLS. WLS was a turning point that empowered them to have a better life trajectory and therefore hope, while not often labeled as such, permeated their language and demeanor. Couples sounded hope-filled when discussing all the things they were now able to do and plan for that they could not do before WLS mainly because they lacked the energy, mobility, strength, or stamina to do so. Patients believed prior to WLS that they could be successful and have a better life. Upon realization that they were successful, they expressed feeling grateful, glad, and relieved. Hence, the grand theme for this study was hope.

Overall, couples’ relationship dynamics were characterized as secure and WLS gave them another way to give support, engage in teamwork, and ultimately become closer. Patients and spouses explained that they loved each other unconditionally, no matter what the patient weighed, and this had been the reality for their entire relationship. Thus, security was the theme for relationship dynamics with support, teamwork, and closer as subthemes. Spouses expressed their desire to help the WLS patient when it came to being open to change and then making necessary modifications in habits and lifestyle. The commitment to change happened before WLS and a mind-shift happened after WLS that enabled both people to adjust their thinking, consistently evaluate their
routines, and continue to change their behaviors. As a result, commit and mind-shift were the themes and subsequent changes (diet, exercise, and mindsets) were the subthemes. A secure relationship and commitment to making “better choices” assisted the patient in experiencing WLS success and this meant that their spouse experienced success, too; “it’s our success together.” The theme for WLS success was follow-through and subthemes were results, comfort, happy, and freedom. Hope was also a by-product of success.

Support, often demonstrated in caregiving, teamwork, and encouragement, was a key idea that was discussed in all three components of this study and it came from a secure, loving relationship. Most patients in this study explained that support from their spouses and partners was a crucial component to their success especially when support meant that their spouse or partner joined them in making lifestyle changes. “We were doing it together…the very fact that we were in a stable relationship before and after is the reason my WLS was successful” [Star, patient and spouse].

Support was present in the relationship because it was apparent in the behaviors of the couple and in the togetherness language that they used, but it came from foundational security in the relationship—their bond and attachment to each other. When this support was applied to the phenomenon of WLS and the patient became healthier and happier after being successful, this launched into hope. Once the patient felt better, was less burdened medically and emotionally by obesity, and was able to physically do more, the couple became more intentional with their household routines in support of a healthier lifestyle that was created or enhanced after WLS. Patients and spouses were
hopeful because they had WLS success and hopeful that their increased quality of life would continue to give them a better, freer future.

**Conclusion**

While reflecting upon the last decade of bariatric surgery, Morton (2014) described it as “an American surgical success story” (p. 377). From the surgical perspective, the surgery itself is a success given that it went from being an open procedure with a high-risk of complications and mortality, a lengthy hospital stay, and a long recovery to a closed procedure with the same risks and mortality chances as any other standard abdominal procedure, a short hospital stay, and a relatively quick recovery (Alley et al., 2012; Linton & James, 2009; Salameh, 2006). Surgical success from a surgeon’s perspective is quickly recognized within the aforementioned parameters, yet success from a patient’s perspective is complex and it is often related to the way the patient has utilized their surgery. Patients in this study learned from their surgeon and other WLS support staff that WLS was a “tool” that would assist them in weight loss, however being successful depended on the patient’s efforts. Utilizing surgery as a “tool” in order to be successful was important to patients and something they typically discussed with their spouses and partners in a way that was unique to the couple’s relationship dynamics.

For participants and their spouses and partners, success was achieved when they could maintain their weight loss in the long-term and improve their quality of life. Success was recognized in how they felt in their bodies and benefits from surgery were realized when they could move without being hindered by excess weight or fear of embarrassment from other people. The experience of success had an impact on spouses
and partners who noticed lifestyle changes that increased WLS success and how achieving success meant that patients were happier and thus overall, their relationships were enhanced for the better, the stronger, and the closer.
Appendix A

Recruitment Packet

Letter to WLS centers

Greetings!

My name is Amanda Westmoreland and I am a doctoral candidate from the University of Kentucky. I have a research interest in the experiences of bariatric patients as they relate to weight loss surgery success and committed relationships. As a result, I am currently asking for weight loss surgery centers to 1) post the attached flyer in an area where individuals may see it and 2) forward the attached letter to people who meet the following criteria:

- Patient had surgery 24-48 months ago
- Patient is 30-65 years old
- Patient has indicated that they are in a committed, long-term relationship

My study utilizes qualitative research methods and face-to-face interviews. If you have any questions, please email me at AWE232@uky.edu or you can reach me directly at 615-796-0264. Research participants will not be connected to their weight loss surgery center. Additionally, it will be made clear that you are merely forwarding recruitment information on my behalf as the Primary Investigator and your patients will be assured that I do not have any of their personal information. Thank you so much for your help!

Sincerely,

Amanda Westmoreland, M.S., L.M.F.T.

Doctoral Candidate, Family Sciences
Letter for potential participants

Greetings!

My name is Amanda Westmoreland and I am a doctoral candidate from the University of Kentucky. I want to learn more about how you and your partner define success after bariatric surgery and what you have done to be successful. As a result, I am currently asking for volunteers to participate in two interviews with their spouses or partners. The information you share with me will be confidential and will not be shared with your weight loss surgery center. Also, your bariatric center did not provide me, the Primary Investigator, with any of your personal information—their involvement is to only forward study information on my behalf.

Your participation would be most appreciated IF you meet the following eligibility requirements:

- You have experienced success with weight loss surgery
- Your surgery occurred at least 2 years (24 months) ago
- You and your current spouse/partner have been living together for at least two years prior to surgery
- You are 30-65 years old
- You and your spouse/partner are available to be interviewed together twice

Interviews will be conducted at a location of your choosing and will last approximately one hour. You are being asked to volunteer no more than 2-4 hours of your time over the next month.
If you are interested in participating, please email me at AWE232@uky.edu or you can reach me directly at 615-796-0264. Thank you so much for your consideration!

Sincerely,

Amanda Westmoreland

Note: A colorful recruitment flyer was created from the text of this letter. The researcher utilized guidelines from UK’s Office of Research Integrity. Included in the flyer was a picture of the researcher and a stamp indicating approval for posting from UK public relations and marketing. Additionally, recruitment letters to WLS centers and potential participants were on UK letterhead with the researcher’s home department information. Another item in the recruitment packet was one copy of the consent form that indicated Institutional Review Board approval. See below for a copy of the form.
Couples' Accounts of Success Years After Bariatric Surgery

WHY ARE YOU BEING INVITED TO TAKE PART IN THIS RESEARCH?
You are being invited to take part in a research study about weight loss surgery success and how you and your spouse/partner experienced success. You are being invited to take part in this research study because you have personally experienced bariatric surgery at least 24 months ago, were residing with your current spouse/partner two years prior to surgery, are between 30-65 years old, and available to be interviewed twice with your spouse/partner. If you volunteer to take part in this study, you will be one of about 40 people to do so.

WHO IS DOING THE STUDY?
The person in charge of this study is Amanda Westmoreland (Principal Investigator, PI), a doctoral candidate at the University of Kentucky Department of Family Sciences. She is being guided in this research by Dr. Nathan Wood (Advisor). There may be other people on the research team assisting at different times during the study.

WHAT IS THE PURPOSE OF THIS STUDY?
By doing this study, we hope to learn how you and your spouse/partner define weight loss surgery success and what things you did in order to be successful.

ARE THERE REASONS WHY YOU SHOULD NOT TAKE PART IN THIS STUDY?
Subjects who do not meet the specific inclusion criteria (bariatric surgery patient, had surgery at least 24 months ago, was residing with their current spouse/partner two years prior to surgery, 30-65 years old, and available to be interviewed twice with their spouse/partner) will not be eligible to volunteer for this study. If you have not had bariatric surgery at least 24 months ago, then you should not take part in this study.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?
The conversations will be conducted at a location that is most convenient to you. You and your spouse/partner will need to be present for 2 different conversations during the study. Each of those visits will take about 60 minutes. The total amount of time you will be asked to volunteer for this study is 2-4 hours over the next month.

WHAT WILL YOU BE ASKED TO DO?
You and your partner are being asked to participate in two conversations (semi-structured interviews) about your experiences 24 months or greater after bariatric surgery. Additional interviews (up to one) may be requested should information provided in an interview necessitate...
further clarification. You and your partner are also being asked to give permission for these interviews to be audio-recorded with a password protected device.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?
To the best of our knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life.

WILL YOU BENEFIT FROM TAKING PART IN THIS STUDY?
There is no guarantee that you will get any benefit from taking part in this study. However, some people have experienced feeling happy or grateful when they share their story to an interested person. Your willingness to take part, however, may, in the future, help society as a whole better understand this research topic.

DO YOU HAVE TO TAKE PART IN THE STUDY?
If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering.

IF YOU DON’T WANT TO TAKE PART IN THE STUDY, ARE THERE OTHER CHOICES?
If you do not want to be in the study, there are no other choices except not to take part in the study.

WHAT WILL IT COST YOU TO PARTICIPATE?
There are no costs associated with taking part in the study.

WILL YOU RECEIVE ANY REWARDS FOR TAKING PART IN THIS STUDY?
You will not receive any rewards or payment for taking part in the study.

WHO WILL SEE THE INFORMATION THAT YOU GIVE?
We will make every effort to keep confidential all research records that identify you to the extent allowed by law.

Your information will be combined with information from other people taking part in the study. When we write about the study to share it with other researchers, we will write about the combined information we have gathered. You will not be personally identified in these written materials. We may publish the results of this study; however, we will keep your name and other identifying information private.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. Audio-recordings are digital and will be stored on a password protected device (no cloud services will be used for the storage of audio data). When the recordings are transcribed, your names and other identifying information will be changed. The de-identified transcripts will be stored in a password protected computer. Signed informed consent forms will be kept in a double-locked file.

We will keep private all research records that identify you to the extent allowed by law. However, there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a court or to tell authorities if you report information about a child being abused or if you pose a danger to yourself or someone else. Also, we may be required to show information which identifies you to people
who need to be sure we have done the research correctly; these would be people from such organizations as the University of Kentucky.

**CAN YOUR TAKING PART IN THE STUDY END EARLY?**
If you decide to take part in the study you still have the right to decide at any time that you no longer want to continue. You will not be treated differently if you decide to stop taking part in the study.

The individuals conducting the study may need to withdraw you from the study. This may occur if you are not able to follow the directions they give you, if they find that your being in the study is more risk than benefit to you. There are no known consequences or procedures for withdrawing from the study.

**WHAT ELSE DO YOU NEED TO KNOW?**
There is a possibility that the data collected from you may be shared with other investigators in the future. If that is the case the data will not contain information that can identify you unless you give your consent or the UK Institutional Review Board (IRB) approves the research. The IRB is a committee that reviews ethical issues, according to federal, state and local regulations on research with human subjects, to make sure the study complies with these before approval of a research study is issued.

**WHAT IF YOU HAVE QUESTIONS, SUGGESTIONS, CONCERNS, OR COMPLAINTS?**
Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions, suggestions, concerns, or complaints about the study, you can contact the investigator, Amanda Westmoreland at AWE232@uky.edu or 615-796-0264. If you have any questions about your rights as a volunteer in this research, contact the staff in the Office of Research Integrity at the University of Kentucky between the business hours of 8am and 5pm EST, Mon-Fri. at 859-257-9428 or toll free at 1-866-400-9428. We will give you a signed copy of this consent form to take with you.

_________________________________________  ______________
Signature of person agreeing to take part in the study  Date
_________________________________________
Printed name of person agreeing to take part in the study

_________________________________________  ______________
Signature of spouse agreeing to take part in the study  Date
_________________________________________
Printed name of spouse agreeing to take part in the study

_________________________________________  ______________
Name of (authorized) person obtaining informed consent  Date
Appendix B

Member checking: Couples and WLS success

Member checking is a very important piece of research. This survey is a means to "check-in" with study participants about their interviews AND to inform them about research findings from the study. Your participation is greatly appreciated and your responses will remain confidential. You may stop the survey at any time, but please answer at least the first two questions pertaining to your transcripts.

Interviews for the study you and your partner/spouse participated in lasted from January to May of this year. The researcher spent June and July compiling all the information from the interviews, analyzing it, and writing it up with oversight from her advisor, Dr. Nathan Wood. This survey will provide you with research results that have only been seen by the researcher and her advisor!

Please do not share this survey with anyone other than your spouse/partner. In the case that you both had WLS, please designate the person who had surgery first as the patient when answering questions. Please complete this survey with your partner/spouse as soon as possible. THANK YOU!!!

Section 1: TRANSCRIPTS

1) After reading over our interview transcripts, I believe that
   a) The researcher represented us accurately
   b) There were multiple instances where our words were misrepresented
   c) I did not read the transcript
   d) Other
2) Having a copy of our transcript was

   a) Not important to me
   
   b) Something I will keep for my personal records
   
   c) Other

Section 2: FINDINGS

Introduction: The study you participated in was about weight loss surgery (WLS) success from a couple’s perspective and how couples navigate their long-term WLS experience. This is a very complex topic therefore interview questions were focused on the following 3 areas: 1) relationship dynamics, 2) household changes, and 3) definitions of WLS success.

Please review the findings for each topic area and answer all subsequent questions. Participating in this final piece of the study will provide validation to the researcher’s advisory committee and to the scientific community that findings are credible and that the research was conducted at a high standard.

Given that this is a qualitative study, it is vital that member checking is completed and it is an important piece of the final data analysis. All interview transcripts were compiled and analyzed through a coding process that broke down experiences into themes. Findings were organized into the 3 topic areas of relationship dynamics, household changes, and WLS success definitions.

Many thanks for your participation and honest feedback! Please initial to indicate that you have read the information above, you are voluntarily participating, and you are giving your consent to take this survey.
**Relationship dynamics.** The main theme for this topic area was **security**. Many couples used language about love, unconditional, and always when describing their spouse/partner. Within the context of WLS, having a secure relationship was demonstrated through **support, teamwork, and feeling closer** (literally and relationally) after experiencing WLS success. Please select the answer(s) that best represents your partnership/marriage.

1) The relationship dynamic I have with my partner/spouse is one of security
   a) Never
   b) Sometimes
   c) About half the time
   d) Most of the time
   e) Always

2) My partner/spouse gave me support before, during, and after WLS through
   a) Encouraging me verbally and nonverbally
   b) Helping me with “hands-on” care before and after surgery
   c) Trusting me to make the right decisions for my health
   d) I did not receive any partner/spousal support with WLS.

3) Name the **one thing** your partner/spouse did that was the most supportive was:
4) Similar to a “joint journey,” WLS required teamwork between me and my partner/spouse to enhance my overall well-being. True or False?

5) WLS gave my partner/spouse and me an opportunity to grow closer because
   a) I feel better
   b) We can physically get closer
   c) We spend more time together
   d) I have improved self-esteem and body-image
   e) Does not apply - WLS was not a means for us to grow closer

Household changes. The main themes for this area were commit and mind-shift.

Couples explained that commitment to change for both the WLS patient and their partner were necessary for WLS success and that changes occurred when there were mind-shifts about food, exercise, and recreation.

1) In order for me to be successful with WLS, my partner/spouse had to commit to the process through
   a) Agreeing to help me with surgery—the decision and/or recovery
   b) Participating in WLS behavior changes—diet and exercise related
   c) Attending WLS seminars, surgery appointments (with the surgeon and/or bariatric staff), and/or support group(s)
   d) I did not need my spouse/partner to commit to any part of the WLS experience/process
2) In order for me to be successful with WLS, I had to make changes in my mind about diet and exercise before I could change by behaviors.
   a) Strongly agree
   b) Somewhat agree
   c) Neither agree nor disagree
   d) Somewhat disagree
   e) Strongly disagree

3) My spouse/partner and I made diet-related changes at home and when eating away from home by
   a) Having smaller portions (using smaller plates, sharing food, ordering less)
   b) Eating protein first (most of the time)
   c) Following the advice from the dietitian/nutritionist
   d) We did not change our diets after WLS
   e) I changed my diet, but my partner/spouse did not

4) I exercise regularly as a means to maintain my weight loss and stay healthy.
   a) This is only important to me
   b) This is important to me and my spouse/partner
   c) This is something I plan to do later
   d) Exercise is not at all important to me
5) WLS success has enabled me and my partner/spouse to recreate differently. Now, we are able to
a) Go on any vacation
b) Do any activity (fishing, hiking, biking, swimming, etc.)
c) Plan trips that we could not take before WLS
d) Ride on an airplane without a seatbelt extender
e) We do not recreate

WLS success. Currently, the medical community has not agreed upon a standardized measure of WLS success. Couples in this study agreed that WLS success was based on follow-through and that follow-through was evident in their health results, appearance, satisfaction, and freedom.

1) When it comes to WLS success, follow-through with the program before and after surgery is the only way to be successful.
   a) Strongly agree
   b) Somewhat agree
   c) Neither agree nor disagree
   d) Somewhat disagree
   e) Strongly disagree
2) The components of follow-through that I have maintained since surgery involve (check all that apply)
   a) Aftercare—going to the prescribed follow-up appointments for WLS maintenance with my surgeon
   b) Being involved in a WLS community such as support groups and/or online support groups
   c) Maintaining a protein-rich diet
   d) Adopting exercise into my weekly routine
   e) Reaching out to my surgeon or WLS staff for help when I need it
   f) Other (please list)

3) Health results that indicated I was successful with WLS were
   a) Weight loss
   b) An increase in energy
   c) A decrease in weight-related medication(s) or being medication-free
   d) A decrease in joint, knee, or back pain associated with weight

“Being comfortable in your own skin” was a repeated indicator of WLS success. This meant that patients could shop in a regular store, were free of weight-related public embarrassment, had increased mobility (could easily get up-and-down from their seats, bed, or the toilet), and had gains in self-esteem or a more positive body image. Comfort was experienced because patients were physically more comfortable and because they were more satisfied with their appearance.
4) “Being comfortable in my own skin” is something that I
   a) Experienced after WLS (weight loss)
   b) Experienced once I became physically fit
   c) Experienced after WLS although I still struggle in my mind or emotions to maintain it
   d) Experienced after skin removal surgery
   e) Experienced once I reached a specific weight
   f) I did not experience this experience

Patients were relieved by their changes in hunger as well as being less driven to make food decisions based on cravings or impulses. They explained feeling happy and satisfied with less food and gaining a sense of control when it came to food. This positive experience of having their appetite satisfied was associated with being successful and feeling successful after WLS.

5) Satisfaction with food
   a) Is something I experience daily
   b) Is something I enjoyed after WLS, although it was “worn off”
   c) Is something I work on by tracking my meals, weighing my food, and/or reminding myself that even if I don’t “feel it,” I’ve had enough to eat
   d) Is something I did not experience after WLS
   e) Is not important to me
6) Before WLS, my size was an issue of concern to me, my spouse, and/or my doctor. I felt trapped, doomed, hopeless, and/or unable to lose the weight on my own. After experiencing WLS success, I have

a) Hope in place of fear

b) Freedom instead of limits

c) Overall good health instead of diseases or a shortened life expectancy

d) Positive self-talk rather than self-ridicule, guilt, or anger

e) A higher quality of life

f) Other (please explain)

7) The impact of WLS on my relationship with my spouse/partner has been

a) Positive

b) Challenging

c) Strengthening

d) Minimal

e) Non-existent because WLS has not impacted our relationship

Please explain your answer
Think about your experience with being a member of this study. Please answer any or all of the following questions:

1) What part of participating in this research stands out to you?
2) What new thing did you learn about yourself, your partner, or your relationship?
3) In what ways did participating in this study help or benefit you?

Think about your experience with being a member of this study. Please answer any or all of the following questions (Note: This question is meant to help the researcher improve on her communication, research, and/or interviewing skills):

4) If you could change anything about the research process from this study, what would it be?
5) Please describe any part of the research process that you found to be unpleasant, unnecessary, or uncomfortable.

Please provide any other feedback or reflections about WLS success that you think is relevant for this study or information you would like to share with the researcher.
Thank you so much for your time! Your kindness and transparency made this research possible. I commit to caring for your story with the utmost respect and diligence. Unfortunately, after December I will no longer be able to reach out and give you updates because of the research protocol at the University of Kentucky. However, you are free and encouraged to contact me at any time!

If there is ever an update you want to share, I’d love to hear it and celebrate with you. If you hit a bump or find yourself struggling in your WLS journey, let me know and I’ll do whatever I can to help you find the resources you need in order to succeed.

Many of you have dreamed of living a healthy and limitless life. My dream is to help other people achieve that through counseling, education, and listening in a way that empowers people to follow-through with positive life changes individually, as a couple, and as a family. We’re all on a journey, thank you tremendously for sharing part of the road with me.
References


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Vita

Amanda Leigh Westmoreland, Ph. D., L.M.F.T.  Born in Memphis, Tennessee

EDUCATION

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<tr>
<th>University</th>
<th>Location</th>
<th>Degree/Program</th>
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<tr>
<td>University of Kentucky</td>
<td>Lexington, Kentucky</td>
<td>Ph.D. in Family Sciences, Family Processes emphasis area (expected 2017)</td>
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<tr>
<td>Graduate Certificate</td>
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<td>College Teaching and Learning</td>
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<tr>
<td>Graduate Certificate</td>
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<td>Gender and Women’s Studies</td>
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<tr>
<td>Dissertation:</td>
<td></td>
<td>Couples and weight loss surgery: Experiencing success</td>
<td></td>
</tr>
<tr>
<td>University of Louisville</td>
<td>Louisville, Kentucky</td>
<td>Post Master’s Marriage and Family Therapy-COAMFTE</td>
<td>2008</td>
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<tr>
<td>Certificate</td>
<td></td>
<td>program</td>
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<tr>
<td>Passed national exam</td>
<td></td>
<td>Licensed Marriage and Family Therapist (KY &amp; TN)</td>
<td>2011</td>
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<tr>
<td>Middle Tennessee State University (MTSU)</td>
<td>Murfreesboro, Tennessee</td>
<td>M.S. in Human Sciences: Child Development and Family Studies</td>
<td>2006</td>
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<tr>
<td>Thesis:</td>
<td></td>
<td>Siblings of children with special needs: Parental perceptions</td>
<td></td>
</tr>
<tr>
<td>Clemson University</td>
<td>Clemson, South Carolina</td>
<td>B.S. in Health Science: Public Health Promotion and Education</td>
<td>2004</td>
</tr>
<tr>
<td>Passed national exam</td>
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<td>Certified Health Education Specialist (CHES)</td>
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TEACHING EXPERIENCE

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<th>University</th>
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<th>Position</th>
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<tr>
<td>University of Kentucky</td>
<td>Lexington, Kentucky</td>
<td>Graduate Assistant Presentation U! (UK’s Quality Enhancement Plan for SACS accreditation)</td>
<td>2015-2016</td>
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<tr>
<td>Teacher</td>
<td></td>
<td>Robinson Scholars Summer College Boat Camp</td>
<td>2014, 2015, 2016</td>
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<tr>
<td>Teaching Assistant</td>
<td></td>
<td>Family Sciences, Dr. Nathan Wood</td>
<td>2013-2015</td>
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<tr>
<td>Lecturer</td>
<td></td>
<td>Social Work, Dr. Lisa Clifton</td>
<td>Fall 2014</td>
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<tr>
<td>Teaching Assistant</td>
<td></td>
<td>Family Sciences, Dr. Claudia Heath</td>
<td>2012-2013</td>
</tr>
<tr>
<td>Middle TN State Univ.</td>
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<td>Lecturer (5:5 load) Child Development and Family Studies</td>
<td>2011-2012</td>
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THERAPY EXPERIENCE

Michelle P. Waiver  
Louisville, Kentucky

*Community-based Interventionist*

Home of the Innocents  
Louisville, Kentucky

*Clinical Specialist, Behavioral Health Professional*

May 2008 - August 2015

*Autism Intervention Specialist, Therapeutic Child Support*

May 2007 - July 2008

MaryHurst  
Louisville, Kentucky

*Residential Youth Counselor*

August 2008 - July 2011

The Maloney Center  
Archdiocese of Louisville, Kentucky

*Counselor (practicum student)*

May 2006 - May 2008

SCHOLASTIC AND PROFESSIONAL HONORS

Student of Excellence Recipient.  *The School of Human and Environmental Sciences, University of Kentucky.*  

Spring 2017

Research Winner.  *The School of Human and Environmental Sciences Graduate Student Research Day, University of Kentucky.*

Spring 2015

“A person (faculty) at MTSU who makes a real difference,” anonymously cited by graduating seniors.  *Office of the Vice President for Student Affairs and Vice Provost for Enrollment and Academic Services, Middle Tennessee State University.*

Spring 2013

PROFESSIONAL PUBLICATIONS


FINAL COPY: Amanda Leigh Westmoreland