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Weight Loss Surgery Maintenance and Psychosocial Development: A Narrative Perspective

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Abstract

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Abstract

Bariatric surgery is not the panacea it was once thought to be for weight loss. Due to patient noncompliance issues, many weight loss surgery patients are relapsing and regaining the significant amounts of weight that bariatric surgery had initially helped them to lose. This failure is costly monetarily, psychologically, and medically to both the patient and to society. Using the narratives of 32 post-weight loss surgery patients, this narrative study explored: (a) whether Erikson's psychosocial stages of development occur after weight loss surgery, (b) whether successful patients (defined as those who are able to maintain their weight loss long term) have successfully navigated Erikson's stages, and (c) whether these patients formed new identities in the process. Recursive analysis and text analysis revealed noticeable trends toward developmental progress among participants after weight loss surgery, with regard to all stages in Erikson's psychosocial developmental theory. This trend suggests that participants are experiencing developmental changes after surgery and that participants who have successfully navigated psychosocial stages are at least beginning to build new identities. These findings may indicate the need for social changes in the way clinicians guide patients through the weight loss surgery process; these findings may also inspire the creation of programs that address developmental milestones, which may increase successes after weight loss surgery.

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Dedication

To Steve, my partner in life, whose love, patience, and support allowed me devote time and treasure to following my dreams. To my friends, family, and colleagues who supported me throughout this amazing journey. Finally, to the courageous participants who trusted me with their stories and generously gave of themselves that knowledge would be furthered.

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This dissertation reflects the contributions of many generous and inspiring individuals. A special appreciation goes out to the leaders of the participating weight loss surgery online support groups for allowing me to recruit participants from their membership in order to gain further insight into the mental health needs of bariatric patients. I am forever grateful to my committee chair Dr. Patricia Costello who stayed with me despite all the changes when no one else did. Thank you for believing in me no matter what my topic. It was your example that inspired me to sprint to the finish. I am so thankful for Dr. Leann Stadtlander for her amazing insight and mentoring. I kind of want to be you when I grow up. I also want to thank Dr. Donna Heretick for holding the bar high and for pushing me to see what I couldn't see on my own. Finally, I want to thank my dissertation buddy Susan Ruiz. We started out colleagues and became sisters.

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Chapter 1: Introduction to the Study

Background

It is said that having weight loss surgery (WLS) is like being reborn into a newly created body (Bocchieri, Meana, & Fisher, 2007). Because of the dramatic changes made during and resulting from the surgery, patients must learn to eat, drink, walk, sit, stand, and dress themselves all over again (Ogden & Clementi, 2010; Throsby, 2008). They must relearn key social skills and assert themselves into new roles by relating in new ways to friends, parents, siblings, colleagues, mentors, bosses, mates, or potential mates. Many celebrate the day of weight loss surgery as a new birthday (Bocchieri, Meana, & Fisher, 2007; Throsby, 2008). Just after surgery, the shaky patient, very much like a newborn baby, takes their first tentative sips of water into their tiny new stomach, and before they know it, their first steps into a new life with a new identity.

Topic of the Study

The topic of this study involved exploring the psychosocial processes involved in the weight loss surgery experience. Using the narratives of post-weight loss surgery patients, the study looked into whether Erikson's (1963) psychosocial stages of development are occurring and if successful patients (those who are able to maintain their weight loss long term) have successfully navigated Erikson's stages and in the process formed a new identity aligned with the goals and lifestyle of weight loss surgery. In looking at participants who have either kept the weight off or regained weight, it is possible to see how their experiences after weight loss surgery align with Erikson's stages of psychosocial development. Erikson's stages of psychosocial development are eight

stages through which the healthy human must navigate in order to successfully pass from infancy to adulthood. In this study, Erikson's stages were used metaphorically to enhance our understanding of the pattern of psychosocial changes that take place after weight loss surgery.

Social Implications

Gastric bypass is not the panacea it was once thought to be (Boeka, Prentice-Dunn, & Lokken, 2010; Elkins, Whitfield, Marcus, Symmonds, Rodriguez, & Cook, 2005; Stewart, Olbrisch, & Bean, 2010; Toussi, Fujioka, & Coleman, 2009; Zalesin, Franklin, Miller, Nori Janosz, Veri, Odom, & McCullough, 2010). Between 20% and 40% of WLS patients begin regaining weight by 24 months post-surgery (Weineland, Arvidsson, Kakoulidis, & Dahl, 2011). Failures in permanent weight maintenance prove a need to better understand the problem of weight loss maintenance (Johnson, 1990). The physical aspects of WLS are well understood, but the psychological aspects of WLS are not (Grimaldi & Van Etten, 2010). Since weight loss maintenance is not simply a physical problem, it is vital that the psychological processes beyond surgery are well understood (Davin & Taylor, 2009; Maggard, Shugarman, Suttorp, Maglione, Sugerman, Sugarman, Livingston, 2005). It is important to note that the psychological processes involved in weight loss maintenance involve not just the WLS patient, but their entire social community, making this a psychosocial problem. Understanding the psychosocial aspects of WLS may lead to a greater understanding of why the surgery is failing for so many and how that might be remedied (Toussi et al., 2009; Weiss, Galuska, Kettel Khan, Gillespie,

& Serdula, 2007; Zalesin, et al., 2010). Success in WLS requires that patients make behavioral and psychosocial changes (Ray, Nickels, Sayeed, & Sax, 2003).

Indications of identity reformation and developmental shifts may be key in this understanding (Granberg, 2001; 2006; Magdaleno, Chaim, & Turato, 2008; Throsby, 2008). Eriksonian theory holds that those whose development closely aligns with (Erikson's) psychosocial theory have higher levels of psychosocial adaptation (Erikson, 1963; Wilt, Cox, & McAdams, 2010). A higher level of psychosocial adaptation is correlated with higher levels of social connectedness and positive health outcomes (Martikainen, Bartley, & Lahelma, 2002; Wilt et al., 2010). If it is understood why WLS is failing (i.e., patients are either not losing weight or regaining weight that has been lost) providers will be closer to understanding how to help patients maintain weight loss permanently. In this chapter, background, problem statement, and purpose of the study will be followed by the research question.

Literature Summary

Adult obesity statistics in the United States have been well documented. According to the National Health and Nutrition Examination Survey (NHANES) program conducted in 2007–2008, an astounding number (68%) of adults in the United States are overweight or obese, defined as a body mass index (BMI) >25 (C. L. Ogden & Carroll, 2010; Shah, Simha, & Garg, 2006). About 5% are morbidly obese, which is defined as a BMI of over 40 (Echols, 2010). It is the people in this last category who typically qualify for obesity surgery (Stewart et al., 2010). The World Health Organization has coined a term for this worldwide epidemic—*globesity* (World Health Organization, 2003, p. 1).

The prevalence of morbid obesity has increased twice as fast as the prevalence of obesity and is associated with a number of comorbidities including type 2 diabetes, coronary heart disease, hypertension, sleep apnea, gallbladder disease, and certain types of cancer (Echols, 2010; Mehler, Lasater, & Padilla, 2003; Stewart et al., 2010). Morbid obesity shortens life expectancy and is one of the biggest threats to health and well being in the world today (World Health Organization, 2003). Diet, exercise, psychological, and pharmacological therapies have not been effective in treating morbid obesity in the long term and as a result, patients have turned in huge numbers to obesity surgeries (Engström & Forsberg, 2011). Unfortunately, obesity surgery failure rates are rising with the increased numbers of surgeries performed (Elkins et al., 2005; Pontiroli et al., 2007; Sarwer et al., 2008; Stewart et al., 2010).

Theoretical Foundations

Eriksonian theory holds that those whose development closely aligns with (Erikson's) psychosocial theory have higher levels of psychosocial adaptation (Erikson, 1963; Wilt, Cox, & McAdams, 2010). A higher level of psychosocial adaptation is correlated with higher levels of social connectedness and positive health outcomes (Martikainen, Bartley, & Lahelma, 2002; Wilt et al., 2010). According to a definition put forward in 2012 by the *International Journal of Epidemiology*, psychosocial factors are those: "1) mediating the effects of social structural factors on individual health outcomes, or 2) conditioned and modified by the social structures and contexts in which they exist" (p. 1091). Psychosocial adjustment can influence health through psychobiological processes or through behavior modifications in lifestyles or both (Martikainen et al.,

2002). Through understanding developmental psychosocial adjustments after surgery, this study supported post-weight loss surgery behavior modification and the complementary psychobiological processes.

A Meaningful Gap in the Literature

Success after bariatric surgery requires behavioral modification (Boeka, 2009; Elkins et al., 2005; Zalesin, et al., 2010). There is very little information on the psychological and social-relational changes and the resulting adjustments after Weight Loss Surgery (Davis-Berman & Berman, 2009; Grimaldi & Van Etten, 2010). Misconceptions about these psychosocial adjustments abound (Bauchowitz, 2005). One misconception is that obesity surgery is a "cheat" or taking the "easy way out" of an obesity problem, rather than losing the weight without the aid of surgery (Drew & Bielby, 2008; Sogg & Gorman, 2008; Van Etten & Grimaldi, 2011). These kinds of misconceptions, and a lack of information about the psychosocial adjustments after WLS, create problems for both WLS candidates, as well as those who screen surgery candidates (Marcus, Kalarchian, & Courcoulas, 2009; Collins, 2011). In addition, the cognitive demands of post surgical self-care poses problems for many people (Bocchieri, Meana, & Fisher, 2002; Elkins et al., 2005; van Hout, Verschure, & van Heck, 2005). The development of the kind of expertise it takes to succeed in complex forms of self-care must be understood (Hayward et al., 2000).

Further, the problem of long term weight loss maintenance is one that neither medicine nor psychology has been able to solve (Pontiroli et al., 2007). There is no magic pill, surgery, or therapeutic technique that has been proven successful in helping people

maintain their weight loss permanently. Insights gained from looking at this problem from a developmental perspective might be helpful in the pursuit of a solution to this worldwide problem. These issues will be discussed in further detail in chapter two.

Why the Study was Needed

Simply put, research that leads to advances in weight loss maintenance is necessary. This study and those that come after it could lead to a greater understanding of what psychosocial processes must take place in order to make weight loss permanent.

Research Problem

Bariatric surgery is not the cure all it was once thought to be. Due to noncompliance issues many weight loss surgery patients are relapsing and regaining the significant amounts of weight that bariatric surgery had helped them to lose (Elkins et al., 2005; Ray et al., 2003; Stewart et al., 2010; Weineland et al., 2011; Zalesin, et al., 2010). This failure is costly monetarily, psychologically, and medically to both the patient and to society. Patients who are not able to adjust to the new lifestyle and bariatric rules are likely to relapse (Barbee, 2010; Weineland et al., 2011). Permanent weight loss maintenance is at the heart of this problem.

Evidence the Problem is Current, Relevant, and Significant

Although weight loss surgery is still the best long term solution to the obesity epidemic, 20-40% of WLS patients begin to regain their weight at or around 24 months post-surgery (Bocchieri et al., 2007; Weineland et al., 2011). The reason most cited for this growing problem is noncompliance with the bariatric weight loss program (Elkins et al., 2005; Pontiroli et al., 2007; Toussi et al., 2009). We know from the literature that the

problem is happening, but there is very little research on programs or therapies that address this problem (Bocchieri et al., 2002; Phipps, 2011; Weineland et al., 2011). Until now, most WLS clinics and researchers have only addressed the physical indicators of bariatric success, which include weight loss and BMI measurements. Very little is known about how to successfully help WLS patients through the psychosocial adjustments post-surgery (Bauchowitz, 2005; Davin & Taylor, 2009; Grimaldi & Van Etten, 2010; Martikainen et al., 2002). Understanding these adjustments may add to successful bariatric surgeries by helping patients maintain weight loss long term.

Purpose of the Study and Research Paradigm

The research paradigm was a qualitative, narrative study. Thirty participants were recruited from online bariatric weight loss support groups. Participants were grouped into three groups of 10 participants each. Each group of 10 were approximately the same time beyond surgery. In Group One, all participants were Maintainers because Regainers in this short time frame are exceedingly rare. Long-term studies of weight loss surgery patients point to a growing problem with weight regain three or more years past surgery (Engström & Forsberg, 2011; Stewart et al., 2010). This group was used as a baseline for comparison. Groups Two and Three had five participants who are Maintainers and five who are Regainers. Maintainers are those who have successfully maintained their weight loss within 10 pounds. Regainers are those who have lost weight and regained at least 50% of that weight. Ten participants were approximately 18 months beyond surgery, 10 participants at three years beyond, and 10 participants at five years beyond surgery. Using semi-structured interviews the developmental experiences of WLS patients was explored

to see if there are changes in identity or Eriksonian-like stages in their narratives (Erikson, 1963; Johnson, 1990; McAdams, 1988). In addition, differences between those who have maintained their weight loss, and those who have regained weight after losing were explored. Understanding identity re-formation via developmental milestones is crucial to understanding the success or failure of weight loss surgery (Granberg, 2001; Hayward et al., 2000; Johnson, 1990). It is imperative that the WLS patient develop a new identity linked to their new image and body so that they do not relapse into old behaviors and attitudes that could lead to weight regain (Drew & Bielby, 2008; Elkins et al., 2005; Granberg, 2001; Weineland et al., 2011).

Phenomenon of Interest

Even though obesity is technically considered a medical condition, there is clearly a psychological component involved (Davin & Taylor, 2009). Dramatic weight loss brings with it challenges and opportunities. The primary challenge is lasting change; permanent weight loss. The opportunities include making changes in identity (Drew & Bielby, 2008; Epiphaniou & Ogden, 2010a; Granberg, 2001). Lasting health behavior changes begin with understanding one's self and that leads to changes in identity (Finfgeld, 2004).

Identity change after bariatric surgery and dramatic weight loss grows out of commitment and acceptance of the new life and new lifestyle that the surgery necessarily forces on patients (Drew & Bielby, 2008; Granberg, 2001; Robins, 2011; Weineland et al., 2011). Without specific changes in lifestyle and in self perception and identity, weight regain is inevitable (Elkins et al., 2005; Johnson, 1990; Throsby, 2008; Zalesin, et al., 2010). Identity formation is a developmental phenomenon (Erikson, 1963; Finfgeld, 2004;

Kroger, 2002a; McAdams, 1988; Strayer, 2002a). The nature of this phenomenon was at least in part revealed in the developmental narratives of the weight loss surgery patients who participated in this study.

Research Questions

There were three research questions. They were: Are Erikson's psychosocial stages of development occurring in the lives of WLS patients after surgery? (2) If so, do successful weight loss surgery patients (those who are able to maintain their weight loss long term) successfully navigate Erikson's psychosocial stages and in the process form new identities?; (3) Conversely, do weight loss surgery patients who regain their weight show evidence that they have not successfully navigated Erikson's stages of psychosocial development?

The narrative of an individual's life can be viewed as narrative developmental script (Erikson, 1963; McAdams, 1993; Wilt et al., 2010). So too, specific life-changing events like weight loss surgery can be recalled by the participant in the form of a developmental script. Insights from these narratives may show a developmental pattern through which the patient must progress in order to succeed in weight loss goals, including long-term weight loss maintenance. Since weight loss surgery is considered the most successful form of treatment available to fight severe obesity, it was the context chosen for this study. It is important to give participants the best chance of losing weight available in order to measure other variables like developmental processes (Bocchieri et al., 2007).

Importance of the Study

Permanent weight loss is the Holy Grail in obesity treatment and research. With dramatically rising numbers of weight loss surgeries being performed each year, it is increasingly important that we understand outcomes and how to ensure successful outcomes (Kushner & Noble, 2006). Understanding the role of ego identity re-formation in the context of the weight loss surgery experience and issues that block new identity formation, may lead to a greater understanding of why weight loss surgery is more effective than other (non-surgical) weight loss methods (Hall, 2010; Herpertz et al., 2003; Kushner & Noble, 2006; Netherton, 2008; Van Etten & Grimaldi, 2011). The current thinking about why WLS is more effective revolves solely around the physical changes of WLS to the body. These primary changes are in the restriction of the amount of food the patient can eat and nutritional malabsorbtion. Little attention has been given to the psychosocial development issues involved in successful weight loss maintenance (Bocchieri et al., 2007; Grimaldi & Van Etten, 2010; Johnson, 1990; Lier, Biringer, Hove, Stubhaug, & Tangen, 2011).

Knowledge of post surgical identity re-formation could shed light on the psychological factors relating to weight regain (Epiphaniou & Ogden, 2010a; Magdaleno et al., 2008; Weiss et al., 2007; Zalesin, et al., 2010). Weight regain is important because it is the ultimate signature of a failed obesity surgery. An estimated 20% of WLS patients fail to reach their excess weight loss goal (EWLG). EWLG is defined as greater or equal to 50% loss of excess weight (Elkins et al., 2005; Livhits et al., 2010). The percentage of

failed surgeries goes up dramatically when you add patients who meet their EWLG for a period of a few years and then regain the weight.

If clinicians better understood psychosocial factors relating to positive outcomes, and behavioral compliance issues, it would be possible for them to make better predictions about which patients stand a better chance of successful obesity surgery and long term improvements in quality of life. In addition, it is possible to guide patients to develop a new identity based on their new body image and lifestyle, which may increase chances of successful long term (even permanent) weight maintenance (Epiphaniou & Ogden, 2010b; Granberg, 2001; Hayward et al., 2000). Further, it may be possible to build interventions that help WLS patients master compliance issues.

Noncompliance with behavior recommendations after bariatric surgery is a pervasive problem that affects approximately 41% of surgical patients and accounts for many failed bariatric surgeries (Bauchowitz, 2005; Boeka, 2009; Elkins et al., 2005). Pre-surgical clinical decisions involve being able to predict who will comply with behavioral modifications post surgery (Davin & Taylor, 2009; Elkins et al., 2005; Livhits et al., 2010; Sogg & Gorman, 2008). An understanding of the psychosocial adjustments in identity formation after weight loss surgery could also provide theoretical insights into processes of change and adaptation to new and more complex self-care requirements. It could facilitate the development of individualized programs, which could proactively address individual differences and provide alternative interventions for patients whose weight loss is not permanent.

Long-term studies of weight loss surgery patients point to a growing problem with weight regain three or more years past surgery (Engström & Forsberg, 2011; Stewart et al., 2010). Of those who lose a substantial amount of weight, 33.5% regain that weight within a year after treatment, and will have regained all or almost all their weight within five years. Ego identity formation blocks and psychosocial adjustments may be mediating factors in these long-term failure rates. Sogg and Gorman (2008) noted that even positive life changes brought on by dramatic weight loss could be stressful in a negative way. For example, dating and dealing with potential mates for the first time could be seen as a positive, yet has the potential to be a negative stressor for many people.

Conceptual Framework

Focus of the Study

In the same way that Erikson (1968) observed the psychosocial stages of human development, this study observed and looked for the psychosocial developmental stages that may be occurring in the lives of patients after weight loss surgery. In identity development theory, the expectation is that the transition from adolescence to adulthood involves progressive growth and understanding of the person's sense of identity (Erikson, 1963; Waterman, 1982). I proposed that the psychosocial developmental stages experienced after weight loss surgery mirror those of Erikson's psychosocial stages. If this is the case, it can be assumed that these stages must be successfully navigated in order to restructure identity which would lead to improvements in maintaining weight loss (Granberg, 2001; Johnson, 1990; Magdaleno et al., 2008).

This study examined the psychological and social conditions represented as developmental stages of psychosocial growth after obesity surgery. These stages may or may not be successfully navigated by the WLS patient, and may become moderating factors in weight maintenance or regain after surgery. It is important to identify potential interventions that will reduce the burden of obesity on society (Kelly, Yang, Chen, Reynolds, & He, 2008; J. Ogden & Clementi, 2010). Identifying these stages may unearth potential interventions and long-term therapies for morbid obesity, reducing the societal burden of morbid obesity and raising the quality of life for many people suffering from morbid obesity. Using Erikson's theory as a framework it is possible to build an organizational system through which it is possible to facilitate healthy development. Effective developmental interventions may be able to help lead people to a healthy new identity and a healthy new life (Epiphaniou & Ogden, 2010b; Pulkkinen & Kokko, 2000).

Contextual Lens

The developmental narrative that emerged from experiences just before, during and considerably after weight loss surgery informed the success or failure of long term weight loss maintenance (Granberg, 2006; McAdams, 1988; 1993; Wilt et al., 2010). Understanding the developmental processes that take place after bariatric surgery is necessary to reinforce the acceptance, commitment and the significant changes in identity that must occur in order to avoid weight regain and relapse into old habits and lifestyle choices (Bocchieri et al., 2002; Davin & Taylor, 2009; Granberg, 2001; Weiss et al., 2007; Zalesin, et al., 2010).

Framework and Study Approach

Follow up studies of weight loss surgery have historically been concerned with weight loss and other physical indicators and post-surgical changes. In order to understand the developmental processes that usher in a new identity, the study approach was qualitative using a narrative tradition. Qualitative research allows for an open-ended discussion of experience. A narrative approach will help to reveal the developmental processes that emerges post WLS (Creswell, 2007). In the narrative tradition, re-storying takes place and allows the researcher to posit a causal link among the participants' experiences (Creswell, 2007; McAdams, 1988).

Nature of the Study

Methodology Summary

A narrative tradition of qualitative research methodology was chosen for this study. Thirty-two participants, 20 who have succeeded in long term weight loss maintenance, and 10 who have not were recruited from online bariatric weight loss support groups. Participants were grouped into three groups of 10 participants each. Each group of 10 were at approximately the same time beyond surgery. Patients were screened for suitability for the study based on the type of surgery they have had and the amount of time past surgery. Group One were approximately 18 months beyond surgery, Group Two were approximately three years beyond surgery, and Group Three were at least five years beyond surgery.

Notices about the study were posted on the support group websites. These notices included a contact email. Potential participants were sent emails from their weight loss

surgery support groups announcing the study, and inviting them to participate. Interviews were conducted online using Cisco Webex Meeting or email in cases where technical failures occurred. Data was coded and analyzed using Dedoose qualitative analysis software. Data collection was information gathered from open-ended semi-structured interview questions, which included all participants. Results were shared with participants, and their comments noted in the final analysis.

Rationale for Design Tradition

The narrative tradition of qualitative inquiry was chosen for a number of important reasons. First, a detailed understanding of a complex problem was needed (Creswell, 2007). Psychosocial and developmental changes after weight loss surgery are complex issues to understand. The narrative tradition of qualitative research allows for detailed accounts of the psychosocial experiences of weight loss surgery patients. Creswell (2007) suggested that for health science research, the narrative tradition was most appropriate because often these kinds of studies involve a priori theories. In fact, that is the case in this study, contrary to the use of the grounded theory tradition, which does not begin with an a priori theory, and watches the data to see the theory emerge. Narrative inquiry is most appropriate to help tell the detailed stories or life experiences that are found in a single or multiple episodes of the life of a person or small group of people (Creswell, 2007). Most importantly, the narrative tradition of qualitative inquiry is appropriate to this study for the advantage that re-storying brings in understanding the post-weight loss surgery experiences and adjustments (Creswell, 2007; McAdams, 1993). Re-storying allows the researcher to reorganize the storied experiences of participants into a framework

appropriate to the a priori theory being investigated. In this case, the stories of weight loss surgery patients were organized within the framework of Erikson's stages of psychosocial development. Psychosocial development is a lens or perspective that is not well enough understood by the public for average participants to use in telling his or her own stories. Using this novel framework increased understanding of these post WLS experiences.

Key Phenomenon Being Investigated

The key phenomenon investigated here was the possibility of a developmental narrative, which could bring insights to identity reformation after weight loss surgery. Identity re-formation post-surgery is important to long term or permanent weight loss maintenance (Bocchieri et al., 2002; Epiphaniou & Ogden, 2010a; Granberg, 2001).

Definitions

Bariatric Surgery: Also known as weight loss surgery, refers to the various surgical procedures performed to treat obesity by modification of gastrointestinal tract to reduce nutrient intake and/or absorption (Okoro, Sintler, & Khan, 2009).

Bariatrics: The branch of medicine that deals with the causes, prevention, and treatment of obesity (Okoro, Sintler, & Khan, 2009).

Body Mass Index: The result of dividing weight (in kilograms) by height (in meters) squared [weight (kg)/height (m)2] (Okoro, Sintler, & Khan, 2009).

Discrepant Cases: Disconfirming or differing cases (Creswell, 2007).

Developmental Stage One: Trust versus Mistrust (Erikson, 1963).

Developmental Stage Two: Autonomy versus Shame and Doubt (Erikson, 1963).

Developmental Stage Three: Initiative versus Guilt (Erikson, 1963).

Developmental Stage Four: Industry versus Inferiority (Erikson, 1963).

Developmental Stage Five: Identity versus Role Confusion (Erikson, 1963).

Developmental Stage Six: Intimacy versus Isolation (Erikson, 1963).

Developmental Stage Seven: Generativity versus Stagnation (Erikson, 1963).

Developmental Stage Eight: Ego Integrity versus Despair (Erikson, 1963).

Erikson's Developmental Stages: Initially eight stages of psychosocial maturation that show the progression from infancy to identity development and ultimately adult maturity within the human experience (Erikson, 1963).

Extreme Obesity: A body mass index (BMI) greater than 40 kg/m2 (Okoro, Sintler, & Khan, 2009).

Gastric Bypass: Gastric bypass involves creating a small stomach pouch in the upper quadrant of the stomach using staples or laser to permanently close the remaining area of the stomach. This pouch is then connected to the small bowel. The stomach volume is decreased to <30ml, which requires a permanent change in eating habits (Okoro, Sintler, & Khan, 2009).

Maintainers: Those who successfully maintain their weight loss (within 10 pounds) for at least the duration measured by this study (18 months, 3 years or 5 years).

Obesity: A BMI greater than 30 kg/m2 (Okoro, Sintler, & Khan, 2009).

Psychosocial Development: Human maturation in the context of their social environment.

Psychosocial Functioning: The way one functions psychologically within one's social context.

Regainers: Someone who has lost weight and regained at least 50% of that weight over a period of time reflected in the duration of time studied here (18 months, 3 years or 5 years).

Stage Model: A point-by-point or step-by-step progressive model of development (Erikson, 1963).

Assumptions

Foundationally, the first assumption was that weight loss surgery does not work as well as it was once thought (Davin & Taylor, 2009; Elkins, 2005). Without this assumption there is no problem. The stigma of obesity has a direct impact on the identity and the psychosocial functioning of the overweight individual (Bocchieri et al., 2002; Epiphaniou & Ogden, 2010b). Obesity is related to social discrimination, which in turn is related to both physical and emotional health (Epiphaniou & Ogden, 2010a; Schafer & Ferraro, 2011; van Hout et al., 2005). Identity and self-image are inextricably linked to weight loss and weight maintenance (Barbee, 2010; Buddeberg-Fischer, Klaghofer, Sigrist, & Buddeberg, 2004; Granberg, 2001). Having weight loss surgery is an intentional form of identity change from that of fat and stigmatized to "normal" (Capparelli, 2012; Granberg, 2006; 2011). Eriksonian theory holds that individuals whose development closely aligns with Erikson's psychosocial theory have higher levels of psychosocial adaptation (Erikson, 1963; Wilt et al., 2010). WLS patients, as a part of a successful weight loss process, must adapt to the psychosocial changes that are an inherent part of the process (Boeka, 2009; Grimaldi & Van Etten, 2010; Hayward et al., 2000; Martinez, Ruiz-López, la Cruz, Orduña, 2011; Shah et al., 2006; Van Etten & Grimaldi, 2011).

In order to successfully adapt to these necessary changes, assimilation and acceptance of the bariatric way of life, including eating and exercise requirements, must be attained (Bocchieri et al., 2002; Weineland et al., 2011). It is possible to create a developmental narrative revolving around the WLS experience in which the "developmental script" holds closely to that of Erikson's psychosocial developmental theory (McAdams, 1988; Wilt et al., 2010). Identifying the developmental narrative is illuminating and potentially instructive in terms of helping WLS patients understand that these changes in identity will happen and that they must be met with acceptance and commitment in order for weight loss to be permanent (Drew & Bielby, 2008; Granberg, 2001; Weineland et al., 2011). The last assumption was that since the WLS patient and doctor relationship is designed to be an ongoing, lifelong relationship, I assumed that if participants do not see their surgeon (or any other surgeon) that they struggled somehow with that patient surgeon relationship. The only exception to this was participants who moved away from where their surgeon's practiced, or when the surgeon moved their practice to a new place that made seeing them annually difficult.

Why Assumptions Are Necessary

These assumptions were necessary in the context of this study because without changes in identity post-surgery, patients relapse into pre-surgical behaviors rather than adopting the new life and new life style, which includes dramatic differences in eating behaviors, exercising and even self-image (Granberg, 2001). In order to study the ways people adopt (or do not adopt) their new bariatric identity, it was necessary to assume that this new identity happens developmentally, as identity formation does in childhood

development. The parallels with Erikson's theory of psychosocial development are clear (Erikson, 1963). With identity development comes commitment to the new identity (Erikson, 1963; Granberg, 2001; Kroger & Green, 1996; Weineland et al., 2011). Erikson (1963) noted that "the process described [identity development] is always changing and developing: at its best, it is a process of increasing differentiation" (p. 23). The exception that has to do with the codes for struggling with surgeons was necessary because actions speak louder than words.

Scope and Delimitations

The focus of this study was the developmental experiences that patients have after going through WLS. The participants' success or failure to complete the appropriate developmental stages shed light on weight loss maintenance issues. This focus was born out of my own experiences with weight loss surgery and the developmental experiences I went through that facilitated changes in my identity. Just as children in Erikson's psychosocial stages of development need to begin to assert power and control over their environment during the 'initiative versus guilt' stage, I was faced with the same dilemma (Erikson, 1963; Erikson & Erikson, 1982; Kroger & Green, 1996). This is one of the first stages where the developing person's choices and actions are only part of what it takes to successfully navigate the developmental stage. The other part of this stage is how others "allow you" to assert yourself in different situations. Just as when children attempt to assert "too much power" they are met with disapproval, my attempts at asserting power were met with disapproval too. This disapproval caused me to pull back and I experienced guilt and even shame for asserting power in ways I had not done as a fat

person. I had feelings of inadequacy and from there I felt myself slipping backward into the old habits and psychosocial roles I had played for most of my life. My journey to develop a new identity was over. Those around me (in this case my boss and co-workers) were more comfortable with me acting in ways to which they had grown accustomed. The familiarity of this made me more comfortable in a way too. It was also clear by their comments about my weight loss that many of them were uncomfortable with how I looked too. Some people were complimentary, but most of the people I knew intimately were uncomfortable with the physical changes. Several even told me that I was too thin and looked unhealthy, despite the fact that my physicians told me during that same time that I was perfectly healthy.

Looking back on my failure in this transformation it was clear to me that, had I succeeded, I might not have regained the weight. Those observations were the foundation of this study.

Boundaries

This study was a qualitative narrative study of weight loss surgery patients in various stages beyond surgery. A group of 30 participants were interviewed. Each of the three groups of 10 people were matched for time since surgery. Group One were all maintainer, since weight regain after WLS does not typically happen within the first 18 months after surgery (Engström & Forsberg, 2011; Stewart et al., 2010). Groups Two and Three were made up of five Maintainers and five Regainers. The goal of the interviews was to provide a picture of the psychosocial development as it related to their experience after weight loss surgery. For consistency, I included only patients who have had gastric

bypass as opposed to including those who have had lap band surgery and other weight loss surgeries. However, three of the participants had both gastric bypass and lap band surgery. The rationale for participant boundaries will be discussed in chapter three in detail.

The data were analyzed using Dedoose software to see patterns in the interview data that were indicators of developmental stage experiences (Dedoose.com). The population for this study came from volunteers found through the cooperation of online bariatric support groups. These groups are at the following web site addresses: a Facebook community; and a meet-up group for bariatric weight loss support.

Potential participants were screened for suitability for the study based on amount of time past surgery, the type of surgery they have had, and whether they are a Maintainer or a Regainer. Both women than men were included in the study.

After the screening process, potential participants were sent emails giving further details about the study, and inviting them to participate. Interviews were conducted online using Cisco Webex and recorded for transcription. In cases of technical failure, email was used to conduct interviews. Data will also consist of participants' self-declared weight loss and regain and surgery dates. Results were shared with participants, and their comments were noted in the final analysis to ensure that their stories have been accurately and respectfully communicated.

Limitations Related to Design

Since this study called for 30 participants, and because the data came from just one interview, understanding the nuances of stage completion or failure was somewhat

limited. Future studies dealing with fewer participants, or even using a case study methodology with multiple interviews may increase the depth of understanding of these complicated issues. Conversely, a more expanded investigation could study each stage in depth with more participants chosen based on how far out they are from surgery. Low participant numbers may indicate that there were limits in terms of transferability to the general population. However, analytical generalizations with an eye to the general theory of the study were possible.

Another limit of this design had to do with the online and written nature of the inquiry. Those who are unable to read, or who are computer illiterate would not be able to participate in this study because recruiting techniques required responses in writing and on a computer which is connected to the internet. Further studies with people who are not as computer savvy or who cannot read would be interesting. This also limits the study participants to those with access to a computer and to the internet. While public libraries have computers for the public to use, and they are connected to the internet, it is less likely that this study will engage a participant who is not familiar with computers by offering them the solution of using the computers at the library. People who are computer illiterate are simply less likely to volunteer for a study that uses the internet to recruit participants (Hanley, 2011).

Another limitation was that all the participants came from bariatric weight loss support groups. This was a limitation because there may be differences between those who seek support via these kinds of groups and the weight loss surgery population who does not seek support online or off.

Narrative research is a challenging type of research to do (Creswell, 2007). It requires an extensive amount of information from participants and in this study in particular, a solid understanding of participants' psychosocial context. In addition, it takes a researcher with experience and an eye to be able to convert source material into the participant's story. Fortunately, my years as a professional narrative television writer has given me precisely the tools I need to be able to overcome these limitations.

Additionally, there has been some research that indicates that Erikson's Psychosocial Developmental Theory may not speak to the lives and experiences of women (Kroger, 2002b; Sorell & Montgomery, 2001). Sorell and Montgomery (2001) hypothesized that due to the historical zeitgeist and socioeconomic assumptions Erikson made when developing his theory that it may not be relevant for contemporary research (Sorell & Montgomery, 2001). However, Kroger (2002) countered Sorell and Montgomery with quotes from Erikson himself refuting the charges. In one example, Erikson (1963) said "And yet, by its very nature, what bears such a definitive name [identity] remains subject to changing historical connotations" (p. 15). And "We deal with a process 'located' in the core of the individual and yet also in the core of [his/her] communal culture" (p. 22).

Biases and Reasonable Measures to Address Them

As a true "insider" in the area of weight loss surgery (I had gastric bypass surgery in 2004) I brought unique insights to this project. By the same token, I also brought the bias of my experience. However, knowing that not everyone's bariatric surgery experience is exactly the same as my experience, I was excited to see and understand those

differences and unique experiences. I will not share the details of my experiences (in particular the fact that I saw my experience as developmental in nature) with the participants so that I do not influence their stories. I will not, nor could I, hide the fact that I regained the weight I had lost after surgery. An important part of my story includes the fact that after five years of successful weight maintenance I got very sick, underwent over 20 surgeries and was prescribed long-term medications that typically cause weight gain. In addition, my illness prevented me from being able to exercise. I think that by focusing on this aspect of my story, the developmental hypothesis should not even come into the conversation with participants. I mention that because one bias I am concerned about is the hypothesis I have concerning the developmental nature of post-surgery experiences. On one hand, I intend to use that as a lens. On the other hand, I do not want to "manufacture" a developmental sequence that may not exist. By collecting data specifically designed to examine developmental stage experiences, it should be clear that either there is a developmental component to post WLS experiences, or there is not. Creswell (2007) indicated that when participants of narrative research tell their stories, whether in writing or orally, they do not always frame their stories chronologically or with a certain context in mind. That is part of what I see as the responsibility of the researcher during analysis.

Significant Potential Contributions to the Discipline

There are many studies that have looked at psychosocial adjustments post WLS. These studies look at post WLS adjustments as separate and distinct experiences (Bocchieri et al., 2007). These studies have resulted in disjointed, fragmented results without theoretical integration or possibilities for social change implications (Bocchieri et

al., 2007). Today, physiological adjustments after WLS are well understood but even though there is a growing body of research on long term psychosocial adjustments, these are not well understood (Grimaldi & Van Etten, 2010). This study attempted to give form and structure (via the lens of Erikson's psychosocial developmental theory) to those psychosocial adjustments in order to better understand them and to bring about social change ultimately through the development of programs aimed at facilitating smooth transitions through the developmental stages post-weight loss surgery. In fact, much of the literature shows that the psychosocial adjustments post WLS are positive and easily borne by patients. This does not seem to be the entire story. Sarwer (2008) contended that these glowing studies generally report group outcomes, not necessarily the changes and challenges of individual patients (Sarwer et al., 2008). Further, the evidence gathered in this study pointed to issues (trust, for example) that could possibly be addressed prior to surgery by the surgical team in order to increase the likelihood of long term weight loss maintenance success.

Potential Implications for Social Change

Long-term weight loss maintenance has so far been an illusory, but definitive goal in the global fight against obesity. Understanding processes that impede this goal, and indeed those that might facilitate permanent weight loss is fundamental in defeating the problem of obesity. To facilitate this understanding this study looked for developmental transitions after weight loss. Herndon (2005) noted that the groups most affected by the obesity epidemic are women, people of color, immigrants, and those whose socioeconomic status is in the low income range (Hayward et al., 2000; Herndon, 2005). This is a group of

people who are already marginalized and by some are considered second-class citizens. If you add the stigma and discrimination that often accompanies obesity to their plight, it further hampers their ability to succeed in society. Understanding not just the experience of weight maintenance, but how to reinforce and even ensure lasting positive health behavior choices could change personal and public perspectives and open doors for people who could not maintain weight loss previously. That would ensure a higher quality of life that includes not only a higher health related quality of life but also has potential social and economic benefits.

Potential to Advance Practice or Policy

There is a gap in practice in how to psychologically treat WLS patients after surgery (Wolfe & Terry, 2006). Current literature does not speak to this issue. It is possible that the identification and understanding of developmental psychosocial adjustments post WLS will lead to clinical applications that are focused on helping WLS patients understand that they will go through a shift in their identity, in the way they see themselves and how others see and interact with them. This guidance could very well increase patients' ability to adjust to the psychosocial challenges and adhere to the bariatric post WLS program. Adherence to behavioral changes may increase effectiveness and improve long term outcomes for bariatric surgery patients (Toussi et al., 2009; Weineland et al., 2011). Higher long-term success rates of bariatric surgeries may yield a much higher quality of life for more people. Using the narratives of post-weight loss surgery patients, data was explored for patterns consistent with Erikson's psychosocial

developmental theory. The topic of this study involves exploring the psychosocial processes involved in the weight loss surgery experience.

Summary of Chapter One

Using the narratives of post-weight loss surgery patients, I explored the data for patterns consistent with Erikson's psychosocial developmental theory. This study involved exploring the psychosocial processes involved in the weight loss surgery experience. The data showed trends toward psychosocial stage development in successful patients (those who are able to maintain their weight loss long term). There were also indications that successful WLS patients have also successfully navigated Erikson's psychosocial developmental stages and in the process enjoyed a higher level of psychosocial functioning. In the next chapter, I will examine the evidence supporting this hypothesis in the form of a literature review.

Chapter 2: Literature Review

Problem and Purpose of the Study

Weight loss surgery is not a nostrum and patients are struggling in greater and greater numbers with the age-old dieter's dilemma of weight regain (Elkins et al., 2005; Weiss et al., 2007; Zalesin, et al., 2010). The purpose of this study was to identify developmental psychosocial experiences after weight loss surgery (WLS) in hopes of better understanding why patients are regaining the weight loss associated with bariatric surgery.

Synopsis

Eriksonian theory holds that those whose development closely aligns with (Erikson's) psychosocial theory, have higher levels of psychosocial adaptation (Erikson, 1963; Wilt et al., 2010). A higher level of psychosocial adaptation is correlated with higher levels of social connectedness and positive health outcomes (Martikainen et al., 2002; Wilt et al., 2010). According to a definition put forward in the International Journal of Epidemiology (2012) psychosocial factors are those: "1) mediating the effects of social structural factors on individual health outcomes, or 2) conditioned and modified by the social structures and contexts in which they exist" (p. 1091). Psychosocial adjustment can influence health through psychobiological processes or through behavior modifications in lifestyles (Martikainen et al., 2002). This study examines post-weight loss surgery behavior modification through the understanding of developmental psychosocial adjustments after surgery.

Preview Major Sections of the Chapter

This chapter will begin with the literature search strategy, move through the theoretical foundations of the study, conceptual framework, and proceed to the literature review. Conclusions and a summary of the literature review will close the chapter.

Literature Search Strategy

The primary databases used in this research were accessed through Walden University's online library. These databases included, but were not limited to: Health and Psychosocial Instruments, Academic Search Complete, CINAHL Plus with Full Text, Education Research Complete, MEDLINE with Full Text, Mental Measurements Yearbook, PsycARTICLES, PsycBOOKS, PsycCRITIQUES, PsycEXTRA, PsycINFO, SocINDEX with Full Text, and Walden University's ebook collections. The key search terms can be broken down to four primary categories: (1) psychosocial adjustments after weight loss surgery; (2) Identity transformations and weight loss; (3) identity formation, and; (4) physiological effects of weight loss surgery.

Iterative Search Process

Within each category, an iterative search process was used to include synonyms and related words. In addition, primary researchers were identified and their works of primary importance to this study were identified. It is those studies that provided the most value in terms of index, references and appendix searches. These studies were located and many of them were useful in understanding the origins of certain concepts. The process was repeated with articles deemed to be particularly salient. Using Scopus (a division of Sciverse) and Google Scholar I was able to initiate an author search for individual authors

of interest (based on the articles I had already found in the above mentioned databases). The author search revealed all the contributions of a given author and what years they were published, etc. Also in this search I found how many others had cited this author, letting me know the author's prominence in the field. I could then see everyone who had cited that author and explore those whose work was based on that author. For example, I began with Erik H. Erikson because his psychosocial developmental theory is at the core of my work. From there I could see those who worked directly with Erikson and those who worked under Erikson's mentees. By using this technique I found, for example, James Marcia who furthered Erikson's work, and then Jane Kroger who furthered Marcia's work, and others who had furthered all of their research.

Theoretical Foundation Theory

The foundation of this work is based on Erikson's Psychosocial Theory of Development (Erikson, 1963). I have combined this theory with the idea of identity change (re-formation) after weight loss surgery (Epiphaniou & Ogden, 2010b; Granberg, 2001; Johnson, 1990; J. Ogden & Hills, 2008).

Major Hypothesis

Since there is much evidence in the literature that there are changes in identity that accompany large weight losses, it is theoretically possible that these changes happen through a developmental process (Finfgeld, 2004; Granberg, 2001; Schafer & Ferraro, 2011; Throsby, 2008). It is also possible that a failure to successfully pass through these developmental changes will correlate with weight regain. The opposite is also possible.

That is to say that successful navigation of these developmental stages could be correlated with successful identity change and successful weight loss maintenance.

Previous Applications of the Theory

Erik Erikson's Psychosocial Theory of Development is one of the most well known theories of human development. As a result, it has been applied in many different situations as a metaphor for development of, for example, gifted children, work place supervisors, even terrorists (Cross, 2001; O'Brien, 2010; Studer, 2007). Ochse and Plug (1986) examined the cross cultural validity of Erikson's work (Ochse & Plug, 1986).

Rationale for the Choice of Theories

In truth, the decision to use this theory was not born out of some analysis I had done that led me to this hypothesis. The observations of my own experiences with weight loss surgery became obvious while reading a book on Erikson's theory. In his theory I saw my own experiences, and I wondered if others had similar experiences post WLS.

Research Questions and Existing Theory

A growing number of researchers are working with the idea that identity change is necessary for permanent weight loss (Bocchieri et al., 2007; Epiphaniou & Ogden, 2010b; Granberg, 2001; 2011; Johnson, 1990; J. Ogden & Hills, 2008; Throsby, 2008). Understanding the specific processes that promote identity change is another matter. It is important to understand that changes in identity are part of lasting health behavior changes, but understanding how identity is changed is at the heart of this issue. Building on the concepts from Johnson's and Granberg's restructuring theories, Erikson's identity theory, and Throsby's new identity concepts demands an understanding of how to quantify

the process. This study will attempt to frame the experiences of weight loss surgery patients in an attempt to quantify how these changes happen, taking the previous research one step beyond the observation that identity change does happen in successful weight loss maintenance. For a complete list of questions see Appendix A.

Conceptual Framework

Phenomenon Identified and Defined

The core phenomenon this study looked into was identity restructuring and its effect on weight loss maintenance. Despite initial optimism in the bariatric community, weight loss surgery is failing for a significant number of patients (Elkins et al., 2005; Livhits, et al., 2010; Pontiroli et al., 2007). Failure estimates vary from 20% to 40% of patients who have weight loss surgery (Elkins et al., 2005; Sarwer, Wadden, & Fabricatore, 2005). Weight loss surgery failure is defined as either not losing 50% excess body weight or regaining that same weight after having lost it. If weight loss is not permanent, the surgery has failed. The primary reason cited for failure is non-compliance (Elkins et al., 2005; Reedy, 2009).

Traditional (non-surgical) treatment results are even worse with estimates above 90% of patients regaining their lost weight (Kushner & Noble, 2006; Puhl & Heuer, 2010; Van Etten & Grimaldi, 2011). The stakes are high. Morbid obesity results in lower health related quality of life than cigarette smoking, alcoholism, or poverty (van Hout et al., 2005). In addition, there are severe social and economic consequences to those who are morbidly obese including higher rates of depression and anxiety, personal rejection,

discrimination in hiring practices, and general public perceptions (Greenberg, 2003; Hall, 2010; Herndon, 2005).

Identity restructuring is the psychosocial process defined by Johnson (Johnson, 1990) whose theory described the process that people went through when attempting to make changes in their lifestyles in order to lose weight. Johnson's theory will be discussed in depth in the next segments.

Synthesis of Primary Writings

There are key theorists and seminal researchers in two areas for this study. The first is identity formation after weight loss surgery (or weight loss in general), the second is in the area of psychosocial development and narrative identity formation after weight loss. While some of those whose work in the area of weight loss surgery have hit on the idea that identity re-formation must happen in order to ensure long lasting weight loss, they have not yet looked into precisely what psychological processes result in identity re-formation. The purpose of this study is to further the work of researchers like Rosemary Johnson, Ellen Granberg, Erik Erikson, Jane Ogden, Eleni Epiphaniou, Jane Kroger, Lorna Hayward, Karen Throsby, and a host of others whose work on psychosocial changes after weight loss surgery has been inspirational. It is their work that is the focus of this literature review.

Identity Reformation in Weight Loss

In 1990, Rosemary Johnson published a theory of identity restructuring during and after weight loss, which explains the psychosocial processes that happen when weight loss is attempted (Johnson, 1990). Johnson's theory describes in very general terms the

existence of an internal restructuring of self and an external restructuring of one's environment that lead to integration of the new identity. Her theory has three stages 1) Gain Control, 2) Change Perspective, and 3) Integrate a New Identity or Way of Life (Johnson, 1990). Although Johnson has not written extensively on this topic since the early nineties, I still consider her a seminal researcher in this area of study.

Then, in 2000, Hayward picked up Johnson's theory and furthered it with her work on restructuring (Hayward et al., 2000). Hayward's work revealed eight major themes in the weight loss process. While interesting and important in laying the foundation for this study, neither Hayward nor Johnson addressed the fundamental issue of weight regain. None-the-less, the foundation is established and the basic assumption (that there are psychosocial changes during and after weight loss) has been met. Their basic premise was that successful weight loss involves identity re-formation (Hayward et al., 2000; Johnson, 1990).

In 2001, Granberg followed on the work of Johnson and Hayward in her dissertation (Granberg, 2001). Granberg's focus was on weight related identity which is affected by obesity stigma and a host of psychosocial variables and the kinds of changes in identity that come with the process of weight loss (Granberg, 2001).

Johnson, Hayward, and Granberg were all concerned with identifying change during weight loss, not specifically dealing with quantifying the psychosocial processes that make that positive health behavior change happen and contribute to its permanency. Despite the fact that Johnson, Hayward, nor Granberg specifically dealt with issues involving weight loss surgery, their insights translate well to WLS as well as to weight

loss in general. The importance of their work, as it relates to this study is the link from weight loss to identity reformation.

It was not until 2010 that Eleni Epiphaniou and Jane Ogden published about successful weight loss maintenance and specifically, identity shift (Epiphaniou & Ogden, 2010b). Ogden had been researching health related behavior change, and joined Epiphaniou in her work on obesity. Ogden's work in health related behavior change is important here too because she is the first researcher to link life crises with change in an effective way (J. Ogden & Hills, 2008). Ogden and Epiphaniou (2008) reported that long-term behavioral change was linked with life events or life crises. The concept of crisis (or conflict) is important in psychosocial developmental change because the stage transitions are tied to life crises (Erikson, 1963; Erikson & Erikson, 1982). In Erikson's theory of psychosocial development, each stage consists of a task and the tasks in each stage are heralded by crises (Erikson, 1963; Phipps, 2011).

Psychosocial Development and Narrative Identity Formation

Key Framework Statements and Definitions

Erikson approached psychosocial development as a way to prevent psychological problems (Erikson, 1963). The current study seeks to do the same within the context of weight loss surgery success. Erikson's view was that healthy psychosocial development is a reaction to a series of predictable crises experienced by every healthy child. Each of Erikson's stages brings with it a critical psychological crisis with which the child must deal. So too in the process of weight loss surgery, very similar stages may be experienced

as the WLS patient navigates through the extreme psychosocial changes brought on by bariatric surgery.

Erikson's psychosocial conflicts arise for the WLS patient as they develop their new identity and new lives after surgery. For example, Erikson's first psychosocial developmental stage is "Trust versus Mistrust" which occurs in infancy and involves the relationship between the infant and its caregivers (Erikson, 1963). If the caregiver is reliable, caring, and affectionate, the infant builds trust for the caregiver, and in general for others. If this relationship falters, the infant develops mistrust, not just of the caregiver, but for others as well. Similarly, the weight loss surgery patient develops a relationship with their surgeon and his/her teams (surgical, clinical, hospital, and administrative). If the surgeon and their team are reliable, caring, and demonstrate genuine positive regard, trust is built between the patient and the bariatric caregivers. Erikson (1963) used the term "providers" when formulating his theory, which is coincidentally appropriate here in reference to the bariatric providers. Further, the use of the term "trust" was interchangeably used with "confidence". If the trust relationship is not built and the patient experiences mistrust or a lack of confidence in the providers, it may undermine the patient's weight loss success as well as their ability to "buy in" to and commit to the process of identity (life) re-formation and permanent weight loss via surgery. Commitment to and an abiding trust in the process are vital in order to succeed (Weineland et al., 2011). It should be noted here that while the parallel stages experienced after weight loss surgery follow the same general pattern as Erikson's psychosocial stages, they do not follow it in terms of specific time beyond surgery. For example, stage two takes place when the child

is about two years old. This stage does not happen for the weight loss surgery patient two years after surgery, but rather immediately after surgery while the patient is still in the hospital.

"Autonomy versus Shame and Doubt" is Erikson's second psychosocial stage (E. H. Erikson, 1963). In this stage, toilet training is the central focus or crisis for the 2-3 year old child. In the toddler's development, they must develop a sense of personal control over their physical world. This requires them to develop physical skills and a sense of independence. When they are successful in this, they experience feelings of autonomy. When they are not successful the result is shame and doubt (Erikson, 1963). The weight loss surgery parallel to this stage has to do with the patient's experiences immediately after bariatric surgery. In the hospital, once the patient has left recovery and has been roomed, there are specific tasks patients must achieve. They must walk, they must take their first sips of water into their tiny new egg sized stomach now called a pouch (and in many cases meet strict hourly hydration intake requirements), and they must void. These very basic physical tasks can be daunting for the weakened weight loss surgery patient. However, completing these tasks is the only way a patient can be discharged from the hospital after surgery, which makes this as definitive as the accomplishment of toilet training. You know objectively when you have finished this set of tasks. The sense of independence that comes from mastering these simple physical tasks in the hospital brings a sense of autonomy. Failure to succeed in these tasks can make the WLS patient feel shame and doubt about themselves, the process, and their decision to have surgery. If trust is not built between patient and hospital staff (as well as the surgical team) this phase is not likely to

go well. Physically speaking, if this phase does not progress smoothly, the patient can have life threatening complications in the hospital or immediately afterward which may require being re-admitted or even additional surgery. It is vital that it go well, not just from a psychosocial perspective, but also from a physical one.

"Initiative versus Guilt", is Erikson's third psychosocial stage (Erikson, 1963). The hallmark of Erikson's third stage for three to five year olds is exploration of their environment. The idea is that in this stage the child must learn to exert control and power over their environment. In this stage, children begin to assert their power through play and social interactions. Those who exert too much control experience disapproval from others, but success leads to a sense of purpose. This is analogous to the WLS patient beginning to lose weight and testing the waters for what that means to their close relationships, work, etc. Those who succeed at this stage feel capable and able to lead others. Other events in this stage for both the child and WLS patient include gaining more control over food choices, "toy" preferences and clothing selection (for many WLS patients the freedom and ability to play is new and exciting). People who successfully complete this stage feel secure and confident. Those who do not are left with a sense of inadequacy and self-doubt. Patients who try to exert too much power may experience disapproval from significant others or co-workers, resulting in a sense of guilt. This guilt, along with the unsuccessful attempts at creating and controlling a successful environment, could derail successful weight loss outcomes. Those who succeed at this stage feel capable and able to lead others. Those who do not are left with feelings of self- doubt and lack of initiative. I believe that success in this stage is at least as dependent upon the WLS patient's

significant others as it is dependent upon the WLS patient themselves. Being successful here has much to do with the reception they get from their social circle when they attempt to initiate power.

Erikson's fourth stage is called "Industry versus Inferiority". In childhood, this stage takes place during the early school years from age five to eleven (Erikson, 1963). At this age, children are introduced to additional social and academic demands. Through these social interactions children begin to develop a sense of pride in their accomplishments. Those who are encouraged and commended by parents and teachers develop a sense of accomplishment and belief in their skills. Those who do not receive this kind of encouragement will doubt their ability to be successful.

Similarly, patients need to cope with new social and economic (work) demands. Socially, when old relationship patterns persist, or WLS patients are not encouraged or commended in their new lifestyle, they will doubt their ability to succeed at anything, including and especially their weight loss goals, which include keeping the weight off. An extreme example of this is something commonly heard in WLS support groups. Significant others sometimes take new WLS patients to fast food drive through windows, in effect sabotaging them. A more supportive partner or friend could make more appropriate choices in those times, which would better serve to encourage the weight loss surgery patient. Successfully navigating this stage leads to a sense of competence, while failure results in feelings of inferiority.

In stage five, Erikson dealt with "Identity versus Confusion"- this is adolescence (Erikson, 1963). The success in transitioning here for both the adolescent as well as the

weight loss surgery patient lies in the person's ability to develop a sense of self. WLS patients must develop an entirely new sense of self in order to succeed (Epiphaniou & Ogden, 2010b; Granberg, 2001). The old self- the morbidly obese person- must give way to the new self, which is developed during this stage. Those who receive encouragement and reinforcement in their self-exploration emerge from this stage with a strong sense of self and a feeling of independence and control. Those who are still unsure of their beliefs and desires will be insecure and confused about themselves. Success leads to an ability to stay true to WLS goals and lifestyle, while failure leads to role confusion and a weak sense of one's new identity. Patients who do not successfully transition through this stage will not be strong enough to keep the weight off.

Erikson's sixth stage, "Intimacy versus Isolation" occurs during early adulthood, when people are exploring close, personal relationships (Erikson, 1963). Young adults need to form intimate, loving relationships with other people. Success leads to strong relationships, while failure results in loneliness and isolation. In the life of the WLS patient this stage is reflected in the changing relationships patients have with those closest to them. The successful WLS patient was able to build new foundations with those closest to them, and forge new, deep, and secure relationships with others in a way that they never allowed themselves to do before their surgery and dramatic weight loss.

In stage seven, "Generativity versus Stagnation", adults feel a need to create or nurture things that will outlast them, often by having children or creating a positive change that benefits other people (Erikson, 1963). This stage has to do with continuing to build our lives focused on our family and career. Those who are successful in this stage feel that

they are contributing to the world by being active in their home and community. Success leads to feelings of usefulness and accomplishment, while failure results in a shallow involvement in the world. Those who are five years or so beyond WLS, and have successfully lost excess weight, are busy during this stage working to keep the weight off while giving back in some way and contributing to the community. Becoming a vibrant part of the community helps them to keep the weight off. Some join running groups, others lead support groups or teach aerobics classes. Maybe they volunteer to help feed the homeless in their time off, or maybe they just work to help their siblings and children become more healthy and productive. WLS patients need to create or nurture things that will reinforce and sustain them long term in their new lifestyle, often by creating a positive change that benefits other people. Success leads to feelings of usefulness and accomplishment, further solidifying and reinforcing their new identity. Failure results in shallow involvement in and commitment to the new identity.

Successful contributions are the key to transitioning successfully through this stage. Those who fail to achieve this skill will feel unproductive, are uninvolved in the world, and risk weight regain.

In Erikson's eighth stage, "Ego Integrity versus Despair" involves looking back on life from a mature standpoint (Erikson, 1963). Older adults need to look back on life and feel a sense of fulfillment. Success at this stage leads to feelings of wisdom, while failure results in regret, bitterness, and despair. Patients feel a need to look back on their lives since surgery and feel a sense of fulfillment and confidence in their choices, including the choice to have weight loss surgery. Success at this stage leads to feelings of wisdom. If

patients do not succeed here or at any point above their failure results in regret, bitterness, and despair which can ultimately throw them back into old identity patterns and life habits which will cause weight regain, and a failed weight loss surgery. Conversely, the successful WLS patient will feel proud of their long-term accomplishments and have a strong sense of ego integrity. Experiencing weight-loss, general health, and a new identity intact several years past surgery brings a general feeling of satisfaction.

Previous and Current Applications

Six million Americans are morbidly obese and obesity surgery has quadrupled in frequency since 1998 (Mabry, 2006). These kinds of statistics relay the urgency of the problem and establish the concept that obesity surgery is increasing. With those kinds of increases in obesity surgery, it is clear that there will also be an increase in surgery failures. With that, an understanding of surgery failures is paramount. Weight loss surgery is no longer considered a "magic bullet" with which to end the obesity epidemic (Davin & Taylor, 2009; Elkins et al., 2005; Toussi et al., 2009). Establishing this fundamental point is vital because if obesity surgery is the panacea it was once thought to be, there would be no need to study the psychosocial aspects of weight loss surgery and the current study would be unnecessary. The concept of identity formation during weight loss is another foundational point the current study benefited from (Drew & Bielby, 2008; Epiphaniou & Ogden, 2010b; Granberg, 2001; 2006). Additionally, studies have examined the connection between positive health behavior change how the patient must accept and assimilate into a new life and create a new identity (Bocchieri et al., 2002; 2007; Weineland et al., 2011). These studies laid the foundation of need to understand the

processes that lead to identity changes after weight loss surgery. McAdams and Wilt, among others, have put forth the idea that Erikson's psychosocial stages can be discovered via participants' narratives (McAdams, 1988; 2001; Wilt et al., 2010). These previous studies provided the vehicle through which this study could potentially identify and quantify the psychosocial experiences of weight loss surgery patients. Many others have applied Erikson's work to a variety of situations including giftedness, work supervision, and religion. Lastly, Erikson himself used the analogy of God as provider, and compared his psychosocial stage development to religious growth (Erikson, 1963).

Literature Review Related to Key Variables

Related Constructs of Interest

Phipps reported on a weight management program in Chicago that caters to adolescents offering bariatric surgery to them (Phipps, 2011). The program used Erikson's psychosocial developmental theory to assist adolescent weight loss surgery patients to move through psychosocial development. This is interesting because not only were these patients moving through their own psychosocial development in an age appropriate way, they were also experiencing identity changes after weight loss surgery. It is the only study I found that examines a direct application of Erikson's psychosocial adjustments in a weight loss surgery environment. The study is only tangentially related because the participants are adolescents, and would be going through psychosocial adjustments without surgery.

Eriksonian psychosocial development takes place throughout the lifespan (Erikson, 1963; Erikson & Erikson, 1982; Wilt et al., 2010). People continue to develop and grow

as long as they live. Personality continues to develop long after adolescence and is affected by life events and life crises (Erikson, 1963; Kroger, 2002a). More important, successful long term behavior changes have been linked positively with successful navigation of life crises (Epiphaniou & Ogden, 2010a).

Chosen Methodology and Methods Consistent with This Study

This study was a qualitative study featuring the narrative tradition. Many obesity researchers use qualitative methods. Similar to my study, Epiphaniou (2010) screened participants using a questionnaire to determine demographic information, and weight loss characteristics. They then used semi-structured interviews in their qualitative research studies (Epiphaniou & Ogden, 2010b). Ogden, Clementi & Aylwin (2006) used semi-structured interviews in their qualitative study of the non-surgical impact of obesity surgery. Ogden and Clementi (2010) used the narrative qualitative tradition to explore obesity stigma. Although Bocchieri, Meana and Fisher (2007) used a Grounded Theory approach to their qualitative research, they did use open-ended interview questions to achieve that goal. Engström and Forsberg (2011) also used semi-structured interviews in their study of the change processes after bariatric surgery. In her dissertation, Hall (2010) used a phenomenological tradition and employed in-depth interviews to understand her research population.

Other Researchers' Approaches to the Problem

As previously mentioned, Granberg approached the problem by simply pointing out that identity changes exist during and as a result of weight loss (Granberg, 2001). Her focus is on agency and psychosocial roles in intentional self-change. Granberg's work is

largely correlational. There may be a correlation between what the successful weight losses. participants in her study changed, and their successful weight loss, but it is simply that; a correlation.

Ogden and Hill focused on sustained general health behavior changes, including weight loss, smoking cessation, etc., and they theorized that a restructuring of identity specifically brought on by a life crisis, was necessary for success (J. Ogden & Hills, 2008). These crises can be either positive or negative life events like a health scare or a new baby (J. Ogden & Hills, 2008). Like Granberg (2001) Ogden and Hill were simply pointing out the existence of identity change, not quantifying the experience.

Wilt, Cox and McAdams (2010) maintained that through narrative interviews, Erikson's stages could be observed and were valuable predictors of psychosocial adaptation. They found that those whose life stories were closely aligned with an Eriksonian developmental script had higher levels of psychosocial adaptation (Wilt et al., 2010). Especially important in their research were the concepts of social connectedness and personal satisfaction in life. Similarly, McAdams focused on narrative avenues to identity change (McAdams, 1988).

Many researchers have danced around the topic of the current research, but none have approached the problem from the specific angle that this study uses. For example, Granberg and Johnson in their respective research focused on identifying the concept of identity change during and after weight loss (Granberg, 2001; Johnson, 1990). Johnson went as far as to propose an emerging theory of how identity changes happen. However, Johnson's approach is simplistic and points not to individual psychosocial changes, but

rather health behavior, ritual or habitual changes in lifestyle (Johnson, 1990). Johnson's stages are (1) Gaining a sense of control; (2) Changing Perspectives; and (3) Integrating a new identity or way of life. The weakness in Johnson's theory is that it does not say enough about how these changes occur, or what psychosocial factors contribute to or ensure these changes. They work well on an abstract basis, but in terms of employing the theory, Johnson's concepts are too vague and assume too much about what is known about identity formation in this context. It is analogous to many cookbooks from the early 1900s. A cherry pie recipe may call for a list of ingredients and then proceed to instruct the reader to "make a crust". In 2012, many cooks do not know from memory how to make a piecrust. However, in the early 1900s, it was common knowledge and writing the instructions was unnecessary.

In contrast, Granberg focused on the analysis of human transformation processes and intentional self-change (Granberg, 2001). Intentional self-change in weight loss involves a process with a specific goal in mind, as opposed to changes that happen gradually and spontaneously over time. Intentional self-change is a decision. It is the individual's self-definition, change decision processes and hierarchical identity structure that Granberg focused on (Granberg, 2001). Unfortunately, understanding change processes does not go far enough in terms of understanding the psychosocial development and identity reformation as it relates to weight loss maintenance.

While Ogden and Clementi (2010) used the narrative approach to study obesity stigma, the study does not include the effects of stigma on identity or identity change. When Ogden and Hill (2008) studied long term health behavioral changes, they focused

on the mechanisms in these changes such as diet and exercise and did not touch on identity reformation or psychosocial development (J. Ogden & Hills, 2008). The majority of health behavior change research focuses on short-term changes. Ogden and Hill (2008) studied long-term changes, which is one of the strengths of their research over a lot of others. In addition, their focus on reinvention, rather than cognitive behavior change models is an important improvement over much of the current research.

Justification of the Rationale for Selection of Concepts

Weight loss surgery, as opposed to non-surgical weight loss, has the direct potential for psychosocial developmental transitions. In non-surgical weight loss, there is not necessarily a caregiver (although there could be) with which to bond and build intimacy and trust. In weight loss surgery the surgical team, hospital nurses, and surgeon's clinical team become the caregivers with whom patients both bond with and build trust or they do not.

Rationale for Type of Methodology

A qualitative research method was chosen to provide the richness in detail that can be missed in quantitative studies. In this way, a qualitative approach may help inform future qualitative and quantitative studies. Data were gathered through in-depth interviews via email. The use of open-ended interview questions decreased the effect of researcher bias and pre-conceived notions and employed a humanistic model that delves into the phenomenon of weight loss surgery from the perspective of the patient. The narrative tradition can be useful in understanding the social context of health and the psychology of healthcare (Stephens, 2011).

Related Studies and Key Concepts

Weight loss surgery is the best treatment option for morbid obesity (Bocchieri et al., 2002; Hall, 2010; Reedy, 2009; Weineland et al., 2011). We also know that for between 20 and 40% of weight loss surgery patients, the surgery fails and they either fail to lose the excess weight, or they fail to keep the weight lost, off (Stewart et al., 2010; Toussi et al., 2009; Weiss et al., 2007; Zalesin, et al., 2010). Weight loss maintenance in general is a problem that has yet to be solved by either medicine or psychology (Epiphaniou & Ogden, 2010b; Grief, 2010; McGuire, Wing, Klem, Seagle, & Hill, 1998; Weiss et al., 2007). Identity changes over the lifespan (Bocchieri et al., 2002; Heatherton, 1997; Kroger, 2002c; Pulkkinen & Kokko, 2000). Positive or negative life events (crises) herald developmental change and that can herald positive health behavior changes (Davin & Taylor, 2009; J. Ogden & Clementi, 2010; Strayer, 2002b). Narrative life stories can lead to understanding developmental status (Kroger & Green, 1996; McAdams, 1988; 2001; Strayer, 2002b; Wilt et al., 2010). Successfully navigating developmental stages leads to higher levels of adaptation and secure social attachments (Kroger & Green, 1996; Pulkkinen & Kokko, 2000; Wilt et al., 2010)

What is Controversial?

One controversy involved in this issue is that there is a "cure" for obesity. Despite mountains of specious claims to the contrary, to this date, no surgery, no medicine, no psychological therapy, has been able to adequately and permanently address this global problem. This is controversial in part because public perceptions of obesity do not include the idea that this is an incurable disease. Without the understanding that obesity is

incurable, many who lose weight regain it because they think that in the process of losing the weight, they have been cured of obesity and do not need to attend to it any longer. Other controversies associated with obesity surgery include access to care for those without private insurance, and adolescent obesity surgery.

What Remains to be Studied

The long-term developmental experiences of weight loss surgery patients needs further study. The longest-term psychological studies of weight loss surgery outcomes only include those whose surgery was 10 years before. In addition, using this technique to study those whose weight loss is not surgically induced would be interesting. The effectiveness of positive health behaviors like support group attendance, nutrition counseling, long term relationships with surgeons and gym memberships on weight loss surgery success remains to be studied.

Filling the Gaps in the Literature

Until now, the developmental experiences of adult weight loss surgery patients have yet to be explored. There is very little known about the psychosocial changes and adjustments after weight loss surgery (Davis-Berman & Berman, 2009; Grimaldi & Van Etten, 2010). There is less known about the developmental processes that may be taking place after weight loss surgery.

Extending the Knowledge of the Discipline

Understanding non-compliance after weight loss surgery is vital in terms of increasing the success rates of weight loss surgery in general (Elkins et al., 2005; Toussi et al., 2009). One way this study has extended the knowledge of the discipline is in

understanding the psychosocial dynamics after weight loss surgery, since so little is known about it. Another way that this study will contribute to the discipline in furthering an understanding of permanent weight loss maintenance. It is through the novel investigative methods used in this study, that those advances in knowledge have been approached. Further details on methodology will be discussed in Chapter Three.

Chapter 3: Methodology

This study explored the psychosocial processes involved in the weight loss surgery (WLS) experience and applied Erikson's psychosocial stages to experiences of patients after weight loss surgery (Erikson, 1963). A key question is the degree to which successful navigation of Erikson's processes of identity reformulations are related to post-surgical success. In the next few pages the research design and rationale will be discussed, followed by the role of the researcher, issues involving participant recruitment and the instruments used to guide participants in sharing their stories. Following that, a data collection and analysis plan will be presented which will include issues of ensuring credibility and fidelity in collection and analysis. Finally, the chapter will conclude with a discussion of ethical considerations and procedures.

Research Design and Rationale

The Research Questions

There were three research questions. They are: (1) Are Erikson's psychosocial stages of development occurring in the lives of WLS patients after surgery?; (2) If so, do successful weight loss surgery patients (those who are able to maintain their weight loss long term) successfully navigate Erikson's psychosocial stages and in the process form new identities?; (3) Conversely, do weight loss surgery patients who regain their weight show evidence that they have not successfully navigated Erikson’s stages of psychosocial development?

Central Phenomenon

The key phenomenon investigated was the possibility of a developmental narrative, which could elucidate identity reformation after weight loss surgery. Identity re-formation post-surgery is important to long term or permanent weight loss maintenance (Bocchieri et al., 2002; Epiphaniou & Ogden, 2010b; Granberg, 2001).

The Research Tradition

This study was a qualitative study using the narrative study tradition. A qualitative research method was chosen to provide the richness in detail that can be missed in some quantitative studies. In this way, a qualitative approach may help inform future quantitative studies. Through in-depth interviews this detail was obtained. The use of open-ended semi-structured interview questions will decrease the effect of researcher bias and pre-conceived notions and employ a humanistic model that delves into the phenomenon of weight loss surgery from the perspective of the patient. The humanistic model states that our problems originate when we are prevented from being or becoming our complete and authentic selves and that we are motivated toward self-actualization (Psychology-Lexicon, n.d.). The qualitative narrative research tradition can be useful in understanding the social context of health and the psychology of healthcare (Stephens, 2011).

Role of the Researcher

The role of the researcher in qualitative research is very different from that of a quantitative researcher (Barbour, 2008; Creswell, 2007). In quantitative research the researcher typically takes every precaution possible to be objective and purposely sets

their biases and personal experiences aside in order to create the most antiseptic environment possible for data collection and statistical analysis. In qualitative research, it is understood and accounted for that the researcher brings their biases and life experiences to the study. In fact being an "insider" is a point of advantage in qualitative research as it helps participants bond with the researcher and informs the study design. Researcher-participant bonding is important for the kind of in depth, highly detailed, and personal data collection involved in qualitative research (Creswell, 2007).

In this study, my experiences as a weight loss surgery patient have served to enrich my relationships with participants by way of empathy, trust, and insight. The weight loss surgery patient community is a very exclusive club, and people who have not directly experienced the surgery are clearly outsiders within this community. Even those who are waiting to have surgery (it can take up to a one year at many clinics) are not considered insiders until after their surgery. There are even different support groups for people waiting for surgery and those who have already gone through surgery. There is a vast amount of knowledge, understanding, and empathy that comes with having experienced weight loss surgery. This experience helped build rapport and camaraderie with participants. This study has benefitted greatly from my membership in this exclusive club.

Personal or Professional Relationships

There were no personal or professional relationships with patient-participants or the weight loss surgery support groups involved in the study. My surgery was performed in Minnesota and my data collection was done online with participants from all over the

United States. I have not been involved with support groups or any other kind of therapeutic relationship with the participants involved in this study.

Researcher Bias

There may be a perceived power relationship between the participants and me, but nothing beyond the researcher-participant bias seen in any study. My past experiences as a weight loss surgery patient mediated this power relationship by making me appear more approachable as part of the community. Because objectivity is more and more a concern in qualitative studies I have taken steps in research design to minimize this possibility (Onwuegbuzie & Leech, 2007). My communication with the Weight Loss Support Group leaders has been guarded in terms of sharing personal information about myself that could be inadvertently translated to participants. In addition, open-ended interview questions have been very carefully constructed to encourage participants (and researcher) to remain focused strictly on topic. My delivery of the interview questions was also faithful to the script, which reduced any undue influence or elaboration on my part that might constitute influence.

Ethical Issues

No incentives were offered to participants or support groups in this study and there were no conflicts of interest. The research did not take place in my workplace or any other area of familiarity to me. There are no known conflicts of interest or power differentials in these research relationships.

Methodology

The Pilot

A pilot study was conducted with three female participants to determine the effectiveness, validity, and reliability of the interview questions in terms how they reflected Erikson's stages. Each of Erikson's stages and his written commentary about each stage and the appropriate negotiation criteria were used when formulating the questions (Erikson, 1963). For example, when explaining stage one, Erikson (1963) said,

> Mothers create a sense of trust in their children by that kind of administration which in its quality combines sensitive care of the baby's individual needs and a firm sense of personal trustworthiness within the trusted framework of their community's life style. This forms the basis in the child for a sense of identity, which will later combine a sense of being "all right" and of becoming what other people trust what one will become. (p. 65)

Therefore, questions that pertained to stage one were focused on issues of trustworthiness of the caregivers in the WLS process. The questions for each stage were formulated in this same way using Erikson's (1963) descriptions of the stages and his description of the appropriate behavioral responses for healthy negotiation of the stage. In the analysis phase, these same criteria were used in determining whether participants had successfully negotiated each stage. As Erikson (1963) explained, there must be a favorable ratio of trust over mistrust. This was the foundation for the successful negotiation of stage one during the analysis phase of this study. More information on individual questions is featured later in this chapter.

The pilot subjects were recruited from my friends and family circles who have experienced extreme weight loss and were not included in the final sample. Based on the responses from participants and their feedback about the questions, no adjustments were made. The questions are listed in Appendix A. Experts on developing qualitative research materials were recruited from Walden University faculty and staff, to review the questions and the pilot for integrity.

The Population

A group of 32 participants were recruited from online weight loss surgery support groups and snowball recruiting. Participants were grouped into three groups of 10 participants each. Each group of 10 was at approximately the same time beyond surgery. Group 1 was comprised of 12 Maintainers because two additional participants joined the study just prior to the end of the participant recruiting effort and it was decided that they should be included. Both extra participants qualified for Group One. Groups Two and Three have five participants each who are Maintainers and five who are Regainers (sub-groups). Maintainers are those who have successfully maintained their weight loss within 10 pounds. Regainers are those who have lost weight and regained at least 50% of that weight. Onwuegbuzie & Leech (2007) warn that subgroups of less than three can lack representativeness, information redundancy, and data saturation, which affect the ability to generalize the findings. Ten participants were approximately 18 months beyond surgery, 10 participants at approximately three years beyond, and 10 participants at about five years beyond surgery. The population for this study came from cooperating online bariatric weight loss surgery support groups. Support group members were

screened for suitability for the study based on verification of eligibility and amount of time past surgery. Once Walden University Institutional Review Board (IRB) approval was obtained, participating support groups were given the approved scripted invitation to posts on their websites, inviting their members to volunteer. Once potential participants emailed me their interest in the study they were sent emails that included the Inclusion Questionnaire (Appendix D) and a Participation Consent Form (Appendix C) for them to electronically sign and return via email. These emails served to open a dialogue to answer any questions potential participants had about the study and their involvement.

Procedures

Data Collection and Storage

The initial plan was to interview each participant using Webex Meeting, but technical difficulties made that impossible. I consulted my committee about the problem and was advised to use email. As a result, each participant was interviewed via firewall encrypted and secured email communication between participant and researcher. This specialized email program and encryption were in place so that my husband could conduct classified government research and development from our home office. The data was further protected from my husband by storing the external hard drive in a locked cabinet and on the hard drive by personal passwords. Consent forms were emailed to participants and reviewed before each interview. A copy of the consent form was given to each participant. Each participant electronically signed the Consent Form (Appendix C) they were given and those records were kept on a secure backup hard drive in a locked cabinet in my

locked home office. Once I received the signed Consent Forms, participants were emailed the Inclusion Questionnaire (Appendix D) and once they emailed those responses and were found to qualify for the study participants were emailed the Interview Questions. The interviews were returned via email to me. Each interview was then downloaded and stored to the researcher's private password protected computer. Each interview was formatted as a spreadsheet by the researcher and stored in a locked filing cabinet within the researcher's home. No identifying information was used within the transcripts. The printed versions of the transcripts were also kept in a locked filing cabinet within the researcher's home office which remains locked, even when someone is present.

Evidence of Quality

Once the interviews were emailed, read, transcribed, coded, and analyzed, the process of verification began. The data for this study were verified by prolonged observation, inter-rater reliability testing, thick description, keeping an audit trail, and triangulation. Thick description was demonstrated by using direct quotes from participant interviews to provide data and support for the themes that were identified. Demographic and personal details were given about each participant, the context of the study was described in detail, and the procedures that were used in this study were described in detail. The audit trail consisted of the researcher's journal of events, a record of interview protocols, transcribed records, and coded records for use in the event that this study would be replicated. Triangulation was accomplished by asking participants essentially the same questions in different ways. For example, question number three asked, “Has your perception of yourself changed since weight loss surgery and if so, how?” and

question number 13 asked, “Do you feel your identity or personality has changed since your surgery or weight loss?” The answers to these and other similarly triangulated questions were compared to validate my understanding of the information given by participants. An independent third party, a Walden doctoral student, tested inter-rater reliability in order to confirm my work. Using dedoose.com, an inter-rater reliability test was performed in which both the independent rater and I created codes from the data in this study. First, I used dedoose.com to create codes based on participant results. Then the independent rater went through the data and created independent codes for the same data. After that we compared the codes we had created. The results of this test revealed good reliability between testers. All differences in codes were discussed and resolved and then the agreed upon codes were applied.

Sampling Strategy

The sampling strategy was a nesting sample strategy using a multistage purposive sampling technique (Onwuegbuzie & Leech, 2007). Those who fit within the confines of the eligibility requirements (see the following section for details) of the study were in the recruitment pool. I approached the online bariatric support groups based on the results of a google.com search for online bariatric support groups. I selected five online groups based on the differences between them. For example, one group was a Facebook group, one was a forum style group, and one was a meetup.com group. The other two groups were website-based groups. One website was organized and supported by a life coach. The last group was organized and supported by two weight loss surgery coaches. This was important because it was a concrete attempt at getting the broadest demographics

possible within the confines of an online weight loss support groups. If all participants had come from different Facebook communities it might have narrowed the field of who could participate in the study. All the support groups I approached happily agreed to cooperate. Cooperating weight loss surgery support groups posted an IRB- approved announcement on the support group website. From there, participants were selected from those who volunteered. The first people who volunteered and fit the selection criteria were selected. Two more volunteers than the required 30 qualified participants came forward and were allowed to participate in the study. Recruitment continued until all categories were filled and data collection was finished.

Participant Selection Criterion

Eligibility was based on type of weight loss surgery, length of time since surgery, and availability to complete the study. Only those who have undergone Roux-en-Y Gastric Bypass surgery were eligible. Roux-en-Y Gastric Bypass was chosen because of all the forms of surgical weight loss, it is the most successful which gives participants the greatest chance for weight loss (Reedy, 2009; Stewart et al., 2010). Both women and men were selected as participants in this study. I used a 2 X 3 subgroup design, with one independent variable being post-surgical weight loss status (Maintainers, Regainers) and a second independent variable of time since surgery (time zone 1 which is 18 months beyond surgery, time zone 2 which is three years beyond surgery, and time zone 3 which is five years beyond surgery). Maintainers are those who have successfully maintained their weight loss within 10 pounds. Regainers are those who have lost weight and regained at least 50% of that weight. Three groups of 10 people each were studied. Each

group was recruited such that they are in a similar place in time in relation to their surgery date. Ten participants were approximately 18 months from surgery, because by this time the participants will have gone through as many as four or five developmental stages. Group one was comprised of only Maintainers because it is not until this time that we begin to see weight regain (Zalesin, et al., 2010). Group Two had 10 participants and were approximately three years beyond surgery. This time period was significant because the participants will have had enough time to begin to experience development of a new identity based on their thinner, healthier body and lifestyle. It was also significant for WLS patients because by this time Maintainers have been able to keep the weight off for a significant amount of time, and most patients were beyond any physical complications from surgery and settling to their new life. Group Three had 10 participants who were approximately five years beyond surgery. This allowed time for transitions in personal relationships and work relationships to have solidified. It revealed whether or not the participants are industrious, have balanced intimate relationships, and show leadership qualities that have built integrity and an authentic satisfied lifestyle, or isolation, stagnation and despair (Erikson, 1963).

Each participant was required to own or have access to a computer with internet access with which they can complete study. This was not a problem since the participants were recruited from online support groups. The length of time beyond surgery was important to this study because weight loss surgery patients, generally speaking, begin to struggle with weight loss maintenance at or around 18 months beyond their weight loss surgery date (Stewart et al., 2010). The data showed not only that participants were

successful in weight loss maintenance, but also that they are successfully navigating developmental psychosocial stages. Conversely, it showed those who were not successful in keeping their weight off were less successful in psychosocial development as well.

Saturation and Sample Size

Sample sizes in qualitative research are typically smaller than their counterparts in quantitative research and they are neither mathematically designed, nor are they random (Leech, 2005). One reason for this is that qualitative research follows the law of diminishing returns in that having more participants does not necessarily mean an increase in information (Mason, 2010). Of course, the sample size must be enough to do the job of saturation of the topic within the study. In this study, the sample size is 30 participants. This number presented the narrative stories of participants in such a way that the data showed trends toward developmental patterns. Recommendations for participant numbers in case studies are usually much lower than this. Yin (1984) recommended the case study method for situations in which the boundaries of the phenomenon and the person's context were blurred. Creswell (2007) recommended a small number of participants for narrative study research. But because I looked at the developmental scope of weight loss surgery experiences, with the intention of making analytical generalizations that apply to the theory, it seemed prudent to choose a number of cases (three groups of 10 participants) that would be adequate for the sake of comparison (Mason, 2010; Leech, 2005). The idea is to allow enough participants, who fit within the selection criteria, enough different ways and opportunities to thoroughly communicate their experiences in order to reach

theoretical saturation (Johnson, 1990; Leech, 2005). It is through theoretical saturation that analytical generalizations may be made (Leech, 2005; Mason, 2010).

Data Collection Instruments and Sources

Interview Protocol

The semi-structured interview protocol involved individual interviews via email. Email was used because of technical difficulties with Webex Meeting. Interview questions are listed in Appendix A. The questions were specifically aligned with the participants' psychosocial experiences and relationships involved because of and since weight loss surgery (Erikson, 1963).

About Interview Questions

The interview questions focus on Erikson's psychosocial stages (Erikson, 1963). Stage 1 questions looked for irrationally negative attitudes (possibly irrational anger/blame for an unpleasant surgical side effect, etc.) toward the surgery itself, their surgeon or staff as an indicator of a less evolved commitment to the process and less evolved psychosocial adjustments immediately after surgery (Erikson, 1963). Trust implies that the patient has learned to rely on the surgeon's continuity and sameness of care and also that the patient learns to trust themselves and their capacity to adjust to their new intestinal organs including the first bowel movements, etc. Erikson (1963) talks about "affection" and here that concept was replaced by "genuine positive regard" as would be more appropriate in a doctor-patient relationship. Erikson uses the terms "provider" and "mother" interchangeably. In the case of weight loss surgery the term "provider" fits nicely.

The questions were also looking for a genuinely mutual positive regard between patient and surgeon (or the surgeon's staff). Erikson (1963) calls it "social mutuality" (p.250). Here I was also looking for any type of emotional compensation on the part of the patient if this social mutuality was missing.

Belongingness in relationship to the weight loss surgery community is important in the WLS experience. Chung and Pennebaker (2007) used Latent Semantic Analysis to examine often overlooked words also unknown as "function words" which includes pronouns. They found that usage of certain words or word types correlated with biological health markers (Chung & Pennebaker, 2007). The word "I" for example, is used significantly more often in people whose testosterone levels are higher. In depressed patients, use of the word "I" was a better indicator of depression than were negative emotion words. Chung and Pennebaker (2007) also found that the words "we" and "us" reflect the speaker's close emotional ties to others. First person singular words indicate a focus on the self, whereas first person plural indicate the speaker's focus on others (Chung & Pennebaker, 2007). Those people who changed pronoun usage from first person singular to first person plural showed evidence of greater health improvements and higher levels of psychosocial adaptation. It is for this reason the analysis of the word usage for "I" "we" and "us" was analyzed to understand the degree to which the weight loss surgery patient is focused on themselves or on the evolving nature of their psychosocial relationships with surgeons, staff, significant others, and others in their community in general. This analysis helped determine the patient's connection to the surgeon and their

staff, as well as to significant others in their lives. To this end, a word count analysis was performed for these terms throughout the interview transcripts.

Trust relies upon not just the elements of basic care, but also the quality of the provider-patient relationship (Erikson, 1963). Some of the interview questions were designed to identify the quality of this relationship. The questions also elicited the patient's reliance on another's integrity (Erikson, 1963). Results were analyzed for indications of a sense of paralysis, impotence or denial, of over-compensatory showing off in terms of their ability to look to or plan for the future (Erikson, 1963). Analysis also looked for signs of exclusionary attitudes, clannishness or an attempt to form a clique of some kind as a post-operative group (Erikson, 1963). While evidence of this was found, it is difficult with so little data to determine the difference between an exclusive clique or an experience-based support group.

For the purpose of coding, the participant was coded as having successfully navigated Stage One if she/he had a highly evolved sense of commitment to the process and shows signs of a mutually respectful relationship with her surgeon and or their staff. In addition, successful navigation includes reliance upon the surgeon and their staff for continuity and consistency in their care of the participant over time. When participants exhibited mistrust for their surgeon or the surgery or any part of the program, they were coded as having failed Stage One.

Success in Stage Two was defined as the participant's resolution of their struggle with their own will, versus the will of their surgeon and the necessities that follow after surgery like dramatically changing eating and exercise habits and aligning themselves with

the WLS community in some way. This stage is all about self governing. For coding purposes participants were coded as successfully navigating Stage Two if they showed signs of self governance and a strong allegiance and commitment to the WLS program and/or community. Some of these signs included taking responsibility for themselves and for their bodies and making choices that conform to the strict rules of WLS aftercare. Failure of this stage was coded for when evidence of a lack of autonomy or the presents of shame about doubt were described by the participant.

Stage 3 is characterized by taking Initiative. The idea is that during this stage the world "pushes back" against some of our ideas and the initiatives that we take like having weight loss surgery, for example. It is during Stage Three that we learn to pick our battles and to stand up for what is important to us. We also learn that insisting on things that are outlandish or irrational will not generally get us very far. This is a stage of social checks and balances and self-awareness. For coding purposes participants were coded as successfully navigating Stage Three if they showed signs of doing what is right for themselves in the face of conflicting views from others. This presented in conflicts between participants and their significant others over having WLS, and conflicting opinions from others about what was and was not appropriate to eat. Failure of this stage manifested in feelings of guilt over initiative taken.

Stage Four is Industry versus Inferiority. This stage holds the key to true maturity. Is the participant a "producer" or a "consumer"? Are they industrious or not? By asking participants what percentage of time each day they spend on weight-loss and weight-loss related issues, we can begin to get a sense of just how much of their time is focused on

themselves, and how much time is focused on being productive and industrious. Those participants in Groups Two and Three who were still obsessed about self care were coded as having failed this stage. Group One was not coded as having failed because this metric does not make sense for patients right out of surgery because of the need for full time post surgical care. Stage four questions included issues that reflect signs that the participant is (or is not) emerging into the world of industry. How do they see their own potential for industriousness? How do they apply themselves? Are they eager to apply themselves in a manner that they had not before surgery and weight loss? Are they a "provider" or a "consumer" in their lives? Does their need to be productive supersede their need for play? Are participants starting to show signs of pleasure from hard work (Erikson, 1963)?

Stage Five is about Identity and Role Confusion. This stage required me to look at both the participants' perception of who they are and if they believe that they have changed, as well as how they perceive others think of them since surgery. Success in this stage was marked by recognition by the participant that they had changed since surgery, and recognition on the part of the people in their lives that the participant had changed. If the participant self selected that they had not changed, or that others did not see them as changed, they were coded as having failed this stage. On the other hand, if participants saw themselves as having changed, and or the perception of others was that they had changed, they were coded as having successfully navigated Stage Five. In addition, some participants were simply confused about who they were post WLS and after losing large amounts of weight. These participants were also coded as having failed this stage.

Erikson called Stage Six Intimacy versus Isolation because the requirements of this stage involve successfully creating intimacy with others. By asking participants about whether or not they had someone significant in their life with whom they could be completely intimate, I was able to get an idea of their progress within Stage Six. I looked for signs that participants were able to mesh their new identities with their significant others, and signs that they were able to reinforce those new identities with support groups or specifically supportive people. Participants who did not claim to have an intimate relationship in their life were coded as having failed this stage. If on the other hand, they had a secure and fully intimate relationship in their lives, they were coded as successfully navigating this stage.

Stage Seven is called Leadership and Fellowship and as the name implies this stage deals with leadership and being part of something larger than you. By asking participants if they are mentors, we got some idea of the trend in participants' lives toward leadership or away from it. Simply put, in order to succeed at Stage Seven participants needed to show leadership in either a formal or informal setting. The setting was not required to be a WLS setting like a support group, but most of the leaders in this study did lead formally or informally within the WLS community.

In analyzing Stage Seven I have coded successful transition through Stage Seven where there were signs of participants' sense of needing to be needed, the desire to guide the next generation, to give back something of what was given to them (Erikson, 1963). Stage Seven failure includes signs of self-indulgence, lack of trust in the next generation of WLS patients to carry out the legacy, bitterness, and a lack of connection to the WLS

community (Erikson, 1963). This correlated to weight regain and a failed earlier transition (many times Stage One) (Erikson, 1963).

Stage Eight is Ego Integrity Versus Despair. For coding purposes I looked for expressions of intimacy, commitment to others, and reciprocal relationships, much like the previous stage's criteria. Has this person bonded with the bariatric team or their formal or informal WLS support group? Are participants "real" or genuine, within the weight loss surgery community or with their significant others? I was also looking for distancing attitudes or prejudices that threaten the person's intimate relationships (Erikson, 1963). It is also important to identify any negative attitudes or sharp differences of opinion the participants may have with their bariatric team. The questions relating to Stage Eight elicited a sense that the choices made relating to WLS had to be made; that life as it was lived, was of necessity (Erikson, 1963). Participants' answers were analyzed for signs of despair about the choice to have WLS and the consequences of life as a result of WLS. I also looked for ego integrity, a sense that the choice to have WLS was the right thing to do.

Analysis included tenses used: past, present, or future. Does the participant tell their story from a first person perspective or a more global or objective perspective? A willingness to take risks for what they want in life, an attitude of "attacking" life, or taking it by storm is an important attitude to measure in order to understand stage three development (Erikson, 1963). This analysis included looking for a willingness to change and do things differently, and to try new things. In asking, "How do you feel about trying new ways of doing things? Can you give me an example of a time since surgery that you

have tried something completely new to you?" I was looking for examples of new things tried, words like "exciting" or expressions of joy at looking ahead to the future.

In addition, observations were made of how the participant sees their past life, socioeconomic status, the inherited genes of overweight, and the legacy that all those issues leaves as something that limits them in their desire to be industrious. This is the first time we will see the participant pull away from, or tragically cling to, their inherited way of life. Here the object was to look for signs of conformity and to what the participant is conforming, development of the new self, leaving the old self behind and clinging to the new lifestyle. Signs that the participant identifies with the new life, being thin, the weight loss surgery community were all important (Erikson, 1963; Granberg, 2001; Throsby, 2008). There is a struggle between what the participant appears to be in the eyes of others as opposed to how they seem themselves (Erikson, 1963; Kroger, 2002). An analysis was performed for possible signs that the participant sees the surgeon or staff as heroes of a sort, replacing the heroes of their pre-surgical life. And in conjunction with that I looked for signs that the participant is looking within the weight loss community for their place, possibly a place of leadership (Erikson, 1963).

Sufficiency of Data Collection Instruments to Answer Research Questions

The idea of data collection is to allow enough participants enough different ways and opportunities to thoroughly communicate their experiences. By using a semi-structured interview protocol, the interviews focused on the psychosocial developmental milestones that participants may or may not have successfully navigated. The use of semi-structured interviews was more effective than simply open-ended questions asking

participants to tell their weight loss surgery stories. For each data collection type, references and rationale have been provided in a separate attachment. The rationale speaks to the sufficiency of the data collection instrument to answer the research question.

Researcher-Developed Instruments

The literature supporting each question is included in the attached descriptions of the instruments and their specific uses (Appendix E). Since there were only 15 questions each question was designed to address more than one stage, as a way to cross check and triangulate the answers from participants.

Content Validity

In addition to my own analysis, an independent third party, who is a student from Walden University was chosen help establish content validity through careful analysis of my coding scheme. An inter-rater reliability test was run using Dedoose qualitative analysis software, resulting in a Cohen's Kappa score of .52. That score represents a good agreement between the researcher's codes and the codes that the independent third party created with the data from this study. From Dedoose.com:

> Dedoose Code-specific application results are reported using Cohen's kappa statistic—Cohen (1960). Cohen's kappa statistic is a widely used and respected measure to evaluate inter-rater agreement as compared to the rate of agreement expected by chance—based on the coding behavior or each rater. Further, to report an overall/global result for tests that include more than one code, we have adopted the Pooled Kappa, rather than a simple average of kappa's across the set, to summarize rater agreement across many codes as reported in de Vries, Elliott,

Kanouse, & Teleki (2008), 'Using pooled kappa to summarize interrater agreement across many items.' Field Methods, 20:272-282. There are a variety of proposed standards for evaluating the 'significance' of a Cohen's kappa value. Landis and Koch (1977), ('The measurement of observer agreement for categorical data.' Biometrics, 33:378-382) suggest that kappa values of: <.20 = poor agreement, .21-.4 = fair agreement, .41-.6 = moderate agreement, .61-.8 = good agreement, and .81-1.0 = very good agreement. Cicchetti (1994)—'Guidelines, criteria, and rules of thumb for evaluating normal and standardized assessment instruments in psychology.' Psychological Assessment, 6:284-290)—and Fleiss (1971)—'Measuring nominal scale agreement among many raters.' Psychological Bulletin, 76(5):378-382—suggest similar guidelines that kappa values of: <.40 = poor agreement, .40-.59 = fair agreement, .60-.74 = good agreement, and .75-1.0 = excellent agreement. Finally, Miles and Huberman (1994)—'Qualitative Data Analysis.' Thousand Oaks, CA: Sage—suggest that inter-rater reliability should approach .90. While the individual researcher must determine the most appropriate standards for the particular research project, Dedoose visual indicators use the following criteria for interpreting kappa values: <.50 = poor agreement, .51-.64 = fair agreement, .65-.80 = good agreement, and >.80 = excellent agreement.

None-the-less, the codes that the independent rater and I disagreed upon were discussed and decisions were made on every code such that complete agreement was reached.

The data collection instrument (the interview) included questions and/or prompts that correspond to and specifically focus on Erikson's psychosocial stages. This was sufficient to analyze the participant's experiences having to do with their psychosocial development as it relates specifically to weight loss surgery. For example, questions about participants' relationships with their surgeons (and surgeon's staff) identified whether or not participants trust their surgeons, and to what degree. This also reflected the participants' psychosocial development in terms of Erikson's first stage: Trust versus Mistrust (Erikson, 1963).

Data Collection Specific to the Instrument and to the Research Question

The three different research questions were addressed in the specific interview questions listed below. The research questions are: (a) Are Erikson's psychosocial stages of development occurring after weight loss surgery?; (b) Do successful weight loss surgery patients (those who are able to maintain their weight loss long term) successfully navigate Erikson's psychosocial stages and in the process form new identities?; and (c) Do those who fail to lose weight or who regain weight show signs that they have failed to navigate Erikson's psychosocial stages?

Interviews

Interviews took place online. Email was used to communicate with participants and to facilitate interviews. Each participant was interviewed using email when technical difficulties prevented the use of Webex Meeting. Interview questions are listed in Appendix A.

Frequency and Timing of Data Collection Events

Interviews and Duration of Data Collection

There was only one planned interview per participant, and follow up interviews were not necessary. Each interview was emailed directly to participants. Participants spent anywhere from one hour to two weeks on the emailed questions.

Data Recording

Interviews were done via email and then formatted into a spreadsheet for analysis in dedoose.com. All data was securely stored on a secure backup hard drive, which is stored in a locked cabinet within a locked office on my property.

Follow-up Plan

Recruitment was supported by the online support groups and word of mouth snowball recruiting, which yielded robust results within a few weeks. As a result it was not necessary to contact additional bariatric support groups for further recruiting. In addition, all participants completed the study in a timely manner and no participants dropped out during data collection.

Study Exit and Debriefing

Before being included in the study, the participants were informed via email about the study design, voluntariness, confidentiality, study exit policies, and the option to withdraw or opt out of any specific questions without consequences at any time during the study. Participants were debriefed via a question that inquired about their understanding of the questions asked and they were asked if they had further questions both before and

after the study. No participants expressed a desire to drop out or be withdrawn from the study.

Data and the Research Questions

To review, the research questions were: (1) Are Erikson's psychosocial stages of development occurring in the lives of WLS patients after surgery?; (2) If so, do successful weight loss surgery patients (those who are able to maintain their weight loss long term) successfully navigate Erikson's psychosocial stages and in the process form new identities?; (3) Conversely, do weight loss surgery patients who regain their weight show evidence that they have not successfully navigated Erikson's stages of psychosocial development?

Interviews consisted of semi-structured questions in order to keep participants focused on issues important to this study. The questions in the interview reflect specifically the areas of: Trust versus Mistrust, Autonomy versus Shame and Doubt, Initiative versus Guilt, Industry versus Inferiority, Identity versus Identity Diffusion, Intimacy versus Isolation, Generativity versus Stagnation, and Ego Integrity versus Despair. By developing questions that are directly related to the research questions, the participants' answers (the data) showed a direct connection to the research question. Specific questions are in Appendix A.

Coding

All data was in text form in the emailed interviews. After the pilot study it was clear that the answers to interview questions were connecting to the research questions. This was based on the fact that the answers given by pilot participants appropriately reflected

Erikson's psychosocial developmental stage theory (Erikson, 1963). The objectives stated in Appendix E were seen in the pilot participants' answers and these were correlated to weight maintenance status (whether they had regained weight or maintained weight loss). For example, when questioned about trust in their weight loss program or doctor, those who had built adequate trust had also maintained the weight they had lost while in the program. It was because of these kinds of responses that it was determined these methods of inquiry were effective. After the pilot study analysis, the main study data collection began and was carried out until saturation levels were met.

Following data collection, considerable time was spent familiarizing myself with the data before it was coded and analyzed. Coding consisted of taking the text of the data apart, dismantling it and looking for patterns and themes (Creswell, 2007). Once this first analysis was finished and coded for, other codes were applied. These codes included a priori codes that relate to Erikson's psychosocial stages of development. In addition, categories, subcategories, patterns, and themes that emerged from the data were coded and organized. In order to strengthen the rigor of the study an additional coder was involved in developing a coding framework (Barbour, 2008). This preliminary framework was used in the initial iteration of code testing. All forms of data collection were coded in similar ways and relationships between the codes were analyzed. Operational definitions for each stage, including successful transition through stages, were employed. These definitions were based on two of Erikson's books on identity formation: *Identity: Youth and Crisis* and *Childhood and Society* (Erikson, 1963 & 1968). By successfully demonstrating mastery of the key developmental points in each stage participants had, by definition, transitioned

through the stage. Dedoose qualitative analysis software was used to analyze all collected data (Dedoose.com). With the use of Dedoose's powerful text search queries, and word frequency queries, themes began to emerge from the data. The codes were then tested for internal consistency, reliability, and validity cross checking related questions against one another. After that it was ensured that the data met requirements for saturation of the issues and topics covered and that no further data was needed.

Discrepant Cases

Since all participants have had different experiences after weight loss surgery, there was much to be learned by differing cases, as was seen in the patterns found during data collection. Discrepant cases were defined as cases that did not follow the same patterns as the majority of cases. Discrepant cases involved inconsistent accounts that had distinct differences or inconsistent features from the majority of cases in this study (Creswell, 2007). There were three discrepant cases in this study (10.6%), which are discussed in chapter four with results. All cases were important, and have been treated equally. Making note of and incorporating these differences is an important part of reporting findings.

Internal Validity

I used triangulation as a strategy to ensure credibility and validity of the data. Triangulation is the act of comparing different answers by the same participant (or potentially about the same participant) for the purposes of completeness and confirmation of the data (Creswell, 2007). Specifically, the interview questions were designed with this

technique in mind. These questions were used to confirm and enhance the understanding of each participant's weight loss surgery experiences.

External Validity

The selection criteria for the study was a group of 30 weight loss surgery patients who were invited through pre-approved weight loss surgery support groups to volunteer. Those volunteers who qualify in terms of type of surgery, surgery dates, gender, and weight loss status were chosen. The diversity of the different support groups ensured that there was variation in the participant selection (LeCompte, 1999). It is difficult to make cross-study comparisons, even when looking at something as specific as the psychosocial outcomes after WLS, because the measures used are mostly non-standardized semi-structured interviews and a variety of untested questionnaires. For the purposes of this study, any possible generalization of the data was limited to weight loss surgery support group populations and will apply only to the theoretical analysis.

Confirmability

Confirmability and trustworthiness are crucial in qualitative research. One way to ensure this is to clearly define research design and audit trails of records (White, Oelke, & Friesen, 2008). To that end a permanent record of interactions emails, including time and date stamps was retained and will continue to be retained for as long as is appropriate in a secure location. This audit trail provides a clear record of participant-researcher interactions, which can be easily reviewed upon request. Recursive analysis was used. The

hypothesis and the data were continuously analyzed until patterns emerged. Triangulation between different interview questions was also used to verify data.

Dependability

Recursive analysis and inductive reasoning during coding helped to confirm the data was dependable. The idea in making sure the data was dependable had to do with knowing that what participants said was consistent and dependable (White, Oekle, & Friesen, 2008). In addition, I established control over my own biases and outside influences by creating a conceptual separation between my own experiences and those of the participants in the study (LeCompte, 1999). Specifically, I only told participants about my experiences in weight loss surgery that are focused on my physical experiences, including weight regain and the reasons for that thereby creating a conceptual barrier between my observations of developmental changes in myself after surgery, and the physical changes that occurred.

Inter-coding reliability

Since there were two people coding the experiences of participants it was important to develop a preliminary coding framework. Then coders used an iterative process to test the reliability of the codes created (Barbour, 2008).

Ethical Procedures

Each participating bariatric support group had signed an agreement to allow me to invite their members to volunteer as participants in this study. Participants shared information about their weight loss and possible regain. No medical data was accessed during this study. IRB approval was granted before any recruitment of participants. All

participants have signed an agreement to participate in the study. Details of the rights and responsibilities involved in participation are on this form. The consent forms used were provided by Walden University's Research Center and the university has dealt with any ethical issues surrounding these forms. All forms were signed and IRB and committee approval took place before any recruitment or data collection began. IRB approval number is 02-19-13-0144351.

Ethics in Data Collection

It was important to be sensitive to the emotional needs of the participants during data collection, as some of the issues involved in psychosocial adjustments could have invoked emotional responses. The interviewer allowed enough time for participants to respond to these issues as they need, and to refuse any questions they do not want to talk about. I advised them up front that they could refuse to answer any of the questions without penalty or bias against them. Participants did not take advantage of these offers to back out or refuse to answer questions. One participant wrote N/A after a question she thought did not pertain to her.

The interviews in this study were treated as strictly confidential. In stored records, participant names were removed from their data and representative numbers replaced participant names in data analysis in order to protect anonymity and to free the researcher from any presupposed prejudices that might have been gained during data collection.

All data are in digital format and kept in encrypted and password-protected storage until they are no longer needed, at which time it will be destroyed. Access to the data is limited to the primary researcher, coding analysis partner and the faculty committee

members associated with this study. The confidentiality form that the coding analysis partner signed is in Appendix B.

Summary

This study was a qualitative, narrative inquiry. It utilized interviews to collect data. Interviews took take place online and were transcribed and downloaded into a digital text format. These methods have been designed specifically to elicit responses relevant to Erikson's psychosocial stages as applied to their weight loss surgery experiences. The results of data analysis will be presented next in Chapter four.

Chapter 4: Results

Introduction

Due to increases in obesity and to unprecedented numbers of morbid obesity in the population, researchers have been looking for effective treatments for the problem. As a result many people have turned to weight loss surgery (WLS) (Boeka, Prentice- Dunn, & Lokken, 2010; Elkins et al., 2005; Stewart, Olbrisch, & Bean, 2010; Toussi, Fujioka, & Coleman, 2009; Zalesin, et al., 2010). Although weight loss surgery is still the best long term solution to the obesity epidemic, 20%-40% of WLS patients begin to regain their weight at or around 24 months post-surgery (Bocchieri et al., 2007; Weineland et al., 2011). Research that leads to advances in weight loss maintenance is necessary. There is no magic pill, surgery, or therapeutic technique that has been proven successful in helping people maintain their weight loss permanently.

Obesity is considered a physical condition but there is clearly a psychological component involved (Davin & Taylor, 2009). Dramatic weight loss brings with it challenges and opportunities. The primary challenge is lasting change, i.e. permanent weight loss. The opportunities include making changes in identity (Drew & Bielby, 2008; Epiphaniou & Ogden, 2010a; Granberg, 2001). Lasting health behavior changes begin with understanding one's self and that leads to changes in identity (Finfgeld, 2004).

Research Questions

The three research questions are:

1. Are Erikson's psychosocial stages of development occurring in the lives of WLS patients after surgery?
2. If so, do successful weight loss surgery patients (those who are able to maintain their weight loss long term) successfully navigate Erikson's psychosocial stages and in the process form new identities?
3. Conversely, do weight loss surgery patients who regain their weight show evidence that they have not successfully navigated Erikson's stages of psychosocial development?

Chapter Organization

This chapter will begin with a description of the pilot study and its impact on the main study. Then it will cover the setting, demographics and data collection phase of research. From there the chapter will go into depth on data analysis, trustworthiness, and finally the results of main study.

Pilot Study

The pilot study was conducted with five participants ranging from 5 month beyond surgery to 9 years beyond. These participants were recruited from friends and family members, and using a snowball recruitment technique. All participants demonstrated that they understood the questions, both directly and indirectly. I asked them directly if they understood the questions, and all replied that they did. Indirectly their responses demonstrated not only that they understood the questions but also that the questions elicited responses appropriate responses for the study. Based on the pilot

responses nothing changed in either methods or questions going forward into the primary study.

Setting

Participants were recruited from three online weight loss surgery support groups. These groups are at the following web site addresses: a Facebook community; an online support group; and a meet-up group for bariatric weight loss support. In addition, a snowball technique was used. This electronic setting had an effect on the study in that it influenced the kind of participants I was able to recruit. First, they were all people who were literate and affluent enough to have access to a computer on a regular basis, either in their own home, at work or in their local library. Further, they were all members of online support groups for people who have had weight loss surgery. The implications of this include a higher general population of participants who have been successful in maintaining their weight loss. There is evidence that support group attendance may be important in weight loss maintenance (Livhits, Mercado, Yermilov, Parikh, Dutson, Mehran, & Gibbons, 2011). This was a limitation because there may be differences between those who seek support via these kinds of groups and the weight loss surgery population who does not seek support online or off. In addition, there might also be differences in weight loss surgery patients who are literate and affluent but not online for a variety of other reasons. In addition, many WLS patients attend in person support groups, rather than online support groups, and some attend both kinds of groups. There may be differences in the WLS population that attends in person support groups rather than online support groups. What is important about that is that there are people who

distrust online communication and feel it is not secure no matter how much security may exist. The participants in this study all seemed to trust the security of online communication, which might make a difference in the kinds of people who would volunteer for an online study.

In addition, each support group has its own distinct personality and the participants in those groups have an enormous effect on the personality of the group as a whole. The support group leaders create a unique milieu for the support group with their own personality and biases. While it is impossible to quantify the effect that had on the types of people who volunteered for the study, I am sure that there was some effect. All WLS support group leaders were very supportive of the study, and all of them made sure that their members knew that they had given specific permission for me to post the invitation to participate. That helped with building rapport, credibility and trust with potential participants.

Participant Characteristics

Participants were diverse in age, weight loss, socioeconomic status, and gender. Out of the 32 participants, three (10.6%) were male. All of the participants had gastric bypass surgery, although two of the participants had multiple weight loss surgeries in addition to gastric bypass. The details of the other surgeries were not available. The participants lost a mean of 99.5 pounds with a standard deviation of 47.22. The average age of the participants was 49 years old with the youngest participant being 31 years old and the oldest participant being 67 years old and a standard deviation of 8.6 years. All communication with participants was done via email due to technical difficulties with

Webex Meeting software. Most participants came from recruitment efforts with partnering online support groups, but some came through word of mouth or snowball recruitment. I did not keep track formally from which support group individuals were recruited. This was largely because I did not want that knowledge to bias me during data analysis.

Participants were classified into three basic groups referred to as Group 1, Group 2 and Group 3 (See Table 1). The distinctions between these three groups are the approximate time since surgery. Participants who were less than 18 months from surgery were classified into Group One. Group Two was made up of participants who were between 19 months and five years beyond surgery. Group Three was made up of participants who were beyond five years after surgery. Group One was made up of only Maintainers because of the physical realities accompanying weight loss surgery. Those realities include the fact that it is typically difficult to regain weight until after 18 months post-surgery (Engström & Forsberg, 2011; Stewart et al., 2010). Group One served as a control group. Members of Group One were simply referred to as Group One, while members of Groups Two and Three were divided into subcategories of Maintainers (A Groups) or Regainers (B Groups) based on their self reported weight loss status. Regainers (B Groups) were participants who had regained at least 50% of the weight they had lost after surgery. All others were classified as Maintainers (A Groups).

Table 1

Participant Profiles

Participant	Age	Gender	Time Since Surgery	Maintainer/ Regainer/Control
Group 1- < 2 years post-surgery				
01	56	Female	2 weeks	Control
02	43	Female	4 weeks	Control
03	31	Female	5 weeks	Control
04	63	Female	3 months	Control
05	51	Male	6 months	Control
06	41	Female	7 months	Control
07	41	Female	7 months	Control
08	31	Female	8 months	Control
09	60	Female	9 months	Control
10	50	Male	11 months	Control
11	45	Female	12 months	Control
12	50	Female	18 months	Control
Group 2- 2-5 years post-surgery				
13	48	Female	2 years	Maintainer
14	52	Female	2.5 years	Maintainer
15	36	Female	3 years	Maintainer
16	46	Male	3 years	Maintainer
17	38	Female	3 years	Regainer
18	45	Female	4 years	Regainer
19	57	Female	6 years	Regainer
20	55	Female	5 years	Maintainer
21	52	Female	5 years	Regainer
22	48	Female	5 years	Regainer
Group 3- >5 years post-surgery				
23	50	Female	7 years	Maintainer
24	33	Female	9 years	Maintainer
25	43	Female	9 years	Maintainer
26	56	Female	12 years	Maintainer
27	63	Female	15 years	Maintainer
28	56	Female	9 years	Regainer
29	67	Female	10 years	Regainer
30	56	Female	12 years	Regainer
31	47	Female	13 years	Regainer
32	49	Female	14 years	Regainer

Variations in Data Collection

The only variations in data collection from the plan originally presented in Chapter Three had to do with an IRB change in the number of participants. Because of difficulties in recruiting participants who had regained weight within the first 18 months after surgery, URR and IRB approved a change in data collection. URR and IRB approved a plan to increase the number of participants from 18 to 30, and to change the groups' configurations to three groups of 10, changing Group One from a group split into Maintainers and Regainers to one control group of Maintainers.

Unusual Circumstances in Data Collection

The only unusual circumstances in data collection had to do with unresolvable technical issues with Webex Meeting. The problems with Webex Meeting stemmed from bandwidth problems from my home office. The problem could not be solved as we already have the highest bandwidth available for our rural community. Upon the advice of my committee chairperson I used secure email to collect data when the problem presented itself with the first interview.

Data Analysis

The emailed interviews were then analyzed through a multi-step process. The first step in the data analysis process was reading and re-reading each interview in its entirety to gain a general understanding of the collected data. The second step involved highlighting statements or words made by each participant that had significant relevance to the proposed research questions and the psychosocial experience of undergoing bariatric surgery. Each transcript was then transcribed into a spreadsheet format and

uploaded to a secure qualitative data analysis system, Dedoose.com, to assist in further data analysis. The participants' statements were divided into 15 different categories based on the 15 interview questions that were built around the research questions and on Erikson's 8 stages of psychosocial development, and the psychosocial experiences of WLS patients. The categories were (a) life since surgery; (b) relationship to surgery staff and surgeon; (c) self-perception; (d) intimate relationships; (e) time spent on weight loss and surgical issues; (f) support group attendance; (g) confidence in WLS decision; (h) struggles in relationships; (i) potential struggles with surgeon; (j) attempting new things; (k) mentorship; (l) examples of helping behaviors; (m) identity changes; (n) sense of purpose; (o) and contributions to society.

These categories created a dialog with participants about their psychosocial development since undergoing bariatric surgery. Based on these categories, relevant excerpts were created from each participant's statements that were related to the primary themes contained in Erikson's psychosocial stages. Then, using Dedoose.com to assist in analysis and storage of data, I developed a structure of cases, root codes, child codes, and further analysis into sub-codes. Cases were identified as participant interviews. Root Codes were identified as the interview questions. Child Codes were identified as possible participant responses. Sub-Codes were identified as further clarification for more complex codes. These categories were used in comparing the three groups to one another and the A and B Groups of Groups Two and Three were compared to one another as well. For example, when Groups 2A, 3A, 2B and 3B were compared in terms of use of language tense, Groups 2A and 3A tended to align with Group One (the control group of

Maintainers).). Groups 2B and 3B were also tended to align with each other in terms of tense used. The comparison revealed that the groups of Maintainers (Groups 2A and 3A) primarily used present tense when asked about their life since surgery, while Regainer groups (Groups 2B and 3B) primarily used past tense when asked the same question, as shown in Table 2:

Table 2

Linguistic Analysis of Tense Usage

	Group 3B	Group 3A	Group 2B	Group 2A	Group 1
Use of Present Tense	1	5	1	5	11
Use of Past Tense	5	0	6	0	0

Themes Identified

The purpose of this study was to explore the psychosocial experiences of bariatric patients post-surgery. Erikson's psychosocial theory was chosen to help develop the research questions and guide the study because this theory is a basis for understanding identity development. The findings below are presented to demonstrate the different primary themes that were generated through the data analysis process that describe the individual and overall group experiences of the psychosocial experience of undergoing bariatric surgery. Some individual statements were included to shed light on the group experiences of bariatric surgery.

Surgical Experience

Many participants who were classified as Maintainers describe the surgery as one of the best things that has ever happened to them. By the same token, many of the

participants who were classified as Regainers wished they had never had the surgery. All Regainers expressed regret in hindsight in their decision to have weight loss surgery. Participant 16 (Age 38 years, 3.5 Years post-surgery, Regainer) said, "I would actually reverse the surgery if I had the opportunity." Only Regainers in this study perceived the personal changes they experienced after weight loss surgery as negative.

Linguistic Analysis

Use of Past and Present Tense

All participants who were classified as Regainers used the past tense when talking about their life after surgery. Further, all participants who were classified as Maintainers used present tense when asked the same question. For example, Participant 14 (Age 36 years, 3yrs post-surgery, maintainer) shared this about her life since surgery, "I am now 125 lbs, work out 3x a week and play power volleyball every Friday night…its great! I actually have the energy to do so much more. Plus I feel so much better about myself mentally and physically." Participant 32 (Age 49 years, 14 yr. post-surgery, Regainer) recalled this when asked about her life since surgery:

> I felt great but people didn't understand why I could only eat tiny bits and they kept pushing me. I fixed what was wrong with my body but never realized what was wrong with my head. I only covered up what was truly wrong with surgery and weight loss but failed to see how I needed to change my relationship to food. Slowly over time I gained the weight back.

This same pattern was seen in Regainers and Maintainers when the same question was analyzed for positive or negative changes. Of 10 participants who used past

tense, eight also reported negative changes in their lives since surgery. Only two of 10 participants who used present tense reported any negative changes since surgery. All of the Regainers, regardless of length of time since surgery, reported negative changes in their lives, and Maintainers reported positive changes in their lives. No Maintainers reported negative changes as a result of having had weight loss surgery. However, some Regainers reported both positive and negative changes since surgery.

Research Questions

This section will cover the three research questions and themes revealed by the data. The research questions were: (a) Are Erikson's psychosocial stages of development occurring in the lives of WLS patients after surgery? (b) If so, do successful weight loss surgery patients (those who are able to maintain their weight loss long term) successfully navigate Erikson's psychosocial stages and in the process form new identities? (c) Conversely, do weight loss surgery patients who regain their weight show evidence that they have not successfully navigated Erikson's stages of psychosocial development?

Research Question One

Research Question One was: Are Erikson's psychosocial stages of development occurring in the lives of WLS patients after surgery? Table 3 shows all eight stages and the successful navigation of each stage by either Maintainers or Regainers. Note that Stage One was successfully navigated by all Maintainers, but by no Regainers. Table 4 ()() shows successful navigation of stages between groups. Group One successfully navigated all stages, while Group 2A (Maintainers between three and five Years post-surgery)

successfully navigated all stages with the exception of one stage (six). This stage was successfully navigated by all but that one participant for which there was not sufficient data. Group 3A successfully navigated more stages than both Groups 2B and 3B combined. Maintainers successfully navigated a mean of 93.75% of all stages with a standard deviation of .0707. Regainers successfully navigated a mean of 35.00% of all stages with a standard deviation of 0.1717. The following two tables illustrate successful stage navigation.

Table 3

Successful Stage Navigation

	Maintainers	Regainers
Stage One	100.00%	0.00%
Stage Two	90.00%	30.00%
Stage Three	100.00%	40.00%
Stage Four	90.00%	30.00%
Stage Five	100.00%	50.00%
Stage Six	80.00%	60.00%
Stage Seven	100.00%	30.00%
Stage Eight	90.00%	40.00%

Table 4

Successful Stage Navigation Between Groups

	Group One	Group 2A	Group 2B	Group 3A	Group 3B	Insufficient Data
Stage One	12	5	0	4	0	1
Stage Two	12	5	1	4	2	1
Stage Three	12	5	2	5	2	1
Stage Four	12	5	2	4	1	1
Stage Five	12	5	3	5	2	1
Stage Six	12	4	2	4	4	0
Stage Seven	12	5	1	5	2	1
Stage Eight	12	5	1	4	3	1

Research Questions Two & Three

Research Questions 2 and 3 were, respectively: (a) do successful weight loss surgery patients (those who are able to maintain their weight loss long term) successfully navigate Erikson's psychosocial stages and in the process form new identities? and (b) Conversely, do weight loss surgery patients who regain their weight show evidence that they have not successfully navigated Erikson's stages of psychosocial development? To review, Stage 1 involves building trust. Participants were considered to have succeeded at Stage One if they demonstrated trust in their surgeon, the program, the surgery itself, or any of the above. Participant 3 (Age 63 years, 3 Months post-surgery, Maintainer) explained her relationship with her surgeon and surgeon staff:

> I've been thrilled with everything they have done and the incredible support of the staff. I saw my surgeon yesterday and will see him again when I am six months out. He is very involved in my care. (After I had the LapBand, I

> didn't see my surgeon again after he released me from the hospital. So, I'm very happy with how involved my surgeon is with my journey.)

If participants failed to build trust in their surgeon or the program, or that trust had been broken, the participant was coded as having failed Stage One. Examples of failing to build trust include Participant 28, (Age 56, 9 Years post-surgery, Regainer) who stated, "At 5 years post op from WLS the doctor group released me from their study program. At that point I felt abandoned." Another example of a participant who appears to have failed Stage One was 32 (Age 49, 14 Years post-surgery, Regainer). Since trust in the program is one of the criteria for successful navigation of Stage One, the following statement was important in determining 32's Stage One status. Participant 32 is a Regainer in Group 3B. When asked about attending WLS support groups she said:

> I do not go to groups. They have a tendency to be full of people who see themselves as victims who need support and help with stuff because they were abused or some other thing. All they do is cry and feel sorry. I'm no victim. I don't want to sit around talking about what was. I want solutions right now. I want to feel victorious and triumphant in life. I deserve that much. I don't need someone to provide that for me. I can do it.

Participant, 16, (Age 38 years, 3.5 Years post-surgery, Regainer) talked about support group attendance:

> No. I have little time to devote to support groups that meet face to face and the support groups I've experienced on line actually had negative information that

> could hurt the success of someone's surgery (such as ways to cheat the surgery to eat the foods you are not supposed to).

Stage Two involves evidence of self-governance. If participants showed evidence of what is commonly referred to as "working the program" (adhering to the program rules about nutrition and exercise, seeing the surgeon at least once a year, and attending educational and support functions) they were coded as having successfully navigated Stage Two. If they showed signs that they are not working at self-governance, using the WLS "tool" (the surgery is often referred to as a tool for weight loss) to control their weight, they were coded as having failed Stage Two. The data showed that 100% of Maintainers appeared to have successfully navigated Stage One. Further, all Maintainers appear to have successfully navigated Stage Two as well. Eight out of 10 Regainers were coded as having failed Stage One navigation. In addition, 7 out of 10 Regainers failed to successfully navigate Stage Two. An example of a participant who successfully navigated Stage Two is participant 15 (Age 46 years, 3 Years post-surgery, maintainer). The following is how he explained his commitment to self-care:

> I do my best to maintain a healthy eating habit and exercise 3 to 5 times a week. Portion control has become second nature so I really don't think about, if I had to guess at I would say 100% of my day is directly involved with my weight loss because making good choices on when, what and how much to eat and exercise is key to maintaining my weight loss. I spend 1% to 10% of my time on issues related to weight loss surgery.

Participant 20 (Age 52 years, 5 Years post-surgery, Regainer) talked about her struggles with self-care:

> I constantly think about food. I snack and graze a lot because I cannot eat a big meal (although I will damn well try – and make myself ill in the process). I think about dieting and how to lose the weight, whether I should go to a slimming club, or try slimming pills and then get depressed, and then give up and eat.

Most participants gave a percentage of time that they spend on self maintenance. Surprisingly, four participants claimed they spend 100% of their time on weight loss surgery issues and 11 participants claimed to spend at least 50%. Those participants who talked about spending all their time working on self maintenance were likely less productive than those whose time was taken up by other things. Many participants talked about being obsessed with their post surgical self care. Those participants in Groups Two and Three who were still obsessed about self care were coded as having failed this stage. Group One was not coded as having failed because this metric does not make sense for patients right out of surgery because of the need for full time post surgical care.

Self Perception and Identity Change Theme

Among those who were classified as Regainers, 80.0% perceived themselves as having had negative life changes since surgery. Among Maintainers 95.6% perceived themselves as having had positive life changes since surgery. This shows that there is a relationship in the data gathered here between the perceived positive changes in identity and weight loss maintenance success. This despite the contradictions of some participants who reported no change in their identity at all. Identity change was seen by

some as a positive, desirable thing, and by others as a negative and undesirable thing. That was something unexpected in the data. Three participants claimed to want to retain their old identity, in some cases to preserve their current relationships. It seemed like a point of personal integrity or an emotional anchor of sorts to some participants to retain the same identity "to still be me" despite the vast number of physical changes due to surgery. But most participants wanted to shed the "old fat" identity. Participant 13 (Age 52 years, 2.5 Years post-surgery, maintainer) explained her desire to remain the same this way,

> My fiancé and I began our relationship when my weight was at the highest, and he was very supportive as I considered whether to have the surgery. We did talk about his concerns that I would become "different" and perhaps decide to "move on"... I told him that I hoped I would stay true to myself at my core, and I believe that is what occurred.

While 13 did not want the surgery to change her identity, 8 (Age 60 years, 9 months post-surgery, maintainer) looked at the changes in her identity differently. When asked about her most intimate relationship participant 8 explained,

> Obviously that person would be my husband. He often says he did not have surgery but he feels the effects every day. For him, he was happy I was and am healthier but he finally admitted he misses the "old" [name omitted]. He misses the food making (I am a good cook) and the going out to eat [name omitted]. He sees I am stronger and after 37 years of marriage our roles have changed. I am more independent and can handle more. This is a real change in our marriage

> relationship and it has taken some time to adjust. This was something I did not anticipate happening.

Participant 8 explained further when asked about trying new things:

> This fat old lady now does cross fit training 4 -5 times a week. I lift weights and grunt and sweat with 30 year olds and I keep up. This summer I am running in two 5k races. These are new behaviors and exciting ones!!!

On one hand, while 8 still describes herself as "this fat old lady" it is clear that she is explaining her transformation from "fat old lady" to someone whose image is very different from that of a "fat old lady". Participant 8 is now someone who runs and lifts weights and keeps up with 30 year olds. It is also clear that 8 is celebrating the changes in her life, while 13 seemed to be resisting change because of the ramifications those changes might have on her relationships. Eight's marriage has changed, but rather than allowing that to stunt her own growth, she is encouraging her family to embrace those changes.

However, while 8 acknowledges these identity changes, she also reports that her personality has not changed:

> My identity certainly has. I am not the fat good cook who always had a pie on the counter and cookies in the oven. But my personality has not changed. I am still me. Just a better healthier me.

It is unclear how different participants define the terms "identity" and "personality" and if they see them as completely different, overlapping concepts or the

same thing. No definition was given to participants for use during this study. It is clear that at least some participants see identity and personality as completely different constructs. The American Psychological Association (APA, 2013) defines personality as "the unique psychological qualities of an individual that influence a variety of characteristic behavior patterns (both overt and covert) across different situations and over time" (APA, 2013, para. 20). The APA has not published a definition of identity in their online Glossary of Psychological Terms (APA, 2013). However, Erikson (1963) did define identity, or ego-identity, as the culmination of the gradual integration of self images over time. Erikson observed that while personality seems to be a well defined concept, the term "identity" is often used in an off-handed, colloquially naïve manner (Erikson, 1963). Is identity simply the culmination of the things, places, people, and events with which we identify? Given that set of definitions, it is easier to understand how participants like participant 8 (Age 60 years, 9 months post-surgery, maintainer) can say on one hand their identity has changed (who and what they identify with) but that their personality (unique psychological qualities) has not changed. This is important in understanding one of the foundational issues related to weight loss maintenance.

Changing what is identified with may be important in terms of long term success, as opposed to changing personality traits, which may not be necessary or have any effect on successful weight management. Further study into this would be very interesting. There is a relationship in the data gathered here between the perceived positive changes in identity and weight loss maintenance success. All participants classified as Regainers also reported negative changes in their identities. All participants classified as

Maintainers reported positive changes in their identities. This is despite the contradictions of some participants who reported no change in their identity at all.

Support Group Attendance

In this context, it is important to note that the term "support group" refers here to brick and mortar (physical) support groups. The reason for this definition is two fold. First it is fitting because all participants assumed that definition when answering the question. Second, nearly all the participants were recruited from online support groups, which would mean that technically speaking nearly all of them "attend" a support group. However, it was clear from the responses given by participants, as well as the use of the word "attendance" that what is being referred to is a brick and mortar support group that one must physically attend. Many participants talked about the physical distance to support groups, and conflicts with schedules. The word attendance is not associated with online support groups because of the asynchronous nature of the online support tools.

Support group attendance was associated with successful weight loss maintenance. Only one Maintainer reported that they never attended support group while all but one Regainer reported that they have not or do not attend support groups. Just one Regainer reported that she does attend support groups, but only occasionally and not consistently. When asked about support group attendance, 29 (Age 67 years, 9 years post- surgery, Regainer) reported, "When I can yes. Lately, however, I've been going to my chiropractor and acupuncturist for the leg/back pain so I miss some support groups." There were Maintainers who do not currently attend support groups, but these

participants reported that they had attended support group for some time right after surgery.

Discrepant Cases

There were three cases that represented discrepancies in the themes cited above. Discrepant cases were defined as cases that did not follow the same patterns as the majority of cases (Creswell, 2007). For example, when asked about how confident she was in her decision to have weight loss surgery, Participant 31 replied "I feel like it was the right decision, but now regret wasting the money, since I am really no better off than I was 13 years ago." Given the fact that participant 31is a Regainer who is a member of Group 3B, it was unusual within this group of participants that she should still feel that weight loss surgery was the right thing for her. She did, however add her regret at spending the money. Another discrepant case was participant 17 (Age 45 years, 4 Years post-surgery, Regainer). While Participant 17 was successful in navigating stages three, four, five, seven and eight, she was unsuccessful in navigating stages one, two and six. One reason for these results could be that while 17 was classified a regainer, she is in the process of losing weight again, which may have led her to revisit some of the developmental stages she had previously failed in order to turn the situation around. Another discrepant case was participant 21 (Age 48 years, 5 Years post-surgery, Regainer). Participant 21 was considered a discrepant case because her interview was incomplete and there was not enough data to conclude anything about her stage development. Participant 21 did express anger and bitterness toward the weight loss surgery community and her own regret at having had the surgery. However, her regrets

were focused primarily on the unpleasant side effects she had experienced for years since surgery rather than her relationship with her surgeon or the surgery team.

Summary

This chapter discussed the recruitment of participants, the profile of each participant, data collection, data analysis, themes developed, and the verification process. The results of this study indicate that while all Maintainers successfully navigated Stage One, no Regainers successfully navigated Stage One. However, there are Regainers and Maintainers that share some common experiences and traits. And while there were some commonalities, there were also differences. For example, many Regainers found support systems inadequate for their needs, while many Maintainers found just the opposite. While there was evidence of trust and self-governance in the experiences of those participants who were classified as Maintainers, broken trust and problems with self-care tended to follow Regainers. The evidence points to a trend that suggested that it is possible to classify participant experiences as developmentally following Erikson's psychosocial stages. This study revealed some interesting patterns that were consistent with this kind of developmental experience. Chapter five discusses an interpretation of these findings, implications for social change, recommendations, and conclusions.

Chapter 5: Summary, Conclusions, and Recommendations

Introduction

The American Society for Metabolic and Bariatric Surgery (ASMBS) estimates that bariatric surgeries in the United States have grown from approximately 16,000 a year in the early 1990s to over 220,000 in 2008 (ASMBS, 2013). Once patients have bariatric surgery they face social, psychological and physical adjustments, which create opportunities to change not just their physical but also their psychosocial identities. The purpose of this study was to gain an understanding of these adjustments and the opportunities for change that accompany them. Further, this study was designed to recognize if any developmental patterns exist in WLS patients' post-surgical experiences. Specifically, this study used Erikson's psychosocial developmental stages as a framework (Erikson, 1963). Erikson's psychosocial theory was chosen to help develop the research questions and guide the study because this theory is a basis for understanding identity development.

Participants were recruited for this study through word of mouth (snowball recruitment) and through three online bariatric support groups: a Facebook community, an online support group, and a meet-up group for bariatric weight loss support. Participants were diverse in age, weight gained or lost, socioeconomic status, and gender. Of the 32 participants, three (10.6%) were male. All of the participants had gastric bypass surgery, and two of the participants had multiple weight loss surgeries in addition to gastric bypass. Thirty-two participants were interviewed in order to explore their experiences after

bariatric surgery. Each of these interviews took place via email and was formatted for use in Dedoose.com qualitative analysis software. The transcribed interviews were coded to assist in identifying major themes that related to the experiences of the participants as a group. Discrepant cases were identified and discussed in chapter four. Dedoose.com was used as a means to store all of the data and to assist in coding the data to identify major themes among all of the participant interviews. The themes that were found were related to the 15 questions that were asked of the participants. The interview questions are in Appendix A.

The interview questions, based on Erikson's psychosocial stage theory, guided the themes and the findings of this study (Erikson, 1963). The findings were based upon Erikson's psychosocial stages and upon the linguistic analysis that resulted from these theory guided questions. Rationale and literature references for the interview questions is in Appendix E.

Findings

This section will address the primary themes found in the data and the main points associated with those themes. Themes discovered in the data included perceptions of having had weight loss surgery, Erikson's psychosocial developmental stages, and linguistic patterns.

Perceptions of Having Weight Loss Surgery

Although every participant's weight loss surgery yielded unique experiences, patterns can be seen in the data. For example, Maintainers describe their weight loss surgery as the best thing that they have ever done, while many of the Regainers expressed

regret at having had the surgery. This could be seen in their responses. For example, 21 (Age 48 years, 5 Years post-surgery, Regainer) said, “I made the wrong decision having weight loss surgery. I wish I could turn back time and undo it.” Similarly, 16 (Age 38 years, 3.5 Years post-surgery, Regainer) said “I would actually reverse the surgery if I had the opportunity.” Some Regainers were conflicted about their weight loss surgery experience. 20 (Age 52 years, 5 Years post-surgery, Regainer) said, “Even with all the problems I have had, I still believe I made the right decision.” All but one of the Regainers perceived the personal changes that resulted from weight loss surgery as negative, while all Maintainers perceived their personal changes since surgery as positive.

Erikson's Psychosocial Developmental Stages

Participants' experiences consistently showed evidence of having experienced the stages in Erikson's Psychosocial Theory (Erikson, 1963). Maintainers showed trends toward successful navigation of all stages. Stage One was confirmed by the participant's trust in either their surgeon or the WLS program. One example that illustrated this was in what 4 (Age 63 years, 3 months post-surgery, Maintainer) said about her experience with her surgeon,

> I've been thrilled with everything they have done and the incredible support of the staff. I saw my surgeon yesterday and will see him again when I am six months out. He is very involved in my care. (After I had the LapBand, I didn't see my surgeon again after he released me from the hospital. So, I'm very happy with how involved my surgeon is with my journey.)

Regainers tended to fail navigation of Stages One and Two. Evidence that the trust between participant and their surgeon was somehow broken or evidence that the participant was not adhering to the program confirmed failure to navigate Stage One. In her explanation of her relationship with her surgeon, 20 (Age 52 years, 5 Years post-surgery, Regainer) recounted,

> My surgeon/clinic staff are one of the best in the country and have been on many programmes [sic] discussing WLS and the benefits. I am disappointed however, that – after a year post surgery, i [sic] was "signed off" from the clinic as everything was OK. I have since had issues, and although the clinic will see me, they have said I need to pay a consultation fee. I don't believe this should be so, considering the issues that I have are related to my surgery. They are still very much publicizing their successes.

Successful navigation of Stage Two was evidenced by the participant's ability to demonstrate adequate weight loss surgery self-care and or self-governance. This was seen in a response given by 23 (Age 44 years, 8 Years post-surgery, maintainer). She explained her self-care this way,

> Since my surgery, I walk/jog every day. My husband and I like to go motorcycle riding, jet skiing, and hiking. We love to travel, and have gone to places like DisneyWorld, Yellowstone Natl Park, Washington, D.C, and many other places. Not carrying around that extra weight makes it all so much easier.

Participants who were not eating the recommended one cup meals consisting primarily of lean meats, not exercising regularly, and not seeing their surgeon as a part of

their commitment to the program were classified as having failed Stage Two. One example of this was 21 (Age 48 years, 5 Years post-surgery). When asked about the amount of time she spends on weight loss issues and self-care she answered, “For about 45 minutes after I eat I suffer overfull pouch syndrome which is similar to dumping syndrome. I experience this three or four times per day minimum. It makes my life hell and makes me regret having the surgery.” Dumping syndrome is common WLS term for a very uncomfortable and potentially dangerous but avoidable condition, which occurs when a WLS patient eats too much sugar or fat at one time, or drinks liquid with their meals. Common symptoms include abdominal cramps, nausea, diarrhea, and dangerously low blood sugar (J. Swartz, personal communication, March 20, 2013).

Linguistic Analysis

The linguistic analysis revealed a pattern of past tense usage among the Regainer participants, and present tense usage among Maintainer participants. All participants who were classified as Regainers used the past tense when talking about their life after surgery and all participants who were classified as Maintainers used present tense when asked the same question. One participant, 24 (Age 43, 9 Years post-surgery, maintainer) used both past and present tense giving a before and after explanation of her life since surgery. The use of past tense was seen in how 29 (Age 47, 13 Years post-surgery, Regainer) responded to the question about her life since weight loss surgery. She said, “I was more active for several years. I didn’t hurt/ache when walking or doing things. Then I started gaining weight back, and the aches and pains that come with obesity have resurfaced.” One

maintainer, 5, (Age 51, post-surgery 6 months, maintainer) answered the same question this way,

> I have less aches and pains; able to cut my toe nails on my own; not struggle getting in and out of the car; easier to put on shoes and socks; don't stress over air travel (need for seatbelt extension; fit in seat); my ankles are not swollen; don't stress getting dressed because I have many choices; easier to purchase clothes; store is more likely to have my size; it's a new experience to eat to live, instead of live to eat; body hungry vs. head hungry; no more cravings; new experience to have leftover food in the house/fridge; I don't clean my plate anymore; been told my eyes, complexion, hair all look clearer, healthier; that I look 20 years younger; more active and have more energy.

This same pattern was seen in Regainers and Maintainers when the same question was analyzed for positive or negative changes. One example of this was a response given by 13 (Age 48, 2 Years post-surgery, maintainer). She replied,

> So many things are easier now to do. I can get off the floor easier. I can jog. I feel attractive. I think I look more attractive. I feel I will now be able avoid weight related health issues for my future. My husband likes the new me, also my kids.

Further illustrating the point was 15 (Age 33, 3 Years post-surgery, maintainer). She responded to the same question using the present tense,

> I have nothing but good (I think) results since my surgery. I have lost 110 lbs, presurgery [sic] I was on the verge of starting Diabetes medication and had

absolutely no energy to do anything!! I am now 125 lbs, work out 3x a week and play power volleyball every Friday night…its great! I actually have the energy to do so much more. Plus I feel so much better about myself mentally and physically.

Eight out of 10 participants who used past tense also reported negative changes in their lives since surgery. For example, 32, (Age 49, 14 Years post-surgery, Regainer) said of her life since surgery, "It was good for a while although I was so weak I couldn't hold a job for over a year. I had an infection in the wound site that got extensive because they couldn't do anything right away."

Interpretation of Findings

The purpose of this study was to gain insight into the psychosocial development processes that may be taking place after bariatric surgery. The analysis revealed that there were noticeable trends toward developmental progress among participants after weight loss surgery, with regard to all stages in Erikson's Psychosocial Developmental Theory (Erikson, 1963). This trend suggests that participants are experiencing developmental changes after surgery and that where psychosocial stages are successfully navigated; participants are at least beginning to build a new identity. The trend also suggested the converse, that those who fail these developmental milestones post-surgery are not developing new identities. Further, resistance to building a new identity was seen among Regainers, suggesting that rather than embracing the new identity that comes with having lost a tremendous amount of weight, they rejected the new identity opting to continue to embrace the comfort of the "old" or "fat" identity. For example, 28 (Age 56, 12 Years post-surgery, Regainer) said, "I feel the same, even though I know I look different.

Sometimes I feel worse – need to have excess skin removed and then the feeling tired all the time, which may or may not be surgery related." Participant 32 (Age 49, 14 Years post-surgery, Regainer) said, "My perception of myself never changed with surgery, at least not like I thought it would." Participant 21 (Age 48, 5 Years post-surgery, Regainer) recounted,

> My perception of self is that I was never a compulsive overeater as I once thought. I was simply an over dieter who was deprived of nutrients which caused me to binge eat. Had I known that in 1989 I never would have had my first surgery.

Maintainers looked forward to and embraced their new "thin" identities and welcomed the changes in their lives that were brought on by weight loss surgery and weight loss. Participant 9 (Age 60, 9 months post-surgery, maintainer) had this to say about her new identity,

> Every aspect of my life has changed since surgery. In fact all these changes although wonderful have been the most difficult part to wrap my head around. The physical changes are obvious but the real changes have occurred internally where others cannot see. I am stronger emotionally and have a heightened sense of what I can accomplish. My work as a teacher has improved as I now am able to focus more instead of being so tired from the weight. Recently one of my children had some upheaval in their family. Instead of allowing this effect my life in a negative way I was able to look at the situation as it was and make judgments in a more

appropriate fashion. This is new for me. Prior to my surgery and weight loss I would have let this situation overcome and over power me. Not any more!

This suggests that successful weight loss maintenance may be related to successfully embracing a new, "thin" identity. This may be happening because the old identity was associated with bad habits, self-sabotaging behavior, unhealthy thinking, eating and exercise patterns. If participants do not shed those old behaviors and habits and embrace a new lifestyle designed to help them overcome morbid obesity, they risk non-compliance and weight regain. The Health Belief Model (HBM) may also apply to these findings. The foundational issues in the HBM are that the participant must believe that they are susceptible to contracting certain health conditions. In this case, those conditions would be obesity related illnesses. The conditions must be deemed serious enough by the participant to require treatment, but not so serious that it inhibit action. The benefits of the treatment must be perceived as necessary, while the side effects of the treatment not too painful (Shumaker, Ockene, Riekert, 2008). If any one of these aspects of the Health Belief Model is violated, proper health behavior decisions may be derailed. For example, if the long term side-effects (being limited to one cup meals and exercising regularly) of WLS is deemed too uncomfortable, patients may make decisions that lead to difficulties with weight loss maintenance. For example, 19 (Age 57, 5 Years post-surgery, Regainer) said, "If I had to do it over gain I would never have had the surgery. There are too health problems that you have after you've had this surgery." This is evidence that the cost was too high for that participant. Many Maintainers who talk about living with the same kinds of health problems but they perceive these problems differently. The severity of side-

effects differs from one person to the next and these differences may rely in part on individual perceptions of the same side-effect. An example of this was seen in a response by 24 (Age 43 years, 9 Years post-surgery, maintainer) “I do get a little nauseous if I eat too much sugar or sweets like ice cream, but that's gotten much much better over time. Now I can eat almost a whole cinnabon [sic] without getting jittery or feeling sick.”

Linguistic Analysis

Maintainers, as shown in the linguistic analysis, look to a positive future and live in the present, while Regainers who tended to look to and live in the past expressed negative experiences with regard to weight loss surgery. These behaviors of both Maintainers and Regainers may be related to the participants' readiness for change, in general. Additionally it may be related to Regainer participants' willingness to let go of the past and embrace a different identity and lifestyle. The evidence does not address whether the participants who used past tense in their responses experienced life in the past tense prior to surgery, or if this was a result of the weight loss surgery experience and failing to maintain the weight they had lost. Participants who were classified as Regainers, when asked about their lives since weight loss surgery made comments that indicated that their life stopped in some ways when they regained the weight. That their lives since surgery consisted of only the time they spent as a thin person, and that their current lives were not as important or meaningful as when they were thin. Regainers tended to respond to the question about their lives since surgery with a synopsis of what life was like as a thin person, and the only comments about the present consisted of how difficult life was for

them since they relapsed (regained the weight they had lost because of WLS). The data showed clearly that Regainers felt life was much worse after surgery than before surgery.

A self-centered focus, as was found in the analysis of word usage, specifically "I" and "me" versus "we" and "us" which may have been due to the nature of the questions. When asked directly about our experiences, it is not uncommon to answer using "I" or "me". This analysis was therefore of little value. Further, a heightened attention to self-care, which is a necessity after WLS, may appear as self-centeredness. In addition to that, it is not unusual to talk about the personal experiences in the first person.

Support Group Attendance

Prior evidence that support group attendance is important in weight loss maintenance was confirmed in the present study (Livhits, Mercado, Yermilov, Parikh, Dutson, Mehran, & Gibbons, 2011). Maintainers found support groups vital to their success, while Regainers tended not to attend support groups. The Maintainers who did not attend physical support groups built informal support systems with friends or family members who had also had surgery, or participated in online support groups. Maintainers also expressed frustration over limitations that precluded them from attending support groups, like physical distance to the meetings or an inability to rearrange their schedule to be able to participate, or to start a group where there was no group available. For example, 12 (Age 50, 19 months post-surgery, maintainer) talked about support group attendance is this response, "There is not a support group here where I live. If there was, I would go for sure." Participant 25 (Age 56, 12 Years post-surgery, maintainer) shared her support group experiences in her statement, "I attended support groups for about 2 years, but they were

not close to home and I couldn't get one started closer." Regainers expressed blame toward support groups for not being adequate to meet their needs, or for being inappropriate for them in some way. Regainers were more likely to make excuses for not attending. For example, while Maintainers regretted not being able to do more with support groups because of distance, Regainers used distance as an excuse not to attend. An example of a specific excuse was mentioned in the following response about support group attendance from 16 (Age 38, 3.5 Years post-surgery, Regainer)

> No. I have little time to devote to support groups that meet face to face and the support groups I've experienced on line actually had negative information that could hurt the success of someone's surgery (such as ways to cheat the surgery to eat the foods you are not supposed to).

Additionally 32 (Age 49 years, 14 Years post-surgery, Regainer) responded to the same question with,

> I do not go to groups. They have a tendency to be full of people who see themselves as victims who need support and help with stuff because they were abused or some other thing. All they do is cry and feel sorry. I'm no victim. I don't want to sit around talking about what was. I want solutions right now. I want to feel victorious and triumphant in life. I deserve that much. I don't need someone to provide that for me. I can do it.

This is important because support group attendance is a demonstration of the participant's willingness, even eagerness to embrace the WLS program. Without this willingness to embrace the program participants tend to regain the weight, and do not

reform their identities. Some Regainers expressed their unwillingness to attend support groups as a part of their personality, which they were unwilling to change. Not being a "support group kind of person" was a common expression by Regainers, however one Maintainer did express that same sentiment. While that Maintainer expressed not being a support group "kind of person" she also shared information about her informal support system and that not attending support group was more a function of lack of time than desire. Her own perception and that of her life partner also confirmed her identity changes. Support group attendance may be an important indication of a willingness to make changes in lifestyle and attitudes, but it does not tell the entire story. More important than support group attendance are holistic indications of identity changes. The afore mentioned prior studies may have been reporting on a symptom of a much bigger issue. Support group attendance has a relationship to weight loss maintenance but it is only correlated not a direct cause of weight loss maintenance success. The more direct measure may be identity change which is evidenced by activities like support group attendance and consistent exercise and faithfully eating a bariatric surgery diet consisting primarily of one cup of "hard proteins" (lean meats) per meal. Taken together, these other indicators show a stronger a relationship to weight loss maintenance than support group attendance.

Limitations of the Study

Limitations of this study included finding participants in Group One who had regained weight since their weight loss surgery. Since Group One was composed of individuals who were less than 18 months beyond surgery, it was difficult to find participants who in that time frame had lost and regained weight. There are individuals

who have surgery and fail to lose weight, but it is extremely rare. J. Swartz, Nursing Director of a bariatric surgical clinic in the Midwest, says that they have only seen it once since 2004 despite the hundreds of surgeries they have performed (J. Swartz, personal communication, March 20, 2013). Weight loss surgery changes the physiological structure of the intestinal tract, which for the first 18-24 months removes the physical hunger sensation and creates a purposeful "starvation mode" during which time the participant normally loses weight very rapidly. During this time it is nearly impossible to gain weight as a result of these changes. Since this is the case, Regainers who are less than 18 months beyond surgery are extremely rare. It was for this reason that members of Group One were all classified as Maintainers in this study because most of them were still in the process of losing weight. Another limitation was that this research was conducted exclusively online, which limits who could participate. People who were not online, or who did not attend an online support group were not included. It would be interesting to delve more deeply into the concept of identity formation. Future studies that replicate this one might give participants a clear definition of this pivotal concept. Future research that follows participants from before surgery to several Years post-surgery is recommended. That would allow for the kind of in depth interviews necessary to understand more fully the changes in identity and identification that participants may be experiencing. Further, it would be interesting to do more psychosocial research including interviews with family, significant others, friends, co-workers, etc. Additional research on the psychosocial components of compliance and self-care requirements is necessary to understand weight loss maintenance. Nearly all participants in this study shared that at least initially they had

many health and psychological benefits after losing weight. They reported higher self-confidence, ease of movement, and trying new things that were previously seen as impossible to them like riding motorcycles or fitting into airplane seats or rides in theme parks. Many of them reported that they looked and felt better physically, and that they no longer felt stigmatized. Despite all those benefits, participants still found it difficult to maintain behavioral compliance. It is important to understand this dichotomy. Future studies addressing compliance and motivational issues would help increase understanding of these issues. A grounded theory study might enhance understanding of the processes that take place during the experience of regaining weight lost through weight loss surgery. Theoretically, a follow up study to this one could be beneficial in terms of seeing future progress and long term psychosocial impacts of weight loss surgery.

In order to understand how psychosocial issues impact weight loss maintenance it would be interesting to study WLS patients' most significant relationships. Divorce rates appear to climb for weight loss surgery patients, especially during the first year after surgery (American Association for Marriage and Family Therapy, 2013). Some participants in this study reported relationship difficulties brought on by weight loss surgery and extreme weight loss, while others reported that weight loss had increased their sex drive and improved their most intimate relationships. It is not well understood why weight loss surgery patients experience these extremes in their significant relationships and it is vital to understand the impact of relationship changes on weight loss maintenance, if any exists.

Implications

The findings of this study could have implications for both surgery candidates and those who screen surgery candidates prior to surgery. In qualifying candidates for surgery it is important to understand the kind of psychological self-care that is required to succeed in weight loss maintenance and the indicators that might lead to identifying candidates who do not possess the psychological capacity to follow through with such demanding and complicated self-care. It is in the best interest of the patient to determine this prior to life altering surgery. In addition, it could have implications for those who have had surgery. It is possible that with the benefit of psychological guidance through the psychosocial transitions from morbid obesity to a healthy weight that higher success rates for WLS could be achieved.

The empirical implications include the introduction of a new psychological construct that could be studied further. Looking at general psychosocial experiences after weight loss surgery has been done, but studying those same experiences from a developmental framework is new. This study is a snapshot in time. To understand the psychosocial development of weight loss surgery patients a longitudinal study is more appropriate. Following the same patients from pre-surgery to several years beyond surgery would be more informative as to the developmental challenges and resolutions that WLS patients experience.

Practice implications include the possibility of creating a program to assist with psychosocial adjustments after weight loss surgery. The current state of the art in psychological post-surgery care is a clinic or hospital-based support group run by a trained

psychologist or social worker that acts as a monitor for the group. A specially trained psychologist, for example, leads the support groups at the previously mentioned bariatric clinic. Many times support groups are led by patients who want to reach out to others like them (J. Swartz, personal communication, March 20, 2013). While support groups have an important function, they are not therapy. Much could be done to support WLS patients in their psychosocial stage navigation, if further research supports the existence of more psychosocial stages. A case could be made that since all Maintainers successfully navigated Stage One and all Regainers failed to navigate Stage One that if bariatric clinics spent more time on building trust with patients their long-term success rates could improve.

Social Change Implications

Understanding weight regain is an important first step in changing public perceptions about obesity. Without exception, participants in this study thought that obesity had a detrimental effect on them both physically and psychologically. Studying weight loss surgery may lead to decreases in social stigma for those afflicted by morbid obesity. Improved treatment and health outcomes for weight loss surgery are among the most important reasons to study this topic. The data gathered here can be used by individuals who are considering weight loss surgery, bariatric surgeons, screening psychologists, and physicians to have a better understanding of the psychosocial changes that happen after surgery. Post-surgical treatment could be enhanced by the data found in this study by helping mental health providers guide patients through the psychosocial adjustments after surgery.

Reflections

Like the participants in this study, this researcher has been morbidly obese and has experienced weight loss surgery. Many of the experiences of these participants are things I have experienced myself with regard to psychological, psychosocial and physical changes. It was a consideration that these shared experiences would provide a strong potential for bias that could affect the outcome of this study. I had to guard against preconceived ideas and emotional identification that might cause me to misinterpret participants' answers. It was important to keep this in mind while collecting data for this dissertation. Although participants knew that I had experienced weight loss surgery, no specific details about my experiences were shared with participants. The nature of conducting online research decreased the problems that could have resulted from researcher bias because communication was accomplished via email and as a result each interaction was well thought out ahead of time. There was a distinct advantage in having had gastric bypass in that rapport and trust were easily established between researcher and participants.

At its foundation, Erikson's theory is oriented toward healthy personality development as opposed to destructive personality development (Cohen, 1960). In human identity development one need only fail one stage to experience a great deal of dysfunction in life. If the only developmental stage one fails is stage one, trust versus mistrust, the problems that stem from mistrust can have significant effects on our ability to psychologically function in healthy ways. The same might be said for weight loss surgery development. If just one stage is not properly negotiated it is possible that weight gain or regain will follow, as a form of dysfunction.

While it is true that each developmental stage is vital for healthy development, human development has no toggle switch. It would be irrational to say that one is either developed or not developed. The fact is that we all function at various levels of emotional and psychosocial success in life. One botched developmental stage does not mean life is completely non-functional. However, it appears that in the case of weight maintenance the stakes may be more of a dichotomy. One stage may mean the difference between regain and healthy maintenance.

Each of Erikson's eight psychosocial developmental stages begins with a crisis, which must be resolved before the subject can move successfully to the next stage (Erikson, 1963). However, when applying Erikson's developmental stages to what amounts to recovery from obesity, it is important to understand that the amount of work one must do in order to recover from obesity (or any illness) is inversely proportional to the amount of psychosocial developmental work the individual has already completed in their developmental experiences (Vogel-Scibilia, McNulty, Baxter, Miller, Dine, & Frese III, 2009). For example, if the participant has not successfully negotiated stage one: Trust vs. Mistrust, and has issues of trust in general in life, the process of creating and building trust within the weight loss surgery community will be increasingly difficult. While the person who has successfully negotiated Trust vs. Mistrust on a human developmental level during childhood will then have the proper foundation for incorporating trust and negotiating the trust versus mistrust stage in obesity recovery. With the onset of any psychological illness or disability, and obesity is no exception; it is likely that there is some level of regression of developmental progress, which allows that illness to continue

to flourish (Vogel-Scibilia et al., 2009). This regression requires the process of at least a partial re-development in order to facilitate healing. Relapses may cause micro-regressions within the process. As the patient works through stages and competency is built, each stage can be worked through more rapidly as progress is built on previous successes (Vogel-Scibilia et al., 2009). Previous successful stage negotiation may be called upon during recovery to help facilitate healing and healthy psychosocial development. The converse is true as well that previous and repeated failures may make recovery more challenging. Vogel-Scibilia, et al. (2009) also named resilience as a factor in developmental recovery.

Marcia (1993) referred to identity as an "internal, self-constructed, dynamic organization of drives, abilities, beliefs, and individual history" (p. 159). The dynamic nature of identity formation or development indicates that elements are continually added and or discarded. Life does not happen in a static state. Life is psychosocial in that it not only involves the individual's changes but the changing nature of the world as well as others around them. Adult identity re-development is dynamic in that while working on trust issues in marriage, for example, one might also be working on issues involving taking initiative at work or consistent healthy self-care. Marcia's (1993) theory is consistent with a nonlinear view of adult identity re-development.

Conclusions

Bariatric surgery patients face enormous postsurgical psychosocial, behavioral, and physical challenges. If these challenges are better understood it is possible that programs and guidance post-surgery could increase the effectiveness of weight loss surgery in terms

of weight loss maintenance. It is important to understand that weight loss surgery does not happen in a social vacuum. Patients' lives revolve around social systems including family members, significant others, co-workers, and friends that are greatly effected by the surgery. While it is understood that behavioral change is required to succeed at weight loss maintenance, the impacts of changes in identity are not as well understood, but no less important. Bocchieri, Meana, and Fisher (2002) suggested that the process of change was the central theme of the weight loss surgery experience among their participants. They also found that many of the participants in their study experienced changes in their close relationships. For some weight loss surgery patients no amount of weight loss will change how they see themselves. Some participants in this study reported that they still felt like a fat person, despite having attained a healthy weight. Others reported that changes due to WLS caused disruptions in relationships with family and friends despite the fact that the changes were positive and healthy. These psychosocial roles are complex and must be understood if we are to better understand weight loss maintenance success. Weight regain is often regarded as personal weakness, both in society and among many of the participants of this study. If public perceptions of obesity are ever going to change it will be at least in part through increased understanding and the resulting compassion for people who suffer with this disease.

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Appendix A: Interview Questions

1. Tell me about your life since weight loss surgery?

2. How did your surgeon (surgical /clinic staff) respond to complaints of post surgical pain or other side effects from surgery? If you did not have complaints, please talk about that.

3. Has your perception of yourself changed since weight loss surgery and if so how? Can you speak about who you are now versus who you were before surgery? Do you feel the same, different? Please explain?

4. Is there someone with whom you have a feeling of complete togetherness? Please talk about how that relationship has been affected by your surgery and or weight loss (or re-gain).

5. What percentage of your everyday life would you say is directly involved in your own weight loss, weight loss surgery issues, or dealing with others? Weight loss issues?

6. Do you attend weight loss surgery support group(s)? Why or why not?

7. How confident are you that you have made the right decision in having weight loss surgery?

8. Describe any struggles you have in relationships or at work since making the decision to have surgery.

9. Describe any struggles or disagreements you have had with your surgeon or her/his staff and how you handled it. Do you still see your surgeon?

10. How do you feel about trying new ways of doing things? Can you give me an example of a time since surgery that you have tried something completely new to you?

11. Do you enjoy mentoring or leading people in their weight loss efforts or health goals? Why or why not?

12. Tell me about a time when you helped someone. Do you feel your efforts at helping people have been successful?

13. Do you feel your identity or personality has changed since your surgery or weight loss? Would others agree with you about this?

14. Tell me about your work (whatever it is that you engage in daily). Does it give you a sense of purpose?

15. Do you think it is important to contribute to society? Please explain.

Appendix B: Consent Form for Inter-Rater Reliability Test

Name of Signer:

During the course of my activity in collecting data for this research: "Weight Loss Surgery Maintenance and Psychosocial Development: A Narrative Perspective" I will have access to information, which is confidential and should not be disclosed. I acknowledge that the information must remain confidential, and that improper disclosure of confidential information can be damaging to the participant.

By signing this Confidentiality Agreement I acknowledge and agree that:

1. I will not disclose or discuss any confidential information with others, including friends or family.

2. I will not in any way divulge, copy, release, sell, loan, alter or destroy any confidential information except as properly authorized.

3. I will not discuss confidential information where others can overhear the conversation. I understand that it is not acceptable to discuss confidential information even if the participant's name is not used.

4. I will not make any unauthorized transmissions, inquiries, modification or purging of confidential information.

5. I agree that my obligations under this agreement will continue after termination of the job that I will perform.

6. I understand that violation of this agreement will have legal implications.

7. I will only access or use systems or devices I'm officially authorized to access and I will not demonstrate the operation or function of systems or devices to unauthorized individuals.

Signing this document, I acknowledge that I have read the agreement and I agree to comply with all the terms and conditions stated above.

Appendix C: Consent Form

You are invited to take part in a research study of weight loss surgery patients' experiences. The researcher is inviting adults who have had gastric bypass surgery to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part. This study is being conducted by a researcher named Carrie Hickman who is a doctoral student at Walden University.

Background Information:

The purpose of this study is to understand the experiences of weight loss surgery patients.

Procedures:

If you agree to be in this study, you will be asked to:

Participate in one interview, which will be audio recorded for the purposes of transcription. This should take approximately one hour.

Here are some sample questions:

· Has your perception of yourself changed since weight loss surgery and if so how?

· What percentage of your everyday life would you say is directly involved in your own weight loss, weight loss surgery issues, or dealing with others' weight loss issues?

Voluntary Nature of the Study:

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. The researcher will not treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:

Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue, stress or becoming upset. Being in this study would not pose risk to your safety or wellbeing. The potential benefits of the study include gaining a greater understanding of the experiences of individuals who have had weight loss surgery.

Payment:

No payment will be given for participation. This study is strictly volunteer based.

Privacy:

Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. However, as a mandated reporter I am bound by law to report any abuse, neglect or suspected abuse to the authorities. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by electronic encryption. Data will be kept for a period of at least 5 years, as required by the university.

Mental Health Resources:

The following is a list of reliable mental health resources, should you ever need them:

http://locator.apa.org (APA psychologist locator),

http://store.samhsa.gov/mhlocator (counseling

locator for substance abuse issues), http://www.anxiety.org (help for anxiety),

http://www.whatadifference.samhsa.gov (mental health support services)

Contacts and Questions:

You may ask any questions you have now. Or if you have questions later, you may contact the researcher via phone at 952-956-4499 or email at carrie.hickman@waldenu.edu. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 1210. Walden University's approval number for this study is 02-19-13-0144351 and it expires on February 18, 2014.

Please print or save this consent form for your records.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. In replying to this email with the words, "I consent" I understand

that I am agreeing to the terms described above. I also certify that I am at least 18 years of age.

IRB approved Consent Form

Appendix D: Inclusion Questionnaire

1. What is your gender Male _____ Female _____

2. What type of weight loss surgery did you undergo?

3. How long has it been since your weight loss surgery?

4. Have you maintained all the weight you lost after surgery? How much did you lose initially?

5. Have you gained any weight since surgery? If so, how much?

6. What is your age?

Appendix E: Rationale for Development of Interview Questions

Question 1. Tell me about your life since weight loss surgery?

Rationale: This question addresses all stages in that it has the potential to allow the participant to communicate about trust issues, self-care, taking initiative, etc.

Looking for: confidence and self-assurance or a sense of paralysis, impotence or denial, or over compensatory showing off in terms of their ability to look to or plan for the future (Erikson, 1963).

Question 2. How did your surgeon (surgical /clinic staff) respond to complaints of post surgical pain or other side effects from surgery? If you did not have complaints, please talk about that.

Rationale: This question addresses Stage One: Trust versus Mistrust and Stage Two: Autonomy versus Shame and Doubt. In Stage One, Trust implies that the patient has learned to rely on the surgeon's continuity and sameness of care. In Stage Two the patient learns to trust themselves and their capacity to adjust to their new intestinal organs including the first bowel movements, etc. (Erikson, 1963). Erikson wrote about "affection" and here that concept is replaced by "genuine positive regard" as would be more appropriate in a doctor-patient relationship. Erikson uses the terms "provider" and "mother" interchangeably. In the case of weight loss surgery the term "provider" fits.

***Looking for*:** a genuinely mutual positive regard between patient and surgeon (or at least the surgeon's staff). Erikson calls it "social mutuality" (Erikson, 1963). (p. 250) Also looking for compensation if this social mutuality is missing. Conversely, irrational negative attitudes (possibly irrational anger/blame for an unpleasant side effect, etc.)

toward surgeon or staff as an indicator of a less evolved commitment to the process and less evolved psychosocial adjustments immediately after surgery. (Erikson, 1963). (p. 248-9)

Question 3. Has your perception of yourself changed since weight loss surgery and if so how? Can you speak about who you are now versus who you were before surgery? Do you feel the same, different? Please explain?

Rationale: This question gives the participant the opportunity to talk about their identity, which is the subject of Stage Five: Identity versus Role Confusion. The answers to this question have the potential to reveal identity confusion, or affirmation of who they know themselves to be.

Question 4. Is there someone with whom you have a feeling of complete togetherness? Please talk about how that relationship has been affected by your surgery and or weight loss (or re-gain).

Rationale: This question speaks to the crisis of Stage Four: Intimacy versus Isolation. The state of the participants' intimate relationships has a reflection on their own development and maturity. Gastric bypass surgery can have a huge effect on intimate relationships. These changes can take many forms. For example a patient may change after weight loss and sees his/her self as more valuable than before. This may cause the patient to re-evaluate their relationships in light of their new self-image. This question may also speak to Stage Three: Initiative versus Guilt. In Stage Three WLS patients may begin to assert themselves or take initiative more in their closest relationships. The effect of this kind of new behavior may be that the intimate relationship improves or degrades.

Looking for: expressions of intimacy, commitment to others and reciprocal relationships. Has this person bonded with the bariatric team? Are participants "real" genuine, etc. within the weight loss surgery community? Conversely, looking for distancing attitudes. Prejudices that threaten the person's intimate relationships (Erikson, 1963). Also looking for harp attitudes of differences. One key factor is the assured reliance on another's integrity (Erikson, 1963).

Question 5. What percentage of your everyday life would you say is directly involved in your own weight loss, weight loss surgery issues, or dealing with others' weight loss issues?

Rationale: This question speaks to Stage Two: Autonomy versus Shame and Doubt. Stage Two is about self-governance. One way to ask about how participants are taking care of themselves is to ask about the time that they spend on weight loss issues.

Question 6. Do you attend weight loss surgery support group(s)? Why or why not?

Rationale: This question addresses Stage One and Stage Two. The issue with Stage One has to do with trust, not only of the surgeon but the WLS program, which includes things like support groups, which WLS patients are strongly encouraged to attend. Not attending support groups could be a sign of distrust of the surgeon or the program, or even the surgery in general. It addresses Stage Two because it is evidence of self-care. This question also has the potential to speak to Stage Seven: Generativity versus Stagnation. Many WLS patients who attend WLS support groups regularly eventually become leaders of their groups. This sense of wanting to contribute to something that will outlast

them, something that will contribute lasting good is one of the reasons many WLS patients become support group leaders.

Question 7. How confident are you that you have made the right decision in having weight loss surgery?

Rationale: This question has the potential to speak to Stages One, Three, and Five. Stage One: If trust between the patient and their surgeon fails, confidence in the WLS decision can flag. Trust relies upon not just the elements of basic care, but also the quality of the provider-patient relationship (Erikson, 1963). (p. 249) Stage Three: for many WLS patients having weight loss surgery is taking initiative in their lives. If the people around them disapprove strongly and emotionally "push back" confidence in the decision to have surgery can be effected. Stage Five: if the WLS patient has incorporated the lifestyle of WLS into their identity they are much more likely to believe that the decision to have WLS was the right thing to do.

Question 8. Describe any struggles you have in relationships or at work since making the decision to have surgery.

Question 9. Describe any struggles or disagreements you have had with your surgeon or her/his staff and how you handled it. Do you still see your surgeon?

Rationale: This question gives the participant a chance to elaborate on the relationship they have with their surgeon. If the participant no longer sees the surgeon as required in the initial protocol for surgery, it is a reflection on the trust relationship between the surgeon and their patient. This speaks to Stage One. This question also speaks to Stage Two in that it indicates whether or not the WLS patient is practicing proper self-care.

Question 10. How do you feel about trying new ways of doing things? Can you give me an example of a time since surgery that you have tried something completely new to you?

Rationale: This question speaks to Stage Three. Trying new things is a good measure of whether someone is taking initiative.

Question 11. Do you enjoy mentoring or leading people in their weight loss efforts or health goals? Why or why not?

Rationale: This question gave the participant the opportunity to address Stage Seven issues. : Generativity versus Stagnation has to do with giving something back or paying it forward to the next generation. Mentoring is a great way to do that, and in the current zeitgeist it is common enough that it is possible many people engage in mentoring.

Question 12. Tell me about a time when you helped someone. Do you feel your efforts at helping people have been successful?

Rationale: This question gives an opportunity to continue or confirm the participant is engaged in Stage Seven issues. Stage Eight: Ego Integrity versus Despair. This question represents a way to delve into issues like looking back on our contribution to life with satisfaction or despair.

Question 13. Do you feel your identity or personality has changed since your surgery or weight loss? Would others agree with you about this?

Rationale: This question addresses Stage Five: Identity versus Role Confusion. Have participants integrated the new thin self into their identity or do they continue to struggle with issues like looking in the mirror and seeing someone foreign to them?

Question 14. Tell me about your work (whatever it is that you engage in daily). Does it give you a sense of purpose?

Rationale: This question gives participants a chance to address Stages Seven and Eight issues. The positive outcome of Stage Seven has to do with a feeling of accomplishment, while Stage Eight endows wisdom.

Question 15. Do you think it is important to contribute to society? Please explain.

Rationale: This question is focused on Stage Eight issues. Reflecting on contributions to society gives the participant the opportunity to share wisdom and fulfillment. Conversely, failure to navigate this stage could be revealed in bitterness or despair at not being able to see your accomplishments come to fruition.

Looking for: a sense that the choices made relating to WLS had to be made, that life as it was lived was of necessity (Erikson, 1963).

Curriculum Vitae

Objective
Qualitative Researcher
Skills
Program and Assessment Evaluation
Writing/Creation of Research tools including Surveys, Assessments, Interviews, Focus Groups, HTML and CSS, etc.
Consumer Behavior & Motivation Analysis
Focus Group, A/B Test, Field & Lab Experiment Administration and Analysis
Internet & Marketing Research, Analysis & Reporting
Research Methodology Design
Cross Cultural Business Experience
Consumer Decision Analysis
Innovation Process Expert
Online Workshop Creation & Moderation
Both Agency, CRM and Academic Research Experience
Highly Experienced with Google Analytics & Yahoo Analytics
Highly Proficient in communicating Design Rationale to all stakeholders

Experience Overview
Agency Experience 2001 -2009
Research Experience 2009-2013
Education
Ph.D. Psychology (with honors) 2013
M.S. Research & Evaluation Psychology (with honors) 2010
B.A. Psychology (with honors) 2002

Research Experience
Qualitative and Quantitative Research and Analysis Experience
PhD Training & Research Walden University 2008-Present
Advanced Quantitative & Qualitative Reasoning and Analysis, Survey Research, Methodological Design, and Program Evaluation Projects. Major research projects in Consumer Behavior, Developmental Narrative, and Intelligence Application Assessment Development.
Consumer Behavior Research Consultant 2010-Present
Designed and conducted consumer behavior research in the area of bariatric surgery. Large dynamic research project was designed to analyze weight loss patient behavior within a qualitative narrative environment. Research design included interviews, guided journaling and focus groups.
Agency & Industry Experience

Consulting Director of Creative Services and Marketing
1/2008 to 12/2008
Temporary full time leadership for creative services and marketing departments for a marketing company. Responsible for setting up comprehensive workflow infrastructure, developing marketing and demand generation strategies and execution management. Conducted usability testing, analysis, and modifications to company website. Directed a team of six graphic designers, ten remote production designers, three copywriters and marketing staff of eleven including three marketing managers. Developed and managed "Google like" innovation & Strategy team. Once the infrastructure was in place and running well, my job was finished.

Marketing Consultant Timbuktek
1/2008 to 5/2009
Responsible for brand creation, product launches and comprehensible marketing strategy for retail based outdoor equipment company. Lead a team of marketing contractors to build marketing infrastructure and public awareness of products. Managed website development including usability testing, analysis and modifications. Manage retail relationships with Gander Mountain, REI, Sportsman's Warehouse among others.

Creative Consultant Carazin Web Group
5/2007 to 5/2009
Weekly Creative consultant to web design firm. Worked with a team to perform usability testing and analysis of client websites, including Cazarin's corporate website. Provided thought leadership in the areas of consumer behavior, online demand generation, relationship marketing, content related SEO and branding for both Carazin Web Group and their clients. Work with C-level executives in strategy development.

Consulting Marketing Director Spa Med
5/2007 to 10/2007
Thought Leadership and management of comprehensive Marketing and Promotional Calendar and timely delivery of marcom and demand generation projects. Responsible for developing, in conjunction with product teams, strategic demand generation plans that heavily utilize consumer-centric, relevant, interactive techniques. Create and implement the systems, processes and schedules that support the identification, creation, approval, and distribution of marketing material. Also responsible for the implementation of smooth operational processes within the marketing department. Managed relationships with business partners, department colleagues, vendors and cross-functional teams.

Message Architect Consultant Patterson Companies
1/ 2007 to 5/2007
Architect of corporate message. Worked with marketing department to direct and control the message within the market. Initiated and developed electronic communication

division, and analyzed current marketing collateral in order to institute programs to hone and further develop the message.

Marketing Analyst-Consultant Honeywell Int'l.
4/ 2006 to 9/2006
Contract Marketing Analyst for Honeywell's Combustion Division. Analyze and write marketing collateral and create brand development and account management for this division. Assist in the development and coordination of marketing communication programs. Managed relationships with business partners, inter-departmental colleagues, vendors, cross-functional teams and database marketing.

Contract Copywriter JT Mega
2005
Wrote ad copy and produced video projects for foodservice advertising agency. Clients include Hormel, Michael Foods, Jennie-O Foods, Ecolab, Land-O-Lakes and included ads in People Magazine.

Marketing Manager Pointcast Interactive
2001 to 2004
Managed and led a team of 40 to create and implement direct marketing advertising campaigns for 400+ clients in Minnesota, North Dakota and Nebraska. The 23 year old firm designs and creates ad campaigns, including print, web and TV commercials, for small to mid-sized companies. Duties included account management, profit and loss, supervision of writing and editing proposals and ad copy. Managed relationships with business partners, department colleagues, vendors and cross-functional teams.

Head of Department -Long Form Development - Wilson Griak 2000 to 2002
Led the development team in long form TV show development for a Multi-national company. Managed the development department and to develop TV shows for sale to National TV /Cable Networks. Duties included writing and editing proposals.

Systems Proficiencies
Proficient in CRM and demand generation software, word-processing, desktop-publishing, graphic arts, audio/video editing, spreadsheet, presentation, and communications software applications on both Windows and Mac OS platforms. Fluent in the following software programs: SPSS & Minitab, Adobe Test & Target, Adobe CS6, iBooks Author, Final Draft, QuickTime, Final Cut video editing, Adobe Edge Animate, CSS, Limited HTML, Analytics Programs including Google Analytics & Yahoo Analytics, CRM software including MS Dynamics & SalesForce & Oracle, KPI Library in association with CRM software, Cisco Web-Ex, Survey Monkey