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Finding the Recipe for Nutritious and Delicious Living: Understanding the Lived Experience of Weight Loss from Morbid Obesity in New Zealand Women

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Abstract

Obesity is classed as a crisis in New Zealand and across the world. Despite obesity reduction efforts, the obesity rates and failed weight loss attempts continue to be high. Due to the limited research available on the successful obesity reduction experience, this research aimed to understand the lived experience of significant weight loss in New Zealand women from a social constructionist perspective.

Using critical discourse analysis, five participants were interviewed using semi-structured questions. Each participant had lost between 30 and 105 kilograms each and kept the weight off long term for over one year.

Findings indicate that there are identity changes, social experience changes, and issues with disclosure of their ex-morbidly obese identity in new social contexts. Additionally, understanding their 'why' was demonstrated to be a significant aspect to their success at long-term significant weight loss.

This research indicates that the psychological and social aspects of weight loss are more significant than the biomedical aspect of energy balancing for weight loss. These results highlight that potentially these psychological and social aspects are not addressed within mainstream weight management programmes. This research calls for evaluation of current weight management programmes to ensure comprehensive and appropriate healthcare is being provided for morbidly obese individuals. This would assist with reducing obesity rates and enable the term 'crisis' to be disassociated with obesity in New Zealand.

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Table of Contents

Chapter 1

Contextualizing Obesity 1

Defining Obesity 2

The Obesity Health ‘Crisis’ 7

Chapter 2

A Focus on Morbid Obesity 19

Research Rationale and Objectives 28

Chapter 3

Methodology 31

My Perspective as the Researcher 31

Social Constructionism 32

Theoretical Lens 35

Critical Discourse Analysis 36

Recruitment of Participants 37

Information and Consent 39

General Procedure 39

Data Analysis 40

Ethical Considerations 42

Chapter 4

Findings 44

Discursively Constructing Identity Change 44

Discursively Constructing the Disclosure of an Ex-Morbidly Obese Identity 56

Discursive Constructions of Successful Weight Loss 61

Chapter 5

Discursive Findings in the Broader Context of Obesity 67

Implications 72

Individual Level 72
Organisational Level 72
Government Level 73
Future Directions 73
Reflections on the Research Process 74
Conclusion 74

References **76**

Appendices

Appendix A: Information Sheet 84
Appendix B: Consent Form 86
Appendix C: Interview Guide 87

List of Tables

Table 1: Participant Profile 38

Chapter 1: Contextualizing Obesity

Although obesity can be seen throughout history, it is currently considered a major health issue. The World Health Organisation (WHO) defines obesity as an excessive amount of weight on a person's body that impairs their health (WHO, 2018). The New Zealand Ministry of Health (MOH) reports that obesity also leads to further health problems (2018). Physical health problems include the development of diabetes, cardiovascular diseases, musculoskeletal disorders and some cancers (MOH, 2018; WHO, 2018). Additionally, psychological problems have also been significantly associated with obesity such as depression, anxiety, stress, low self-esteem and poor quality of life (Abilés et al., 2010; Nigatu, Reijneveld, de Jonge, van Rossum, & Bültmann, 2016; Zhao et al., 2009).

Obesity rates have increased rapidly in recent years. In 2016, the WHO reported that internationally, 1.9 billion adults were overweight, with 650 million adults being obese (WHO, 2018). In total, 13% of the global population were obese two years ago (WHO, 2018). At the same time, the 2016/2017 New Zealand Health Survey reported that 32% (one in three) of New Zealand adults were obese, with a further 34% classed as overweight (MOH, 2018). When tracking the increase in obesity rates, statistics demonstrate that the world obesity rate has almost tripled since 1975 (WHO, 2018). New Zealand's own rates have also increased, since 2006 the overall obesity rates in adults has increased from 27% to 32% in 2017 (MOH, 2018). This significant increase in obesity rates has generated an increase in health promotion activities along with obesity intervention and prevention programmes aimed at reducing this high obesity rate.

Despite health promotion and obesity reduction efforts across the world, research has predicted that global obesity rates will continue to grow. In 2008, based on the current trends at that time, the estimated number of obese individuals by 2030 came to 1.12 billion and 2.16 billion overweight (Kelly, Yang, Chen, Reynolds, & He, 2008). A more recent study in 2016 supported the continuation of obesity rates in the future, predicting that 33 of the 53 countries are expected to have obesity rates of more than 20% (Pineda et al., 2016). These predictions indicate that the obesity reduction efforts that have been recently actioned are not effective and suggest low rates of successful weight loss attempts are occurring. To reduce obesity rates, the successful weight loss

attempts need to be better understood so the current prevention and intervention programmes can be more effective.

This research project will investigate the lived experience of successful long-term significant weight loss in New Zealand women. The first chapter will undertake a brief overview of this major health issue of obesity. Additionally, variations of the definitions of obesity from biomedical, social, cultural and historical contexts will be addressed. Next, how obesity is measured in present day will presented. Following this, how the obesity issue has been classed as a 'crisis' will be explored along with what this means for New Zealand at the different ecological levels of government, community and the individual. Lastly, the causes, treatment, issues with treatment and obesity reduction failures within the New Zealand context will be addressed.

Chapter two will summarize the current literature that focuses on the significant weight loss experience of the morbidly obese population and outline the aim of this study. In chapter three, the methodology of this research project will be addressed including the rationale and data collection process used. In chapter four, the findings of this research will be presented along with a contextual analysis of where these findings fit within the current knowledge of the obesity health issue. In chapter five, a discussion of what these findings mean within the New Zealand social context will be offered along with recommendations of how to decrease the currently high obesity rates that plague New Zealand society.

Defining Obesity

What must be noted from the outset of this research is that the definition, or perspective, of obesity can vary significantly. Similar to beauty, obesity, in a way, is in the eye of the beholder. Obesity is commonly defined within western society in biomedical terms, whereby obesity is a physiological health issue that can be physically measured and treated. However, there are also arguments that obesity can be defined socially, culturally and historically different to this common biomedical definition.

Commonly in biomedical terms obesity is viewed as a 'disease'. However, disease is a constructed term and has many different meanings to different individuals, groups, and cultures. The Collins dictionary defines disease as an illness that impacts individuals (Disease, 2018). Furthering this, the Merriam- Webster Dictionary (2018) and Oxford Dictionary (2018) define disease as a condition that impairs regular

functioning of an individual and an entity that exhibits physical signs and symptoms. Scully (2004) presents a more comprehensive perspective on the definition of disease and advises caution when using the term, whether in biomedical or sociocultural contexts. Whilst it is understandable that within the biomedical context obesity could be viewed as a disease (because the physical signs of obesity are visible and weight is a measurable concept) the wider meanings of the label of 'disease' should also be taken into consideration when using the term. Scully (2004) also highlights that the construction of disease is fluid and can change through time, as can be seen with the Diagnostic Statistical Manual of Mental Disorders being on its fifth version. Additionally, the term 'disease' can be used as a green light for pharmaceutical companies to increase business growth by providing medicine for newly defined 'diseases' (Scully, 2004). Despite the differences in the biomedical definition of disease, obesity is commonly classified as a disease within this context and is measured as such when obesity treatment plans are implemented.

At a societal level, obesity is socially viewed negatively and is portrayed as a crisis, immoral, unpleasant and unattractive within the western mainstream media (Boero, 2013; Brewis, 2010). The people who are idolised by the public and highlighted as 'normal', or the 'ideal' within tabloids, online, news stories and advertising are rarely morbidly obese and can have a direct impact on the behaviour of the public to fit into these norms (Ferris, 2003). With the argument of advertising and its contributions to eating disorders and obesity aside, most of the public figures and celebrities have low body weight. It is through the media platform, non-obese is constructed to be the ideal and the norm that is socially acceptable.

For those who do have a larger body mass than is socially constructed to be normative, they are then classified, and live, as obese individuals. These individuals have reported social issues which indicate they experience social isolation, personal and group discrimination along with stigma in their daily lives that impact their social interactions due to being classified as obese (Lewis et al., 2011; Magallares, Luna, Garriga, Botella-Carretero, & Morales, 2016). These findings indicate that there are psychological impacts from living as a socially unacceptable weight.

What must be noted at this juncture, is that it is commonly assumed that obese individuals are unintentionally obese and are socially perceived to have 'let themselves

go' or too lazy to lose weight (Brewis, 2010). However, there are members of society who choose to be obese, as well as members who find obesity as an attractive quality in another person. In some cases, obesity is idolised as can be seen through the aspirations of some people to hold the Guinness World Record of largest body weight. This award is given each year to the heaviest living female or male, as well as a title given to the heaviest female or male in recorded history (Guinness World Record, 2018). Additionally, there are obesity focused social groups (Overeaters Anonymous, 2015) pro-obesity dating apps (WooPlus, 2017), pro-obesity movement groups such as the National Association to Advance Fat Acceptance (NAAFA, 2016) and specific pornography categories for obese individuals (Pornhub, 2018).

Obesity is viewed differently within different cultures. In western industrialised cultures obesity is viewed as negative and is stigmatised against (Brewis, 2010; Carr & Friedman, 2005). However, many studies have indicated that in some cultures, obesity is viewed in positive ways and is commonly the preferred 'ideal'. In South Africa, thinness was reported to be an indicator of AIDS and therefore not a preferred body shape within these communities (Kruger, Puoane, Senekal, & Van Der Merwe, 2005). Samoan communities also view obesity or larger figures as positive (Brewis, McGarvey, Jones, & Swinburn, 1998) further opposing the western perspective. Additionally, 'fattening rituals' have been reported to occur in the Tahiti and Nauru cultures (Pollock, 1995). In some cases, obesity is not an individual's choice with reports of young girls being sent off to be force fed to fit in with an obese ideal. The 'justification' around these behaviours is that excess weight will enable the girls to marry well and bring their family wealth (Foyta, 1984). This critical perspective on obesity definitions generates an understanding that obesity is perceived differently by different cultures, which demonstrates that the ideas around obesity are socially constructed and open to change. The fluidity and alternative constructions of the obesity definition can be further highlighted when looking at the historical origins of obesity.

Depending how far back one wishes to delve, obesity was first recognised as a health issue by Hippocrates who determined that obesity could lead to disease and early death (Christopoulou-Aletra & Papavramidou, 2004; Haslam, 2007). Whilst obesity, or the importance of bodily health, was recognised through time by many societies as a way to prolong life and health (Haslam, 2007) what we know today of obesity began to emerge in the 1800's.

Assessing the population's weight, and therefore obesity, began in 1885 in Germany with the introduction of the penny scale which enabled body weight to be measured (Schwartz, 1986). Shortly after 1885, the penny scale was used in the United States of America which sparked the search for the weight that was considered 'healthy' (Schwartz, 1986). Insurance companies ignited this spark to define the weight categories for 'healthy' because their life insurance policies needed data for weight related cut off points for their customers (Komaroff, 2016). These insurance companies required a definition of the ideal weight in order to decline, or charge higher premiums, to those who were outside the 'ideal norm' weight. Statistically speaking, they understood that they would likely to have more claims for those who did not fit into the 'ideal' weight category and as a for-profit business, aimed to avoid paying out more than necessary on insurance claims.

We have the Metropolitan Life Insurance Company (MLIC) to thank for providing the standard 'ideal' weight tables for human beings. Komaroff (2016) highlights the evolution of these body weight ideals as developed by the MLIC. Komaroff explains that in 1942, the 'ideal' weights for men and women were published by the MLIC, which developed into the 'desired' weight tables in 1959, and then into the 'height to weight' ratio table in 1983 (2016). From the information generated from the MLIC, came the Body Mass Index (BMI) that is presently commonly endorsed as the standard measurement of weight categorisation (MOH, 2018; WHO, 2018). Since the inception of the BMI, there have been updated versions published and endorsed due to the general population changing through time and is now accessible for anyone online (MOH, 2018).

Presently, the BMI is used within the obesity industry to categorise an individual's weight. This tool measures the severity of obesity in an individual. The BMI is calculated by dividing an individual's weight in kilograms, by the square of their height in meters (kg/m^2) (WHO, 2018). This tool categorises a BMI less than 18 as underweight; between 18.5 – 24.9 as 'healthy' weight; 25-30 as overweight; and over 30 as obese (WHO, 2018). There are subcategories within the obese range which indicate degrees of severity of obesity as well. Class I obese is considered a BMI of 30-34.99; Class II obese (morbidly obese) is considered a BMI of 35- 39.99; and Class III obese is considered a BMI of >40 (WHO, 2018). This study focuses on the individuals

who were previously classified in the Class II and Class III obese category, also known as morbidly obese, and who are now within a 'healthy' weight range.

Great caution is recommended when even mentioning the BMI, as it is publicly known as a flawed tool which this research does not dispute. Not only is the BMI a socially constructed tool, it is a quick, indirect measure to gauge the healthiness of an individual's weight but is not generalizable. Whilst today, the BMI does take into consideration factors (such as age, gender and ethnicity) it does not, however, differentiate between fat and lean mass nor any fat distribution on individuals (MOH, 2015). Prentice and Jebb (2001) explain the inaccuracies of the BMI through the lack of direct measurement of body fat and by highlighting the inappropriateness of the BMI as a generalizable tool. Many high-level athletes, for example most of the New Zealand All Blacks rugby players, are considered 'obese' even though they are labelled as being in peak physiological 'health' and socially labelled as 'fit and healthy' (All Blacks, 2018; MOH, 2018). However, even with these known measurement issues, the WHO and the New Zealand MOH use this measurement tool. The lack of an appropriate alternative has driven this research to use the BMI as a guideline for participant criteria and the demarcation of weights within this research. Until a more comprehensive or individualised tool is developed the BMI, despite its flaws, appears to be a standard feature within obesity healthcare that unfortunately doesn't seem to be going anywhere soon.

It is at this juncture that a couple of key points must be highlighted about this research. Firstly, this research focuses on the individuals who are biomedically classified as Class II and Class III obese. Whilst the differences are noted within the meanings and constructions that surround the term 'obesity' (and therefore the higher levels of obesity) this research will refer to the term 'morbidly obese' from here on out to identify Class II and Class III obese from the BMI table.

Secondly, the way in which the weight categorisations will be referred to from this point onwards must be understood within the appropriate context. As with the constructed terms 'obesity' and the BMI tool, the other weight categorisations such as 'underweight', 'normal weight' and 'overweight' are all defined differently by different people. In this research, the terms 'morbidly obese' and 'normal weight status' are referred to in order to demarcate between the participants heaviest weight, and their

post-weight loss weight only. Under no circumstances are these terms reflective of the researchers, nor the participants, views or personal definitions of what a ‘normal’ or ‘morbid’ weight status means to them. These terms are used for explanatory reasons only and have been determined to be the most appropriate for the objectives of this research. The researcher understands the issues surrounding the health, weight and BMI ‘definitions’ and operates with this understanding throughout the research.

Thirdly, the term ‘obesity’ is commonly used to generalise all individuals or statistics that fall within the obese BMI category and above, which includes Class I, II, and III obese categories. Most organisations (MOH; 2018; WHO, 2018) and academic literature use the term ‘obesity’ to generalise information of the health issue also. This research will address the BMI weight categories as obese and morbidly obese to demarcate the severity of obesity, as this is a significant aspect to the objectives of this research. The researcher acknowledges that the current literature generalises the obese population in many cases and takes this into consideration throughout this research.

The Obesity Health ‘Crisis’

Before the causes, treatment, and issues with obesity treatment are examined, the meaning of an obesity ‘crisis’ will be addressed. With the history of obesity acknowledged, there have been individuals who have been obese, and most likely had obesity related comorbidities in the past (Komaroff, 2016). However, obesity was never considered a ‘crisis’ in the past. Historically obesity was rare and used as a tool to demonstrate one’s wealth (Haslam, 2007). In more recent times, an overweight baby was viewed as a positive aspect, because this meant that the child was nourished and will grow strong and healthy, with common assumptions that the child would grow out of it (Garn, 1976). In contrast, presently, the MOH (2018) warns that a child who is overweight will most likely become an overweight adult and develop comorbidities. So why is the ‘crisis’ term now associated with obesity in New Zealand?

Many claim that the ‘crisis’ is based on the health industries inability to accommodate for obesity. In recent history, obesity was able to be treated in professional health contexts due to the obesity rates being low. This can be likened to anorexia nervosa, whereby the rates of anorexia are not classed as being at a crisis level, as those suffering from anorexia nervosa can be accommodated for within the health industry (Health Navigator, 2018). However, the rates of obesity in New Zealand have

reached a third of the population (MOH, 2018) and accommodating this many people has become an issue.

At this juncture the most relevant part of the New Zealand public health system that relates to this research must be explained. In New Zealand's society, healthcare is government funded which means that individuals are not required to have health insurance in order to receive medical care (MOH, 2016). That being said, the government fund this healthcare system through the taxes collected from the entire working population of New Zealand (MOH, 2016). So, technically, while healthcare is free or subsidised, employed individuals are contributing to this fund with their income. This brings us back to the point of the health industries ability to accommodate for obesity healthcare. Many claim that obesity has been declared, and therefore labelled, as a 'crisis' due to the government being unable to financially afford to accommodate the large numbers of obesity related healthcare being sought, which is why the idea of fat tax has been explored (Bødker, Pisinger, Toft, & Jørgensen, 2015). Critically speaking, the obesity 'crisis' is potentially not necessarily a health crisis for the population as a whole, but could also be constructed as a financial crisis related to the health industry.

When evaluating the meaning of this New Zealand obesity 'crisis' each ecological level can have different priorities. At the government level, this crisis can be likened to financial if governments can be likened to a business. Money is collected from tax payers and spent on a variety of services (MOH, 2016). Some claim that the government do not demonstrate a personal, moral, or ethical connection with the obese populations they govern (Bødker et al., 2015). In other words, the government do not care if we as a population are obese or not, they care about what an obese population will financially cost them at the end of every tax year. In this case, the New Zealand government class the high obesity rates as a 'crisis' because potentially there is not enough money to fund the time, staff, and resources that are, or will be, required to accommodate the obesity related healthcare needs. If the obesity rates and healthcare needs continue to grow, the money required to fund the healthcare industry will also grow, which potentially means an increase in every New Zealander's taxes, regardless if they are obese or not.

At the community level, the threat of a tax increase is present with the obesity 'crisis'. The employed members of New Zealand's communities fund the national

public health system and this funding is allocated to District Health Boards (DHB's), national services and to the running of the Ministry (MOH, 2016). This obesity 'crisis' therefore becomes financially relevant to every tax payer, regardless as to whether they are a contributor to the high obesity rates or not. Some members of the community who are not obese, yet who are contributing to the financial aid of treating the obese, are rejecting the implied consent of funding this crisis. Due to obesity socially classed as a 'personal responsibility' or an 'avoidable' health issue, the attitudes towards publicly funded obesity treatment vary and offer limited support (Lund, Sandøe, & Lassen, 2011). Consequently, with increasing amounts of funding being spent on obesity related healthcare, this leaves less for other health issues that are not curable, such as AIDS or cancer, that impact the obese and non-obese (MOH, 2018). Additionally, with more and more obesity related health issues being treated, this leaves less available doctor's appointments, longer waiting lists, less hospital resources and less availability of funding for research. These all have a direct impact those who 'choose' not to be obese yet are paying for the obese population's health care.

At the individual level the obesity 'crisis' impacts the obese individual in many ways. There are the physiological and psychological effects of obesity that deteriorate an individual's health, as addressed earlier, such as depression and diabetes (Abilés et al., 2010; Nigatu et al., 2016; Zhao et al., 2009). However, there are also additional financial burdens that an individual with obesity must deal with whereby prices of goods and services are higher for them (Byrd, 2004). For example, clothes can be more expensive due to more material used (The Guardian, 2018) and some airlines charge more for obese passengers, such as Samoa Air (BBC, 2016).

Not only does the physical and mental health deteriorate, the obese individual's social health deteriorates also. There are reports that social isolation and discrimination are a daily occurrence when living with obesity (Carr & Friedman, 2005; Lewis et al., 2011; Magallares et al., 2016). Additionally, since obesity was declared a 'crisis' by the government, the obese person has been victimised and personally blamed for their weight status as being too 'lazy' to maintain a socially acceptable weight (Brewis, 2010). Whilst obese individuals can also be blamed for contributing to the high obesity rates (and therefore the obesity health 'crisis') some researchers argue that the individual cannot be solely to blame, as there are a number of other potential factors that influence obesity such as genetic and socioeconomic status factors (Hruby & Hu, 2015).

Arguments for the food industry being responsible for the individual's obesity have also been addressed with some arguing that the unnatural food additives cause an increase in fast food consumption (Cordo, 2011; Mello, Rimm, & Studdert, 2003). These studies shift the blame away from the individual and position the obese individual as the victim. Whilst these are interesting debates, the obesity health issue has been concluded to be a complex and multi-levelled health issue (Hruby & Hu, 2015; WHO, 2018) which this research aligns itself with. No health issue can be viewed in isolation, and a comprehensive understanding is needed of obesity and weight loss if it is going to be possible to remove the term 'crisis' from this health context. However, comparing the individual level with the community and government levels in the preceding paragraphs, it seems that it is the obese individual who is impacted the most by this obesity health 'crisis' in multiple contexts.

With obesity currently regarded as a 'crisis' many questions surround why and how society got to this point. There are several suggested explanations, or blame, as to why the obesity rates have increased to a 'crisis' level. The major contributor to obesity has been argued, understandably so, to be the energy imbalance between calorie intake and calorie expenditure (Hill, Wyatt, & Peters, 2012). On a biomedical level obesity is the result of an energy imbalance between the quantity of food energy intake and outtake. Hill et al., explain that when an individual consumes more energy from calories than they expend through movement and exercise, then the body's fat cells grow and the individual becomes overweight or obese for their height (2012). This biomedical cause for obesity is supported by the MOH (2018) and the WHO (2018). As is typical of the biomedical industry, this view operates with a very simple constructed perspective on what directly causes obesity. Whilst the energy imbalance is, in biomedical terms, demonstrated to be the most direct influencer on obesity, different researchers have indicated that there are other factors that influence the balancing of this energy equation within individuals.

Opposing arguments have been made that there are other influencers on an individual's obesity. Environmental factors, genetic factors, socioeconomic status, education, ethnicity, changes in societal lifestyle and ease of access to processed food have all been suggested to contribute to an individual's obesity (Hruby & Hu, 2015; Juul & Hemmingsson, 2015). These extra potential factors can play an influencing role on the likelihood of the energy intake and outtake equation being balanced. This

indicates that the reasons why an obesity 'crisis' level has been reached is more complex than simply over-eating and under-exercising.

Within the New Zealand context there are arguments that additional potential influences are present on individual obesity development and the increasing obesity rates. The Ministry of Social Development (MOSD) reported that there are also regional, socioeconomic and ethnic differences to the New Zealand obesity rates (2016). The MOSD report further supports the international observations by the WHO that indicates there are differences in the prevalence of obesity between high, middle and low-income countries (2018).

Despite the debates about the main cause of obesity it has been recognised in the last few years that no potential cause of obesity can be viewed in isolation, which this research argues in support of. Obesity is argued to be the result of a cumulative effect of multiple influencers on an individual's health and obesity development (WHO, 2018). Whilst the energy imbalance is a significant and direct influencer on obesity rates, Hruby and Hu summarise obesity as a complex and multileveled disease (2015). They describe obesity as the result of factors that can include some, or all, components such as behavioural, genetic, socioeconomic and environmental factors (Hruby & Hu, 2015). The WHO also support this complex view of obesity causes and further this by including psychological and social dimensions to obesity that can influence virtually all socioeconomic groups from developed and developing countries (2018). With the view that obesity is a multifaceted health issue, this could indicate that the treatment of obesity is also complex.

With obesity constructed as a health 'crisis', socially constructed as a 'choice' and constructed in biomedical terms as a 'preventable and treatable' health issue, there are treatment options available. A controlled and balanced diet with an active lifestyle not only prevents obesity, but also treats obesity (Hill et al., 2012; MOH, 2018; WHO, 2018). There are many options available for those who want to prevent or treat obesity, including commercial companies and government organisations that offer weight management programmes. Common commercial companies include Jenny Craig (2018) and Weight Watchers (2018) for example. These programmes use different systems for calculating the caloric intake and exercise expenditure of a person to assist in their weight loss and weight management goals. These commercial companies do produce

weight loss results in line with the biomedical process of controlling the energy intake and outtake of the human body (Hill et al., 2012). These weight management programmes are commonly used by individuals wanting to control their weight and have a financial cost for the participants.

For more severe obesity cases, surgical weight management options are available. These surgeries can be publicly funded by the New Zealand health system (and indirectly the community tax payers) or privately funded by individuals (MOH, 2018). In New Zealand, morbid obesity can be treated by one of three bariatric surgical procedures; Adjustable gastric banding, Sleeve gastrectomy or a Roux-en-Y Gastric Bypass (commonly known as gastric bypass) (Health Navigator, 2018). An adjustable gastric band surgery entails an adjustable band placed around the individual's upper stomach to create a small pouch for food (Health Navigator, 2018). A sleeve gastrectomy removes the outer majority of the individual's stomach which turns the stomach effectively into a long gastric tube for digestion (Health Navigator, 2018). The gastric bypass creates a small pouch of the stomach with a narrow outlet for food to pass through. An incision of the small bowel is also created and connected to the now reduced stomach outlet, which effectively reduces the absorption of nutrients in the food eaten (Health Navigator, 2018). Like any surgery, these procedures come with risks and side effects, and the decision to undergo surgery can be a long process.

Individuals with morbid obesity, who have had unsuccessful results on previous weight management programmes, can be eligible for one of the three publicly funded surgeries in New Zealand (Health Navigator, 2018). Consequently, with the rising obesity and morbid obesity rates in New Zealand, this has created an increase in the demand for these weight loss surgeries, which has therefore increased the financial pressure of generating more publicly funded bariatric surgeries. Privately, individuals can expect to pay around $25,000 NZD for a weight loss surgery alone, not including any pre or post-surgery costs (Auckland Weight Loss Surgery, n.d). However, despite the option for people to privately fund the surgery, 2016 saw an additional $10 million NZD allocated to publicly fund approximately 400 bariatric surgeries (MOH, 2018). This figure will no doubt rise given the increase in New Zealand obesity rates.

Additional to the increase in financial pressures, resource and time strains have consequently increased as well. The National Health Service (NHS) in the United

Kingdom (UK) report that bariatric surgeries require a multidisciplinary team to assist the individual through the physical, psychological and behavioural changes that come with undergoing bariatric surgery (NHS, 2017). This team attends to the individual's on-going health requirements post-surgery, such as regular blood tests, emotional and psychological support and advice along with complete physical check-ups every year (NHS, 2017). This long-term need for healthcare resources and time will also add to the increasing workload of health industry. Clough and Destremau explain that there is an expected increase in financial pressures in New Zealand (2015) similar to those seen in the UK. Additionally, they report that there will not only be costs on socio-cultural contexts, but also to environmental and economic contexts of obesity in New Zealand (Clough & Destremau, 2015) which no doubt will be played out at all ecological levels within our society.

Predictions of the future economic and health pressures from the increasing obesity rates have been made internationally. Comorbidities that arise from obesity will consequently increase along with the obesity rates. Wang, McPherson, Marsh, Gortmaker, and Brown (2011) report that by 2030 in the USA and UK alone, there will be 6-8.5 million more cases of diabetes, 5.7-7.3 million more cases of heart disease and stroke along with 492000-669000 cases of cancer (Wang et al., 2011). The financial translation of this, will be approximately £2billion per year, equivalent to $4billion NZD per year extra (Wang et al., 2011) which fuels the threat of increasing tax rates for both obese and non-obese New Zealand tax payers. The predicted rise of financial strain has sparked funding to be put into health promotion actions in a bid to prevent increasing obesity rates.

In an act to avoid this future financial, resource, and time pressures that have been predicted should the high obesity rates continue, obesity prevention programmes and health promotions have been generated. The WHO have implemented programmes such as the Childhood Obesity programme and the WHO Global Strategy on Diet, Physical Activity and Health (2018). These programmes highlight and operate with the multi-levelled understanding and approach needed to reduce obesity through action at global, regional and local levels for individuals (WHO, 2018).

In New Zealand the established obesity reduction programmes include the Childhood Obesity Plan and the Green Prescription programme for example (2018).

Obesity awareness has also been increased with access to healthy living information on government websites and in medical clinics (MOH, 2018). The Health Promotion Agency (HPA) provide free access to tools and resources about exercise and healthy eating to support individuals and communities (n.d). The HPA also contributes to the development of the physical activity policy and guidelines through developing nationally consistent messages that reflect the guidelines of the MOH (n.d). Whilst there is evidence that obesity reduction is a health concern, the health promotion and obesity interventions do not seem to have the desired effect because the New Zealand obesity rates are still high.

Due to the lack of reduction in obesity rates, research has been undertaken to understand potential barriers of weight loss experienced by obese individuals to shed some light on the issue. A study conducted by Johnson, Beeken, Croker, and Wardle (2014) investigated the public's perception around obesity as a barrier to weight loss behaviours. They found that most obese individuals in Great Britain do not identify with being obese or are simply unaware that they are classified as obese in a biomedical context (2014). The results indicated that individuals perceived their obesity differently than the categories set out by medical professionals (2014) which could indicate that the health messages being promoted to the public are being lost in translation. These biomedically 'unaware' obese individuals therefore, potentially fail to seek out obesity treatments because they construct their weight as not a health issue (Johnson et al., 2014). This could indicate that health promotion efforts are not reaching the target audience which in turn, contributes to the continuation of high rates of obesity in the population.

For those who are psychologically aware they are biomedically constructed as 'obese' and have a health problem, research has investigated the facilitators and barriers around weight loss in order to assist with reducing obesity in the future. A recent study by Metzgar, Preston, Miller, and Nickols-Richardson (2015) investigated the barriers and facilitators of weight loss in women using focus groups. Metzgar et al., found that the common facilitators to successful weight loss were nutrition education, knowledge of portion sizes, social support, accountability to others, exercise and self-motivation (2015). In contrast, the barriers to weight loss success included environmental pressures, internal factors, lack of accountability and social support, life transitions and health status changes (Metzgar et al., 2015). These findings indicate that what assists

weight loss is biomedical education around food and exercise, however what hinders weight loss are more social and psychological factors. This suggests that weight loss is more complex than just the biomedical perspective of balancing energy intake and outtake.

Metzgar et al., findings support the WHO view that obesity is a complex issue and indicate that obesity and weight loss is experienced differently by everyone (2015). This view is further supported by a New Zealand study, which found obesity intervention programmes need to be tailored to the socioeconomic status and culture of the obese individual in order to be successful (Metcalf, Scragg, Willoughby, Finau, & Tipene-Leach, 2000). It is indicated that weight loss is a complex process, with physical, social and psychological changes occurring differently between individuals. Due to the high obesity rates still existing in New Zealand, this suggests that the health promotion and intervention efforts are not tailored to the specific needs of the individual or are too generalized for successful weight loss at the individual level.

Relapses from weight loss to weight gain could also contribute to the lack of success in the health promotion programmes. The success rate of morbidly obese individuals who successfully lost significant amounts of weight and keep it off long-term was investigated by Wing and Phelan (2005). They found that the success rate for maintaining weight loss for over 1 year was almost equal to 20% (Wing & Phelan, 2005). This indicates that approximately 80% of morbidly obese individuals attempting long-term successful weight loss fail to do so, which could also be contributing the continuation of high obesity rates we see today.

Elfhag and Rössner (2005) investigated the factors associated with weight loss and weight regain also. They found that many psychological factors contribute to failed long-term weight loss including negative responses to stressors and emotions, and more passive reactions to problems faced (Elfhag & Rössner, 2005). This suggests that the failure to keep weight off could be orientated around psychological factors, which is not a focus of many commercial weight management programmes such as Jenny Craig and Weight Watchers. Furthering this Wooley and Garner (1991) investigated the effects of failed weight loss attempts and consequently found that higher frequency in failed attempts at weight loss can cause further psychological issues, which does not help the reduction of obesity or associated health issues. These failed attempts at weight loss,

and relapses from weight loss, could indicate areas that are overlooked in the obesity reduction efforts, which could contribute to the continuation of high obesity rates we see today.

Due to the approximately 80% of failed attempts to lose significant amounts of weight and keep it off long-term (Wing & Phelan, 2005), researchers have attempted to investigate what happens when significant weight is lost by an individual. However, there is limited research on those individuals who are successful on losing a significant amount of weight (commonly constructed in biomedical terms as over 10% of body weight) and keeping it off long-term (>1 year). It must be noted that 'significant' is a constructed term and there are different arguments for what measurement is classed as 'significant' weight loss, ranging from 5% to 20% or more (Mitchell, Furniss, Helmkamp, & Van Pelt, 2017; Williamson, Bray, & Ryan, 2015; Wing & Phelan, 2005). In this research, 10% of body weight is classified as significant on the basis of the BMI chart that is endorsed by the MOH and WHO (2018). With over 10% of body weight loss, the individuals go from a morbidly obese (or above) categorisation to a normal weight categorisation. This small population of successful significant weight loss individuals have not only improved their personal quality of life, but also effectively assisted in reducing obesity rates that form this 'crisis'.

From the physiological aspect, those who have achieved significant weight loss have also achieved positive physical outcomes. These positive outcomes include lower risk of cardiovascular diseases, diabetes, stroke, reproductive abnormalities and some cancers (MOH, 2018). In contrast, negative consequences were also found to be a side effect of significant weight loss including reports of excess amounts of skin which is left over on their body, poorer quality of life and poorer body image (Song et al., 2006). This excess skin can act as a barrier to psychosocial and physical functioning for those who have lost significant amounts of weight (Steffen et al., 2012). This issue is regularly resolved through body contouring surgery however, which removes the excess skin and allows more optimal functioning for the individual in daily life (Steffen et al., 2012). This removal of excess skin enables the individual to avoid having to carry round kilograms of sagging skin with them everywhere they go, improves psychosocial and physical functioning along with improving their quality of life.

Previous research has also demonstrated the psychological changes that occur when an individual loses a significant amount of weight. Abilés et al., investigated the psychological characteristics of morbidly obese individuals (2010). They found that when compared with normal weight categorised individuals, morbidly obese participants demonstrated higher levels of negative psychological issues such as anxiety, depression, stress, eating behaviour disorders, lower quality of life and lower levels of self-esteem (Abilés et al., 2010). This research suggests that not only are physical changes occurring during the weight loss process, but also psychological changes that are potentially not evident unless clinically measured.

Nigatu et al., (2016) research also supports the psychological changes that are present with obese individuals. Nigatu et al., focused on major depressive disorder and anxiety disorders when investigating the prevalence of psychological factors with obese individuals (2016). They found that individuals reported lower levels of quality of life the more obese they became. Additionally, reports of quality of life we even lower if the individual had depression or anxiety health issues as well (Nigatu et al., 2016). This research indicates that psychological factors are part of the weight gain and weight loss experience with individuals at any severity of obesity.

A study by Wallace, Myles, Holt, and Van-Tam (2015) supports the view that psychological health changes with obesity status. They reported that psychological distress decreased below the clinical threshold when weight loss increased among their morbidly obese clients (2015). These findings demonstrate that obesity related psychological comorbidities can be avoided with weight loss and an active lifestyle. Fontaine et al., also support and demonstrate that the psychological problems and health related quality of life improves when weight loss is achieved (1999). These studies offer findings that further support the stance that the MOH (2018) and WHO (2018) operate with today where the reduction of psychological problems is possible with weight loss or weight management. Whilst the physical changes that occur during weight loss are important, these findings ultimately suggest that the psychological changes are just as important, if not more, to reducing obesity rates. Whilst these psychological changes are demonstrated to be present in the weight loss process, they are less visible than the physiological changes of obesity. These studies indicate that psychological changes should not be overlooked as they make up the very complexities of obesity and indicate possible avenues to treating and preventing obesity in the future.

Another aspect of the complex and multileveled issue that is obesity, are the social contributors to obesity. The social problems and changes that an individual deals with at different stages of obesity and weight loss is a less investigated area of the obesity health issue. Stigma attached to being obese has been researched thoroughly with the overweight and obese population and indicate that negative social interactions are experienced by obese individuals (Brewis, 2010). However, minimal research focused on the group who were previously morbidly obese which was unexpected seeing as obesity is presently at 'crisis' level in New Zealand.

In summary, the context of obesity is complex. Not only are there multiple perspectives and definitions of obesity, the construction of obesity is fluid and has changed throughout history. Presently, New Zealand has reached an obesity 'crisis' which again is a construction. This chapter has addressed the arguments of why obesity has been declared a 'crisis' and what this crisis looks like at the government, community, and individual levels, with financial and low quality of life being primary consequences. The causes of obesity have been suggested to be complex, and the treatment of obesity predicted to be equally complex and individualistic. The recent weight management programmes available, and the biomedical perspective of weight loss as an energy balancing equation and behaviour are argued to be not effective. There are suggestions that the psychological and social aspects of weight loss are undervalued despite evidence of their presence within obese individuals. To move out of this obesity crisis, investigation is required to understand how the weight loss journey for morbidly obese individuals is experienced. With this necessary understanding obesity rates could be enabled to decrease. Consequently, this will give individuals an improved quality of life, community members a chance to avoid a tax increase and the government the ability to accommodate for obesity healthcare sought after in the future. This research now turns to consider the body of literature available with regards to the morbidly obese weight loss experience.

Chapter 2: A Focus on Morbid Obesity

This chapter addresses the current literature that surrounds the experience of the significant weight loss journey. With the understanding of the context of obesity from the preceding chapter, the social and psychological aspects of weight loss are investigated and reviewed. The majority of the current literature focuses on the obese individual and there is limited literature that focuses solely on the morbidly obese individual. In this chapter the social and psychological aspects, including identity change, social treatment, stigma and addressing the experience of morbid obesity within new social contexts are examined.

Identity change within social contexts has been demonstrated to occur in many weight loss stories. Identity in social psychology refers to the social category that one identifies with, or the groups one belongs to. These social groups can include age, gender, ethnicity, as well as identifying as a dog person or a cat person. In the 1970's, Henri Tajfel created the Social Identity Theory which operates with the notion that all individuals are motivated to achieve and maintain a positive self-concept which comes from their identity sources (Rodriguez, 2013; Tajfel, 1974). Tajfel's theory explains that an individual's identity is developed through social categorisation, whereby an individual is socially categorised into a certain group and out of another. In the obesity context, an individual's identity is categorised into 'unhealthy' group if they are physically overweight, obese, morbidly obese or above and therefore out of the 'normal' weight (non-obese) category. According to Tajfel's theory, the demarcation of social categories contributes to the comparisons made between each group socially (Rodriguez, 2013; Tajfel, 1974).

Tajfel explains that the aim of comparisons between groups is to determine that the social category a person identifies with is socially superior to other groups (Rodriguez, 2013; Tajfel, 1974). When the group an individual belongs to is classed as socially inferior, then the self-image of the individual gains negative distinctiveness (Rodriguez, 2013). In other words, the inferior identity acquires social discrimination and stigma. In the obesity context, the normal weight group is socially classified as superior with the overweight, obese, morbidly obese and above group classified as inferior. Whilst remembering that 'inferior' and 'superior' concepts are socially constructed and are different for everyone, according to Tajfel's theory an individual is

motivated to enter a superior group that they personally see as superior (Rodriguez, 2013). Therefore, those categorised in the inferior obese (or above) group become motivated to identify with the non-obese group to improve their self-concept. This identity change is actioned by the obese individuals by losing significant amounts of body weight to then be categorised in a normal weight 'superior' social category and thus improve their self-concept.

This change from a morbidly obese to a normal weight social category is described in Tajfel's theory as 'exiting'. This is when a person exits, or leaves, one group's social categorisation for another (usually superior) group (Rodriguez, 2013). In an obesity context, an individual who is classed as morbidly obese is required to lose weight to the point where they are physically classified as a normal weight. Only when they have successfully reached a biomedical definition of a 'normal' weight can they successfully identify with a 'superior' social group.

Previous research has demonstrated this identity change in weight loss along with the coincidental struggles. Carr and Jaffe found that obesity status can impact an individual's identity (2012). They found that individuals who have been persistently obese for the majority of their life include the 'obese' social category as part of their identity. In contrast, they found that individuals whose weight has fluctuated, increased, or decreased in their life struggle between two different identity and social categories (2012). Additionally, their findings indicate that there is a psychological conflict between the weight category the participants physically are, and the weight category they believe exemplifies who they are (Carr & Jaffe, 2012). These findings demonstrate that identity change can be complicated but is constructed to occur with weight loss. Likewise, identity change can be fluid if weight is not maintained at a constant state throughout the life of an individual.

Epiphaniou and Ogden (2010) support and demonstrate identity change and exiting described in Tajfel's theory. They investigated the self-identity of individuals who had successfully maintained a weight loss of over 10% (2010). Their research found that there is a social category identification shift from a restricted obese identity, to a liberated normal weight identity (2010). Within this research individuals were found to have effectively reinvented their identity through significant weight loss and exited the obese social category successfully (2010). Due to the change in identity and

social categorisation, these individuals were liberated from their inferior obese identity, along with the stigma attached to their obese identity. These individuals were now, effectively free from the restrictions that came with an obese identity, physically and socially (2010).

A study by New Zealand researchers Young and Burrows (2013) also support the presence of identity change. Using video blogs of two North American women on their significant weight loss journey, Young and Burrows discursively analysed the narratives which described a change in identity that these two women were going through (2013). This research indicated that the women's self-concept and identity changed with the more weight they lost (Young & Burrows, 2013). The researchers explained this change of identity as demarcation between the participant's morbidly obese and normal weight identities. Young and Burrows' research demonstrated Tajfel's theory of identity exiting through their analysis of their participants stories. They described the identity exit as going from an 'old' fat self-concept, to a 'new' thin self-concept in their study.

A study conducted in Brazil also supports the identity change theory that occurs with significant weight loss. Magdaleno, Chaim, and Turato (2010) found that women were motivated to lose weight for the possibility to socially 'reinsert' themselves into their societies or desired 'superior' social groups. These researchers also found that some women wanted to reinvent their identity, effectively exiting one social category (of obese) and entering a (normal weight) superior social category (2010). These findings also support the identity change and exit aspects of the social identity theory described by Tajfel (1974) along with improving their self-concept. Collectively, these studies indicate that an identity change can occur when weight loss is successful. These findings suggest that identity is not only a constructed concept, but also fluid, and can change through time and weight loss. Identity is different for everyone and the social categorisation one enters, or exits, is also constructed.

There are arguments, however, that those who do theoretically exit the obese identity still face residual stigma of their old obese identity, even when currently a normal weight. Stigma has been pinpointed as a heavy influencer on the self-concept of an individual and is a large part of exiting identities (Goffman, 2009). This is no different in an obesity context. Examples of successful significant weight loss in

individuals has demonstrated that there is more conflict experienced by these people when entering a new identity or social categorisation group than solely losing weight.

Social stigma has been demonstrated to be a significant part of obesity and weight loss. Whilst stigma is also a constructed concept, it is commonly defined as a mark of disgrace attributed to an individual with reference to a circumstance, person, or quality (Stigma, 2018). Goffman defined stigma as an attribute given to someone's identity that causes the receiver to be discredited, devalued, dismissed or made inferior in some way (2009). The society one lives in establishes the means of categorising a person and defines what attributes are classed as 'normal' or 'abnormal' along with which 'norms' are socially unacceptable (Goffman, 2009). In other words, stigma causes a person to be socially viewed as an abnormal, different, or tainted person, when compared with a 'normal' person who fits into the societal 'ideal'.

Obesity stigma is evident throughout the different weight categorisations. Some of the negative stigma experienced by obese individuals include being categorised and attributed with qualities such as lazy, sloppy, weak willed, non-compliant and ugly (Brewis, 2010). These stigmas can impact the obese individual's identity in negative and positive social contexts. For example, one attribute that an individual has could be viewed as positive by one social group, and negative by a different social group. This attributed stigma can positively or negatively impact the individual's self-concept.

In the context of obesity, stigma is visible through obese individual's social interactions. Highlighting some of the severity of pervasive stigma experienced by obese individuals is research conducted in the United States by Carr and Friedman (2005). They found that obese individuals do not experience stigma in isolation and are subjected to day-to-day interpersonal discrimination and institutional discrimination (2005). Additionally, the more obese an individual becomes, the more stigma is perceived to be experienced including employment and environment discrimination as well as lower levels of personal self-acceptance when compared with non-obese individuals (Carr & Friedman, 2005). Supporting the view that obesity stigma is pervasive is a study by Lewis et al., (2011). They indicated that there are many types of obesity related stigma experienced including direct, indirect and environmental stigma. Stigma attached to obesity can cause more harm to the obese individual as suggested by these studies and does not help with efforts to reduce obesity in society.

In some cases, stigma has been viewed as a motivator for weight loss. It has been thought that if someone was subjected to obesity stigma on a daily basis, this could motivate them to lose weight, in order not to deal with the stigma any longer. There is a common perception that weight stigma is justifiable as obesity is viewed as a personally controllable attribute (Puhl & Heuer, 2010). Due to the socially accepted and justifiable nature of obesity stigma, obese individuals are expected to cope with the stigma they receive because they are socially constructed to have the control over whether to be obese or not. This coping aspect of experienced stigma in relation to obesity was examined by Puhl and Brownell (2003). They found that individuals either accept or reject obesity stigma aimed at them for their physical appearance. By rejecting obesity stigma, individuals are motivated to lose weight and improve their self-concept and social categorisation. Magdeleno et al., (2010) and Puhl and Brownell (2003) both demonstrate this motivational aspect of stigma through the enabling possibility that the individual could be socially accepted back into their societal norms and groups.

In contrast, recent research has opposed the view that stigma is a motivator for weight loss and highlight possible negative consequences. Stigma has been constructed to effectively act as a barrier for weight loss. Carr and Friedman (2005) found that there are negative implications of stigmatised obese identities whereby the individual's overall quality of life is lower when compared to non-obese individuals. Stigma was also demonstrated to have psychological and physical consequences on obese individuals (Brewis, 2010). Brewis demonstrated that stigma can act as barrier to weight loss by threatening obesity intervention efforts (2010). Furthering this, Lewis et al., (2011) argued that the combination of multiple forms of stigma reduced the obese individual's participation in health promoting activities. Effectively, stigma can act as a perpetuator of obesity in some cases by lowering self-esteem to the point where an individual is not motivated for a better quality of life. Stigma can influence obesity by increasing the likelihood of overeating behaviours, avoidance of exercise and reduce motivation to lose weight or control weight in an obese individual's life (Puhl & Heuer, 2009; Vartanian & Shaprow, 2008). Potentially, stigma perceived and received by obese individuals could be a contributor to the already high, and still rising, obesity levels seen across the world and within New Zealand.

In cases where an individual is successful in overcoming stigma and losing weight, they are, unfortunately, at risk of facing residual stigma. Residual stigma has

been found to be associated with an individual's identity even after they have exited an old identity and entered a new identity successfully (Mattingly, Stambush, & Hill, 2009). This can be seen with individuals who exit an inferior obese social category and enter a normal weight social category. A study by Mattingly et al., (2009) revealed that residual and lingering stigma is experienced for those who are classed as ex-obese, whereby some individuals continue to experience negative attributions associated with their old obese identity despite having lost weight. Furthering this, they found that women experience residual stigma more than men and the weight loss method used by individuals additionally attracts stigma for the ex-obese (2009). Supporting the view of residual stigma are findings by Latner, Ebneter, and O'brien (2012) which indicate that residual stigma is experienced by individuals who were previously obese, regardless of their weight loss method. These studies indicate that other people knowing that an individual was previously obese, creates negative attributes on the ex-obese person's new identity. This suggests that once a person has succeeded at losing a significant amount of weight, they can still be subjected to obesity stigma that can discredit their new identity.

Levy and Pilver (2012) examined whether this residual stigma caused psychological distress for ex-obese individuals. Their findings suggest that ex-obese individuals are more susceptible to anxiety disorders, depression disorders and suicide attempts than the normal weight group that they now belong to (2012). The research by Levy and Pilver supports the residual stigma experienced by ex-obese individuals, even after having made a socially 'valued' transition from an inferior obese identity to a superior normal weight identity. Whilst 'stigma' is a constructed term and is perceived differently by different individuals, it can still be harmful. Residual stigma can be just as psychologically harmful to an ex-obese individual as it is to an obese individual.

Although an identity change has been demonstrated to be possible, identity exits are not easy or clear cut (Levy & Pilver, 2012; Tucci, Boyland, Halford, & Harrold, 2013). Granberg (2011) further contributes to the complexities of identity exiting through residual trauma arguing that losing weight does not automatically mean that the obese individual has exited the obese identity, nor exited from the obesity stigma attached to it (2011). Granberg distinguishes a difference between identity exiting and stigma exiting when losing weight by rejecting the notion that stigma and identity are the actions required to successfully exit one identity and enter another (2011). In order

to exit obesity stigma and be fully accepted into a superior social group, it is not as simple as just losing enough weight to be classed, in biomedical terms, as a 'normal' weight. Granberg explains that a successful identity change requires changes not only in the responses of significant others in the social contexts that are required, but also needs a psychological shift in the way that ex-obese individuals view themselves and evolve their self-concept (2011). This complex process of identity change and stigma change experienced through significant weight loss contribute to the idea that exiting an identity is not simple and relies not only on the individual, but the social environments they operate within as well. This shows that the weight loss journey does not start and end with a number on a set of scales (Levy & Pilver, 2012) but can continue post-weight loss (Tucci et al., 2013).

A study by Tucci et al., (2013) highlighted the complex stigma attached to an ex-obese identity. They found that when people have the knowledge of someone being ex-obese, the ex-obese individual is subjected to further stigma. Tucci et al. demonstrated that the knowledge of another individual's weight history has an impact on the social evaluation of them (2013) with gender and BMI also being contributing factors to this evaluation. These findings suggest that despite having lost weight and exited an obese identity, the individual is still subjected to obesity related stigma from other people. These ex-obese individuals have indicated the new stigma they face and how they must defend, or justify, why they became obese in the first place (Throsby, 2007). Despite these individuals being part of the small group that successfully lose significant amounts of weight (Wing & Phelan, 2005) they are still facing obesity related stigma. Consequently, due to these ex-obese individuals having to socially deal with the threat of residual stigma in new social environments, they also must deal with issues around disclosing their ex-obese identity.

Disclosing an old inferior identity can create social vulnerabilities for an individual by exposing them to further stigma associated with their previous identity. In the obesity context, an ex-obese individual revealing their old obese identity can generate stigma similarly experienced by a currently obese identity. This disclosing experience can be likened to 'coming out' and admitting to others in social contexts, that one used to hold an inferior obese identity. Similar to other socially inferior identities, such as ex-alcoholics and ex-drug addicts, disclosing to new social environments comes with a social risk of stigma (Romo, Dinsmore, & Watterson,

2016). Individuals with ex-socially inferior identities, conceal this old identity in order to socially 'blend in' and minimise any stigma received (Romo et al., 2016). By disclosing their previously obese identity, ex-obese individuals are judged on how they let themselves become obese in the first place. This is because the attributes associated with obesity, such as laziness, sloppiness and ugliness can linger (Brewis, 2010) on their now normal weight identity, despite all their efforts to exit the obese identity.

There have been limited studies investigating the issues surrounding disclosing an ex-obese identity. Fardouly and Vartanian (2012) demonstrated that there is a weight bias present with the knowledge that an individual has lost weight, or previously held an inferior obese social identity. Furthering this, the weight loss method was a factor in this bias and discrimination (Fardouly & Vartanian, 2012) indicating the complexities around weight loss, obesity and associated stigma. Not only do these obese individuals have to lose significant amounts of weight, they also must navigate through new forms of identity stigma (such as weight loss method) to 'fit in' with their respective social contexts.

Mattingly et al., (2009) also found that the weight loss method generated a risk of further stigma when disclosing this to new social environments. Supporting the findings by Fardouly and Vartanian (2012), Mattingly et al. discovered that individuals who used surgery as a weight loss method were perceived more negatively than those who lost weight the 'old-fashioned' way, through diet and exercise. However, Mattingly et al., (2009) also found that gender influenced the stigma as well, with females being perceived as more responsible for their weight status than the control group. Additionally, Tucci et al., (2013) demonstrated there were gender differences associated with stigma around obesity. They found that when disclosing a female's prior obese identity, this would generate negative judgements and evaluations from other females, but not males. These studies illustrate that the disclosure of an ex-obese identity is somewhat of a mine field and that no two social contexts are the same. Ex-obese individuals have the privacy option to conceal their old identity, similar to those of ex-alcoholics or ex-drug addicts. Weight loss enables an individual to hide an old obese identity, and ex-obese individuals must now determine whether or not to disclose their previous identity.

Despite the long list of associated stigmas with obesity and ex-obese identity, there is minimal research available regarding disclosure from the perspective of the ex-obese individual, let alone the ex-morbidly obese individual. Through a literature search, a study by Romo (2016) was found to focus on ex-obese individuals negotiating the disclosure of their previous identity. This disclosure study was conducted as an extension of the study by Latner et al., (2012) which called for more research to be conducted from the perspective of the successful ex-obese individual, as little is known about their experience. Romo (2016) also supports and highlights the change in identity when significant weight loss occurs, along with the residual stigma experienced. This study investigated what motivates an individual to disclose or conceal their previous identity and in which social contexts this behaviour would occur. Romo found that individuals decided to disclose or conceal their former identity based on an assessment of the social risk versus benefits (2016). Ex-obese individuals were found to disclose their ex-obese identity to others to inspire others, to build relationships with others, or to hold themselves accountable. In contrast, it was found that individuals concealed their ex-obese identity to avoid coming across as boastful and to protect their 'thin' identity (Romo, 2016). In general, this study found that these individuals were not put off disclosing their ex-obese identity in the face of residual stigma (2016). This study used qualitative methods and, as such, the results cannot be generalised. Therefore, this research also indicates support for the notion that each significant weight loss experience is highly individualised (Metcalf et al., 2000; Thomas et al., 2008) and the post-weight loss experience can bring further issues.

The only New Zealand specific study found through a literature search was by Sheridan (2014). Sheridan explored the stories of nine women who had successfully lost over 25% of their body mass and kept it off for over five years. As approximately 80% of significant weight loss efforts fail long-term (Wing & Phelan, 2005) Sheridan highlights the importance of 'successful slimmer's', which is the 'ultimate dream' of those with morbid obesity and above (2014). Sheridan's research focused on the everyday experience of these nine women and the life events concurrently happening at different weight points using their individual life timelines. Whilst this research agrees with Sheridan's point on focusing on the 'successful slimmer' to assist with obesity healthcare (2014) this research concentrates on the weight loss journey through identity

change and social experience, rather than the specific life events relevant to each participant.

Research Rationale and Objectives

This study aims to build on the current knowledge about the experience of significant weight loss from the individual's perspective. With the number of obesity cases rising, there is an urgent and desperate need to look at how obesity can be effectively treated. While the current literature acknowledges that a direct physiological influencer of treating obesity is a balance of energy in and out of the human body, much of the recent literature argues for the significance of psychological, social and cultural aspects to be addressed as well.

Current literature fails to comprehensively understand the ex-morbidly obese individual's perspective of their successful weight loss journey, which this research argues is vital in the aim to reduce obesity rates in New Zealand. If obesity rates are to effectively reduce, which has been called upon for quite some time now, concentration must be on the success stories. The numerous studies that focus investigations on what doesn't work is in sharp contrast to the lack of understanding on what does work.

The rationale behind this research is to investigate the lived experience of successful weight loss that will shed light on areas that are important and significant to the individual. The findings could potentially assist with providing effective health promotion and obesity related healthcare. Consequently, this will assist with efforts to reduce obesity rates and disassociate the term 'crisis' with obesity in New Zealand.

The current published literature lacks focal points that this study aims to fill. There is scarce New Zealand population specific research that has been done in this field, even though we have the third highest obesity rate per population in the world (Health Navigator, 2018). There is a lack of literature surrounding the understanding of the change in identity, disclosure negotiation and social experience changes of the ex-morbidly obese population in which this study aims to contribute to.

Additionally, this research aims to further knowledge about the lived experience of successful long-term significant weight loss in the New Zealand context. Whilst Sheridan (2014) touched on this subject, her focus was on weight loss ranging between 23 kilograms to 62 kilograms. This research aims to focus on women with larger weight

loss starting at 30 kilograms. The intention of this research is to contribute findings to assist in the formation of effective weight management programmes, health promotion efforts and obesity related healthcare which are needed for this specific morbidly obese population in order to reduce obesity rates.

There are two aims of this research, both of which are relevant to reducing the obesity rates in New Zealand and understanding the lived experience of successful significant weight loss. The first aim is to build upon current literature that surrounds identity changes, social experiences and disclosure negotiation that ex-morbidly obese individuals experience. The purpose is to build upon the findings from the current literature outlined in this chapter and investigate whether these aspects are relevant to the New Zealand population.

The second aim focuses on identifying discursive strategies that participants offer pertaining to their success at significant weight loss. Whilst a limited amount of previous research has demonstrated that social and psychological factors are influential on the weight loss journey (e.g., Abilés et al., 2010; Carr & Friedman, 2005; Nigatu et al., 2016; Zhao et al., 2009) this study aims to identify how participants discursively construct their success at long-term significant weight loss. Potentially, these findings could assist in understanding what the successful weight loss journey entails and, in turn, could assist current efforts at obesity reduction by way of an increase of successful weight loss attempts.

Due to the ineffectiveness of the current health promotion and obesity healthcare in New Zealand, as seen through the high obesity rates, a new tactic is called for. In order to generate an effective new tactic, an understanding of what is important to the individual going through significant weight loss is warranted. For aim one, this research expects to find support for the previous literature surrounding the identity changes, obesity related social experiences and disclosure issues, as the New Zealand culture shares similarities with the cultures in these previous studies, such as the UK and USA (Carr & Jaffe, 2012; Epiphaniou & Ogden, 2010; Young & Burrows, 2013). For aim two, this research expects to find discourse that could assist in understanding the success aspects of the significant weight loss experience. Whilst open to findings for this second aim it is expected that, due to the unique nature of weight loss, the findings could be significantly varied.

The main objective of this research is to investigate the experience of significant long-term weight loss success from the perspective of the individual. Through this understanding, obesity healthcare can be improved, creating a reduction in the high obesity rates in New Zealand. This can be achieved by comparing other low rates of successful achievements. For example, if you wanted to be a billionaire, you would not speak with, or learn from, the thousands of people who failed to make a billion dollars. You would talk to the one person who succeeded in making a billion dollars. Again, if you wanted to be the fastest runner in the world, you would not speak with, or learn from, the thousands of people who did not make it to Olympics. You would speak with, and learn from, the gold medallist because they succeeded. The same can be said in the context of obesity. If we want to reduce obesity rates, we need to speak with, and learn from, those who have succeeded in losing significant amounts of weight long-term. Through this knowledge the significant weight loss journey can be understood more comprehensively, and healthcare can be more effective at reducing obesity.

Chapter 3: Methodology

In this chapter, the details of the research process will be outlined. Firstly, my presence and assumptions as the researcher will be outlined. Following this, the epistemological foundation that this research is based upon will be explained. Next, Social Identity Theory, Stigma Theory and critical discourse analysis that this research uses will be addressed. Lastly, the methods used will be explained including the research design, recruitment of participants, information and consent, general procedure, analysis and ethical considerations.

My Perspective as the Researcher

As the researcher, the assumptions and lived experiences that I have are important to acknowledge as this can impact how analysis is conducted (Burr, 2003). Critically addressing the cultural contexts that I belong to is vital to understand the findings at the conclusion of this research. This data is analysed from my perspective, which could differ from another researcher who might attempt the same study. Noting this, I am a 29-year-old female from New Zealand and British descent. At the age of seven, my family settled in to New Zealand where we have since stayed. At 15 years old, I was classified in biomedical terms as morbidly obese with a BMI of 42. During this stage I was at a high risk for developing obesity related comorbidities and had a poor quality of life.

I began my weight loss journey at 15 years old and lost 20 kilograms within 6 months. At this point I 'fell off the wagon' and regained more than my original weight of 140 kilograms. At the age of 16, I re-started my weight loss journey. I have successfully lost 52 kilograms since my second significant weight loss attempt and have successfully kept the weight off long-term.

My lived experience of morbid obesity and my personal significant weight loss journey is beneficial for this research. Due to these experiences I am able to understand aspects of the discourses used by participants, where potentially, other researchers without this experience could not. Additionally, I have also lived through the experience of long-term significant weight loss within the New Zealand female culture. This cultural experience enables me, as a researcher, to be able to analyse the discourse from the relative perspective of the participants in this study.

My educational background is also beneficial for this research. My qualifications and academic focus are within Critical Health Psychology, which enables me to be qualified and experienced to effectively analyse the data within the participants' narratives. With this professional knowledge I am able to critically analyse the data objectively, whilst also acknowledging the potential for my own perspectives to have influence on the results. I do acknowledge that my personal weight loss experience could be very different to those in this study. However, my personal lived experiences, coupled with my academic qualifications, enable me to be suited to analyse the discourse from this research effectively and from the participant's perspective to a large extent.

Social Constructionism

The epistemological foundation this research is based upon is Social Constructionism which is rooted in both psychological and sociological theory (Allen, 2017). Social constructionism operates with the perspective that all knowledge and phenomena is constructed through the social interactions between people and that reality is different for everyone (Burr, 2003). It is believed, from this perspective, that through social interaction, the world and everything in it is constructed to have meaning. Unlike the positivism and empiricism perspectives, social constructionism does not operate with the view that knowledge of the world can be understood through observation. Instead, social constructionism operates with the cautious view that one person's reality and knowledge might not be the same for another person (Burr, 2003). Furthering this, social constructionism argues that the ways in which people socially interact daily is the basis for shared versions of knowledge via shared constructions of concepts (Burr, 2003).

A key caution to understand within this social constructionist perspective, however, is that all constructed knowledge of the world along with the categories and concepts that are used are culturally and historically specific and must be understood from within that specific context (Burr, 2003). The contexts that each individual operates within are tied in with the society they live in and are never defined as random (Burr, 2003). With that noted, the lived experience of long-term significant weight loss is based upon the perspective of each participant and influenced by their own culture and past experiences. For this research, no participants' weight loss experience will be

the same. Each participant's experience will be constructed in the historical and cultural contexts that are relevant to each of them.

Social constructionists are primarily concerned with how knowledge is constructed through social interactions therefore making language a primary focus (Burr, 2003; O'Leary, 2007). Language is the medium in which knowledge is shared and constructed between people and groups. Language, commonly referred to as discourse, can be generated through different texts such as written, spoken and picture texts. Unlike the positivist or empiricist perspectives, social constructionism believes that by viewing phenomena as social constructs, and not biological realities, permits them to change through time to reflect the current social realities within historical and cultural contexts (Burr, 2003; O'Leary, 2007).

Language within the social constructionist perspective is performative and is action-orientated (Burr, 2003). Language has the power to 'do' things in other words. Language enables shared constructions and knowledge giving people the ability to make a shared sense of their world (Burr, 2003). Language can create meaning in physical objects, give a phenomenon a shared identification, or can negotiate social identities within social interactions. Critical evaluation of texts from a social constructionist perspective include analysing and understanding what the text is being used for and what it is trying to achieve (Burr, 2003). For example, language could be used in a way to defend, attack, convince, legitimize, or dismiss aspects of social phenomena or social identities, whilst being relevant to the cultural and historical context it applies within. In the context of this research, the language being used by each participant reflects their experience and acts to inform or persuade the researcher of their weight loss perspective and experience.

Language is used to construct and position one's identity as well as the identity of others in social interactions (Burr, 2003). In this sense, language can be used to construct, accept, reject or negotiate social identities. Discursive psychology is primarily concerned with how individuals use language and how individuals position their identity within their social interactions (Burr, 2003). In relation to this research, the identities of these ex-morbidly obese women can be negotiated through their choice of language within the interview. Their language use is crucial for understanding the perspective of each participants' weight loss journey. Through their choice of language,

each participant has the power to construct their own identity for the researcher, giving them agency in the social identity they position themselves in.

From the social constructionist perspective, the term ‘obese’ is constructed and therefore classified as a shared construction of human knowledge. This ‘obese’ term is not the same definition or reality for everyone. Remembering that discourse is subject to the current society it is constructed within, obesity related discourse has changed through time and will continue to change. At the time of this research (2018) within New Zealand culture, the term ‘obese’ has acquired meaning through the discourses used within social interactions. ‘Obese’ is drawn upon as knowledge of a shared ‘definition’ for someone who has excess amounts of body fat. It is these discursive constructs that are used to position an obese person into an inferior identity, due to the negative stigma surrounding the social construct of ‘obese’ (Brewis, 2010). Being positioned in an inferior identity can, through discourse and social interactions, be accepted or rejected by the obese individual. In this research discourse, therefore, can be used to position others, position oneself or negotiate one’s own ‘obese’ identity. Discourse is analysed with the aim of understanding how certain language is purposefully used to represent events or how identities are being achieved by the individual using the discourse (Burr, 2003) and is therefore, suitable for this research project.

It is important to note that the social constructionist perspective differs from mainstream psychology. A key difference is that social constructionism takes a more critical perspective and argues that a more cautious and suspicious stance should be adopted towards any and all ‘truth’ claims (Burr, 2003). This critical viewpoint is also relevant to a researcher’s own reality or truth. Any findings that come from research need to be interpreted within the context of the researcher’s own life experience. This is important to recognise because without analysing in a critical way, the research could potentially be conducted in a way that disadvantages or misrepresents certain groups or individuals (Burr, 2003). Taking my own life experience and cultural contexts I belong too into account when concluding the findings is a crucial part of the social constructionist perspective. I have advised the reader of my awareness of my own experiences and understood that these findings are based not only within the social constructionist perspective, but also the historical and cultural contexts of my experiences, as well as within the social and historical contexts that are present in this

time (2018) in New Zealand. The findings could have been different ten years ago and could be different in another ten years.

Theoretical Lens

The two theoretical lenses used to guide this research are Social Identity Theory (Tajfel, 1974) and Social Stigma Theory (Goffman, 2009). These two theoretical lenses were used to guide the analysis of aim one in this research, whereby the identity changes, social experience changes and issues of disclosure are all addressed.

The first theoretical lens this research uses as a guide for analysis is Henri Tajfel's Social Identity Theory (1974). Further adaptations to this theory address how individuals are categorised into a particular social identity, how individuals reject or accept their social identity, intergroup conflict as well as what motivates an individual to exit inferior identities (Tajfel, 1974; Tajfel & Turner, 1979). Keeping in mind that theories are constructed phenomena, Tajfel's theory is used as a guide only for this research. For the first aim of this research, identity change is investigated within the social and cultural aspects of New Zealand. In previous studies overseas, it has been demonstrated that those who lose significant amounts of weight describe a change in identity (Carr & Jaffe, 2012; Epiphaniou & Ogden, 2010; Magdaleno et al., 2010; Young & Burrows, 2013). Using Tajfel's theory as a lens to analyse the data, discourse supporting or challenging this theoretical lens are able to be identified and analysed. Similarly to the social constructionism origins social identity theory is based within a social-psychological perspective and is an appropriate theory to use for the aims of this research.

Whilst Tajfel's social identity theory is appropriate for this study, it is important to note that there have been arguments opposing this theory since it was first introduced. Brown (2000) evaluates the theory in depth and indicated five issues with the theory that should be taken into consideration when being used in research. These include: positive-negative asymmetry in intergroup discrimination; choice of identity strategies for low-status groups; relationship between group identification and in-group bias; and the self-esteem hypothesis (Brown, 2000). Even with these aspects argued to be issues, this theory remains the most appropriate for this research. The critical view of this theory is taken into consideration during this research and the theory is only being used as a way to guide the analysis.

The second theoretical lens used for aim one is Erving Goffman's Social Stigma Theory (2009). This theory is based on his book *Stigma: Notes on the Management of Spoiled Identity* (2009) and operates with the perspective that stigma is attached to all identities. Whilst stigma attached to identities is usually negative, it has been noted to be positive in some cases (Goffman, 2009). The stigma attached to superior (in-group) or inferior (out-group) identities can cause further harm to an individual or motivate an individual to exit their identity for a more socially accepted identity (Tajfel, 1974). It is this lens that is used to guide the analysis of aim one and identify discourse surrounding the stigma experienced by the women through their weight loss journey.

For aim two there is no specific theoretical lens that is used to guide discourse identification and analysis. The analysis is conducted from a social constructionist perspective and focuses on each participant's discourse surrounding their perspective of the 'success' aspect to weight loss and what it meant to them. As there is no specific theoretical lens used, the discourse that each participant uses is important to them and enables the analysis to be open to findings. Due to weight loss being considered an individualised process, it is expected that the discourse around the construction of 'success' is different for each participant. However, this approach is best suited for this research as it enables a broader critical view to be taken. That being said, I do take into account my own experience and acknowledge that this could influence the findings.

Critical Discourse Analysis

Critical discourse analysis (CDA) is the method used to analyse the qualitative data from these interviews. CDA focuses on the discourse of social and political contexts and defines language usage as a social practice (Frey, 2018). This research focuses on the discourse of the narratives told by women who have lost significant amounts of weight, from their perspective, and includes the social changes they construct. CDA is interested in how the social relations, identity, knowledge and power are negotiated through discourse (Frey, 2018). Therefore, CDA is most appropriate for this research because the focus of this study is to investigate the social aspects of significant weight loss. This includes identity change and social relations when disclosing an ex-morbidly obese identity along with stigma influence, knowledge and power in relation to the similarities of these women's weight loss journeys in different social contexts.

CDA is concerned with subjectivity, agency and subject positions of identity (Wiggins, 2017). CDA is focused on how the discourse used resonates at the wider social levels of our society, as opposed to the detail and structure of words used by participants (Wiggins, 2017). This research is not concerned with which specific single words are used by these participants. Instead it is focused on what they are trying to say overall, which is why CDA is relevant and suitable for this study. This research focuses on understanding how discourse is used to construct social issues and identity as well as the agency one has to change their identity in these social contexts. Therefore, CDA is most appropriate to extrapolate meaning from the participant's discourse and constructions.

It is important to note, unlike quantitative research, qualitative research has no specific step- by- step process to follow (Frey, 2018). Specifically, with CDA, no standardised formula exists for analysing texts because discourse is always based within the specific historical and cultural contexts within individual societies. In addition to this, the researcher's own culture and historical context adds a perspective that has influence on the interpretation of findings. Therefore, no analyses can be repeated exactly the same by different researchers, unlike a mathematical formula, as all researchers have different lived experiences. Having noted this, all qualitative data is individual, unique and from the perspective of each participant. Whilst this means that any findings cannot be generalised, the findings are nevertheless significant to the individual and context it is based within.

Recruitment of Participants

Participants consisted of five female volunteers who met the participant eligibility criteria for this study. The criterion was; female aged between 25 and 50 years old; associate with a New Zealand Pākehā identity; have lost over 30 kilograms of weight and kept it off for minimum one year; currently a healthy weight; no diagnosed medical conditions that influenced weight gain or loss and no substance addictions. All five participants successfully met all the criterion.

Participants were recruited one of two ways. Firstly, I utilized all personal social networks and enquired if any of my personal contacts knew any potential volunteers who fit the participant criteria. This avenue secured one participant after I emailed her the information sheet and answered all of her questions. Secondly, I released on one of

two University Facebook pages an advertisement for participants needed. There were 13 respondents who contacted me for further details. All 13 respondents were emailed the information sheet and invited to ask questions. Eight of these respondents met the participant criteria appropriately, with four recruited. The four excluded were due to geographical location and lack of availability during the interview process.

The participant profiles can be seen in Table 1 below. These include the pseudo name of each participant, each participant's weight loss amount in kilograms and their weight loss method (surgical, non-surgical, commercial weight management programmes).

Table 1. *Participant Profiles*

Participant Name	Weight Loss Amount (kg)	Weight Loss Method
Mary	30	Weight Watchers
Harriet	75	Weight Loss Surgery
Gemma	105	Weight Loss Surgery
Anna	60	Nutrition / Exercise
Lucy	45	Nutrition / Exercise

Note: 'Kg' is abbreviation for kilograms weight measurement.

Three participants lived in the Auckland region and two in the Waikato region of New Zealand. All are assumed to be between the required participant age-range as none indicated otherwise. There was no date of birth collected, but all women were visibly perceived to be within this range by the researcher.

This research focused on a small homogenous sample with specific cultural, age and gender requirements. All participants associated with a New Zealand Pākehā identity. The rationale behind the exclusion for Māori volunteers who wished to participate was that their inclusion would be culturally inappropriate. I endeavoured to uphold the Treaty of Waitangi principles with this research project and ensure a culturally safe practice. As the researcher, I personally associate with a New Zealand Pākehā identity and understand this culture to appropriately ensure safe practice. I would not have been able to effectively or critically analyse the qualitative data from the Māori cultural perspective, as I personally have not lived this experience which could jeopardise the results.

Furthermore, the participants were all female. The rationale behind this is also upholding the culturally appropriate practice. I am female and can understand this culture having lived it. Additionally, males were excluded on the basis that I have not lived the experience of male social interactions and the complexities of these interactions from a male perspective. I would be unable to conduct the research in a culturally appropriate way, nor critically analyse the data from a male perspective, which would have jeopardised any findings.

The age of the participants was between 25 and 50 years old. The rationale behind this age group was that it would be culturally appropriate for the researcher to conduct. I am 29 years old and can understand the lifestyle and social interactions of this age bracket more effectively, and critically, than those who are under 25 or over 50. This is due to the significant change in lifestyle and social interactions since the introduction of technology and social media. The reliability of the results would have been threatened if this age bracket of participants was wider.

Information and Consent

Potential participants were provided with an information sheet (see Appendix A) before they agreed to volunteer. This information sheet provided them with the necessary information regarding the study and their role within it should they participate. All potential participants were invited to ask questions at any point. All participants were required to sign a consent form (see Appendix B) before the interview commenced. All participants received a $25 Prezzi card as compensation for their time in this research and all participants signed the confirmation form that they had received this compensation before the interview commenced. The information sheets and consent forms were all approved by the Massey Human Ethics Committee for use and considered appropriate and acceptable.

General Procedure

Once ethical approval was granted and the participants organised, the data collection process was held via face to face interviews between the 18th and 30th July 2018 in a private room booked at a local library near the participant. At the time of the interview, the participants were welcomed and general conversational rapport was built with each of them. The participant signed the relevant consent forms and any further questions or concerns were given the opportunity to be openly addressed. The

participant was advised that they may stop the interview at any stage with no explanation required. None of the women terminated their participation. The interviews were expected to last between 30 to 90 minutes and therefore $25NZD was deemed appropriate compensation for the time required to participate.

The interviews were audio recorded for later transcription using an Olympus Audio Device provided by Massey University. A full interview guide that was approved by the Massey Human Ethics Committee (see Appendix C) was used during each interview for consistency. The interview consisted of six semi-structured topics. The first question invited the participant to speak about their physical object they were invited to bring with them. This was used this as an ice breaker for the interview, and to give the participant the opportunity to recall, through objects, their experience. This object process has been demonstrated to be effective by Sheridan (2014) in previous studies and considered appropriate for the objectives of this research. The second question invited the participant to speak about their weight journey, from weight gain to weight loss. The third question invited the participant to speak about why they believe they became overweight, or if they feel anything triggered it. The fourth invited the participant to speak about how they were socially treated, personally or professionally, when they were morbidly obese or at their peak weight. The fifth question invited the participant to speak about how they are socially treated now that they had reached their weight loss goal. The final question invited the participant to speak about their disclosure process of their morbidly obese experience in new social contexts.

All the data that was collected during the interview process was from the participant's perspective. The participants were invited to continue to speak about their experience if they felt there was more they wanted to say. This was done by allowing each of the women time, and opportunity, to speak through confirming with them if they had anything else to say before concluding the interview. Once the last interview topic had been answered to the participant's satisfaction, the participant was thanked for their time and they left the interview room.

Data Analysis

Once all five interviews had been completed, the audio files were transcribed by the researcher using Express Scribe software. The audio files were slowed down and typed verbatim into a Microsoft Word document. There were no specific conventions

followed for this transcription. However, the data was aimed to be transcribed as authentically as possible. Included within transcription were any pauses in speech, false starts, contradictions, hesitation words (‘um’ and ‘ah’s), deleted first syllables (for example ‘instead of ‘because’ the actual phrased used was transcribed of ‘cos’ if this is how they said the words) and cut offs. These texts were then used for analysis.

Each participant’s transcripts were analysed individually. Each data set was read and re-read by the researcher for immersion of the data. Each data set was then analysed thoroughly and general ideas or points from the participant’s discourse were noted on the right-hand margin of the page. These notes became a long list of comprehensive codes lacking critical thought as they were simply regurgitating the participant’s discourse. After this, I then went back through each transcript and wrote, on the left-hand margin, a single or double word meaning for each section of transcript. This created a more analytically appropriate set of manageable codes.

The data was then re-analysed for any potential missing codes. This new list of codes was compiled together on a separate page for each participant. Each participant had long lists of codes associated with their transcripts. These codes were then edited by removing similar and redundant codes as well as double-ups. This allowed for the remaining relevant codes to be used for further analysis.

The next stage of analysis was identifying the overarching themes within the list of codes and categorising them. These categories formed the results of this research. For aim one, the data was analysed from a social constructionist perspective, with stigma and social identity change theoretical lenses used as a guide, to identify any discursive strategies used by participants. For aim two, the data was analysed from a social constructionist perspective to identify any discursive strategies used by participants that focused on the ‘success’ aspect of their weight loss journey. In this sense, the discursive constructions used by participants indicated their important aspects of their significant weight loss from their perspective. Once all the discursive strategies had been identified, they were then compared with the other four data sets to determine if there are any similarities between the narratives. These similarities surrounding the 'success' of their weight loss from each participant's perspective was combined into an overarching theme. This theme was present within all individual data sets and provide the findings of this research from the participant's perspectives. The significant findings outlined in

the next chapter are the result of this study's analysis within and across each of the participant's narratives.

Ethical Considerations

The processes involved in this research were considered in relation to the Code of Ethics for working with human participants as stated by the Human Ethics Committee at Massey University (MUHEC, 2018). The key ethical issues surrounding this research was cultural competency, residual trauma (through memory) and informed consent.

Firstly, cultural competency was a key ethical consideration for this research. In New Zealand, all research matters are to be conducted in culturally appropriate ways and uphold the Treaty of Waitangi principles (MOH, 2018; MUHEC, 2018). Taking these aspects into consideration, it was decided that for this research, these participants would need to be from the New Zealand Pākehā culture. My lived experience, as the researcher, would be culturally appropriate for these participants and ensure safe practice.

Secondly, residual trauma was a key ethical consideration in terms of not causing harm to participants. In this research participants were asked to speak about their lived experience of morbid obesity, social treatment in relation to their weight as well as their weight loss journey. From the current literature, it is understood that morbid obesity can act as a target for social mistreatment and negative stigma which can cause psychological harm (Brewis, 2014). Asking participants to speak about their experience could bring forth negative feelings and memories which, potentially, could cause the individual to emotionally relive or recount some historical trauma from their past. The psychological health of each participant was of paramount concern when undertaking this research and if psychological harm became a factor with participation, then the interview and participation would be stopped at any time by the participant or the researcher. Whilst no participant indicated psychological harm, each participant was given information on how to access counsellors should they wish to talk about their experience with a qualified professional after the interview.

Lastly, a key ethical consideration that was deliberated over was informed consent. All participants should be provided with all necessary information about the research to enable them to give informed consent (MUHEC, 2018). The information

sheet (Appendix A) provided to the participants was approved by my academic supervisor and the Massey University Code of Ethics Committee. It was concluded that the information sheet was comprehensive and enabled informed consent to be gained successfully. Any potential participants who did not have the intellectual capacity to give informed consent were not to be included in the study. There were no volunteers presenting with issues of intellectual capacity.

Chapter 4: Findings

In this chapter the findings from this research will be explained in turn. Three main findings will be identified and explained, followed by data extracts relevant to each category of discourse. Following this, each of the findings in relation to the current literature will be addressed. Firstly, for aim one, the findings related to an identity change that each participant uses in relation to their personal weight loss experience will be described. Secondly, for aim one, the findings related to the social issues of disclosing the ex-morbidly obese identities that each participant used will be described. Lastly, for aim two, the findings that orientate around 'understanding the why' that each participant positions as crucial for their long-term significant weight loss success will be addressed.

Discursively Constructing Identity Change

A personal form of identity change was found to be a significant aspect of the weight loss journey for all five participants. Each participant discursively constructed that their weight loss had led to an identity change. This research found evidence of demarcation between a participants' old morbidly obese identity and their new, normal weight identity. Social identity researchers argue that identity is a fluid concept and can change many times over an individual's life or through different experiences (Rodriguez, 2013). For the participants in this research, their constructions of an identity change are directly linked to their significant weight loss.

Whilst an identity change was constructed differently by each participant, all participants discursively demarcated their change in identity through the comparison of their personal social experiences at different weights. This research found evidence that the social experience for these individuals changes from primarily negative to primarily positive when significant weight loss occurs. Whilst negative social discrimination is experienced in different ways by people at different body weights (Brewis, 2010; Carr & Friedman, 2005; Lewis et al., 2011) all participants discursively constructed their social experience change in similar ways. All participants constructed a negative social experience with a morbidly obese weight identity and a positive social experience with a normal weight identity.

Whilst all participants had different weight loss methods and experiences, this research found evidence of an identity change across all narratives. Harriet and Lucy had similar identity and social experience changes that they discursively constructed as a direct link with their reduction in weight. Likewise, Mary and Anna discursively constructed similar identity and social experience changes in relation to their weight loss as well as furthering this identity change with their construction of motherhood. Alternatively, Gemma discursively constructed her identity and social experience change through comparing her physical functioning ability at her morbidly obese weight and normal weight identity.

Harriet and Lucy discursively constructed similar experiences of their personal identity change and social experience. Both Harriet and Lucy discursively positioned an old, and new, identity for themselves and drew upon their social experiences to demarcate these identities. For both Harriet and Lucy, their physical weight loss signified a change in their personal identity and social experience, as can be seen from the following excerpts-

> *Harriet: "Um but, That's the old life. This is new life."*
>
> *Lucy: "That's, that's like, old Lucy. And I don't wanna forget old Lucy because old Lucy made me new Lucy, if that makes sense?"*

Here, Harriet and Lucy demarcate their identities as old and new versions of themselves. Their old identities are their morbidly obese selves, and their new identities are their current normal weight selves. The discursive usage of 'old' revolves around something that is associated in the past, or a former entity (Old, 2018). In contrast, the discursive usage of 'new' orientates around a reinvigorated or transformed entity that did not exist before (New, 2018). In this context, both Harriet and Lucy use this discourse to construct their previous morbidly obese identity (old) and their current normal weight identity (new). Here, from Harriet and Lucy's perspective, it is understood that their previously morbid obese identities are discursively constructed as a discarded former version of themselves. In contrast, their new, and current, identities are discursively constructed as updated and fresh. The old and new comparisons constructed by Harriet and Lucy are directly linked to their weight.

Harriet and Lucy's discourse directly links their weight identity change to their social experience. This research found that both Harriet and Lucy discursively

constructed negative social experiences when they identified with their old morbidly obese selves. As can be seen from the following excerpts, both Harriet and Lucy demarcate their change in identity through their social experiences-

> *Harriet: "I've had cans of beer thrown at me you know [when morbidly obese]. All the names under the sun. Like I was just some, piece of shit, that had no feelings. (That) people didn't care about."*

> *Lucy: "I was actually disgusted by the way that, how, differently men treated me. Um, suddenly they were all over me. And, I got real bitter about it for a while. Um, sort of like, 'oh, you're gonna look at me now?' Yet you wouldn't have looked at me thirty kilograms ago."*

Here, Harriet and Lucy discursively construct negative social experiences with their old morbidly obese weight identity, positioning their old identities as dehumanised. Dehumanisation is a socially constructed term, commonly defined as disassociating positive human qualities to a person (Dehumanisation, 2018) which is a negative form of social treatment. Harriet positions her old identity as subjected to inhumane and abusive social experiences because of her morbidly obese weight. Additionally, Lucy discursively positions her old identity as not eligible for human affection through romantic partnerships.

Harriet and Lucy position their new normal weight identities as socially superior to their old identities through their constructions of positive social experiences. From their perspective, they are no longer subjected to the dehumanised social experiences now that they are at a current normal weight. As can be seen from the following excerpts, Harriet and Lucy speak about their normal weight identity social experiences in positive ways-

> *Harriet: "If I fall over now, several people will rush to help me. When I used to fall, 'cause I, I'm a bit clumsy anyway, um, before I fell over once and it took three people just walk past me before someone offered to help. Yeah. Um, and that, that wasn't just an isolated incident. Yeah. Um, I'm just treated like a normal person now."*

> *Lucy: "So I think that, there's a big [social] difference there as well. Um, yeah people are just, seem to include you more, and you're not as invisible [when*

compared with when morbidly obese]. Yeah, but yeah the, the male side of things. Yeah, big difference."

Here, both Harriet and Lucy discursively construct their social treatment in positive ways now they have reached a normal weight. From their perspective, they are no longer subjected to dehumanising social experiences (namely) being included in social situations (Lucy) and helped when in physical need (Harriet). Harriet speaks about her new identity in positive ways where she is happy with her new social inclusion and normal social treatment. Lucy speaks about her new identity in positive ways and constructs an eligibility of being a romantic option for male attention and included in social interactions and activities now she has lost her weight. These discursive constructions by these women indicate that they perceive their new identity as socially superior to their old identity as they are now accepted more within their society.

Mary and Anna had similar experiences with a change in identity related to their significant weight loss. In contrast with the other participants, however, Mary and Anna experienced a more complex identity change. For these two, their weight loss led to an identity change related not only to their weight loss but also to motherhood. Mary and Anna discursively constructed an identity change of moving from a morbidly obese weight to a normal weight, as well as a change to a 'good' mother identity. As can be seen in the following excerpts, Mary and Anna's weight loss added to their identity as a mother-

Mary: "I like knowing that they [her children] are learning about healthy eating."

Anna: "My kids were getting older, and I didn't want them, sort of having that mother that sounds like she's got emphysema on the side lines. You know I wanted to be involved."

Here, Mary and Anna discursively construct their new identities as 'good' mothers through their weight loss achievement. Whilst the definition of a 'good mother' is a constructed term and different for everyone, in this case, Mary and Anna directly link their motherhood identity with their weight change. Within this morbid obesity context, both participants discursively construct a 'good mother' as one who is not morbidly obese as this, for them, is not a positive role model for children. In the social context, both participants discursively positioned the identity of a 'good' mother as one who

promotes healthy lifestyles for her children. 'Health' is again a constructed term, that has different meanings within different people and cultures. However, Mary and Anna construct their version of 'health' as the government promoted biomedical definiton of 'healthy'. Mary constructs her new identity as that of a normal weight mother who leads by example by teaching her children how to live a healthy lifestyle. On this basis, Mary percieves her actions as 'good' by enabling her children to survive in the future with a good quality of life linked through nutrition and exercise. Anna constructs her new identity as one of a normal weight and a 'good' mother through the capability of being physically involved with her childrens lives and not having to subject her children to having a mother who is morbidly obese with comorbidities.

Both Mary and Anna's weight loss led to a change in their social experience along with their identity changes. Mary and Anna discursively construct negative social experiences when they each were morbidly obese, as can be seen from the following excerpts-

> *Mary: "Whereas before [when morbidly obese] I felt like people wouldn't talk to me because I was fat. Or um, kind of disregarded me."*
>
> *Anna: "If I was bigger, I was therefore less attractive. And I wouldn't get hit on……. because I was big fat and ugly."*

Here Mary and Anna discursively construct their negative social experiences through their morbidly obese weight. Mary constructs a form of social isolation when recalling her morbidly obese experience. Anna constructs a negative perspective of her morbidly obese identity as unattractive in social situations. Both these participants speak in negative ways about their morbidly obese identity and social interactions.

In contrast, both Mary and Anna discursively position their new identities in positive ways. Both participants construct positive social interactions now they have successfully reached a normal weight, as can be seen from the following excerpts-

> *Mary: "Like at school, all the mums like 'oh my gosh every time I see you you are smaller and smaller' and, um, yeah so they all know I'm on Weight Watchers and it's funny the Indians they go 'oh you're reduced!"*
>
> *Anna: "It just means you know, I can walk a long way, I can, um, do most activities. I'm not restricted in my life apart from just the standard getting older*

and health issues…yeah I mean you know, you do get cracked on [now] and things like that."

Here we can see that Mary and Anna discursively speak in positive ways about their normal weight identities through their social interactions. For Mary, she constructs positive feedback and approval from other mothers she meets when she reached her normal weight identity. For Anna, her negative construction was around not being physically active with her children which she now constructs as 'not an issue' for her within motherhood. Additionally, Anna positively constructs her normal weight identity as liberated from the physical restrictions of obesity along with recieving romantic attention. For both these women, the changes in social interactions assist with differentiating between their old and new identities.

Gemma's identity change was constructed differently than the other participants. Gemma discursively constructs a change from her morbidly obese identity to her normal weight identity through reclaiming her physical abilities. As can be seen from the following excerpt, Gemma discursively constructs an old identity as one that was physically restricted through her morbid obesity-

Gemma: "I had to start changing my life, because of my weight. So I stopped scuba diving. I couldn't walk like I wanted to, just everything started to hurt. And I'm not that middle aged that, I should have had to change. But I, I'd always said when, it started, affecting what I want to do on a daily basis then I was seriously gonna do something about it."

Here, Gemma demarcates a change in her identities through the measurement of her physical functioning. From Gemma's perspective, she discursively constructs and associates her morbidly obese identity with a loss of a quality of physical life, which she once had when she was not morbidly obese. Gemma constructs a self-imposed physical restriction of when she was morbidly obese. She compares this with the physically restricting aging process that humans do not have control over.

What it interesting to note throughout Gemma's discourse is that she consistently speaks in the first person. The other four participants change from first to third person (and back again) which indicates an interchangeable and fluid construction of their identities. Gemma is more rigid with her constructions, and positions her identity change as isolated to her physical changes. Gemma does this through her

discourse by highlighting her position of rejecting weight loss for vanity reasons and that she became a healthier version of herself through weight loss. This indicates that from Gemma's perspective she has not changed personal or social identities just a physical identity.

Interestingly, however, when comparing her social experiences at her morbidly obese weight and her normal weight, this research found that Gemma does change from speaking about her identities in first and third person, similar to the other participants. This indicates that within her social experiences, there is a demarcation of identities between her morbidly obese and normal weight lived experiences. As seen in the following except, Gemma contradicts herself when speaking about her social experience changes on two occasions-

> *Gemma: "Um you're scared, I. I was scared to eat in front of people, because, you, I'd be sitting at a café even having a coffee- god forbid if you're a fat person and you don't just drink black coffee!"*

Here, Gemma is discursively constructing her social experience when she was morbidly obese in a negative way, being fearful of being subjected to obesity stigma. Gemma corrects herself to speaking about herself in first person, when she is recalling a social interaction from when she was morbidly obese, through the discourse correction of 'you' and 'I'. Here, Gemma is discursively demarcating her identity change through her negative construction of her social experience. Gemma's discourse indicates some tension over the social changes related to her weight loss, whether she is conscious of this or not.

Additionally, within this excerpt Gemma discursively constructs and provides an example of a social expectation of a morbidly obese individual in a negative way. Similar to the other four participants, Gemma is constructing the change of social experience from negative to positive whereby she is no longer subjected to the social rules that govern morbidly obese individuals.

'Obesity etiquette' as I refer to it, is the social etiquette an obese person is expected to abide by to be socially acceptable. Etiquette is a social construction which is commonly defined as a customary code of polite behaviour in society or among members of a particular profession or group (Etiquette, 2018). The appropriate etiquette, in this case, is that if you are obese you are expected to be aware you are obese and to

be actively engaged in changing this 'socially unacceptable' way of living. In other words, obese individuals are expected to know they are obese and to be working on a weight loss solution to live a socially acceptable existence.

Gemma discursively constructs her evidence of her experience of obesity etiquette by highlighting the acceptable coffee order for an obese person in a public café. Gemma's excerpt argues that when dining in public (with 'healthy' weighted individuals) she is required to abide by this obesity etiquette, or risk attracting negative social stigma and discrimination. In Gemma's example, the acceptable behaviour is to only order a black coffee to demonstrate to society that she is aware of her weight issue and is in the process of fixing her issue, in other words, losing weight.

Gemma discursively positions her morbidly obese identity as negatively subjected to obesity etiquette and obesity related social stigma when she attempted to enter public social environments. It would have been socially unacceptable for Gemma to order a flat white, for example, as this would socially demonstrate she was unaware of her obesity, nor behaving in a way to 'fix' her obesity or lose weight. Gemma's discourse indicates however, that there is a positive change in her social experience because she is liberated from previous obesity stigma when now eating in public. Gemma can now order any full fat coffee she chooses without attracting negative obesity related social stigma, and no longer subjected to obesity etiquette.

The findings from this research provide support for an identity reconstruction that occurs with significant weight loss. This study found that the change from a morbidly obese identity to a normal weight identity was present within all the discourse, although each participant's construction was slightly different. The findings from this study provide further support for the research conducted by Carr and Jaffe (2012) who found that weight status can impact one's personal and social identity. Harriet and Lucy's discourse supports Carr and Jaffe's findings because from both Harriet and Lucy's perspective, their weight loss led to a change in identity. Mary and Anna further support Carr and Jaffe's (2012) findings because from their perspective, their weight loss and therefore change in weight identity, led to a change in their personal identities. Mary and Anna experienced identity changes not only with weight loss but also motherhood identities. In contrast, whilst Gemma's discourse is negotiating an old version of herself, she does discursively demarcate a change in identity. Gemma's

constructions also offer support for Carr and Jaffe's findings, however, Gemma's discourse offers weaker support in comparison to the other four participants.

Tajfel's theory explains that when an individual holds an inferior social identity, they are motivated to change to a superior one (1974). The findings in this research indicate that through weight loss, individuals do change from a socially inferior identity (morbidly obese weight) to a socially superior identity (normal weight). This is evident within all the participant's discourse through their construction of the change from negative social experiences to positive experiences. Brewis (2010) has already demonstrated that holding a morbidly obese identity exposes the individual to negative social judgement which all participants in this research provide discursive support for. Additionally, all participants construct that when reaching a normal weight, they are no longer subjected to this negative obesity stigma. This indicates the participants have successfully entered a new socially superior identity as theorised by Tajfel (1974).

However, the findings from Mary and Anna's discourse challenge the simplicity of Tajfel's theory. Whilst Mary and Anna discursively construct supportive evidence that they changed their identity for a socially superior one, they further this by not only exiting one identity (morbidly obese) but consequently a second identity simultaneously (a 'bad' mother). The findings from Mary and Anna's discourse indicate that the change in identity through significant weight loss can be multiple, and more complex, than solely isolated to weight change.

Tajfel (1974) explains that having an inferior identity is what motivates an individual to exit that identity and enter a socially superior one. The findings from this research provide no evidence to support this, as the discourse does not centre on motivation to lose weight specifically. Whilst some of the findings in this research could be interpreted as motivation (for example, Mary and Anna's desire to be a 'good' mother, and Gemma's desire to reclaim her physical functioning again) this change in identity is discursively constructed as an end result, or a by-product of their weight loss by each participant. It is unclear, inappropriate and unfair to assume or interpret the discourse used by these participants as specific personal identity change motivation. 'Motivation' is a construction and can be different for everyone. Additionally, this research does not investigate the motivation behind individual weight loss. It is

unknown from these findings whether the specific motivation to lose significant amounts of weight was to enter a socially superior identity or not for each participant.

Whilst the motivation is unclear, each participant did experience a change in identity with the change in weight. Through this change in weight, their social experience changed to positive and each participant had, in a way, reinvented themselves. Effectively, each participant had re-joined social contexts that they were not a part of when they held a morbidly obese weight identity, for example, Gemma re-joined her scuba diving contexts. Epiphaniou and Ogden (2010) found that through significant weight loss, individuals effectively reinvented and changed their identity from restricted to liberated. This research provides support for Epiphaniou and Ogden's findings through the discursive constructions made by Harriet, Lucy and Gemma. They discursively argued that a form of personal, social and physical entrapment occurs with having a morbidly obese weight identity. Additionally, Mary and Anna's discourse also offers support to Epiphaniou and Ogden (2010) as they changed their weight. They reinvented their motherhood identities to positive to be included in social circles that were not available to them when they were morbidly obese.

Through weight loss, women have been found to socially reinsert themselves into desired social groups (Magdaleno et al., 2010). The findings in this study provide support for Magdaleno et al., (2010) through each of the participant's discourse. Harriet and Lucy were able to reinsert their new normal weight identities into romantic and social contexts, as discursively constructed through their social experience changes. Additionally, Mary and Anna were successful in reinserting their new normal weight and 'good' mother identities into positive social contexts where they were approved by other parents. Whilst Gemma's discourse was focused around her own physical comparison, she too was able to reinsert her new normal weight identity into the social contexts that required a physical ability scuba diving component.

Whilst this research does provide some support for Epiphaniou and Ogden (2010) findings of the possibility of social reinsertion through weight loss, it does not provide significant evidence that this social reinsertion was an intentional act of weight loss by these participants. Additionally, this research does not provide significant evidence that the social contexts that became available for these participants, when they reached their normal weight identity, were the ones they socially desired to be included

in. Whilst some social reinsertion is evident throughout the discourse used by participants, it would be inappropriate to assume these were the social groups intended to be entered. Potentially, these social contexts are just simply additional social perks that come with the social complexities of long-term significant weight loss.

The findings in this study support the complexities of changing identities as explained by Granberg (2011). Granberg argues that identity change is possible but not clear cut and takes the combination of a personal psychological shift in self-concept by the individual exiting their old identity along with a social response change by significant others in social contexts (2011). All participants in this study provide supportive evidence for the combination of factors needed for a successful identity change. Harriet and Lucy discursively construct a shift in their self-concept from old and run-down versions of themselves, to new and improved identities through their weight loss journey. Additionally, their social experience changed from negative and dehumanised, to positive and socially accepted, which further supports Granberg's view (2011). Mary and Anna also discursively provide support. From their perspective, they have changed their personal self-concept to a normal weight and 'good' mother. Additionally, the social responses from other parents is constructed as changed to positive and socially accepted due to their weight loss. Gemma too provides additional support for Granberg's (2011) view by discursively constructing a positive self-concept of a changed physical identity without being subjected to obesity etiquette now she is a normal weight.

Discursively Constructing the Disclosure of an Ex-Morbidly Obese Identity

This research found that once an individual had successfully reached their weight loss goal and embodied a normal weight identity, negotiation around disclosing their old identity in new social contexts became an issue. Obesity is visible and cannot be physically hidden within any social contexts. However, during the time of the weight loss process, the physical change is visible within usual social contexts. However, when an individual has reached a normal weight identity and enters new social contexts, their previously morbidly obese weight identity is not physically visible to others and the individual's new normal weight identity is presented.

This study found that the issues surrounding disclosure in new social contexts for these participants relates to the risk of exposing oneself to obesity related stigma.

Holding a previously socially inferior identity can generate negative stigma in new social contexts (Mattingly et al., 2009). Therefore, disclosing an old identity becomes a purposeful decision for these individuals within these new social contexts. All participants in this study discursively constructed a disclosure process where they would negotiate with themselves whether, or not, to reveal their ex-morbidly obese identity in new social contexts. All participants were consciously aware that this disclosure could expose them to further negative obesity related stigma as demonstrated by previous research (Mattingly et al., 2009). The negotiation process used by these participants can be explained as a risk versus benefit equation. If the social benefits of disclosure outweighed the social risks of attracting negative stigma, then the participants constructed this as acceptable and would disclose their ex-morbidly obese identity. This analysis of social repercussions was constructed as conditional to different social contexts by all participants.

Additionally, this research found a discursive construction in the form of resignation within the data. Unlike other health issues such as gambling, drug and alcohol addictions, morbid obesity cannot be physically hidden by choice in any social context (Romo et al., 2016). Therefore, once reaching their normal weight identity, these women consequently were empowered with the choice of whether to conceal or disclose their ex-morbidly obese identity in new social contexts. However, whilst these participants now had this choice, a form of resignation was constructed over their accomplishment. Whilst they could choose to hide or conceal their old identity, they were powerless to completely deny their old identities existence. This was underscored by the presence of witnesses, along with the physical evidence when they were morbidly obese.

The social risk of disclosing their ex-morbidly obese identity was constructed as exposing themselves to obesity related stigma. Anna constructs this negotiation of disclosure as the risk of making herself a target for gossip and obesity stigma. As can be seen from the following excerpt, Anna is consciously aware that disclosing could generate obesity stigma aimed at her-

> *Anna: "I mean even if they come across as a bitch, you know, cold and shallow and your thinking, this could bite me in the bum, and they could, sort of, you know [spread gossip like] 'did you know she used to be fat?!' I think well, even*

if they say that to someone else, that shows your character not mine. Um, so yeah, just really how I approach it."

Here, Anna constructs recognition of the threat of potential obesity stigma that she could receive if she discloses her old identity. Anna discursively positions herself as superior to others who generate negative social stigma of obesity, refusing to let the threat of social stigma control her decision to disclose her ex-morbidly obese identity. Here, Anna has constructed her personal approach to disclosing as contingent upon her social risk versus benefits balancing and deciding to disclose in this particular social context.

The social benefits, for participants, for disclosing their ex-morbidly obese identity was constructed as relationship building and education. Mary discursively constructed this negotiation of disclosing as a way of helping others lose weight. She would happily share her story if she perceived this would be beneficial for the social context, as can be seen in the following excerpt-

Mary: "I probably would still say it [her weight loss experience] because it might prompt them to lose some weight as well, um. Yeah, like I have no problem telling people I've lost weight."

Here, Mary positions her negotiation to disclose as a way of helping other individuals who have visible obesity related health issues. Mary constructs her disclosure position as beneficial to new social contexts and, therefore, is forthcoming with sharing her ex-morbidly obese identity.

Lucy constructs the benefits of disclosing as a way to build new social relationships. However, she divides positive social contexts as people who understand the weight loss journey, and negative social contexts as those who don't understand what it is like to have weight issues. As can be seen in the following excerpt, Lucy is forthcoming with her weight loss experience to build a social connection-

Lucy: "I just, if somebody even says a hint of anything to do with weight loss I'll [tell] them, not to brag, or, 'oh you know I've lost more weight than you' or anything like that. But just to let them know, that I sort of, understand where they are coming from."

Here, Lucy constructs a negotiation of her disclosure dependent upon whether she perceives her weight loss experience story would be beneficial to the other person. Lucy positions her decision to disclose as a way of letting the other person know she understands what they are going through and to assist with building a social connection. Lucy also discursively positions her disclosure in a friendly and helpful manner, without bragging how much weight she has lost. This indicates that bragging does not benefit building a social connection as Lucy constructs this in a negative way.

Harriet and Gemma constructed their negotiation of the social risks versus social benefits to disclosing through the action of education. Harriet constructed her social benefits of disclosing as helping others, particularly those who are not obese, to understand the negatives and struggles of living with morbid obesity. Harriet negotiated exposing her previous identity as beneficial even if this generated negative stigma for herself. Additionally, Gemma constructed an education position whereby she is forthcoming about her ex-morbidly obese identity to reject the stigma of weight loss surgery being the 'easy way out' for obese individuals. As can be seen from the following excerpts, Harriet and Gemma reveal their ex-morbidly obese experience through educational ways-

> *Harriet: "A couple of times, people, talked about an overweight person, [I would say] 'you know I used to weigh 150kg. Um, I know how that person is probably feeling'. And you know, I can sometimes turn people around. Because I, I usually don't hang out with people unless they are nice anyway. No-ones perfect. And it's just like me saying 'hey, here's, here's turning the light on for you' about what their life might be like."*
>
> *Gemma: "Yeah so, just kind of just kept that little [online photo] album up to date as I went through with everything. Trying to, um, hopefully give people some understanding of what was going on. Because of, like I said, it was pretty rough. It was pretty hard. It's not easy at all."*

Here, Harriet and Gemma disclose their ex-morbidly obese identity and weight loss experience in order to educate those who don't understand the lived experience of morbid obesity. Harriet educates others in order to terminate negative obesity stigma occurring around her, even if the stigma is not directed at her. Harriet educates these people who generate negative obesity stigma by defending the obese person they are

socially judging. Harriet constructs her position of educator as superior to those who are generating the stigma because Harriet knows what living with morbid obesity is like on a daily basis. Additionally, Gemma educates those who don't understand the lived experience through her online social media accounts where she kept an up-to-date photograph album of her weight loss journey. Here, Gemma positions herself as an educator by literally showing people the lived experience of weight loss surgery, whilst simultaneously rejecting the negative stigma of weight loss surgery as being 'easy'. Gemma discursively positions her education action as important by effectively defending others who have had weight loss surgery and who are receiving this negative stigma. Both Harriet and Gemma choose to disclose their experience in an act to stop further negative stigma and to defend others going through experiences similar to their own. For Harriet and Gemma, the social benefits of disclosing their story in these particular contexts outweigh the potential social risks.

Whilst all these participants had the choice to disclose their ex-morbidly obese identity when they reached a normal weight identity, there was a form of resignation constructed of the disclosure process. They discursively construct a form of resignation through the understanding that they are unable to completely deny the existence of their old identity. As can be seen from the following excerpts, concealment of their old identity is possible, whereas denial of their old identity is not possible -

> *Anna: "I'm me, That's it. I can't hide it [morbidly obese experience]. Photos prove it and a lot of people knew me then and, so, it's kind of like, who am I- who am I pretending with?"*

Here Anna is acknowledging the fact that she cannot completely deny the existence of her old identity as there are witnesses of her time spent as a morbidly obese person. Anna constructs her social contacts that she had then and now, as witnesses that can attest that she did, in the past, live a morbidly obese existence. Additionally, photographs from when she was morbidly obese act as evidence of an identity that she did once possess. Anna positions her power to conceal her old identity but is also resigned to the existence of evidence that demonstrates her morbidly obese identity, which could be revealed in social contexts. She constructs her resignation in a way where there is no point to hiding it, as her long-term social contacts could prove

otherwise. Here, we can see she discursively constructs an understanding that she can conceal but not hide or deny her identity completely.

Mary also constructs her long-term social contacts as evidence of her old morbidly obese identity, as can be seen from the following excerpt-

> *Mary: "We have had some new people come to church and because I'm with friends that already know [about my morbid obesity] like it just, comes out."*

Here Mary constructs the social contacts she had at church, when she was morbidly obese, as people with evidence that she used to be morbidly obese. For Mary, her social contacts have the power to expose her old morbidly obese identity without her consent. Mary constructs these social 'witnesses' in an almost threat-like way where they have the ability to remove her choice to disclose or not. She positions herself as being aware of this social threat throughout her discourse. However, she simultaneously positions a form of resignation over this knowledge as she is unable to change her friends' knowledge, or deny their claims, to new social contacts at church.

Harriet also constructs an awareness of her social contacts having the power to remove her decision to conceal her old morbidly obese identity, as can be seen in the following excerpt-

> *Harriet: "Sometimes, he [Harriet's partner] just blurts out to people, and he tells them about me, so I'm like 'oh!'. But he's quite extrovert, so he will start the conversation and I will kind of, participate."*

Here, Harriet constructs her awareness that her partner was witness to her morbidly obese experience and that he can expose or disclose her old identity in new social situations. Here, Harriett resigns to the position that whilst she can choose to conceal her old identity, she cannot choose who her witnesses reveal her old identity to. Harriet constructs an understanding that she has no control over others behaviour and has to just 'go with the flow' with disclosing, as she is unable to deny the existence of her old identity should her witnesses, who act as evidence, advise other social contacts of this.

There is very limited literature available that investigates the issues of disclosure from the perspective of an ex-morbidly obese individual. The closest research relevant to this disclosure issue that was found was by Latner et al. (2012), who acknowledged this lack of literature and called for more research to be done on this matter. This call

was answered by Romo (2016) who investigated how ex-overweight and ex-obese individuals negotiate their decision to disclose their weight loss. What must be noted at this juncture is that Romo's (2016) study investigated overweight and obese individuals, whereas this research focuses on morbidly obese individuals and therefore the findings are not exactly comparable.

However, there are parallels in the findings by Romo (2016) and with the findings of this research. Romo found that individuals negotiated the disclosure of their ex-obese identities to be orientated around risks and benefits of disclosing, which the findings from this research support. Additionally, the findings from this research further Romo's knowledge by indicating this negotiation is present for morbidly obese individuals. Anna and Mary demonstrate this support through their discourse with their perception that the risk of exposing themselves to further obesity stigma is outweighed by the benefit of helping others lose weight. Additionally, Lucy's discourse demonstrates the risk and benefits equation through her perception that disclosing is more beneficial than risky when the aim is to build social relationships.

Further to the risk and benefits of disclosing, this research generates knowledge on the ex-morbidly obese population when negotiating disclosure of their old identity through the benefit of educating others. This research indicates that educating others is perceived as a social benefit from the perspective of the ex-morbidly obese individual. Harriet and Gemma use their old identity as a way of educating other people who are naïve or don't understand the significant weight loss process. Harriet and Gemma offer discursive evidence that argues, in some cases, disclosing an old identity for educational purposes is perceived as a social benefit, even with the threat of this disclosing action attracting further negative obesity stigma.

Additionally, this research generates knowledge over the ex-morbidly obese individual's awareness that, whilst they have the ability to conceal or reveal their old identity, they are unable to completely deny their past identity. Each participant discursively constructed their resignation that there are witnesses and photographs of their time spent as morbidly obese which can act as evidence. Consequently, this evidence causes them to be unable to deny the existence of their old identity. Additionally, these participants construct an awareness that their long-term social

contacts, who knew them when they were morbidly obese, have the power to disclose and expose their past identity without their consent.

Whilst there is limited literature focused on the perspective of the ex-morbidly obese individual, there have been studies done on social stigma attached to the ex-obese individual from the perspective of others. Studies conducted by Fardouly and Vartanian (2012) and Mattingly et al. (2009) found that negative stigma was attached to an individual when their old obese identity was exposed. Additionally, negative stigma was attached to these individuals when the weight loss method was disclosed, with surgical weight loss viewed more negatively than non-surgical methods. The findings in this research parallel the Mattingly et al. (2009) findings as the participants in this study were aware of the threat of obesity related stigma should they disclose their ex-morbidly obese identity. What must be acknowledged is that the participants used by Fardouly and Vartanian (2012) and Mattingly et al. (2009) were classified as obese, whereas this study focuses on the morbidly obese category. However, this research found further parallel findings regarding the stigma attached to the surgical weight loss method. Gemma's discourse highlights the additional stigma faced by those who disclose they had used a surgical weight loss method as this is commonly perceived by others as the easy option of weight loss. Gemma discursively positions herself as rejecting this negative stigma through educating others on the 'actual' process of weight loss surgery with aim to demonstrate how 'uneasy' surgical options are. These findings suggest that the disclosure of an ex-morbidly obese identity is also further complicated if one used a surgical weight loss method, when compared with a non-surgical method.

Discursive Constructions of Successful Weight Loss

The second aim of this research was to investigate the successful aspect of these weight loss narratives. This study found one key discursive strategy that all participants used to construct a significant aspect to their weight loss success. This discursive strategy was the significance of understanding the reasons why they were overeating and found themselves in a morbidly obese identity.

The discourse of understanding their personal reasons of why they were engaging in overeating behaviours was constructed as a crucial factor that contributed to their success at significant long-term weight loss. Some participants discursively constructed this as understanding their mind, their mentality, their emotions towards

themselves or their lives, or addressing their psychological state. Whilst each participant constructed their understanding of their 'why' using different discourses, they all discursively argued that this overall understanding was crucial not only for their success of significant weight loss, but also for their long-term weight loss achievement.

All the participants in this study addressed the question of 'why' they were overeating when they had reached their morbid obesity identity. Through understanding their own answers to this question, they were consequently enabled to engage in their weight loss behaviours which contributed to their now normal weight identity. The following excerpts highlight Harriet, Gemma and Lucy's construction of their understanding of why they became morbidly obese.

Harriet's understanding of her reasons 'why' she had become morbidly obese was constructed as a result of her negative cognitive state and her lack of satisfaction in her own social life. As can be seen in the following excerpt, Harriet constructs a recognition that she was unaware she was unhappy when she was morbidly obese-

> *Harriet: "I was eating was because I was sad, and lonely. And I thought I'd been relatively happy. You know, I had a good life. Um, you know good friends and stuff but I realised I, made every excuse under the sun not to go out. Um, not to do things with people. I would go to work and come home. And I lived by myself with my dogs and that's, that's all I did."*

Here, Harriet positions herself currently with the understanding of why she became morbidly obese when looking back in hindsight. For Harriet, she was unaware of her unhappiness within her social life and directly links this to her engagement in overeating behaviours. For Harriet understanding that her 'why' was because she was socially unsatisfied, led to her engagement in weight loss behaviours, and subsequently led to an increase in social interactions. Harriet discursively constructs that this knowledge of her own unhappiness was a key factor in her significant weight loss success.

For Gemma, understanding that her psychological state played a role in her overeating behaviour and exercise avoidance was crucial for her to achieve significant weight loss. As can be seen from the following excerpt, Gemma addressed her 'why' of overeating as not recognising her emotions, or knowing what was going on in her mind-

Gemma: "I've started to, [address] where is my self-sabotage coming from? You now on the days where, oh, I just want to eat, not one donut, but like ten donuts. Why do I want ten donuts? What's going on? And you sort of try and bring yourself back to, well hang on a second, um, what's going on in my head? You know because it's not hunger. There's no, there is no way that I'm hungry for ten donuts. I mean there's no way I could eat ten donuts. Now. But there is no way I am actually like, hungry, for ten donuts, so, what's kind of going on?"

Here, Gemma discursively constructs her process of understanding the difference between the food 'cravings' of her mind and body. Gemma positions herself currently with a knowledge that her body might be saying she is hungry, whereas her emotions are saying something is not right or not being addressed, resulting in overeating behaviour. Gemma discursively indicates that this is new knowledge she did not possess when she was morbidly obese. For Gemma, understanding that her hunger cravings are a signal for something else going on in her mind, and not actual hunger, was crucial to her weight loss success. Gemma discursively positions this understanding of her 'why' as the key to her weight loss and weight loss maintenance.

Lucy discursively constructs that understanding her personal 'why' enabled her to successfully lose weight. Lucy constructed an emotionally broken version of herself when she was morbidly obese and an unhappiness that, for her, derived from an abusive relationship, as can be seen from the following excerpt-

Lucy: "I went to counselling [addressing an abusive intimate relationship] and I don't know just from that. It was one of the best things I have ever done. I started making all these decisions about my life. Decided to go to Uni. So did that, and um, I just started, to join the gym and that was always something I'd been too scared to do."

Here, Lucy discursively constructs her understanding of her 'why' as recognition she was not happy with her life which contributed to her overeating behaviour. Lucy discursively positions multiple negative contributory factors that led to her becoming morbidly obese. Lucy discursively constructs her position of being equipped to understand why she found herself in a morbidly obese lifestyle through her engagement in counselling. Lucy discursively argues that this aspect of understanding why she was unhappy in life was vital not only for her long-term success at significant weight loss

but also other aspects of her life as well, like education opportunities and safe relationships.

Understanding their 'why' was also discursively constructed as key to their long-term success at keeping their excess weight off. Whilst each participant's personal understanding of their reasons why they became morbidly obese is unique to them, they all discursively argued that their understanding was crucial for their weight loss maintenance. As can be seen from the excerpts by Anna and Mary, recognising their personal factors that contribute to their weight gain enables them the ability to avoid these factors and keep the weight off.

Anna constructs her understanding of her reasons for weight gain, and consequently morbid obesity, to not making her personal needs a priority in her life. For Anna, recognising this as the contributory factor to her weight gain enables her to actively avoid this behaviour and avoid relapsing back into morbid obesity. As can be seen from the following excerpt, Anna directly links her long-term success at significant weight loss with taking care of herself-

> *Anna: "Once I start sort of stabilising myself, and if I put- when I start prioritising me, the weight stays off and I'm a lot healthier. But when I sort of start prioritising other people and sort of giving that up, that's when I tend to put it [weight] on, and I think it's more of a mindset than anything else. Because of course if everybody else is a priority then I'm not going to be really eating properly or you know, or exercising or doing any of that- then I don't feel I'm worth the while, or worth the priority."*

Here, Anna discursively constructs her understanding of 'why' as important to be able to avoid these overeating behaviours long-term. For Anna, putting herself first ensures she is not engaging in overeating behaviours enabling her to remain at a normal weight identity. In other words, when Anna stops putting herself first, she gains weight. Anna's awareness of this contributory factor enables her to stop prioritising other people when it is detrimental to her weight loss and weight maintenance. Here we can see that Anna discursively positions this awareness of her personal 'why' as vital to the long-term weight loss maintenance success that she physically demonstrates through remaining at a normal weight identity.

Furthering this personal awareness, Mary discursively constructs her understanding of her 'why' as vital for long-term success at weight loss. As can be seen from the following excerpt, Mary constructs her understanding that she needs to create a food balance in order to maintain her successful weight loss-

> *Mary: "I'm trying to find a healthy balance between still being able to enjoy life, and eat the foods that I like and still lose weight or atleast maintain it someways. So yeah. And I've decided that I'm gonna stay with Weight Watchers forever, because I know as soon as I stop going I'll put the weight back on, like yeah. I just [like] to be accoutnable every week hopping on the scales. And making sure I'm alright."*

Here, we can see that Mary constructs her key to long-term successful weight loss as creating a food intake balance and being held accountable consistently. From Mary's perspective, she understands that if she is not held accountable by a third party for her weight this could jeopardise her success and she could relapse back into morbid obesity. Through this recognition of her personal weight gain behaviours, she is enabled to actively avoid the factors that could cause her to become morbidly obese again. Mary discursively highlights that recognising how she could become morbidly obese again enables her to avoid this by remaining with Weight Watchers indefinitely.

The findings from aim two indicate that there is more to long-term significant weight loss than just balancing energy in and energy out of the physical body. The women in this research each constructed the importance of understanding their reasons 'why' they became morbidly obese. This understanding enabled participants to actively avoid these overeating and exercise avoidance behaviours which contributed to their morbid obesity. This personal understanding was found to be a significant factor in the success at weight loss and weight maintenance.

What is interesting to note with the narratives in this research, is what is not talked about. None of the participants in this study spoke about their individual food and exercise plans, indicating that this aspect of the weight loss process was not significant in their overall journey. All the participants mention their weight loss method (surgical, Weight Watchers, counting calories and exercising) however, no significant amount of discourse is focused on this energy balancing topic. Given that the only physical way weight loss can occur is if energy intake is less than energy out take (Hill et al., 2012) it

was unexpected that none of these participants highlighted energy balancing as important to their weight loss success. Regardless of what food or exercise programme is used, in biomedical terms, weight loss is focused on this energy balancing equation. Yet none of these successful long-term weight loss participants discursively construct this as a vital component. Instead, all participants prioritize their psychological understanding to their morbid obesity as the key factor to their weight loss success and effectively reject the importance of the biomedical view of weight loss.

Previous research has demonstrated that there are psychological factors that are associated with obesity. Commonly, the overall psychological state has been found to be more negative the more obese an individual became (Nigatu et al., 2016) and more positive with the more weight loss that was achieved (Fontaine et al., 1999; Wallace et al., 2015). The common negative psychological states of morbidly obese individuals are argued to include a poor quality of life, low self-esteem, depression and social isolation (Abilés et al., 2010; Lewis et al., 2011).

The findings in this research provide support for these previous claims as all participants discursively constructed a negative psychological state when they were morbidly obese through unhappiness at their emotional and physical quality of life, as well as social isolation. Despite the differences in personal experiences that led each participant to their morbid obesity, they all discursively constructed a negative and poor quality of life relative to their morbid obesity. This suggests that despite the highly individualised experiences of morbid obesity, there are some common aspects between the different cases.

Chapter 5: Relocating Findings in the Broader Context of Obesity

In this chapter, the findings will be discussed in relation to the broader context of the obesity health issue. Firstly, weight loss programmes available will be addressed with comparison between commercial and government weight loss options. Next, the healthcare needs of the morbidly obese population will be addressed. Following this, the recommendations and implications at individual, organisation and government levels will be explained. Lastly, future directions and a conclusion of this research will be offered.

These findings, overall, suggest that there are more aspects to significant weight loss than simply the physiological balancing of the energy in and energy out equation. This research argues that there are identity changes that occur through significant weight loss, social experience changes, the potential for lingering stigma and a self-understanding change. The findings from this study indicate that not only do these important contextual aspects occur with significant weight loss, but also indicate that these aspects are significant to the successful weight loss journey. However, these significant weight loss aspects found in this research are not commonly advised on the back of a generic diet pack or when signing up for a commercial weight management programme (Countdown, 2018; Weight Watchers, 2018).

Before we look at the broader understanding of where this research fits, it must be highlighted that these findings are from morbid obese narratives and not from overweight or obese narratives. Potentially, these important contextual aspects are significant only to the morbidly obese population, as these findings are personal constructions of an experience and cannot be generalised. That being said, these social and psychological aspects to the significant weight loss journey are relevant to the success of these women's weight loss, but are not however, common aspects in the current weight management programmes.

Weight loss programmes vary dramatically in style but not content. Essentially, a weight management programme comes in commercial and government funded forms, which is important to demarcate when addressing where these additional aspects to weight loss are located. Commercial weight management programmes consist of basic

energy balancing information. For example, commercial ‘diets’, such as meal replacement shake diets, or diet bars, sold at supermarkets have all biomedical nutritional information on the packet and state that the product needs to be used as part of a balanced diet and exercise programme (Countdown, 2018). The ability to buy weight management programmes require no face to face contact or consultation with a medical professional when purchasing online or over-the-counter (Countdown, 2018)

Commercial weight management programmes are demonstrated, in biomedical terms, to reduce body mass and weight. What should be noted here is that a for-profit company grows on repeat business (For Profit Organisation, 2018). These commercial weight management programmes can be likened to what the economic industry refer to as planned obsolescence (Obsolescence, 2018; Waldman, 1993). In general terms the product does perform its purpose, however, it is not sustainable for long-term use. So whilst the commercial weight management programme as a ‘product’ one is purchasing does produce advertised results, it does not provide a long-term solution whereby social and psychological healthcare is not included with the product purchased. These programmes are seen as concentrating only on the nutritional (biomedical) aspect to weight loss and not the social and psychological aspects as well. Potentially this tactic is intentional as these companies (financially) do not want individuals to keep the weight off long-term. Should relapse into weight gain occur, consumers will return to use their product again because they have demonstrated weight loss results. Whilst this is a generalized perspective of commercial weight loss programmes, there is evidence of this through Mary’s discourse. Mary constructs herself as a repeat customer for the rest of her life, indicating the social and psychological aspects to her weight gain have not fully been addressed. This behaviour is financially beneficial for Mary’s weight loss company, but potentially, this is not financially beneficial for her in the long run (MOH, 2018).

Generally, commercial weight loss programmes are private companies and are not bound by the financial restrictions that pertain to government or public healthcare industry. In contrast to the commercial over-the-counter weight loss programmes, government funded weight management programmes require consultation with a medical professional and approval for funding (MOH, 2018). Some of these commercial programmes do include facets addressing some psychological aspects of weight loss, as discursively argued by Gemma and Harriet in this study. However, they do not

comprehensively address all the additional aspects that this research found to be part of weight loss, as they primarily focus on the energy balancing equation and physical aspects to weight loss (Health Navigator, 2018; Weight Loss Surgery Clinic, n.d). This research does not argue against the importance of the energy balancing equation for weight loss, however, it does challenge whether the social and psychological healthcare needs of morbidly obese individuals are being adequately met in the government funded weight management programmes.

In many cases a morbidly obese individual begins their journey of weight loss by consulting a healthcare professional or a GP (MOH, 2018). This can be, for example, a surgical weight loss procedure referral, meeting a nutritionist, dietitian or personal trainer (Health Navigator, 2018; MOH, 2018). There have been acknowledged differences between biomedical and social approaches to healthcare (Albert, Laberge, Hodges, Regehr, & Lingard, 2008). In these biomedical contexts, the morbidly obese individual is viewed as a 'patient' and their 'obesity' as a biomedical health issue requiring treatment. This biomedical treatment comes in the form of energy balancing which could indicate why the social and psychological aspects, such as identity change and stigma experience are less focused on. However, lacking this inclusion and or concentration of the additional important aspects of significant weight loss that this research found, could be more detrimental to the morbidly obese individual seeking healthcare assistance.

There is an indication that the healthcare needs of the morbidly obese individual are not being met due to the high and still rising, obesity rates within New Zealand (MOH, 2018). This suggests that the current healthcare efforts at reducing obesity are not effective (MOH, 2018) and indicates that those who are going through significant weight loss are not being appropriately or adequately helped with their morbid obesity. There are reports of an increase in the obese individual's physical needs being met, with wider hospital bathrooms, reinforced beds and ambulances, and pulley equipment to assist nurses with moving obese patients for example (Capital & Coast District Health Board, 2017). However, there is scarce reporting of an obese individual's social and psychological needs being adequately met. The findings in this study suggest that the psychological and social needs of the morbidly obese 'patient' are not being appropriately met.

Many arguments have been made about the potential reasons as to why obesity rates have not reduced and common conclusions are that obesity is a complex and multileveled health issue (Hruby & Hu, 2015; WHO, 2018). This research argues that the lack in reduction of obesity rates is a result of the lack of understanding by the health industry about what healthcare is beneficial for the morbidly obese population. This research found that the energy balancing aspect of weight loss is less significant than the identity changes, social changes and the understanding of personal psychology related to overeating behaviours for the morbidly obese individual.

The narratives from each participant indicate that these additional aspects to significant weight loss are not highlighted at the beginning of the weight loss journey. These participants all constructed their weight loss process knowledge (such as recognising their unhappiness in other aspects to their life) as new information and that this knowledge is a key contributor to long-term significant weight loss success. These participants discursively position this knowledge in the form of a 'best kept secret' to weight loss. Whilst some participants gave discursive evidence that some weight management programmes do use parts of this knowledge already (Weight Loss Surgery, n.d) this research argues that only having minimal weight management programmes that include some of these additional aspects is not enough to reduce the overall high obesity rates.

This research argues that a combination of biomedical, psychological and social perspectives be used when providing healthcare for morbidly obese individuals. Whilst this research supports the relevance of the biomedical construction that energy balancing is crucial for weight loss, this research indicates that using this energy balance equation in isolation could be detrimental to the weight loss results for the morbidly obese population. This research argues that a more comprehensive tactic to significant weight loss be generated that includes the social and psychological aspects of weight loss that are relevant to this morbidly obese population.

Including the social and psychological aspects of weight loss in this energy balancing equation could generate more successful long-term significant weight loss results as obesity is complex and highly individualised. If, through understanding that the social and psychological aspects have the possibility to influence this adherence to the energy balancing equation, then these aspects should be included in the overall

weight loss programme. From a biomedical viewpoint, this would be similar to someone adhering to medical advice, such as taking the right amount of antibiotics for an infection. If a person has other factors negatively influencing them such as depression, emotional health challenges or social health challenges, they are less likely to adhere to medical advice, less likely to take their medication and less likely to engage in positive health behaviours (Martin, Williams, Haskard, & Dimatteo, 2005). The same can be said for obesity. If there are negative psychological or social factors influencing the individual, then adhering to a diet and exercise plan (energy balancing equation) could be jeopardised. Therefore, this research argues that a more comprehensive energy balancing equation be generated which includes these social and psychological aspects.

In order to generate a more comprehensive balancing equation, more understanding is needed about the successful significant weight loss experience. Therefore, more research is required on this specific group to further understand how success is constructed from more successful weight loss narratives. Unfortunately, there is minimal literature specifically focused on this morbidly obese population despite the high obesity rates in New Zealand.

Perhaps the reason that there is a lack of literature focused on the successful significant weight loss stories is because of the small number of such people available. Wing and Phelan argue that only approximately 20% of long-term significant weight loss attempts are successful (2005). This suggests that the 80% of failed attempts are a group that is more readily available and easier to focus on in research. Additionally, issues around disclosing an ex-morbidly obese identity can expose the individual to further social stigma (Romo et al., 2016). Therefore, perhaps the majority of those 20% of successful people do not wish to expose their previous identity to save themselves further social and psychological harm. Regardless of the reason for the lack of understanding of what is experienced when significant weight loss is undertaken, more research is required. This research recommends that the best way to generate knowledge that will help to assist other morbidly obese individual's future attempts at long-term significant weight loss, is to further research this 'successful' sample group and investigate avenues that could provide effective healthcare in the future.

Implications

The results of this research have implications for providing healthcare to morbidly obese individuals on the individual level, organisation level and government level. The obesity health 'crisis' is a multi-levelled issue and requires attention and change at these three levels if the obesity reduction efforts are to be effective.

Individual Level

At the individual level the findings in this research highlight the need for morbidly obese individuals to be as fully prepared for their weight loss journey as possible. From these findings, there is more to an individual's significant weight loss journey than just a food and exercise programme. There are also social and psychological changes that can occur simultaneously. These additional aspects to the significant weight loss journey are important for the morbidly obese individual to understand at the beginning of their journey. This knowledge would better prepare the individual for the weight loss experience that lies ahead of them. Furthermore, this knowledge of what can happen when undergoing significant weight loss could potentially contribute to the success of their weight loss goals as well as their long-term weight loss success.

Organisational Level

At the organisational level, the findings from this research address the necessity for comprehensive weight management programmes. The current weight management programmes need to include the social and psychological aspects that can occur with significant weight loss. This will assist with ensuring that well rounded and appropriate healthcare is being provided to this population seeking help. Not only is the energy balancing aspect to weight loss vital to the weight loss journey, the additional aspects found in this research are significant and should be included. These weight management programmes need to include education for the individual orientated around the possibility that there could be some identity changes, social experience changes, psychological changes and post- weight loss disclosure issues that they may have to deal with. The necessity of these comprehensive weight management programmes is stressed through the current high obesity rates and an evolved weight management programme is essential if obesity rates are to reduce.

Government Level

At the government level, this study stresses the need for more funding to be allocated to successful significant weight loss research. More funding is needed to investigate what factors influence the success rate of significant long-term weight loss. The findings from this research indicate that there are additional aspects to the significant weight loss journey that are not fully understood due to the lack of literature. Producing up-to-date and relevant literature could assist in guiding the evolution of weight management programmes provided to the morbidly obese population. Through understanding more about the experiences of significant weight loss from psychological and social aspects, as opposed to just the biomedical perspective, more adequate healthcare could be provided for this population seeking help. This adequate healthcare would then, therefore, generate more effective weight loss results and lower the obesity rates and related comorbidity rates in New Zealand. Consequently, by reducing the obesity rates, the strain on the financial, resources and time faced by the healthcare industry would reduce. This would then create the opportunity for concentration on unavoidable health issues that require attention.

Future Directions

Firstly, future research should focus on extending the research sample, to include more women in a wider age range and to compare the findings within different generations to determine if there are differences in the weight loss journey. Additionally, the sample could be extended to include Māori and Pasifika participants and compare any potential ethnic differences in significant weight loss experiences. Additionally, it would be useful to involve male participants and compare their experiences against the female findings. By extending the sample, this will enable comparisons to be made. Findings from these comparisons will facilitate more culturally specific health promotion messages and culturally appropriate weight management programmes to be generated to reduce the New Zealand obesity rates.

Secondly, future research should focus on the social and psychological changes that occur through significant weight loss within the extension of the sample. As a result of a more comprehensive understanding of the social and psychological changes that occur along with physical weight loss will give the health industry the means to provide more effective, relevant and appropriate healthcare for this morbidly obese population.

Over time, the improved healthcare provided to this population could assist with generating more successful weight loss attempts.

Reflections on the Research Process

When reflecting on the research process, the participant recruitment process could have been influenced by an unforeseen factor orientated around disclosure. Whilst the research in its entirety was conducted appropriately, with the post-research understanding of disclosure my actions could have potentially influenced the type of volunteers. This research, as well as Romo (2016), found that disclosing an ex-obese identity can assist with building social relationships. However, I did not disclose on the information sheet or participant advertisement my ex-morbidly obese identity. By not disclosing my weight loss experience, this could have put-off potential volunteers who saw the advertisement. Potentially, they could have thought they would be speaking with a researcher who does not understand weight issues or could potentially generate further negative stigma for them (Throsby, 2007; Tucci et al., 2013). This was unforeseen when designing the participant advertisements and information sheets. However, in reflection, this could have been key for attracting more volunteers. Critically evaluating my awareness at the lack of disclosing, indicates that potentially I also deal with these disclosure issues and didn't want to open up the potential for further stigma by disclosing my experience on the public information about the research. These women did not know they were speaking with a researcher that had experience with morbid obesity and significant weight loss until the interview. However, they were still willing to share their story even with the potential for further negative stigma

Conclusion

This research aimed to investigate the lived experience of significant weight loss for women in New Zealand. This research has contributed to the understanding of significant weight loss by identifying that there are social and psychological aspects of weight loss that participants perceive to be more significant than that the biomedical aspect of energy balancing. This research argues that weight loss programmes need to be more comprehensive and calls for an evaluation, and evolution, of the ineffective weight management programmes that are currently on offer to this population. Generating adequate and appropriate weight loss programmes will enable effective healthcare to be provided to this morbidly obese population seeking health assistance.

With the appropriate healthcare provided, this will increase the number of successful long-term significant weight loss attempts, reduce obesity rates, and will enable the term ‘crisis’ to be disassociated with obesity in New Zealand.

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Appendix A

Information Sheet

[Print on Massey University departmental letterhead]

[Logo, name and address of Department/School/Institute/Section]

Understanding the Lived Experience of Significant Weight Loss in Women

INFORMATION SHEET

Researcher Introduction

My name is Kimberley Norman and this study is conducted as part of completion of my Masters of Critical Health Psychology with Massey University. The purpose of this project is to understand the weight loss journey that Pākehā women have experienced when losing significant amounts of weight.

Project Description and Invitation

The purpose is to understand this weight loss journey from the participant's perspective. This project aims to understand further if there was any social discrimination, or, if there is still social discrimination being experienced by women in a pro-health society in New Zealand.

You are invited to take part in this study on understanding the lived experience of significant weight loss. Whether or not you take part is your choice. If you don't want to take part, you do not have to give any reason as to why. If you decide part-way through the study you would like to not take part any more, you can pull out of participating, again with no need to give a reason.

What would I have to do to participate?

You will be asked to participate in a one off interview where you will be asked to speak about your weight loss experience, and describe what your journey was like in your own words. You are asked to bring an item or object that is significant to your weight journey and speak about it with myself, the researcher. You will be asked if a photograph can be taken of your item, which would be used in any publication if the findings of this research. You are welcome to decline this photograph being taken of your item, or use of the photograph if you wish, without explanation. It is anticipated that the interview will take around 45-90 minutes of your time and will be audio recorded. You are welcome to ask for the recorder to be turned off at any time during the interview, and you can decline to answer anything during the interview.

Once the research is completed you will be provided with a summary of the findings and thanked for your time. For compensation of your time you will receive a $20 Prezzy card for participation.

I do understand that there is a possibility for some discomfort when talking about past experiences, but I do not anticipate this to be major. You are welcome to pause or abandon the interview at any time if you find it too difficult to continue. If you would like further assistance with the discomfort, a counselling directory for support can be found at https://www.talkingworks.co.nz/dir.html, alternatively you can contact your GP.

You are invited to participate if you meet the following criteria:

- You are a woman aged between 25 – 50 years old

- You associate with a Pākehā New Zealand identity
- You have had 35-40 kg or more of weight loss and are now a healthy weight, and kept this weight off for minimum of one year.
- You do not have a diagnosed medical condition that influenced weight gain and or loss.
- You have no substance addictions.

If you are interested to take part, please contact me by phone or email – my details are given below.

How will my identity and information be protected?

Your identity will only be recorded if you sign the consent form and agree to participate. For the remainder of the research you will have a pseudonym to keep your identity anonymous. These consent forms will only be accessible by myself and my supervisor, no one else will have access to them.

The audiotaped information will be later transcribed into written form, and all material will be carefully and securely stored. The photograph of your item, should you agree for it to be taken, will also be stored securely with the transcripts. Your information and identity will not be accessible to anyone else other than myself and my supervisor.

Participant's Rights

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- Ask any questions about the study at any time during participation
- Decline to answer any particular part during the interview
- Ask for the recorder to be turned off at any time during the interview
- Withdraw from the study any time up to two weeks after the interview
- Provide information on the understanding that your name will not be used unless you give permission to the researcher, which includes any material published after the research
- Be given access to a summary of the project findings when it is completed.

Project Contacts

Researcher: Kimberley Norman *Phone:* [redacted]

Email: [redacted]

Supervisor: Kerry Chamberlain *Phone 09 414 0800 EXT 43107*

Email: k.chamberlain@massey.ac.nz

You are invited to contact the researcher and/or the supervisor if you have any questions about the project.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application NOR 18/15. If you have any concerns about the conduct of this research, please contact Associate Professor David Tappin (Chair), Massey University Human Ethics Committee: Northern, email humanethicsnorth@massey.ac.nz

Appendix B

Consent Form

[Print on Massey University departmental letterhead]

[Logo, name and address of Department/School/Institute/Section]

Understanding the Lived Experience of Significant Weight loss in Women

CONSENT FORM

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature: ..... **Date:** .....

Full Name - printed .....

Appendix C

Interview Guide

The participant will be greeted in a friendly and welcoming manner and thanked for agreeing to participate. Once this has been completed the researcher will go over the material in the information sheet that has already been provided to the participant. At this time, any questions or concerns can be raised and answered. The participant will sign the consent form and the interview will commence.

The interview will start with the researcher asking the participant to speak about the object they have brought with them and the significance of it to their weight loss journey.

Next, the researcher will ask the participant to speak about their weight journey, from weight gain to weight loss.

Next, the participant will be asked to speak about why they believe they became overweight, or if anything triggered it.

Next, the participant will be asked to speak about how they were socially treated (personally/ professionally) when they were overweight.

Following this, they participant will be asked about how they are socially treated now at a healthy weight.

Next, the participant will be asked to speak about when you decide (or not) to disclose to someone new about their weight journey. What do they say when speaking about this to others?

Once the last interview topic has been answered to the participant's satisfaction, they will be thanked again for their time. They will be asked if a photograph can be taken of their item they brought with them to the interview. If they agree, the participant will sign the consent form allowing the photograph to be taken. The photograph will be taken on researcher's phone.

The researcher will again thank the participant and leave the interview site.