“Tubby, like a marshmallow”: The lived experiences of children and their parents as participants in a child weight management programme.

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Abstract

Global concern regarding the 'obesity epidemic' has focused increasingly on children, resulting in numerous child weight management programmes around the Western world. The reality of this 'epidemic' is controversial, with large bodies of literature presenting arguments both for and against an urgent need for intervention. Between each side is little common ground, making a cohesive analysis of the extent of the obesity reality difficult. Additionally, there is a paucity of studies that include participants' experiences. The present study adopted a critical realist ontology in an attempt to bridge the divide between the realist/positivist and relativist/constructionist camps. Further, it aimed to give voice to parents and children through a two-phase exploration of their lived experiences as participants in bodywise, a child weight management programme, based in the Waikato, Aotearoa/New Zealand. In phase one, seven focus groups were undertaken with 22 participants whose children had been part of the bodywise programme, to explore their views on the programme. In phase two, individual interviews were undertaken with three children aged 11 to 16 to explore their experiences of being bodywise. Groups and interviews were audio taped and transcribed verbatim. All data were analysed under an interpretative phenomenological framework (IPA), which provided three superordinate themes, namely *sites of struggle*, *sites of support* and *sites of success*. A key finding was the contrast between the programme's sole measure of success (the child's reduced or maintained BMI), and the wide range of successes experienced by participants. The children described success as that which was fun and enjoyable, in contrast to previous studies that found little relationship for children between health behaviours and pleasure. Overall, bodywise was a positive experience for participants regardless of improvements in the child's BMI. The key metaphor of the experience of bodywise as "special journey" by waka [canoe] was developed from the parents' talk, and this metaphor is posited as an ideal way to integrate the bodywise experience for all participants. Future research could develop a model based on the waka metaphor model, with an emphasis on fun, enjoyment and active engagement for participants of child weight management programmes.

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[1] Not her real name - all names are pseudonyms

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Prologue

Since the 1990s, concern about an 'obesity epidemic' in the 'Western world' has been widespread in academic literature, government policies and media (Gard & Wright, 2005). The assumptions driving the dominant view of the causes and consequences of obesity are based on the body as a machine where fat can be controlled by the correct balance of energy in/energy out (Gard & Wright, 2005; Powell, 2010) and that obese individuals will lose weight if provided with the right information, skills and support. This has resulted in a proliferation of interventions promoting the 'gold standard' recipe for managing weight (increased fruit and vegetables, decreased portion sizes, increased physical activity). Increasingly, children have become the primary focus for obesity interventions. These interventions are most commonly located in schools, communities, sports centres and hospitals, with the messages of children at risk reinforced by a wide range of print, screen and social media.

More recently, a growing number of commentators are critiquing the assumptions undergirding the acceptance of an obesity epidemic, questioning the relationship between fat and health, and highlighting the complexity of the factors that influence weight, bodies and health. In this study I have aimed to provide some sort of synthesis between the two 'camps' in the obesity literature, and have selected a critical realist stance as the most appropriate ontology to bridge the two opposing poles of thought. There is little evidence of dialogue between the two camps. The dominant discourse generally draws from a realist framework and is mostly unquestioning in its understandings of both cause and solutions of obesity, while the critical discourse, often from a constructionist paradigm, seldom considers the evidence for negative health consequences, rather focusing on the whether or not there is an obesity epidemic, and the effect of the dominant discourse upon health providers, government policies, teachers, parents and children. A critical realist ontology allows space for consideration of both the biomedical 'reality' of carrying too much fat, and the impact on the child of identification as obese. In attempting to bridge the divide between realist and constructionist viewpoints, I have reviewed recent and relevant evaluations of child weight management programmes, considering both research and clinical settings, across the predominant locations of family, school and community. This review has revealed that there are few studies that seek the views of the primary focus of these interventions, the children and their parents. This thesis therefore aims to address this absence by giving voice to parents and children who have participated in a child weight management programme.

In the following chapter I situate the present study in the current academic and social obesity environment, beginning with a consideration of how obesity is defined, and the ensuing debates surrounding this definition. A body of robust research demonstrating that there is relationship between child obesity and negative health consequences is discussed. This chapter ends with a review of relevant lifestyle interventions across a range of sites, revealing the paucity of research that seeks the views of the parents and their children.

Chapter 1: Child Obesity

The World Health Organisation has described the public health consequences of obesity to be comparable to the polluted drinking water and poor sewage systems of the 18th and 19th centuries, with at least 2.6 million people dying each year as a result of being overweight or obese (World Health Organisation, 2004). Reducing rates of childhood obesity is recognised internationally as a high priority (World Health Organisation, 2004). In 2010, 43 million children worldwide were estimated to be overweight and obese (de Onis, Blossner, & Borghi, 2010). US statistics indicate obesity in children aged from 6 to 11 years increased from 6.5% between 1976-1980 to 19.6% between 2007 -2008 (Ogden, Carroll, Curtin, Lamb, & Flegal, 2010). In England, the *Health Survey for England 2006* reported obesity in children aged between 2 and 10 years had increased from 23% to 31% between 1995 and 2005 (Pearce et al., 2009). The most recent report on obesity in children in New Zealand shows an increase in child obesity from 8% in 2006/07, to 10% in 2011/12 (in children aged 2–14 years) with an additional 21% of children measured as overweight but not obese. Māori and Pacific children and those living in areas of deprivation were most at risk of obesity (Ministry of Health, 2012).

In this chapter, I provide a background of the key issues surrounding the obesity debate. I begin with how obesity is defined, and outline the two sides of the debate, and the conclusions of each side regarding the consequences of obesity. I then review studies investigating the effectiveness of lifestyle interventions across the predominant locations of family, school and community. This chapter concludes with a discussion of those studies most relevant to mine, evaluations that include input from parent and/or child participants of weight management programmes.

Definitions

Obesity is generally defined in accordance with the World Health Organization (WHO) classification and U.S. dietary guidelines by measuring Body Mass Index (BMI), where overweight is 25-30kg/m_2 and obesity is a BMI of 30kg/m_2 or greater (Speiser et al., 2005). For children, obesity is defined as a body mass index (BMI) above the 95th percentile for age, and overweight is defined as a BMI between the 85th and 94th percentile for age (Lochrie et al., 2013). Since 2000, the WHO has defined obesity as a disorder of excess body fatness that brings with it an increased risk of non-communicable diseases (World Health Organization, 2000). The description of a dramatic increase in people with a BMI above 30 as an 'epidemic' came into prominence in the late 1990s when referred to as such by WHO and numerous

obesity researchers (Hill & Peters, 1998); this term continues to be widely used in both the medical science and media communities (Saguy & Almeling, 2008). This 'obesity epidemic' (across all ages) has become a key policy focus for Western and increasingly, Asian governments (Wright, 2009) and developing nations (World Health Organisation, 2004). Childhood has become the primary target for obesity interventions, based on the concern that obesity in childhood increases the likelihood of obesity in adulthood (Whitaker, Wright, Pepe, Seidel, & Dietz, 1997). Some researchers estimate as many as 70% of adolescents continue to be obese as adults (Dehghan, Akhtar-Danesh, & Merchant, 2005). It has become a common catch-phrase that the current generation of children may reverse the present era's trend of increased life expectancy where today's children may live with poorer health and for shorter lifespans. However, the evidence for this claim is less than conclusive.

Debates

The reality of the 'obesity epidemic' is controversial. Much of the debate on obesity centers upon whether or not obesity is to be found in 'epidemic' proportions. This debate has served to highlight a divide between 'obesity scientists' and 'obesity sceptics', with the ensuing rhetoric influencing policies which are, according to one of the most prominent critics of the obesity epidemic, Michael Gard, misguided and ineffective (Gard, 2010). Gard contends that the 'obesity epidemic' (across all ages) peaked in 2000. This viewpoint is not shared by all obesity scientists. In Australia, Gill et al. (2009) claimed "all of the available data (including those quoted by dissenters) show strong and consistent increases in the rates of combined overweight and obesity over the past 20 years" (p. 146) The Australian Health Survey released by the Australian Bureau of Statistics (ABS) and described by ABS as the 'largest check up of the nation's health ever undertaken' estimated one in four Australian children were overweight or obese (as cited in International Business Times, 2012).

Concerns about childhood obesity as a real and future risk to health remains the prevalent view, as evidenced by frequent ranking of countries by obesity risk in the media (see for example, "New Zealand named 12th most overweight country," The New Zealand Herald, 2013, July 11). While sharing a social constructivist perspective with many obesity sceptics, Gard concedes the debate from the sceptics fails to actually debate whether obesity poses a health risk, which he accepts it probably does (Gard, 2010). A 2010 review seeking evidence of a plateau in the prevalence of childhood obesity invited published researchers from nine countries to review large population-based studies of their own countries. An analysis of data from over 500,000 children aged 2-19 years between 1995-2008 from Australia, China,

England, France, Netherlands, New Zealand, Sweden, Switzerland and USA indicated child obesity has indeed slowed. The mean rate of change in overweight children was -0.01 (.57%) and in obese children +0.03 (.25%). Rates differed according to various factors, for example, the flattening of change was more evident for girls and younger children, and those in higher socio-economic status groups (Maher et al., 2010). Maher et al. (2010) posited three possible hypotheses for this plateauing; firstly, intervention (thus limiting the rise in prevalence); secondly, saturation equilibrium (that those with a predisposition to gain weight have done so, and the remaining children have resistance to excessive adiposity); and thirdly, self-selection (that overweight and obese children are choosing not to participate in follow-up measurement).

However, since Maher's (2010) study showing a plateauing in childhood obesity, the Health and Wellbeing Survey 2012 targeted 10,000 New Zealand secondary school students over time (2001, 2007 and 2012), with the most recent report describing key indicators of health and wellbeing. The suggested plateauing in obesity was not seen in younger children, with statistics for children (aged 2-14 years) indicating obesity had increased from 8% in 2006/07, to 10% in 2011/12 For older children, the plateauing was seen in older children (as measured by BMI) as this age group has remained at approximately one third in each of the 3 years surveyed (Ministry of Health, 2012). However, a later study suggests this plateau is mediated by socioeconomic status, with rates of overweight or obesity higher in students from higher deprivation neighbourhoods (50%) compared with lower deprivation neighbourhoods (29%) (Clark et al., 2013).

An additional point of controversy in obesity studies is the use of BMI as the measurement tool, with BMI criticised for being an inaccurate measure of body fat. The body mass index, also known as Qhetelet's index, has been used since its inception by mathematician and sociologist Adolphe Quetelet in the 1830s, which he designed as a simple measure of relative body size within a population (Ernsberger, 2012). Critics of BMI as an accurate measure of childhood body fat emphasise that BMI is a population level measure, based on population curves and assumptions about childhood growth. BMI is unable to distinguish between muscle and percentage of body fat, and is insensitive to body composition for any given BMI. As Graham et al. (2008) note, this is particularly troublesome in children as body composition between these two variables change as children mature, thus two children with the same BMI may have very different body compositions. The popularity of BMI may in part be due to its safety and simplicity for in-the field testing, requiring only a set of scales and

a tape measure, and that I can be used concurrently with other health indicators such as waist circumference, heart rate and blood pressure (Graham et al., 2008).

Reilly, a prominent pediatric obesity researcher, agrees that any definition of obesity based on BMI uses weight as proxy for fat and is not a measure of obesity per se (Reilly, 2005). However he points out that when BMI is used with national reference data, the inability of BMI to accurately measure body fat is irrelevant, as its purpose is rather to identify those children in a population who are the fattest (2005). Reilly conducted two systematic reviews (in 2005 and 2010) to assess the efficacy of the use of BMI as a diagnostic tool for child and adolescent obesity. All studies in the reviews were graded under two criteria; firstly, the evidence level based on the type of study, and secondly, the rigour of the methodology and subsequent risk of bias. The 2010 results were consistent with the 2005 review, leading to Reilly's conclusion that BMI compared to national BMI reference data was the best diagnostic tool for measuring body fatness for accuracy of body fat and denotation of potential health risk, with low-moderate false negatives and low false positives (Reilly, 2005, 2010). His 2010 review found BMI to be superior to alternate measures of obesity including the Cole-International Obesity Task Force or waist circumference for age which define obesity based on age (Reilly, 2010).

Consequences

Just as there is dissention regarding the accuracy and usefulness of defining obesity, there is debate regarding the consequences of childhood obesity. In general terms, the health consequences of obesity can be categorised as short-term, that is, adverse health impacting upon the child or adolescent, and long-term, that is, adverse health effects of child obesity that are manifested in adulthood (Reilly, 2005). Reilly summarised the short-term health consequences of pediatric obesity as psychological (including teasing and bullying), cardiovascular (including hypertension, dyslipidemia, abnormalities of the left ventricular mass and/or function, and insulin resistance, drawing particularly from the Bogalusa Heart Study), asthma and chronic inflammation (2005). Reilly's (2005) review revealed limited high-quality evidence for long-term consequences, due in part to the difficulties in tracking populations from child to adulthood. However, Whitaker and colleagues (1997) have demonstrated that overweight children are at increased risk of becoming overweight adults, and are therefore vulnerable to the numerous medical illnesses associated with excess body weight. Cardiovascular disease remains one of the major causes of death throughout the world, exceeding undernutrition and infectious diseases, with obesity widely accepted as a risk factor for cardiovascular disease (Berenson, 2012). Hypertension, dyslipidemia and disruptions to

glucose metabolism are frequently seen in overweight children (l'Allemand, Wiegand, & Reinehr, 2008; Reinehr, 2005) and these conditions are associated with premature morbidity (Baker, Olsen, & Sorensen, 2007; Berenson, 2012; Biro & Wien, 2010; Reinehr, 2011). Daniels, a US professor of pediatric and environmental health, cites an increase in many diseases heretofore only seen in adults now being seen in children. These include high blood pressure, early symptoms of hardening of the arteries, type two diabetes, nonalcoholic fatty liver disease, polycystic ovary disorder and disordered breathing during sleep (Daniels, 2006). More recently, Reinehr (2011) cites a range of studies as evidence of long-term consequences of childhood obesity, including negative impact on quality of life and social integration, and premature death, due to the comorbidities associated with obesity.

In Aotearoa/New Zealand, the Ministry of Health associated child and adolescent obesity with increased risk of chronic diseases such as diabetes, cardiovascular disease and cancer (2004b). A recent review into global trends of type 2 diabetes indicated increasing diabetes diagnoses for children of ethnic minorities, including Māori and Pasifika (Farsani, van der Aa, van der Vorst, Knibbe, & de Boer, 2013). Gill et al. (2009) cite evidence in Australia of an association between obesity in children and these frequently seen diseases, as well as those less researched, such as orthopaedic complications, sleep apnea and psychosocial difficulties including low self esteem and bullying. WHO identify overweight and obese children to be at risk of reduced quality of life and increased risk of teasing, bullying and social isolation (2012). The likelihood of larger children being bullied and/or bullying and of increased risk of suicide is agreed upon by both sides of the debate. There is also some evidence of adverse socio-economic consequences (social isolation, educational attainment and income) for adults, especially women, who were obese in their youth (Sarjent & Blanchflower, 1994).

Lifestyle interventions and their effectiveness

Lack of clarity around the definition and consequences child obesity has not restricted the proliferation of lifestyle interventions based on the 'gold standard' of adjusting energy in/energy out. There is a large body of literature documenting interventions in both research trials (most commonly randomised control trials) and clinical programmes (that is, programmes facilitated by health practitioners in a range of settings, without a control group and without a standard process of evaluation). Controversy over programme efficacy is as prolific as is the debate on the obesity epidemic and we now review the predominant sites of these weight management interventions targeting children. I have selected evaluations in the literature from a range of international locations, based on relevance to this present study and

to provide a brief overview of recent studies. Where possible I have selected research located in New Zealand, or in countries most similar to New Zealand, so that the majority of the studies come from work in New Zealand, Australia, and the UK and to a lesser extent, the US. Because of the paucity of evaluations that include the views of parents and/or children, I have also reviewed one study from Sweden (Teder et al., 2013). This next section details the most relevant, recent studies by type (research trials compared with clinical programmes), and location (family, school and community), concluding with studies including input from parents and/or children.

Research trials compared with clinical programmes

Some commentators have such confidence in the success of programmes that they consider the only question remaining is which programmes work best (Gunnarsdottir, Njardvik, Olafsdottir, Craighead, & Bjarnason, 2012). Others assert that interventions targeting eating and activity habits of individuals have limited impact (K. Campbell, Waters, O'Meara, & Summerbell, 2001). Epstein, a major US contributor to pediatric obesity interventions and research for over 25 years, is unequivocal in his confidence in the short and long-term evidence of the efficacy of family-based behavioral pediatric obesity (Epstein, Myers, Raynor, & Saelens, 1998; Epstein, Paluch, Roemmich, & Beecher, 2007).

Child obesity interventions are most commonly tested and developed by way of quantitative studies involving randomised control trials (RCTs), with published programme evaluations in a clinical setting (that is, those programmes run by practitioners and without a control group) by far in the minority (Pocock, Trivedi, Wills, Bunn, & Magnusson, 2010). Epstein et al. (2007) concede that RCTs with their emphasis on inferential statistics are poor predictors of clinical success. RCT results cannot be assumed to translate to clinical settings, as clinical programmes are likely to have their own criteria for participation depending on their service directive, and these would not usually be as rigid as the criteria for RCTs (N. Parkes, personal communication, 12th August, 2013). Economic constraints also impact the feasibility of delivering programmes developed in research settings (Lochrie et al., 2013). Thus, while programmes may have 'proven' their efficacy in RCTs, which may in turn inform the gold standard for clinical interventions, this may not translate into effectiveness in clinical settings (Reinehr, 2011). A growing awareness of the gap between research and clinical settings in the US has led to the prioritising of 'translational research' at least in principle, at the National Institutes of Health, but funding constraints have yet to see this intention result in much actual research (Epstein & Wrotniak, 2010).

Child weight management programmes target multiple locations, most commonly the individual child, their family, school and community. Regardless of location, most programmes include behaviour modification of nutrition, physical activity and sedentary lifestyle, and include BMI as a primary measure of efficacy. Quantitative research is predominant in RCTs, and while qualitative or mixed methods are more frequently seen in clinical programme evaluations, quantitative methodologies remain dominant. Across all evaluations, direct feedback from programme participants is seldom included. There is therefore a paucity of research regarding people's own experiences of obesity interventions, but limited conclusions can be drawn regarding child weight management lifestyle interventions from the published literature. In the next sections, this literature is reviewed, firstly with a consideration of the three predominant locations, followed by a summary of the smaller group of studies, those including evaluation by programme participants.

Family- based interventions

Family based programmes identify the need for intervention based on the BMI of the child, but aim to introduce change at the family level, most typically involving the child and at least one parent. Recent meta-analyses have identified multi-component family-based interventions as effective in achieving modest but clinically encouraging improvements in child BMI, at least in the short term (Luttikhuis et al., 2009). Most pediatric child obesity programmes follow guidelines established over the last 30 years by Epstein, as an internationally recognised authority on family-based behavioural treatments. A recent assessment of Epstein's family-based intervention involved 84 obese children (7.5 – 13.6 years) in an Icelandic clinical sample (Gunnarsdottir et al., 2012). Sixty one families were assessed for one year post-treatment, with a large effect size for reduced BMI. Psychological well-being was also assessed, showing improvement during treatment and at 1 year follow-up. The Icelandic study claimed to be the first to assess the efficacy of family-based behavioural treatment in a relatively large clinical setting (Gunnarsdottir et al., 2012) and reinforces the perception of the prevalence of RCTs in child obesity evaluations.

In Aotearoa/New Zealand, a new clinical intervention commenced in January 2012 and was heralded as unique for its combining a home-based programme (run in a collaboration between Sport Waikato and the Taranaki District Health Board) with a research assessment by clinical trial (run by the University of Auckland) (Anderson et al., 2012). Whanau Pakari has a particular focus on Māori reflecting current concern regarding the overrepresentation of Māori children in overweight and obesity statistics. To date, more than 200 children (aged 5-16

years, and 50% Māori) have been offered support from the multi-disciplinary team, including a healthy lifestyles coordinator, a dietitian, a health development and physical activity advisor, a psychologist and a paediatrician (Humphreys, 2013). Whanau Pakari is described by Taranaki District Health Board paediatrician, Dr. Yvonne Anderson, as "the first intervention of its kind to be put under the lens of a clinical trial looking at outcomes" thus enabling it to be assessed for success and "help inform future potential programmes" (Humphreys, 2013, p. 5). It is unclear whether the evaluation will include any opportunity for participants to share their views of the programme.

School-based interventions

School-based interventions have proliferated in schools in New Zealand, Australia and the United Kingdom in response to the 'obesity epidemic' rhetoric. One such programme is Project Energize, established by the Waikato District Health Board in New Zealand in 2005 and expanded in 2008 to include all schools in the region, aiming to improve nutrition and increase activity levels to reduce child obesity and cardiovascular risk. A two year randomised control study was undertaken to evaluate Project Energize, involving 2,752 children aged 5 or 10 years at enrolment, in attendance at one of 124 Waikato primary schools (Graham et al., 2008). The evaluation was designed with four aims, including to evaluate the efficacy of a school-based intervention, and to identify whether there is an association with child obesity and related health outcomes. The intervention was facilitated by Team Energize change agents, trained to encourage increased activity and reduced sedentary behaviour in the children, and to optimise nutritional intake through changes in the school environment and culture (Graham et al., 2008). BMI, percentage of body fat (%BF) and blood pressure were measured at baseline and two years later. The two year outcome showed an association of the intervention with reduced body fat in younger children and reduced systolic blood pressure in older children (Rush et al., 2012). As predictors of %BF, waist circumference and BMI at baseline were similarly predictive for Europeans, but waist circumference was a better predictor of %BF for Māori children (Rush et al., 2013). The impact of ethnicity upon BMI has only recently been considered in studies, and these results challenge Reilly's (2010) conclusion regarding the superiority of BMI over waist circumference.

Community-based interventions

Community-based interventions generally follow the same accepted gold-standard of family-based programmes, with the main difference being their location in a community rather

than a family setting. Some community-based programmes such as the UK's MEND recruited from the community but operated within family settings, others, like New Zealand's Healthy Eating-Healthy Action: Oranga Kai-Oranga Pumau (HEHA) coordinated involvement from families, schools and health providers, while others such as APPLE were located in schools.

MEND (Mind, Exercise, Nutrition…Do it!) was a secondary prevention UK community-based programme for 7-13 year olds, and covered skills training in nutrition, activity, parenting and behavioural change. While once again BMI was the primary measure of success, MEND also considered outcomes beyond the physical. The evaluation of MEND for 5-7 year olds (n= 440) showed an association with positive changes in physical, behavioural and psychological outcomes, based on the 62% of the participants who completed post-programme measurements. Mean BMI decreased by 0.5 kg/m_2 and BMI z-scores decreased by 0.20. Smith et al. (2013) suggest that with only 62% completing the programme, biases due to selective attrition may have caused an overestimation of treatment effect. By 2008, MEND was run in over 320 locations in the UK and has been exported to Australia and Denmark (Sacher, Wolman, Chadwick, & Swain, 2008). However, the brevity of the 10 week programme must add caution to the assessment, as most behavioural changes can be maintained for short periods of time.

In England, the Health Survey for England 2006 reported obesity in children aged between 2 and 10 years had increased from 23% to 31% between 1995 and 2005 (Pearce et al., 2009). The United Kingdom government's commissioning of the Foresight Report of 2007 was tasked with reviewing the scientific evidence of factors influencing obesity, and to identify effective interventions based on this evidence (Kopelman, 2010). This report concluded that interventions have limited efficacy, citing modest success as a 5-10% weight loss, and claimed an association between weight loss and health benefits, namely reduced risk in developing type 2 diabetes, improved blood pressure and reduced cholesterol (Kopelman, 2010). The UK Department of Health responded to the Foresight Report with a cross-government strategy, "Healthy weight, healthy lives", showing similarity with the New Zealand Healthy Eating-Healthy Action: Oranga Kai-Oranga Pumau (HEHA).

HEHA was launched by the Ministry of Health in 2003 in response to growing concern about obesity in New Zealand (Ministry of Health, 2003). HEHA had an ecological approach and incorporated methods of health promotion recommended by the Ottawa Charter for Health Promotion (World Health Organization, 1986, as cited in Boulton & Kingi, 2011), with a particular focus on key population groups such as Māori, Pacific Island, lower socioeconomic groups, children, young people and families/whānau (Ministry of Health, 2004a). HEHA called

for action across communities including families and schools, and provided for a comprehensive evaluation of the strategy, via a consortium of researchers. This consortium published a detailed conceptual framework of the intended evaluation (McLean et al., 2009). HEHA evaluations developed a complex evaluation tool that incorporated a Māori conceptual framework, and sought comprehensive input from key informants. But despite acknowledging that HEHA Strategy's effects were "intended to be experienced at all levels and among a wide range of groups, including… communities, families/whānau and individuals" (Boulton & Kingi, 2011, p. 6), key informants of the Te Tuhono Evaluation Framework included only those at policy level or on key advisory boards and not those participating in the intervention (Boulton & Kingi, 2011). This persistent neglect of programme participants' views in evaluations is one of the key factors my study aims to address. The planned evaluation of HEHA was truncated by policy changes with a change of government in 2009 (Boulton & Kingi, 2011). The National government's budget of 2009 also cancelled Mission-On, an anti-obesity programme for youth planned by the previous Labour government. This same budget cancelled state funding for the Obesity Action Coalition, and removed district health board targets for increasing fruit and vegetable consumption, and restrictions on unhealthy food and drinks by schools (Johnston, 2009).

APPLE was another New Zealand community programme that coincided with HEHA and Mission-On, and these initiatives may have contributed to the reported success of APPLE. APPLE introduced activity co-ordinators who were responsible for facilitating activity programmes and providing basic nutrition education to 554 primary school age children over a 2 year period, involving seven schools in Otago, New Zealand (four of which received the intervention via the activity coordinators, and three control schools did not receive the activity programmes or nutritional education). Measures were BMI, waist circumference and systolic blood pressure. BMI was taken at 1st year, 2nd year and at follow up (approximately 2 years after programme cessation, n = 381 intervention, n = 346 control). Waist circumference and systolic blood pressure were measured at 1 and 2 years (Taylor et al., 2008). Waist circumference was significantly lower at 2 year and systolic blood pressure was reduced at 1 year (Taylor et al., 2007). BMI z scores were significantly lower in intervention compared to control groups at 1 year, 2 year and follow up, but only for those who completed the entire 2 year programme (Taylor et al., 2008). The two-year time span and reasonably large sample

size allows us to have some confidence that the results might translate into a clinical setting.

Despite conflicting views regarding the extent of child obesity and the best method of measurement and intervention, there is surprising consistency in programme design across these three levels of intervention, with most programmes based on the accepted 'gold standard'. The reliance upon this formula is somewhat surprising, given the evidence for success in clinical settings is not overwhelmingly robust as these studies have shown. The impact of national policies has been seen to impact not so much programme design, but funding, reflecting the priority policy makers place upon child obesity. None of the programmes cited thus far have invited feedback from the participants of the interventions (while LEAP asked parents to report on changes in their child's nutrition, their role was restricted to prescriptive data collection, and did not include an opportunity for parents to share their experiences of the programme). A summary of five programme evaluations that included participant feedback are discussed in the following section, and include family, school and community settings.

Evaluations by parents and children

Other commentators have observed, just as I have, that few evaluations located in the published literature have invited participants to share their experiences of child weight management programmes (Hesketh, Waters, Green, Salmon, & Williams, 2005). Interestingly, there has been a recent study reporting the views of policy makers in New Zealand (Walton, Signal, & Thomson, 2013), and even scientists, (Wickens-Drazilova & Williams, 2010). As noted by MacDonald and colleagues, there is an abundance of research *on* children but very little *with* children (MacDonald, Rodger, Abbott, Ziviani, & Jones, 2005). Very few evaluations of interventions procure input from programme participants. The paucity of research including the voices of children is succinctly expressed in a recent article by Wright, Burrows and Rich as "a singular lack of interest in how bodies are experienced and imagined from the point of view of young people themselves" (Wright, Burrows, & Rich, 2012, p. 673). The scarcity of studies has necessitated broadening the country of origin beyond those discussed thus far.

Of the 24 most relevant articles that I located that describe evaluations of child weight management programmes (including both RCTs and clinical interventions), seven involved input from parents and three of these also included feedback from children. Five of the seven were clinical programmes and two were RCTs. One study (Manger et al., 2012) also included the views of teachers. Each of these seven studies is discussed more fully below.

One of the three studies including input from parents and children was a Swedish observational study of 26 obese children aged between 8 and 12 years that examined changes in the children's lifestyle habits over a 2 year period in an attempt to identify mediating mechanisms in a family-based behavioural intervention (Teder et al., 2013). Children's self-reports of eating habits, physical activity and sedentary activity were compared with their parents, taken at baseline, 3 months and 24 months by structured interviews. Parent and child reports were in agreement regarding activity, with both reporting increased physical activity over the 2 year programme (2004-2006). Reports on healthy eating showed more variance between child and parent. According to the children, they had improved their eating habits after the programme in a variety of ways, while their parents perceived only a reduction in binge eating (Teder et al., 2013). Similar studies have found an association between divergence of reporting and child obesity, where the greater the divergence between the child's estimation of their levels of physical activity and their parents' reports, the more likely the child would be overweight or obese (Sithole & Veugelers, 2008). Teder et al.(2013) did not find any associated patterns between convergence and weight reduction, and concluded the relationship between child and parental reports and weight outcomes during family-based interventions is complex.

'Active for Life Year 5' (AFLY5) was a school-based obesity prevention intervention for 9 years olds in the United Kingdom (Kipping, Jago, & Lawlor, 2011). This programme targeted the general school population of nine year old children as an obesity prevention intervention, and was not an evaluation of a programme tailor-made for children identified as 'obese'. At the suggestion of teachers, the AFLY5 evaluation included child and parent feedback, and unlike Teder et al. (2013) and Manger et al. (2012) broadened the scope beyond observations of changes in nutrition and physical activity so that child preferences and parental suggestions were also heard. Results showed that homework and newsletters sent out to parents by teachers were completed by children, and recalled by parents, especially when these activities were novel and required practical activities (Kipping et al., 2011).

Similarly, Values Initiative Teaching About Lifestyle (VITAL) was a pilot school intervention aimed again at obesity prevention rather than obesity reduction in school children in Pittsburgh, USA (Manger et al., 2012). VITAL was introduced to a convenience sample of 14 intervention schools (with 15 control schools). VITAL involved eight weekly lessons promoting good nutrition and physical activity, and also like AFLY5, emphasised child participation and novelty through educational entertainment. Students' height and weight was measured annually for two years; the results showed the children's BMI declined

significantly (p=.015) more in the intervention group than in the control group. Twenty one teachers evaluated the impact of the eight lessons on a five-point Likert scale; 80% rated the lessons as good to excellent for promoting good nutrition, and 77% rated them good to excellent for promoting physical activity. Parents were not asked to evaluate this particular programme, but 250 parents completed questionnaires to share their observations of VITAL in other schools. This parental feedback indicated a progressive increase in children eating more fruit and vegetables and in engaging in physical activity during and after VITAL, and positive responses from parents increased from start to completion of the programme (Manger et al., 2012).

Rice, Thombs, Leach, and Rehm (2008) developed a patient recruiting process for overweight and obese children aged 7-17 years in metropolitan USA, and obtained feedback from participating families (n= 68) via questionnaires and interviews. While the authors provided little detail on this feedback process, Rice et al. (2008) reported that the child and youth enjoyment was a key measure of success, and many parents reporting "improvements in their child's self-esteem resulting from participation" (Rice et al., 2008, p. 146). In this study, the children were identified as the smallest barrier and the parents the biggest barrier to enrolment. Clinical outcomes were excellent, with 68% of participants reducing their BMI by an average of 2.5% in the 12 month programme. Despite this success and the participants' favourable impressions of the programme, it was discontinued due to lack of recruitment, with only 10% of parents following up pediatrician referrals by inquiring about the programme. Rice et al.'s (2008) results suggest a disconnection between programme aims and parental awareness, which might have been resolved if the parents had been included in the programme evaluation.

Sonneville, La Pelle, Taveras, Gillman and Prosser (2009) also attempted to identify barriers and facilitators assisting or inhibiting participation and adoption of recommendations to youth weight management programmes. They conducted four focus groups (two English and two Spanish) of 19 parents of overweight children aged 5-17 years. These parents identified many barriers but few facilitators to adopting recommendations, with an emphasis on economic barriers (in both time and money), and resistance to making changes that go against child and family preferences. This study emphasises the importance of context for family-based programmes, and highlights the flaws in relying solely on an energy in/energy out explanation of children's weight.

An Australian randomised clinical trial of a family-based intervention for childhood obesity investigated the impact of the programme upon parenting (West, Sanders, Cleghorn, &

Davies, 2010). West and her colleagues explored an alternative to family-based interventions in a study investigating the efficacy of targeting parents as the sole agents of change. One hundred and one families with overweight and obese children aged between 4- 11 years participated in a 12 week lifestyle-specific parenting program (Group Lifestyle Triple P). At 12 weeks and at 12 month follow-up, the program was associated with reduced BMI in the children. Parents reported increased confidence, decreased inconsistent or coercive parenting strategies at the end of the intervention.

Where West et al. (2010) considered the impact of programmes targeting parents as the sole agents of change in Australian family-based behavioural interventions , a recent paper by Boulton, Gifford, Kauika and Parata (2011) pondered the ethical implications of using children as agents of change. Their article described an impact evaluation of Te Kahui Whai Ora – Healthy Lifestyles & Tamariki Programme (TKW), a successful, Māori, community-initiated, health promotion programme, situated in the Whanganui region of New Zealand. The goal of TKW was to empower tamariki (Māori children) and their whānau (families) to make lifestyle changes aimed at improving health through improved nutrition and increased activity. The qualitative evaluation sought input from a wide range of stakeholders, including Whanganui District Health Board managers, staff delivering the programme, school principals. Focus groups were run with whānau participants, (including parents but not child participants) to obtain qualitative data from parents and caregivers (Boulton et al., 2011).

Increased knowledge of healthy food and its preparation was the primary direct benefit for whānau. TKW offered cooking lessons with 75% of parents participating in this skills training opportunity. An additional benefit of the application of these new skills in the home was improved relationships between parents and children, as they worked together to prepare the new recipes. Whānau also reported an increase in the quantity and range of physical activities shared as a family, with a wider knowledge of the local environment as they explored new activities with their tamariki. Whānau observed numerous indirect benefits for their tamariki, including increased self-confidence and independence, emerging leadership skills and stronger cultural identity. Boulton and colleagues attributed the success of this initiative to two key factors: programme design based on best-practice for Māori health promotion; and appropriate delivery by programme coordinators with a sound knowledge of these principles (Boulton et al., 2011).

However, while TKW has been heralded a success by a wide range of stake-holders, including the participating whānau, Boulton and her colleagues questioned the implications for best practice for Māori health promotion in using children as agents of change. They describe

the tension between children's rights to be active citizens in society, and the pressure created when children are expected to educate and admonish adult family members in making changes. In TKW, the tamariki became the bearers of new information (for example, teaching their parents to read food labels). Boulton et al. (2011) advise caution in asking children to be teachers, particularly where parents may have poor literacy and may not desire this fact to be broadcast to either their children or the programme coordinators. TKW tamariki applied their new knowledge to 'correct' their parents' behaviour, leading to positive changes in this instance. However, Boulton and her colleagues (2011) warn against assuming this dynamic will work in all circumstances, as parents in more authoritarian-style families may react unfavourably, especially if the adults' mana (authority) is challenged.

Both TKW and Group Lifestyle Triple P reported success in both clinical outcomes and behavioural change, but differed in the agent of change. Boulton et al. (2011) expressed concern regarding the expectations placed on the child to instigate the changes recommended by TKW. This concern is valid, as some studies have found children's involvement in weight management interventions may be unnecessary and even counterproductive, and may increase the risk of stigmatisation and contribute to unhealthy food or appearance preoccupation (Golan, Abraham Weizman, Apter, & M, 1998; Golan, Kaufman, & Shahar, 2006). The awareness of the potentially power differential is crucial when working with children, and clearly the parents in Group Lifestyle Triple P took responsibility to lead the changes, supported by child-appropriate parenting techniques. Both TKW and Group Lifestyle Triple P are unusual in that they targeted either the child or the parent but not both, and yet both achieved success across a range of measures. Further research into parents as the sole agent of change would be beneficial, for if such programmes are effective, this may alleviate the risk of negative consequences for the child.

In summary, less than a third of the total relevant studies located for the present study included input from the key participants, the children and their parents, suggesting policy makers, practitioners and researchers place limited value on the views of the participants. The seven studies reviewed here that have included child and parent feedback provide an interesting snapshot of current attitudes in the experience of obesity programmes. These seven studies that incorporated the views of children and/or their parents highlight the complexity of health promotion and intervention for children, alerting us to the need for great sensitivity and caution when working with children to ensure the power differential is neither overlooked nor exploited. It is to these matters that we now turn.

Chapter 2: Children's sense-making of their bodies, weight and health.

The foundation laid so far has illustrated the tensions that exist between the two main sides of the obesity debate, and the paucity of programme evaluations that include the experiences and insights of children and their parents. There is, however, a substantial body of discursive studies inviting input from children with regard to their bodies, weight and health, often from a post-structuralist ontology (for example, Burrows, 2008, 2010; Burrows & Wright, 2004; Burrows, Wright, & Jungersen-Smith, 2002; Wright et al., 2012). Whilst these studies focus on the impact of health imperatives in primary schools rather than programme evaluations per se, they provide rich insights into the way children make sense of their bodies and health. This chapter summarises the conclusions of a range of qualitative studies, as they relate to child obesity. Evidence of children's ability to think critically is outlined, and their awareness of health beyond the body is considered. The impact of health trends in policy is seen in children's discourse and the impact of surveillance of health behaviours upon children is described. The final focus of this chapter considers the intersection of obesity, socio-economic status (SES) and ethnicity.

One of the most prolific researchers into children and weight in New Zealand is Lisette Burrows, who works within health and physical education at the University of Otago. Her research draws from post-structural social theory on the social construction of health and physical education, and more recently, on "critical interrogations of obesity discourse and understanding the impact new health imperatives have on young people's sense of their bodies and 'selves'" (University of Otago, n.d.). Her position on the 'obesity epidemic', shared with her co-researchers, defines the problem as "not one of children becoming fatter, but rather the way in which the ideas associated with the obesity crisis are being taken up by many children" (Wright et al., 2012, p. 673). Much of the research that Burrows is involved in is located in New Zealand, Australia and the UK, and provides a rich resource to help understand how children experience health and their bodies in the current 'obesogenic' environment.

A poststructuralist approach is strongly influenced by Foucault with an explicit focus on discourses of power (Braun & Clarke, 2013). This power may be seen as it influences and restricts the range of possible meanings children have access to in constructing their idealised picture of 'the healthy self', resulting in some meanings being more accessible and therefore more powerful according to the dominant discourses of the day (Hughes & MacNaughton (2001) as cited in Burrows & Wright, 2004). Research into teachers' talk about health and the

self indicated that, despite the then-mandatory requirements of a national Health and Physical Education syllabus, (HPE, 1999- 2010), the delivery of the message was vulnerable to the teachers' personal, and political aspirations (Burrows & McCormack, 2012). Burrows credits poststructuralist social theory with the ability to interrogate "the gaps, the silences, the contradictions implicit in how young people construct themselves as healthy" defining subjectivity as "an on-going project of making and re-making the 'self' and the 'self' as something fluid" (Burrows, 2010, pp. 237, 238). A common theme throughout the work by Burrows and her colleagues is the way the predominant health discourses as portrayed in schools and in the media has impacted the health talk of children (Burrows, 2008; Burrows & McCormack, 2012; Burrows & Wright, 2004; Wright et al., 2012).

Major changes in the HPE curriculum in New Zealand have occurred during the period in which Burrows and her colleagues have conducted much of their research. The HPE curricula in both New Zealand and Australia in the first decade of the 21st century responded to global concerns of childhood obesity with a compulsory component focusing on health (Wright et al., 2012). The 1999 HPE curriculum in New Zealand reflected the critical theory that was influential at that time, which incorporated Jewett's view that while physical education is important, so also is the individual and society (Burrows & Wright, 2004). Thus, the interrelationships between the self, others and society were stressed in the curriculum. With this came a clear mandate to critique health promotion policies. However, in New Zealand, a new curriculum introduced in February 2010 made the inclusion of health learning optional rather than mandatory, reflecting the ideologies of the newly elected conservative government and its rejection of previous 'nanny state' interventions. This National government also scrapped the multi- million dollar *Mission On* multi-faceted programme established by the Clark Labour government (Johnston, 2009). Similarly, in the UK the Conservative/Liberal government cut funding to the Change4Life campaign (Wright et al., 2012). Thus policy decisions shaped the range of healthful identities available to the children learning under these curricula, with the identities shaped by the dominant discourses more accessible and therefore more powerful (Burrows, 2010; Burrows & Wright, 2004).

In younger children, the capacity to critique the dominant health messages against their own and observed experiences was evident in some studies, but with this came indications of concern by the child that personal failure to achieve the anticipated results brought both health risks and a perception of diminished ability to make positive changes for oneself (Burrows, 2008, 2010). Older students were more likely to attribute the failure to the health

imperative rather than assume personal blame, but with this came a recognition that others may still judge them as unhealthy (Burrows, 2008).

The Ottawa Charter intersects with the Māori health promotion framework Te Whare Tapa Whā, developed by Durie in 1982. This framework conceives of four dimensions of health as being mutually essential to hauora (well-being): taha hinengaro (mental and emotional), taha whānau (social), taha tinana (physical); and taha wairua (spiritual) (Durie, 1994). Despite the emphasis on an holistic framework in the HPE curriculum taught in New Zealand schools between 1999-2010, research undertaken in that period demonstrated children drawing from predominantly corporeal practices in their sense-making of health. In a few instances, children also expressed a more psychologised description of health, emphasising 'a healthy mind' and having 'good healthy thoughts' (Burrows & Wright, 2004, p. 199). Socio-ecological concepts were visible in references to the importance of 'being loving and kind, respecting others, not being 'cheeky'' (Burrows & Wright, 2004, p. 200). Māori students in particular emphasised the health benefits of altruism (Burrows & Wright, 2004).

Research by Burrows and her colleagues provides an opportunity to investigate how well informed children in the general New Zealand population are regarding the dominant health messages. One of the key components of child weight management programmes is the dissemination of information; the research by Burrows and colleagues suggests school children in New Zealand are already well informed and taking up the health discourses portrayed by school curricula and media, adopting the dominant discourse on what is to be healthy, commonly expressing a deterministic relationship where eating habits impact weight and shape which in turn impacts health (Wright et al., 2012). Studies exploring children's perspectives on health and self reveal the gap between the expressed ideal, as carried by this dominant discourse, and the lived reality for many children. Burrows asks, what is the impact upon families who are unwilling or unable to live up to the behaviours recommended by the 'fat is bad' discourse? (Burrows, 2009). Further pertinent questions consider the impact of participation in a family-based weight management programme upon the child and their family, where unintended negative consequences are potentially exacerbated by the focus upon the child's body. As seen in the literature, success is consistently measured by the child's BMI. Also seen in the literature are the mixed results in reducing BMI, particularly in clinical settings. As expressed by Burrows, 'children have the propensities to unpredictably engage in unhealthful behaviours' (2009, p. 128). There appears to be no published studies exploring the impact on the child and/or their parents of 'failure' in a weight management programme.

What is the lived experience like for a child where the evidence of this 'failure' is highly visible to all and regularly measured by the health professionals and reported to parents?

Burrows suggests that the combination of parental responsibility for their child's success and the visible evidence of this success therefore leads to an intense level of surveillance both by the child and on the child, and to some degree, also upon the parent (Burrows, 2009). This surveillance may not be restricted to children enrolled in weight management programmes, as lunch box checks by teachers became common practice in New Zealand schools under the *Mission On* initiatives (Burrows, 2010). Surveillance may not be restricted to home and school either, with national competitions like New Zealand's media-led, community wide intervention campaign *Push Play,* (which included a competition between families in 2006 to compete against one another to be the most active) encouraged the public declaration of participation with a green balloon flown outside the family's home (Burrows, 2009). The BBC television show *Honey We're Killing the Kids* uses computer-generated technology to predict what children may look like as adults based on their current life-style. The format has been adopted in various countries, including the US, Canada, Australia, New Zealand and the Ukraine. The central premise is that parental failure to change their child's health behaviours is tantamount to contributing to their child's death. Burrows argues that such programmes invite us to evaluate how we 'do' family, to scrutinise ourselves and others, and make judgments (Burrows, 2009). Children's awareness of surveillance includes both watching others and being watched. Burrows gives several examples of children's dismay at having their food choices observed and judged by others, at the school canteen and at supermarkets. In one instance, a student called Rose describes her father's monitoring of her healthy food chart, to see if she was "still OK", so that she 'started to 'feel quite good' about herself (Burrows, 2010, p. 243). But in this instance, the surveillance was specific, initiated by Rose herself, which is very different from the general sense expressed by Amy that the 'whole world' was watching and judging – 'she shouldn't be doing that' (Burrows, 2010, p. 242).

The intersection of class with the obesity discourse is demonstrated in the narratives of twenty four 9-10 year old children from two contrasting New Zealand primary schools. There were very few children from the school with the high socio-economic index who were obese. However all children expressed very forthright opinions on parental responsibility to ensure their children were not overweight, apparently based on observation of 'silly parents' who fed their children takeaways and failed to properly care for them (Wright et al., 2012, p. 247). Thus obese children were positioned as 'the other', understood by Burrows as the coding by middle-

class children for children from homes unlike their own, with the desire for health in part motivated by a fear of becoming or looking like those 'others' (Wright et al., 2012).

Of particular concern is the Euro-centric basis for this ideal as most families of non-European descent will fail to live up to the depicted 'good' family. Do weight management programmes lay an additional burden upon families who are already struggling to fit the picture of health created by the current dominant discourse? Within the New Zealand context, Burrows suggests the conflation of ethnicity, class and obesity risks increasing the marginalisation of Māori and Pasifika families (Burrows, 2009). This assertion was sadly supported by the Al Nisbett cartoons published by Fairfax media in New Zealand on May 29 2013 in response to the National Government's Breakfast in School campaign (Daly, 2013), one of which is shown in Figure 1. These cartoons portrayed culturally stereotyped Māori and Pasifika parents and it is hard not to agree with Burrows' assertion that 'the Māori obesity story is incorporated into a general disposition towards Māori that positions them as poor, criminals, truants, abusers' (2009, p. 129).

Figure 1: Al Nisbett's cartoon published in the Marlborough Express on May 29 2013 (Daly, 2013).

Not only are Māori discriminated by cultural stereotypes in New Zealand, it may be that the measurement tools add racial bias, as seen in the Rush et al.'s (2012) results. A recent study investigated whether BMI as the lingua franca of obesity was ethnically appropriate. Compared with European children, Māori are more likely to be small for gestational size at birth, to have slow early post-natal growth and accelerated weight gain after 2 years of age. Both low birth weight and rapid weight gain are associated with coronary heart disease in adulthood, which is the most prevalent cause of death for Māori (Grant, Wall, Yates, & Crengle, 2010). A longitudinal study of 5 and 10 year old children enrolled in Project Energize was undertaken to compare the rate of change in body mass with composition over 2 years in Māori and European children. Larger increases were seen in Māori at all time points (Rush et al., 2012). This study suggests BMI fails to capture the inter-ethnic differences in body composition, and Rush et al. (2012) conclude fat mass and fat free mass measures may provide a clearer picture of the growth trajectories of Māori and European children.

Locating the research

A critical realist ontology

The summary thus far has identified two clear camps of thought in the academic literature on obesity apparently diametrically opposed to one another. Patterson and Johnson (2012) clearly describe this opposition where the realist position treats obesity as "biomedical fact, a health risk and an 'epidemic'" and the constructionist view disputes any such epidemic, adopting a critical view of obesity as "a moral panic driven by political interests and cultural values" (p. 265). Fullager, a discursive researcher into healthy lifestyles, describes the tension between these two poles in this way: "The search for the truth in evidence based approaches and epidemiological calculation paradoxically ignores how individuals embody everyday leisure and health practices in the process of governing themselves" (Fullager, 2009, p. 123). Thus, I have been challenged to consider how to synthesise the wealth of research documenting the biomedical understandings of obesity with an equally robust body of knowledge considering the social constructions of child weight and health. This juxtaposition of two opposing approaches led me to consider very carefully my assumptions and beliefs regarding the reality and causes of obesity, and more importantly, the foundation for any knowledge claims I may potentially make based on the present study. I have therefore carefully considered the ontological and epistemological frameworks underpinning this research.

Critical realism sits between the two major ontological positions of realism (which assumes a pre-social reality exists and can be accessed through research) and relativism

(where what constitutes reality fully depends upon human knowledge and interpretation) (Braun & Clarke, 2013). Similarly, a critical realist ontology has been recognised as establishing a foothold between logical positivism and the "collapsed ontology" of anti-realism (O'Mahoney, 2011, p. 122). Critical realism was developed by Bhaskar, widely accepted as the principle architect of critical realism, to overcome the limitations of positivism and relativism. It assumes there is a real and knowable world existing regardless of whether it is observed, known or understood by humans (Bhaskar, 1975). This world is depicted as existing on three levels, the empirical (resulting from events experienced by our senses); the actual (comprised of all events whether experienced or not); and the real (generated by deep-rooted, causal mechanisms). While critical realism is founded on a belief in a discoverable reality, this is not the same as suggesting that reality is fixed, homogenous or static, either in its nature, or in the way we perceive it; indeed key proponents of critical realism such as Lawson emphatically reject such a view (Lawson, 2003). Thus, critical realism holds two things to be true: that there is a real and knowable world; and that our attempts to know it will be nuanced by our various and ever-changing lenses (i.e. culture, history, etc.) (Braun & Clarke, 2013). However, accepting the distortion upon reality by our lenses is not the same as rejecting that there is no reality (Sims-Schouten, Riley, & Willig, 2007).

When considering child obesity, the biomedical literature identifies children who are 'at risk' of becoming obese, which can be pictured as a loaded gun. However, whether these children become obese depends upon a range of lifestyle factors. A critical realist perspective allows for the consideration of a comprehensive range of causal mechanisms: these causal mechanisms may be personal (emotional, cognitive and ontological), and they may also be societal (social, cultural, political). These mechanisms interact and lead to unique trajectories for each person (Houston, 2001). To continue the metaphor of a loaded gun, while the multitude of mechanisms may increase the number of bullets, the decision of whether or not to pull the trigger lies with each individual. Bhaskar attributes people with knowledge and agency, insisting that the 'actor's accounts form the indispensable starting point of social inquiry' (Bhaskar, 1989, p. xvi). He views social structures as forces which predate, enable and constrain us, while simultaneously being dependent upon human activity for their very existence. A key theme in Bhaskar's philosophy is the obligation to identify and reduce the causative mechanisms that lead to human suffering and oppression (Bhaskar, 1991).

Braun and Clarke (2013) define critical realism as 'a theoretical approach that assumes an ultimate reality, but claims that the way reality is experienced and interpreted is shaped by culture, language and political interests' (p. 27). A key objective of my research is to bridge the

divide between realist approaches which treat child obesity as a biological, diagnosable condition, akin to a disease, and the 'hard' constructionist view that perceives obesity as a social construction. A realist perspective offers crucial insights into the biomedical conditions that affect children's weight, while social constructionism highlights the role that meaning plays in the way the child construct obesity. In the words of Archer, one of the leading authorities of critical realism, this foundation 'accepts the challenge of ontological difference between physical and social reality' (Archer, 1998, p. 190).

In the present research, I am proceeding on the assumption, supported by the quantitative research, that obesity as calculated by BMI, provides an objective measurement of body fat and is therefore provides a representation of something that is physically 'real'. Further, the large body of literature supporting the relationship between child obesity and health risks is also assumed to contribute to the 'reality' of the need to consider childhood obesity. However, neither of these realist assumptions allow for the complex interplay of bio-cultural socio-economic forces upon the reality of obesity. A critical realist ontology aims to avoid the 'impoverished ontology' of many secondary prevention programmes, as identified by Clark, MacIntyre and Cruickshank (2007, p. 513), by exploring the social determinants of health. They argue that critical realism allows subjective effects of interventions to be linked to objective characteristics of the programme.

Burrows identifies a 'fascinating juxtaposition' between neoliberalist discourses, those who 'make rational and autonomous choices about their health regardless of context' (Burrows, 2009, p. 137), and the 'nanny state' where concern for children vulnerable to obesity is so great that state intervention is seen as justified. Clark et al. (2007) argue that a critical realist approach has the capacity to embrace both positions, by acknowledging both the agency of an individual to instigate change, and the constraint upon this agency by external contexts, including programme features and socio-economic environments, and their understandings of their embodied social worlds (provided in part by dominant discourses). A strength of critical realism is the recognition of the complex interplay between agency and structure. O'Mahoney (2011) has suggested the weakness of critical realism in its confinement to either social structures (such as class and inequality) or to an adversarial positioning against relativist ontologies. There are few studies exploring the individual and those that do so, predominantly focus on agency and reflexivity, based on the work of Archer. Yet Archer (building on the earlier work of Bhaskar) describes an emergent self, where neurological matter gives rise to mind, from which comes consciousness, leading to selfhood, and from selfhood emerges personal identity, and from personal identity comes social agency (Archer,

2000). This emergent view of self within a critical realist framework opens the possibility of exploring the self beyond reflexive agency to 'a complex, multi-layered and embedded being' (O'Mahoney, 2011, p. 125).

One of the key tensions in the obesity debate concerns the location of power. Where does the need for change originate? Is it from a policy-based positivist risk assessment, where obesity is accepted as a biomedical fact, or a moral health risk in epidemic proportions? Is the primary instigator of change a social culture driven by an over-reliance on poorly-evaluated programmes, generated in an environment of health crisis kept alive by the media? Or do the children and their families, as consumers of these health messages delivered and reinforced by the media and schools, assess themselves as at risk to obesity-related poor health outcomes, and seek help? Within a family context, does the parent's role override the children's choices? If the individual is credited with the responsibility to make changes, are they also empowered to do so? The location of power is closely connected to responsibility, and embedded in the consideration of power is the temptation to point the finger of blame. If obesity is constructed as the result of personal choice, then interventions operating at the level of the individual should be effective in reversing the health risks. But if obesity is socio-eco-politically constructed, then the correct response to an individual with an 'obese' BMI is more complex.

Clark et al. (2007) consider the emancipatory power of three different approaches to changing personal health behaviours. The positivist approach views the programme itself with the power to bring change, where information is the key. Hermeneutic approaches describe individuals as reacting to programmes experientially, but do not share the positivist confidence in the ability of the intervention to deliver change. Critical realism credits the individual with the power to change (the ability to decide whether to pull the trigger of the loaded gun), while recognising the impact of time and context (the bullets), and circumstance (when the right mechanisms are activated).

The weaknesses of a positivist approach include its inability to incorporate contextual and personal influences, while hermeneutic approaches are at "philosophical odds with health care as a practical, emancipatory and evidenced-based endeavour" (Clark et al., 2007, p. 521). While critical realism is better placed to deal with the complexity that is inherent in health behaviour, the infinite variations in context make programme adaption difficult. Critical realism was developed by Bhaskar in part to assimilate the epistemological insights of knowledge that are socially located with

ontological realism. He argues for a philosophy that is socially positioned but not socially determined. In so doing, he emphasises the importance of distinguishing between ontological and epistemological enquiry (Bhaskar, 1986).

When considering reality, Lawson (2003) makes a crucial distinction between an 'object of knowledge' and 'knowledge of that object' (2003, p. 164). Bhaskar defines confusion between statements about *being* with statements about *knowledge* of being as 'epistemic fallacy', and the reverse, 'reduction of knowledge to being' he defines as an 'ontic fallacy' (Bhaskar, 1986, p. 23). This builds on Bhaskar's differentiation between the intransitive or ontological dimension and the transitive or epistemological dimensions (Bhaskar, 1998) Neither Bhaskar nor Lawson claim either dimension is fixed or static, and the complexity of their position is best summarised for our purposes here as "one reality (or world) but many theories of it" (Lawson, 2003, p. 165) (with the proviso that this 'one reality' will be 'known' in a multitude of ways, as varied as there are individuals experiencing it). Thus, a critical realist ontology of obesity sets the foundation where the biomedical reality can be viewed as reasonably predictable, impervious to culture, race or class; that is, while there is some debate around the efficacy of BMI as an accurate measure of health risk for all cultures (see, for example, Rush et al., 2013), it is generally accepted that excess body fat is associated with uniform risk for all humankind. Lawson (1998) states that the description of such realities as intransitive indicates that 'they exist at least in part independently of any knowledge claims' by those referring to them (pp. 222-223). However, while insisting on one reality (the object of knowledge), Lawson accepts the relativity of knowledge (the knowledge of the object), thus leading us to an acceptance of epistemological relativism (Lawson, 2003). Thus, once we step off the intransitive critical realist ontology into the domain of transitive epistemology, we immediately need a framework to investigate the myriad of mechanisms impacting the 'reality' of obesity. The epistemological framework that I suggest provides the best fit for both the ontological position and the research aims of the present study is contextualism.

A contextualist epistemology

Just as critical realism fits between the two ontological poles of relativism and realism, contextualism sits between two epistemological extremes of positivism and constructionism. A contextualist epistemology assumes that meaning is related to the context in which it is produced (Henwood & Pidgeon, 1994) and is therefore consistent with a transitive epistemology as defined by critical realists. Contextualism is consistent with constructionism in that is does not assume a single reality, but also shares positivist interest in truth.

Contextualism therefore argues that 'knowledge will be true (valid) in certain contexts' (Braun & Clarke, 2013, p. 31). So while there is an apparent contradiction between the insistence of a single reality purported by critical realism, this tension can be better understood with a deeper definition of 'reality' as discussed earlier.

Contextualism allows for the subjectivity and conscious reflexivity of both researcher and participant, as they interpret and act on their world (Madill, Jordan, & Shirley, 2000). Jaeger and Rosnow (1988) define contextualism as 'the position that all knowledge is local, provisional, and situation dependent' (Jaeger & Rosnow, 1988). This position is also emphasised under a phenomenological framework (Giorgi, 1995). The efficacy of differentiating between ontology (the object of knowledge, in our case, child obesity) and epistemology (the knowledge of the object, in our case, the experiences of children and their parents as participants in a child weight management programme) becomes particularly useful, to clarify that while each of the children enrolled in the weight management programme have a similar BMI, their knowledge and consequent experience of this shared 'reality' is completely context dependent.

Pidgeon and Henwood (1997) locate the production of knowledge upon four dimensions: "(1) participants' own understandings, (2) researchers' interpretations, (3) cultural meaning systems which inform both participants' and researchers' interpretations, and (4) acts of judging particular interpretations as valid by scientific communities" (p. 250). When contextualism is used with a critical realist ontology, the research aims to discover the underlying logic and structure of social practices (Parker, 1996). An additional strength of contextualism is the attention paid to the second dimension, through explicit awareness of researcher subjectivity. Just as I have attempted transparency in the rationale for selecting a critical realist ontology, a contextualist epistemology recommends researchers explicitly articulate the salient demographic details along with the less easily defined beliefs, values, social locations and cultural assumptions, to assist the reader to assess the impact of researcher subjectivity upon the study (Madill et al., 2000). Indeed, this subjectivity, rather than introducing bias as a positivist paradigm would see it, may be advantageous. Again, we find synergy with critical realism, as Lawson (2003) suggests that researcher subjectivities are not only 'methodologically advantageous, as well as morally desirable and democratic', these differences, including partiality and fallibility provide 'epistemological resources' (p. 163). Madill et al. (2000) credit contextualism with similar potential benefits, where the empathy generated by a common humanity and cultural understanding may provide a bridge between researched and researcher. As contextualist analyses accept the inevitability of the

researcher's perspective influencing the research, it is relevant for me to identify myself as a white, middle class, female researcher with a confidence in at least the need if not the effectiveness of lifestyle interventions such as the programme under scrutiny.

A critical health perspective

Murray and Poland describe critical health psychology as "a moral project[2] of personal and social transformation", where critical health psychologists act not as "scientist-practitioners but rather as scholar-activists", working to "challenge oppression", and thereby "expose the impact of social inequalities on health" and "contribute to the building of a healthier society" (Murray & Poland, 2006, p. 383). Most weight management interventions are designed with an individualistic approach, based on the assumption that people are free agents, with the ability to choose how they behave. These programmes typically aim to empower participants, by increasing control over their two worlds, the internal (predominantly knowledge and skills) and to a lesser degree, external (physical and social environments) (Lyons & Chamberlain, 2006). Such individualistic approaches to lifestyle change have not had consistent success, with research failing to demonstrate a relationship between changes in knowledge and changes in behaviour (Lyons & Chamberlain, 2006). Additionally, if the core premise is that an individual has the power to change for the better, then it is a very small step to attribute responsibility, (aka blame) to that individual if the desired change does not occur. Further complicating the dynamic in family-based weight management programmes is the potential tension between the child and their parent(s) as participants. An individual's position in the lifecourse impacts their view of lifestyle behaviours (Backett & Davison, 1995). Typically, the physical consequences of childhood obesity are not manifested until adulthood. Since the motivation to change lifestyle behaviours are often triggered by an experience of illness (Lawton, 2000) child participants may not see the need for the intervention. Their parents, on the other hand, at a different point on the lifecourse, may be strongly motivated to make changes, possibly out of concern for their child's wellbeing, and/or prompted by an experience of illness in their own lives. The potential for tension between these two positions is strong.

Individualistic approaches assume people are free to choose how they will behave and tend to downplay or ignore socio-demographic influences, such as gender, SES, or environment (Lyons & Chamberlain, 2006). This is despite clear evidence of an association

[2] Term used by Hank Stam at the Third Annual Conference of Critical Health Psychology, Auckland, New Zealand.

between health and SES, such as was demonstrated in the classic Whitehall study (Murray & Poland, 2006). A critical approach should lead us to consider the material and social circumstances that may lead a child to make unhealthy food choices after being empowered with the skills and knowledge that make that choice 'irrational'. Indeed, a critical lens may reveal unhealthy choices are in fact the 'rational' choices, once the impact of the family budget, peer influences, parents' shopping behaviour and advertising is considered. It may even be that the dominant discourse, where health is equated with morality, has the unintended consequence of providing a forum for a child to demonstrate social resistance by making the unhealthy choice (Murray & Poland, 2006).

The effect of consumerism potentially intersects with SES, as health promotion has been most consistently successful for the materially advantaged (Nettleton & Bunton, 1995). This is particularly pertinent for bodywise families living in a country where healthy food, especially fresh fruit and vegetables, is more expensive than unhealthy food and takeaways. A structural-collective approach is one alternative to the individualistic approach, which includes health-related legislation, some of which have been successful (Lyons & Chamberlain, 2006). Such measures aim to change the culture rather than the individual. These two approaches could be combined, for example, if an individualistic intervention was supported by a government policy to reduce the cost of fresh fruit and vegetable by removing GST, as has been suggested in New Zealand from time to time (for example, NZPA, 2010).

A critical health psychology lens views both individualistic and structural-collective approaches in context, by focusing on an individual's lifestyle from the perspective on the one living that life, with opportunity to explore those things that have meaning and value for that individual. Critical health psychologists consider the unintentional consequences of interventions and respectfully consider cultural and social diversity (Lyons & Chamberlain, 2006) and look for root causes of health problems as much within cultural and social structures and within the individual (Murray & Poland, 2006). A researcher committed to a critical health framework will reflect upon their own social location and values (Murray & Poland, 2006), intentionally checking to see where their own assumptions and perspectives may cause blindness and bias when considering the lived experiences of others. Only then will a researcher committed to critical thinking be ready to consider strategies for affecting change.

Bodywise

In the summer of 2012/13, I worked as a student researcher facilitating seven focus groups with parents[3] as part of an evaluation of bodywise. Bodywise is a family- focussed weight management programme for children aged 5 -12 years old who have a Body Mass Index (BMI) in the obese range, run since 2008 by the Waikato District Health Board in collaboration with Sport Waikato (Keene, Stockman, Woolerton, & McGall, 2010). The bodywise team of four is comprised of a clinical psychologist, a medical officer, a dietitian, and an active family advisor. The bodywise programme follows the New Zealand Guidelines for Weight Management in Children and Young People (Ministry of Health, 2009). The primary goal of the 14 month programme is to reduce or maintain the BMI of the enrolled child, and BMI is the primary measure of success. Of the 28 children who completed the 12 month programme between 2007 -2009, 71% either reduced or maintained their BMI as measured at the end of the 12 months, compared with baseline at programme entry (Keene et al., 2010).

Bodywise is established on an objective, realist epistemology, and shares many assumptions with other health interventions aimed at the level of individuals. While the causation of obesity is not fully understood, most commentators agree it is related to diet, exercise and genetics (Fraser, 2003). The first bodywise programme was conducted in 2007 a time when many policy makers, academics and media shared the view that New Zealand, along with other developed nations, was in the grip of an 'obesity epidemic'. While the bodywise health professionals work alongside families to introduce new behaviours (i.e. to increase healthy food options and activity) and in so doing, take into account individual needs and circumstances, it is possible that the ontological foundation of the programme, like most interventions targeting the individual, assume too much power in the programme itself and in the participating individuals to affect the desired change. While bodywise is run in small groups with one-on-one time spent between the health professionals and the enrolled child, it is difficult to assess how much the child's experience of bodywise is impacted by their particular preferences, fears and prior understanding of health, food and fitness. The large body of research exploring New Zealand children's ideas of health that has been generated by Burrows and colleagues reveals 'kiwi kids' are well informed about 'body matters' (Burrows & Wright, 2004; Wright et al., 2012). Additionally, the impact of the social determinants of health, including gender, culture and socioeconomic differences, may be underestimated.

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[3] Parents includes all parents, grandparents and caregivers of bodywise children

The programme evaluation conducted by bodywise in early 2013 is rare in that it centred on eliciting the views of parents and caregivers ('parents' is used hereafter to include parents, grandparents and all other caregivers in a parenting role) with some input from children (bodywise children were invited to complete a one page questionnaire summarising their evaluation of bodywise). It may be that other programmes have conducted similar evaluations without publishing the findings. The United Nations Convention on the Rights of the Child and legislation specific to the rights of children living in New Zealand emphasise the importance of hearing from children on matters and decisions that affect them (Hill, 2005).

Burrows (2009) acknowledges that the recommendations of child weight management interventions are not of themselves problematic; the benefits of child obesity programmes are outside the scope of her research. While the poststructuralist approach largely ignores the well-documented and potentially life-threatening or at least, life-diminishing, consequences of childhood obesity, the biomedical literature largely ignores the potentially adverse impact of the well-intended weight management interventions. O'Mahoney argues that the lack of engagement between these two camps is due to the differences in ontology and methodology (O'Mahoney, 2011). In taking a critical realist approach, this present study aims to consider simultaneously the risks and realities of child obesity, and the positive and negative unintended consequences for the child and their family through participation in child weight management programmes. The research questions included consideration of the impact upon the children of a programme that measured success by reduced BMI, through surveillance and measurement of their body. What is the impact upon parent and child of this close attention paid to a highly visible site of success/failure? Does the body become redefined by the children as a consequence of this measurement? When the body does not succeed in reducing BMI, how do children harmonise a 'failed' body? Is there evidence of critical thinking in either the parents or the children?

My study seeks to give a voice to a small sample of bodywise children and their parents. It is unusual in that it aims to consider the lived experiences of weight management participants at the micro-level, using a critical realist approach as a 'bridging mechanism' between positivist, correlational studies and the constructivist discourse analyses used by poststructuralist approaches (O'Mahoney, 2011, p. 124). This study aims to explore the lived experiences of parents and children and parents as participants in bodywise, a clinical weight management programme, and their subsequent views on the programme and its impact. Within these aims, I looked for unintended negative consequences due to enrolment in bodywise. This exploration includes consideration of the parents' and children's perspectives

of the strengths and weaknesses of bodywise, their experience of the use of BMI as a measurement tool, and their views of bodies and the impact of the regular measurement throughout the programme. I was particularly interested in participants' perception of success and how it might differ from the bodywise measure of a reduced or maintained BMI and if they experienced any negative consequences from enrolment in bodywise. Additionally, the dual phase approach (phase one with parents, phase two with children) allowed a rare opportunity to compare the experiences of parent and child.

Chapter 3: Methodology and methods

While both parents and children were included in this study, research involving children requires age-appropriate sensitivity, and consideration to these differences are now discussed. This chapter outlines the phenomenological methodology utilised and the rationale for this, before detailing the method for the two distinct phases as they occurred chronologically: phase one for the parents; and phase two for the children.

Phenomenology

A phenomenological methodology was selected as it is highly relevant for this study design where the research aimed to focus on lived experiences, and to enable children and parents voices to be heard. Phenomenology is a philosophical approach to studying experience, especially in the things that matter most to us as people (Smith, Larkin, & Flowers, 2009). As a method of philosophical enquiry, is was introduced by the German philosopher Edmund Husserl (1859 -1938) who urged phenomenologists to 'go back to the things themselves' (as cited in Smith et al., 2009, p. 12). Drawing from his mathematical knowledge, Husserl recommended the technique of 'bracketing' or setting to one side our taken-for-granted ways of being in the world (Smith et al., 2009). A phenomenologist attempts to approach the phenomenon as it is experienced, 'bracketing' preconceived expectations, enhancing the researcher's ability to hear the participant with fresh ears. This bracketing requires reflexivity and critical concentration, all the while maintaining curiosity and a disciplined naiveté (Giorgi, 1985). Researchers influenced by the quantitative traditions may confuse bracketing with an attempt to remove bias and increase objectivity, when quite the opposite is intended. Phenomenologists recognise that while taken-for granted assumptions need to be identified and set aside as much as possible, at least during data collection, the researcher needs to remain simultaneously aware of being a dynamic co-creator of the

research context (Finlay, 2011). This self-awareness fits well with the contextualist epistemology previously outlined.

Heidegger, a student of Husserl's, built onto the work of his teacher with his seminal work, *Being and Time* (1962/1927). Heidegger moved away from the transcendental roots of Husserl, and focused on the ontological question of existence, as seen through meaningful relationships and activities. For Heidegger, context was crucial (Smith et al., 2009). This emphasis on context is seen in the way phenomenology came to prominence along with numerous other qualitative approaches in the 1980s (including feminism, poststructuralism and social constructionism), challenging the positivist empiricism of behaviourism and cognitive experimentalism (Braun & Clarke, 2013). Heidegger's 'there-being' (his preferred term for a human being) was later extended by Maurice Merleau-Ponty and Jean-Paul Satré, collectively moving the interpretation of human experience of the world towards something personal, while at the same time, inextricably linked to the relationships with the world and with others also 'there-being' (Smith et al., 2009). Phenomenology became included in the cluster of approaches opposing the positivist and post-positivist empiricist research design and practice and fits well with a critical realist ontology which, while challenging the positivist approach, still retains a confidence in a discoverable 'reality'. A contextualist epistemology allows for the myriad of interpretations of that reality due to context, allowing that 'reality' to be seen through the experience of others. The context of this study involved three key players, the child, their parent(s), and myself as researcher.

The continental philosophers, particularly Satré, Heidegger and Merleau-Ponty, define human existence as the 'lifeworld' (Finlay, 2011). The self, the body and the world are seen as inextricably linked, where the world is experienced kinesthetically, through the senses, creating an embodied consciousness, shared primarily through language. Simultaneously, phenomenology recognises the impact of emotions, cognitions, and social relationships upon our embodied sense of self (Finlay, 2011). A phenomenological approach to children's talk aims to describe and interpret a child's way of attending to the world, to discover what it is like to be a child (Danaher & Briod, 2005).

My application of Giorgi's (1985) recommended curiosity and disciplined naiveté created an interest in the impact of surveillance upon the body for the children during bodywise. The primary goal of the 14 month programme is to reduce or maintain the BMI of the enrolled child, and BMI is the primary measure of success. The 2007-2009 evaluation of bodywise found 71% were 'successful' under this criteria when measured 12 months after programme entry (Keene et al., 2010). I was interested in the impact

upon both parents and children, especially those who were not successful, where the child's body is the visible, measurement of success, and is so stringently surveilled throughout the programme? Does surveillance support the motivation to make the recommended changes? Does the child experience a redefining of self? When the BMI 'fails', does the body become an objectified, separated from self, alienated, a traitor that refuses to get with the programme? What is the impact on the parent of a 'failed' child? Does the parent's success depend upon by their child's reduced or maintained BMI? As the aim of phenomenological research is to describe the paradox, richness and poignancy and complexity of the lifeworld (Finlay, 2011), it offers a sound methodological fit to tackle such questions.

Methods

My involvement with the bodywise evaluation in the summer of 2012/13 afforded me the opportunity to experience the benefit of qualitative research as part of a programme evaluation which utilised focus groups with the parents. I then designed a new study to include the children's voices. The research design involved two distinct phases, as noted, and this section describes each phase in detail.

Phase one research design: Parents

The above-mentioned bodywise evaluative study aimed to ascertain the programme's success for families and to obtain recommendations for changes to improve the programme. Face-to-face focus groups were selected as an appropriate method of exploring the parents' perceptions, opinions, views and attitudes. Parents met in groups during the bodywise programme and because they were familiar with a degree of shared discussion, it was anticipated that they would be comfortable to take part in facilitated focus groups. The anticipated number of potential participants (up to 90 parents from 45 families) would have made individual interviews difficult for one facilitator within the timeframe. Additionally, focus groups offered the benefits of interaction between parents that is considered more 'naturalistic' than those obtained in individual interviews (Wellings, Branigan, & Mitchell, 2000) as a well run group will see participants talking to each other rather than to the facilitator. It was also hoped that a group setting would enable me as the researcher to get a feel for those topics which were areas of agreement or dissension, where participants could contribute to a 'collective sense-making' (Wilkinson, 1998). I provided the bodywise folder and several posters as prompts for the parents. The folder was the workbook used by families

during their enrolment in bodywise and included many colourful pictures and charts. All focus groups were audio recorded.

Recruitment and participants

Adult participants were those 22 parents (21 parents and one grandmother) who participated in seven focus groups I facilitated between January and April 2013, as part of the bodywise mixed methods evaluation of the programme. All parents of past and presently enrolled children from a total of 45 families were invited to participate in these focus groups. Recruitment had been partially completed before I joined the research team; my role was to phone the remaining families and book each interested parent into a focus group time according to their availability. Times were made available to best suit participants. Most parents were keen to be involved, but some were unable to attend because of other commitments. Eight additional parents booked a time but were unable to keep that appointment. 60% of participants were mothers, 25% fathers and 5% grandmothers (as shown in Figure 2).

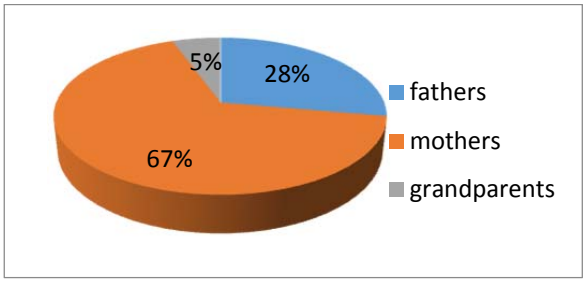

Figure 2: Distribution of fathers, mothers and grandparents in focus groups

55% of the participants' children were male. Ethnicity was collected for the children but not for the parents. The children's ethnicity (as identified by parents) were 65% New Zealand European, 30% Maori (including Maori/New Zealand European and Maori/Samoan), and 5% Philipino/NZ European. (See Figure 3). The months between bodywise enrolment and the date of the focus group evaluation at February 2013 was 3 – 55 months, with a median of 21 months. (See Appendix A for the full summary of focus group demographics.)

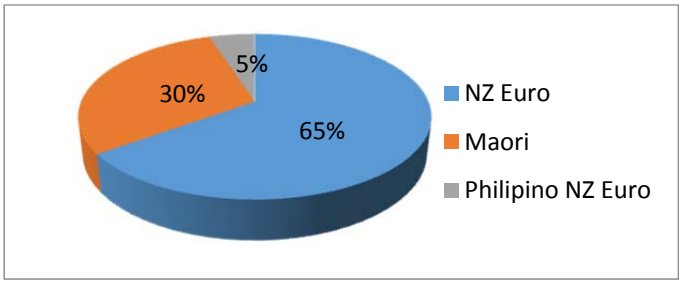

Figure 3: Distribution of the ethnicity of children of focus group parents

Information and consent

Ethical approval was given by the Northern Y Regional Ethics Committee prior to my involvement with bodywise. Participants were assured their involvement was confidential and that no information identifying themselves or their child would be used. All parents had the opportunity to ask questions both at the time appointments were made and prior to the focus groups. It was made clear that anonymous direct quotations may be used in a range of media, including written reports, articles, and presentations. No additional ethics application was required for my study as the use of the parents' data was covered by the scope of original application. For this first study, all eligible families were sent an invitation to participate in the focus group discussions (see Appendix B). A consent form (Appendix C) was completed by every parent before each focus group, with clarification of the aims and potential uses of the study and an opportunity given to ask questions. I assigned a pseudonym to the all parents, partners, family members and either altered or deleted any other potentially identifying place names and schools to protect participant confidentiality.

Procedure

Phase one involved seven focus groups with 22 caregivers from 20 families, with group sizes ranging from two to five participants and taking from between 60 and 90 minutes. These focus groups took place at Sport Waikato, a familiar venue as this was where the parents had attended the bodywise programme. The discussions commenced with sharing snacks of fruit, hummus, crackers and water (provided by the bodywise nutritionist) and introductions followed by a simple ice breaker (introducing ourselves with an adjective starting with the same letter as our first names). This ice breaker was met with laughter and occasionally with some anxiety, but in the one instance when I did not use it (in a group with only two participants) one of the participants referred to her co-participant as "that other lady", which

alerted me to the benefit of the ice breaker. Some parents did not understand the instructions of the ice breaker, missing the request to use a word starting with the same letter as their first name, which indicated to me that I should not assume my instructions were clearly received by participants. In every case, however, the activity served its purpose in introducing participants, breaking the ice with laughter and starting a conversation; I would consider using some form of ice breaker in future with groups.

I was solely responsible for facilitating the group discussions, following the semi-structured format designed as part of the bodywise evaluation, with some input from me. Participants were asked to consider the specific skills and information conveyed to families (content), how the programme was delivered (process), and outcomes for families. Both the bodywise folder and wall charts were used by participants, most typically to either remind them of the part of the programme I was asking them about, or as memory prompts to remind them of some aspect of their experience of the programme they wanted to share.

I met with my field supervisor (Natalie Parkes) after I had facilitated and transcribed the first group, to review and discuss process and results. The key change we made at this point was to add a question asking if bodywise had been successful for parents, and what this meant to them. This was motivated by Sarah, one of the first focus group participants, describing success as a "sliding scale" alerting me to the many ways success may be experienced by parents and potential importance of these insights. All participants received a koha in appreciation of their time (a $10 fruit/vegetable voucher). Over 550 minutes of transcribed data were generated from these focus groups which I analysed for the bodywise study using a thematic analysis. For the present study I re-analysed these data to consider the lived experiences of parents and how they made sense of those experiences, using a phenomenological framework.

Phase two research design: Children

Studies involving child participants require attention to two key differences between child and adults; the first relates to ability; the second, to power (Hill, 2005). With regard to ability, a child's verbal ability is not typically as developed as an adult's, and engagement with abstract ideas also comes with maturity. Age/stage appropriate language was used in all aspects of the study, from informed consent to interview processes. All attempts were made to treat the power differential with sensitivity, as there is a very real danger of breaching the ethical principle of doing no harm when involving children in research (Hill, 2005). Greene and

Hill (2005) are experienced child researchers, and they suggest investigators may be motivated to research children from several different perspectives. A researcher may have an interest in experience itself, or in the study of children as persons, informed by a moral perspective on the rightful place of children as social beings. This latter commitment may be motivated by a desire to understand how children make sense of, negotiate, and feel about their daily lives, which is the primary motivation of this study, with an aim to gain a fuller understanding of the impact of child weight management programmes upon the children themselves.

While focus groups were also considered for the children, after discussion with my academic supervisor, I decided that one-on-one interviews were more appropriate. Interviews are well suited to explorations of experience and the aim was to hear the idiographic accounts of each child in as much detail as possible, without them being influenced by other children. As matters pertaining to bodies can be very personal, the privacy afforded by individual interviews was seen as essential. These interviews were face-to-face, as the proximity of the potential participants made this possible and was considered better for establishing rapport than a virtual interview. In addition, I hoped to benefit from non-verbal cues and body language in a face-to-face setting. The interviews were both audio and video recorded, to allow non-verbal cues to be included in the analysis. The awareness of the power differential present in any research with children was also a factor, and I selected face-to-face individual interviews as the format that would best allow me to monitor the child's degree of comfort with the process. I designed a semi-structured interview structure and as with the parents, I used the bodywise folder (but not the wall posters) as memory prompts for the children.

Recruitment and participants

Child participants were identified from the records held by bodywise, as part of the Waikato District Health Board database, and were purposively selected according to the following criteria: those children whose parents had participated in the bodywise focus groups in early 2013, those children who had completed the five week skills training of bodywise, to ensure participants had sufficient experience of the programme to reflect upon, children aged seven years or older, to ensure sufficient ability to understand the study and express themselves verbally in English during the interview. Had any child been assessed as potentially unsafe to participate by my field supervisor for known trauma around body and weight issues, or for any other reason deemed relevant by the bodywise psychologist, they would have been excluded from the selection sample: no child met this exclusion criteria. Three children (all female)

chose to participate. For a summary of the demographics of the child participants, see the table below.

Table 4: Summary of child participant demographics (n=3).

name (pseudonym)	age at programme entry	age at interview	yrs since programme entry	ethnicity
Boby	9	11	2	NZ European/ Middle Eastern
JoBob	11	13	2	NZ European
Keira	11	16	4	NZ Maori

Information and consent

A separate ethical application was made for researching the children's experiences. I considered the New Zealand Psychological Society's Code of Ethics for research with human participation, especially when working with children as vulnerable persons. I met with Trish Young, (Ngati Kea Ngati Tuara, Te Arawa) Māori research advisor to discuss relevant sensitivities in working with urban Māori in their home environment and to make every effort to design the study with this in mind. Ethical approval began with an application to the Health and Disability Ethics Committee (HDEC) which included consultation with and approval from Te Puna Oranga (Maori Research Advisors for Waikato DHB) (see Appendix D). However once this comprehensive application was completed, I was advised that the new HDEC regulations no longer covered Master's level research in their scope. An application was then submitted and approved by the Massey University Human Ethics Committee (HEC: Southern B Application 13/74).

Recruitment of child participants then commenced with a letter to the parents of these potential participants from Natalie Parkes, outlining the study and inviting their participation, and requesting written permission for me to contact them. At least one parent of each family had therefore met me in the focus groups. I also met five children in one of the bodywise programmes at the end of 2012, so there was some degree of familiarity already established with potential participants. On receipt of permission to contact, I then posted the information sheets (see Appendices E and F) to each of the families who agreed to be contacted for this study (three families); one for the parents and one for the child. This was followed up with a phone call, and/or email (according to the preference of the parents) to answer any questions they had and to arrange an interview time for those who wish to proceed with participation. When I met with these families, I again explained the research to the parent and child,

including aims, confidentiality, their right to withdraw, potential uses of the data, and ways the data would be shared. Material for which informed consent was sought included any art work the child may offer as visual rather than oral responses to my questions. Particular care was taken to clarify anonymity and the possibility that direct (anonymised) quotations may be used in the written reports of the study. Each of the three children who expressed interest chose to proceed with the interview.

At this point, written informed consent was obtained from both parent and child (see Appendix G). Children of this age group (seven years and older) are considered capable of participating in research, providing appropriate care is taken to protect them from the imbalance of power and to structure the process with regard to age-appropriate language and methods. While the child's parent was legally required to give consent on their child's behalf, the consent form was worded so that the children could understand it, and sign their consent as well. This process occurred just prior to the interviews, in the child's home, to assist me in reading the child's body language as well as their words, to help me be as sure possible that they understood the aims and processes of the study. All participants chose their own pseudonym and all identifying information such as places, schools, participants, parents, siblings, extended family/whānau and friends, or unique circumstances, was changed or omitted during the transcription process to protect participant identity.

Procedure

Each of the three children were interviewed in their homes. The semi-structured one-on-one interviews with the three children were guided by the content of the bodywise folders and the prompts I designed specifically for the present study. Some sections of the folder prompted many stories and experiences, while others did not. At times I asked a child to think more on a particular topic, if it related to my research aims, or to dig deeper on information already shared. If this question did not elicit much response from the child, we moved on. At times they made comments when reading a page of the folder, which I then asked them to expand upon. The folder was an invaluable resource, as both a memory prompt and a non-threatening media for introducing each topic. As such, it served as a more central focus of the discussion than it had with the parents. JoBob and Keira were at times critical of the printed material. As the primary aim of the study was to explore the children's experiences of bodywise, the interview schedule was very much a guide and not a checklist for points that must be covered.

Coloured pens and paper were supplied as an additional media for the child to use if they preferred; no child chose to draw pictures. I provided bodywise-approved snacks for the family (fruit, hummus, crackers and coconut water), and was guided by the cultural preferences of the family regarding when/if to share the snacks. For some, it was a useful way to get to know each other and establish rapport with the child; for others, it was more appropriate to leave the food with them after the work was done. I decided to take coconut water to drink to avoid any potential awkwardness if families felt obliged to offer a drink with the food, as this was one of the difficulties Trish Young had warned me might occur if working with poorer families with a cultural emphasis on hospitality. Any uneaten snacks were left with each family, as well as the koha (a $35 Exscite Interactive Science Centre family pass) at the end of each interview. The koha was well received by the youngest of the three girls, but was perhaps not the most appropriate gift for Keira, who, 16 was at the top end of my anticipated age range.

I reminded the children before and during the interview that we could stop at any time if they grew tired or distressed, without them having to explain why. The child's parents were welcome to sit in during the interviews, although I emphasised it was the child's views I was seeking; no parent chose to stay for the interview. One hour was allowed for each interview, and the interviews ranged from 30-70 minutes, from youngest to oldest participant. The brevity of the shortest interview (with Boby) was due to her very busy schedule, with her kindly fitting me in around piano lessons, dinner and prize giving. We covered the full range of experiences that she thought were important to her, but perhaps with not as much detail as we might have with more time. Boby had excellent recall of the programme, probably because she had completed it most recently, and of the three girls, used the bodywise folder the least as a memory prompt. The interviews were video recorded to capture body language and gesture, which can be particularly expressive with children and meaning may have been lost if only sound was recorded. My concerns that video recording may have been intrusive for the participants were unfounded, but on reflection, it is possible some children were put off from participating by this requirement. The video recording did not add enough of value to the analysis to justify their use, and I may not include video for children of this age in future if there was a risk that it would restrict recruitment.

Analysis

Transcription

All focus groups and interviews were transcribed verbatim by the researcher using Express Scribe Pro (version 5.48). The seven focus groups were transcribed verbatim as part of the bodywise evaluation study, between February and March 2013, and took an average of ten hours per group. The children's data were transcribed between November and December 2013. A key difference in the transcription process between parents and adults was the ease of transcribing the children's single voice compared with a group. A simple notation code was used (provided in Appendix H). Normal literary conventions (commas, full stops, etc) were also used to clarify meaning. Sound quality was excellent and very little data was lost through inaudibility.

Interpretative Phenomenological Analysis.

Interpretative Phenomenological Analysis (IPA) was selected as the best fit for this research design because of its idiographic nature and suitability for small sample sizes, and the close focus afforded by a detailed examination which was appropriate for investigating individual unique experiences. Additionally, IPA has a highly accessible and detailed guidance on how to 'do' IPA (J. A. Smith, 2010). IPA was developed by Jonathan Smith as a bridge between experiential and mainstream psychology (Smith, 1996) and is particularly prominent in the applied settings of health, clinical and counselling psychology (Braun & Clarke, 2013). As well as phenomenology, IPA is informed by two additional philosophies of knowledge, hermeneutics and idiography. Hermeneutics is the theory of interpretation, originally developed to interpret Bible texts. The significance of the relationship between phenomenology and hermeneutics is conceptualized as "without the phenomenology, there would be nothing to interpret; without the hermeneutics, the phenomenology would not be seen" (Smith et al., 2009, p. 37).

As with other hermeneutic approaches, IPA researchers recognise there is always a veil between the researcher and the researched, and that the view through that veil is coloured by the researcher's views. IPA explicitly acknowledges that access to a participant's lifeworld is dependant upon and complicated by the researcher's interpretations of the encounter, thus a double hermeneutic is at play, where the researcher is attempting to make sense of the participant's attempt to make sense of their world (J. A. Smith & Osborn, 2003). Where IPA differs from other hermeneutic approaches is in the idiographic orientation, with the emphasis on the individual and upon an exploration of that individual's sense-making (Finlay, 2011).

IPA's concern is with "the detailed examination of individual lived experience and how individuals make sense of that experience" (Eatough & Smith, 2008, p. 179). This fits the exploratory epistemological position of the research question of the current study, where the emphasis is on meaning rather than causation, with an intentional reliance upon open rather than closed questions, as is typical of IPA studies (Smith, Larkin & Flowers, 2009).

IPA is 'phenomenological' because it is concerned with how people make sense of their lived experiences, and it is 'interpretative' because of the role of the researcher (Braun & Clarke, 2013). Just as contextualism identifies the researcher's role as one of the four dimensions of knowledge production (Pidgeon & Henwood, 1997), IPA requires the researcher to not only analyse and describe the data, but to interpret it. The sustained interpretative engagement of IPA has the capacity to uncover powerful insights and imagery, thus making valuable evidenced-based contributions to health interventions (Finlay, 2011). With the focus on the 'person in context' and 'being in the world' (Larkin, Watts and Clifton, 2006), IPA gives voice to the participants, thus meeting the broader aim of this study to provide a forum for bodywise parents and children to speak and be heard for their benefit, and to guide positive change for future participants of bodywise.

Analytic procedures

Parents' talk in the groups and children's talk in the interviews constituted the primary data for analysis, combined with my notes on context and reflections. Analyses commenced with a review of initial thoughts and notes made during transcription. Each transcript was then read separately, one at a time and several times, with points of interest and potential significance highlighted on each transcript (Smith & Eatough, 2007). Additionally, I listened to the audio recording several times to pick up on nuances and the use of laughter and humour which was easier to analyse from the audio rather than the text. Paramount to the analysis was keeping in mind the *interpretative* dimension of an IPA methodology, and to ensure the analysis went beyond the descriptive. I attempted to 'bracket' my bias towards the efficacy of lifestyle interventions as I entered into the lifeworlds of the participants through an empathetic reading of their stories. To a great degree, this bracketing was not difficult, as my experience with lifestyle interventions has given me ample evidence of their low success rate, as measured by an improvement in the targeted aim of the intervention. I was therefore highly motivated to investigate what else might be going on beyond the dissemination of information and skills.

Phase one analysis: Parents

Once transcription was completed, using an iterative and inductive cycle, attention was paid to claims, concerns and understandings of each participant, to contradictions and convergences both within and between participants' data, and any linguistic features of interest (Smith et al., 2009). After noting all points of interest on each transcript, I made a table charting each potential theme for each of the seven focus groups, with all relevant indicators, and highlighted the indicators that described the theme most succinctly. I then drew each potential superordinate theme on A3 artist's paper with coloured pens and reflected on the themes inter-connectedness and how to best describe participants' experiences of bodywise. This was especially useful when analysing the parents' data, as I knew the data very well from the evaluation analysis, and needed to be liberated from that analysis and look at it with fresh eyes. I found it essential to keep the present study's aims to the forefront during this second analysis. It was at this point that the core superordinate themes of *sites of struggle, sites of support, and sites of success* were identified.

From here, subordinates themes were grouped beneath each of the superordinate themes, and settling on the correct descriptive label required much reflection on what I understood was the key descriptor. Here, I drew on the notes and recollections of the context of each group. Each superordinate and subordinate theme, with its descriptor, was then linked back to the transcript with an identifier of key phrases (Smith & Osborn, 2003). The biggest challenge here was to select the best identifier from the many insightful comments. When this was completed, I once more checked that the themes were related back to the study's aims, namely to explore the lived experiences of parents as participants in bodywise, and their subsequent views of the programme and its impact.

Phase two analysis: Children

As the children's analysis occurred some months after the parents' analysis was completed, I made every attempt to allow the children's data to speak without influence from the parents' experiences in the first instance. The video recording was useful in highlighting the use of eye contact as the child and I established a rapport (with eye contact from the child to me increasing as the interview deepened). The video also emphasised how pauses in the child's talk were allowed to continue without becoming awkward for as long as their body language expressed that they had something more to say. Humour was a key component in each of the three interviews, and at times the stark transcript read as if laughter from me was inappropriate. But the video and audio recording showed how my laughter followed that of

the child and was in support and affirmation of the experience they were describing, and was in keeping with the context.

During the initial readings of the data, I paid attention to the descriptive meaning of their talk, and made a note of all points of interest. I also highlighted any linguistic features in these early stages. In subsequent readings I moved to a more conceptual analysis, as I attempted to understand how each child made sense of their bodywise experience. It was at this stage that the analysis became the most interpretative. When the possible meanings became overwhelming, I made notes on each transcript and referred back to my research journal to see if any of the impressions made immediately after the interviews reinforced my interpretation. I also spent time away from the data, reflecting on my interpretations and probing them for inconsistencies. I returned to the transcripts and checked to see if my own biases were influencing my interpretations. I then looked for commonalities and contrasts across the three children's transcripts. I drew all potential themes and descriptors on a white board and looked for descriptors that would justify a theme. Contradictions and linguistic features were included at this level of the analysis. I then coded each transcript with coloured highlighters, to graphically portray these predominant themes. Where the volume of parents' data was at times a challenge, the small number of child participants leant itself to an idiographic treatment of their data. It was tempting to treat each child's data as a case study, without looking so much for commonalities. However, the unique opportunity afforded by having both parent and child data was one of this study's strengths and could only be done by grouping the children's themes together.

Validity and cultural and ethical considerations

Thematic identifiers have been used liberally in the report, to enable the reader to assess the validity of the knowledge claims. Validity can be broadly defined as research which shows what it claims to show (Goodman, 2008). For any research to have validity, it must be open to scrutiny (Madill et al., 2000), and all the more so for qualitative research within a field so saturated with quantitative, positivist assumptions and practices. The very notion of validity in qualitative research is seldom discussed, which is one of the "quantitative research preoccupations" Parker (1994, p. 14) suggests should be considered in qualitative research, if only to explain why it will not be addressed. I have therefore outlined in some detail the ontological and epistemological foundations of this study, and my rationale for these positions. Validity in phenomenology is measured by the ontology and epistemology guiding the methodology, with the focus on the lived world and daily language of research participants to

gain insight into experience (Braun & Clarke, 2013). Kvale, describing himself as a "moderate, post-modern qualitative researcher" (1996, p. 231) explains his conception of validity:

Ideally, the quality of the craftsmanship results in products with knowledge claims so powerful and convincing in their own right that they, so to say, carry the validation with them, like a strong piece of art (Kvale, 1996, pp. 224, 225).

Therefore, the validity of the claims made in this study rests upon the connection between the claims initially outlined as possible under a critical realist ontology and a contextualist epistemology, using a phenomenological methodology, with a clear link between the claims and the identifying passages of the participants' data.

As bodywise children included several ethnicities, it was necessary and desirable to plan for culturally appropriate procedures, and for me to be aware of the limits and deficiencies of my own cultural competencies. As a middle class Pāhekā, I have power and privilege not afforded to all members of society in Aotearoa/ New Zealand, and this power differential may impact the research relationship with both parents and children. Additionally, the provisions under Te Tiriti o Waitangi ensure all interactions with Māori as tangata whenua show regard for partnership, participation and protection. 30% of the parents and 33.3% of the children identified as Māori. As a Pāhekā, I recognise I have limited ability to assess my own cultural competency, and I am grateful for the consultation process available to me from both Trish Young, (Ngati Kea Ngati Tuara, Te Arawa) Māori research advisor for Massey University, and Manaaki Nepia, (Service Development Manager, Te Puna Oranga (Maori Research Advisors for Waikato DHB). Their guidance ensured I was flexible in both place and process of the interviews, allowing time prior to the interviews to get to know the families and for them to get to know me, and knowing when and how food is to be shared. Trish Young alerted me to the possibility of embarrassment to Maori families if I offer food with an expectation of a reciprocal cup of tea, as this hospitality is outside the budget of some whānau. I avoided this by taking a cold drink with me to share in addition to the snacks. Manaaki Nepia reminded me that Te Puna Oranga is the agency I should contact in the first instance if I have any concerns for a Māori family I visit, and requested progress updates and a summary of my study on completion.

The emphasis on the relationship between researcher and participant emphasised by IPA highlights an additional layer to the ethical complexity of this study. At every stage of the research and most particularly during data gathering I was aware of the power imbalance,

particularly when working with the children, where the dynamics of the study created the perception that I was at least 'in charge' and possibly also as 'an expert'. To mitigate this, I expressly reminded the children that I was most interested in what interested them, that the interview was not an evaluation of the bodywise, but an exploration of their experience of the programme. What mattered to them, mattered to me, and they were free to share as much or a little as they chose.

Chapter 4: Parents' experiences of bodywise: sites of meaning

During analysis, the higher level themes of *sites of struggle*, *sites of support* and *sites of success* became a useful way of conceptualising the lived experiences of caregivers, with clusters of themes being drawn to one of these three umbrellas. A landscape metaphor was useful in conceptualising the 'lived' focus of the study, alerting me to the reality of the daily trials and triumphs experienced by bodywise caregiver. A summary of the parents' superordinate and subordinate themes is depicted in the table below.

Table 2: Summary of the themes of parents' talk about their bodywise experiences

SUPERORDINATE	SUBORDINATE
SITES OF STRUGGLE	
	Whose journey is it?
	Good cop, bad cop
	Family struggles
SITES OF SUPPORT	
	Family support
	Support from the bodywise community
	Support dealing with bullying
SITES OF SUCCESS	
	Te taha tinana [physical]
	Te taha whānau [family, social]
	Te taha hinengaro [emotional, mental, psychological]

Sites of Struggle

Struggle was a very dominant theme with most parents struggling with aspects of bodywise. Struggle was especially prevalent in some parents' experiences, for a range of reasons, for some, relating to family dynamics, and for others, as a direct result of their attempts to implement the bodywise recommendations. Belinda's account is included as an example of the sites of struggle parents described:

Belinda: Yes we – we had a family like that, the one that travelled up from Putaruru. His partner didn't come with him and that he said that was a struggle for him and his daughter as well. So all the families in my group struggled with that family catch-up. And some of them, one of them had a religious background and he said he still struggled. But he had children I think living away from home that he wanted to include in the catch-up. So we all struggled for different reasons.

These “different reasons” were experienced by parents across three subordinate themes. The first subordinate theme related to the ambiguity parents expressed regarding the programme, expressed as a question. *Whose journey is it?* described parental confusion over the primary target of change, themselves or their child? The second subordinate theme, *Good cop, bad cop*, described the parents’ guilt at allowing their child to gain weight in the past and their present responsibility to instigate changes, and their resistance against being seen as “bad” parents. *Family struggles* includes parents’ challenges in making changes through family lack of support and financial pressures is the final *site of struggle*.

Whose journey is it?

Throughout all of the focus groups, the tension between the aims of the programme, the parent and the child was apparent, and the ambiguity felt by parents resulted in a theme title that is a question: *Whose journey is it?* The metaphor of the bodywise experience as a journey came from Sheryl who described the programme as a “special journey” for her mokopuna [grandchild] Meiani, with herself as the “director of the waka [canoe]”. Sheryl thus expressed clarity around their respective roles. Like Sheryl, Brianna was very clear that bodywise was targeting her son, and not herself, as she gave this account:

Brianna: … being in the bodywise programme for that whole time he <u>had</u> to be accountable. It wasn't about <u>me</u>, it was about <u>him</u>, so it made <u>him</u> accountable, it made <u>him</u> listen cos I could go ‘do whatever’ but Helen and Soroya and Natalie and Donna they weren't coming to me and saying, "Why didn't you do this? Or why didn't you walk a thousand steps? Or why didn't you get up and go ride your bike?" It was <u>him.</u>

But as parents struggled to make adjustments in their parenting and received support for the changes they were attempting to make, at times the lines were blurred regarding who was the primary focus of the programme. This was particularly apparent with the three parents who were themselves engaged in a weight loss programme. One of these three parents, Amy, described a sense of competition between herself and her daughter, Anna, when Amy completed a course with Sport Waikato and lost 15 kilograms:

Amy: Anna? Umm (2) aww when she was losing weight yeah she seems to think now she was competing with me for a while there.

This competitive spirit was exacerbated after Amy enrolled in a Sport Waikato programme for herself and shared the same activity coordinator as her daughter. This led to confusion for

Amy when Soroya, the activity coordinator visited, as Amy was not sure whether Soroya was there to support herself or Anna, her daughter.

This confusion was exacerbated when Anna responded more favourably to Soroya than to her mother, leading to Amy taking action to regain control:

Amy: Cos like she wouldn't moan at all when Soroya came over to my place - I think Soroya came over to see me actually with my bodywise thing um, my Sport Waikato thing then um next minute she was out there doing the hoops with Soroya and we'd made a little game of it and that was fine but if I tried to say "Oh come on, Anna. Let's do this; it was "hmm in a minute". Yeah now it's hard. I get "Tea's ready" "In a minute." And it's, "Well, no", pull out the computer plug.

Parental empathy and identification with their child was also experienced by parents. Sarah described the struggles for her daughter during the weigh-ins, revealing a painful process for both child and mother:

Sarah: *That was really hard to be there and watch her be told that things hadn't gone as well as we'd expected.*

Despite the ambivalence over who was the primary target of the programme, parents recognised there was an expectation on them to take responsibility to make changes. The expectation was often unwelcome and expressed by parents in the next theme, *Good cop, bad cop.*

Good cop, bad cop

In every case, the decision to enroll in bodywise was made by the parent rather than the child, often on the recommendation of a health professional. This is not unusual for children of this age, but from the outset, it sets up potential for tension, where the child is following the parents' lead, and may or may not be convinced of the necessity or desirability of enrolment. Some parents were ambivalent regarding their role as leader of the changes. The skills taught during bodywise appeared to introduce a new paradigm for Matthew, giving him permission to be in charge, which he embraced with some uneasiness, describing this dynamic as potentially "manipulating" his child if he put pressure on her to do what he wanted. Diana was also reluctant to take charge of her child's bodywise journey, preferring the bodywise team to play 'bad cop':

Diana: I certainly would like um the team to be more of the <u>bad</u> cop in terms of saying - at the end of the day, cos I haven't processed this through in my head properly, I's making it up as I's saying it, but for them to be the health professionals and say, "This is how it will be for you."

And I would like to come in under that and be the support person, this is, you know, these are the professionals, this is what they say, and so this is what we're doing.

The positive role of the health professionals in supporting the changes was appreciated by Verity, again emphasising parental perception as the 'baddie' when attempting to make changes:

Verity: One thing I really enjoyed about the days, the information days, was having the professionals there reinforcing the messages, was an awesome help, cos I hate it how things would go where your child wants to argue with you about everything to do with food and you're the baddie…

Hayley's despair in enforcing the changes for her daughter Keira is also evident: *"Why do I have to be the jailer you know <u>all</u> the time?"*

The reasons for parental reluctance to take the lead in their child's bodywise journey were likely to be complex and varied, but one father generously and honestly shared his reluctance to play 'bad cop' was grounded in his fear that this would risk his daughter rejecting him, as this account shows:

Brent: But yeah it's like for me especially with her having a separated family unit, um it was always a concern for me that perhaps unless I - unless she was happy all the time with me, happy with the way things were going, she might start liking her mum better and then she'd want to go and stay with her mum and I wouldn't want her to stay away from me cos I love her that much.

Parents felt caught in a double bind, feeling 'bad' for allowing their child to become overweight, and then 'bad' for trying to reverse the weight gain, as Amy clearly expressed:

Amy: Yes cos I thought I'm a bad mother and it was all my fault, why she was overweight…She thought I was the nastiest mother in the world [Laughs]. Didn't get any lesser.

This sense of responsibility was compounded for Sarah, who described herself as in charge of their family's eating habits *"cos in my household you ask before you get anything pretty much".* Sarah experienced a sense of relief from guilt when reducing her child's portion sizes once she was armed with the nutritional information shared by the "experts" in the bodywise team. But like Stella, Sarah experienced guilt for her child's 'failure' to reduce or maintain her BMI. This very visible measure of success became not only a measure of the child's weight, but also of the parent's success as a parent, as Sarah continues:

Sarah: I feel like it was my fault in that it was the things that I had control of that I didn't control properly. Um I still feel a sense of that because Ngakarepe hasn't learnt from the programme… She would still, if allowed free rein, eat whatever she wanted.

Stella also experienced this, describing the desperation she felt after responsibility for her child's weight, and making the recommended changes without seeing results:

Stella: And you go like like you've let them down, but you don't understand how it happened in the first place. And deep down I'm like, "Yeah, I've overfed her" but she's still gaining weight and we've changed everything you know.

The theme of *good cop, bad cop* therefore captures the parents' struggles as they attempted to motivate and support their child to adopt new behaviours, and their ambivalence towards taking the role of 'bad cop'. They had a perception of being judged first by the health professionals and then by their child. This sense of judgment is exacerbated by the regular weigh-ins, and the child's body, which many times refuses to 'get with the programme' becomes itself a site of struggle, as not only does the sole measure of success depend upon its performance, (as measured by the programme), it also becomes a visible measure of being a 'good' parent.

Family struggles

One of the key sites of struggles for parents was their child's resistance to the programme, which seemed to increase as the child grew older, with teenagers most frequently described as the most non-compliant, as Samuel's parents Ben and Claire describe in this passage:

Ben: Oh he's a teenager now….It's crap…

Claire: …12 months ago, if we'd had the evaluation 12 months ago it would have been really different. Um he but the last 6 months it's been - yeah. It's just a battle.

This struggle between parental concern for their child and their child's resistance to the programme was a recurring theme in the parents' data. Parental frustration was frequently expressed, expressed most vehemently by Hayley:

Hayley: I think for me that it's frustration that Keira would not take responsibility for all she knows. And I think that there are other people in <u>our</u> group and I think they <u>all</u> felt the same thing, is that when are these kids gonna take a bit of responsibility - we don't expect them to take <u>complete</u>- but you know, the kids - I don't know, that's the one thing that sticks in my mind, that <u>frustrated</u> me the most.

As bodywise targets change at the family level, parents also experienced resistance from other family members as the changes were introduced. Most parents did not expect their partners to adopt the changes for themselves, but encountered behaviours from family members they interpreted as akin to sabotage:

Amy: Yeah we had a major problem with my partner. He didn't always come here and he would - if she did really well and lost weight he'd think "Oh yeah, I'll take her out for tea!" It'd be MacDonald's. I'd be like you can't do that, you're just wrecking the whole programme!

For Hayley, the challenges came when her daughter stayed with her father in the holidays:

Hayley: It was just a battle. And then she'd go up to her father's and in the space of two weeks she'd come back and she'd be like two kilos heavier. I know! I kid you not. It was just trash rubbish and crap. Bullshit.

Sarah described the difficulties she had persuading her mother to limit sugary treats to the children, when the grandparents' attitude was *"You don't say no to your mokos* [grandchildren]". Matthew's depiction of his flourishing relationship with his daughter as they planned meals and shopped together was tempered by his quiet acknowledgement of the lack of support from his wife. Resistance from siblings created problems in other households, as seen in Jill's account of her son's resistance to the changes they were making for their daughter JoBob:

Jill: Well no, the biggest change was for my son. And that night, it was the hardest for him, because he had to give up something and he could not see the point. "Well, if she can't control herself, why do I have to suffer?"…

All parents were only too aware of the complexity of the context in which they were attempting to make changes. Pressures on time, finances and marriages featured prominently. Half of the parents were either single parents or living with a partner who was not their child's biological parent. The financial challenges of making changes was a shared experience for some parents, as Trixie's account highlighted:

Trixie: It's all very well to say 'buy that, buy that, buy that' but you go [intake of breath] my budget's fifty dollars. What am I going to buy with that? That's what I found the biggest problem…

Parents also noted that less healthy food such a pizza was a cheaper option than fresh fruit and vegetables. Cost was therefore a barrier making to making the recommended changes for some parents. Some parents adapted family favourite recipes to a more healthy option, such as Sheryl describes in this passage:

Sheryl: I think that um for me sort of with our Maori food and boil-ups, um I (1) kinda um well I used to get brisket and cut you know cutting half the fat off that's been weighed that you've paid for, but um I went to the butchers and I said "what's a meat that's the nearest tasting to brisket but hasn't got all that fat?" And they said, "Skirt steak"…It's cheaper like um it's five

dollars …it's all meat and it's just got like a little tiny bit of fat…And you cut it up into squares like it's got no fat on it, and you've got your boil up meat and it's still a tasty meat.

Overall, sites of struggle were predominantly relational, demonstrating confusion for parents regarding who was the primary target of the programme and who was the agent of change. Most parents were uncomfortable taking the role of change agent, leading to a major site of struggle between parent and child. These results suggest parents seeking their child's compliance with unpopular behaviours (for both the child and other family members) was new and difficult territory for many parents.

Sites of Support

Parents were unequivocal in their accounts of child obesity as a negative experience, and making changes as challenging. They were also unanimous in their description of bodywise as a positive experience, and emphasised the support of the bodywise team and from other bodywise parents. Some parents also experienced support from family. A key area of support also discussed in all focus groups was the support they experienced from the programme in dealing with bullying. These three subordinate themes, *family support, support from the bodywise community*, and *support dealing with bullying* are described in the next section.

Family Support

Family was not only a site of struggle, it was also a site of support, depending on the response of family members to the bodywise recommendations. Some parents had support from both immediate and extended family/whānau. Trixie was one of the three parents who described their own weight loss during the programme and for her, bodywise was for the whole family. Her attempt to reconcile genetic and lifestyle determinants of health is demonstrated in this account of family involvement:

Trixie: Three years since starting the programme and then now but I mean even you know it was a real family thing you know. I mean, Morris has obviously got the genes of being you know short and chubby you know that was - we're all built you know - but it wasn't just totally him that was focussed, it was a family focussed weight loss as well and eating habits so it was for everyone. Yeah.

The focus group experience reminded some parents of the benefits of different components of the programme. Family catch ups, although not always easy to fit into families' busy lives, were seen as beneficial by all parents. The successful implementation of family catch ups depended upon the willingness of other family members to participate, and

provided an opportunity for their involvement. For Chris, turning off the TV over dinner was a chance for the family to support his son Josh as he made changes:

Chris: Yeah, yeah he was good cos we started the catch up we started doing the catch ups at nights at the dinner table, the TV went off and we just found out what was happening in the day. And at those stages he was usually quite amped about what he'd learnt and stuff and he was quick to pass it on to his sister or my partner and stuff like that. So he was pretty good about it.

But these examples of family support were fewer than the stories of family struggles, and the parents' experiences emphasised the response from other family members greatly impacted the bodywise journey.

Support from the bodywise community

Parents were unanimous in their expressed appreciation of the bodywise professionals. Brian described the impact of the team's encouragement as a "boost" in confidence to an otherwise draining experience. Many parents emphasised their appreciation for the emphasis the team placed on the programme not being about their child's weight, and the skill the team had with their children. Stella described learning from the modelling provided by the bodywise team, which she experienced as both an emotional support and valuable learning:

Stella: Even when I've struggled and we've set goals and some of those ah the six weekly meetings and I've sat down and Penny's refused to set a goal cos it meant that she'd have to do more steps or something and she's like, not doing this anymore, um really not wanting to and bringing up you know brick walls, and then all of a sudden Helen's next to her and I'm right, how can you do that? (Laughs)

Jill: And gets these goals out of her

Stella: Yeah exactly

Stella: I'm about ready to walk out. But um they can turn it around and um that was fantastic and actually I learned a lot about my daughter just by watching um the interactions that they had with her. And for them to then say to me, "You've done well, mum. Good patience." And I'm like, 'Yes!'

For other parents, crucial support came from the other children, as it was for Amy's daughter:

Amy: And she was keen to lose weight- "I've gotta lose weight because I'm gonna see my friends next week." And as soon as that – the weekly visits stopped it was like, "Oh, I'm not going to see anyone now, I don't need to prove to them that I lost weight."

Despite the struggles experienced during bodywise, parents described their enjoyment and appreciation of the programme, and attributing positive family change to the bodywise team:

Stella: I just think it's - I just think they're fabulous ladies. I think um they've changed our family for the better. They definitely are just beautiful people. I don't want it to END, actually.

This sense of loss at the end of the programme was mirrored by Verity, who described the programme's end at Christmas an "anxious time" while she waited for home visits to start in the New Year. Many parents experienced isolation for their child or themselves as a result of their child's size. The group dynamic not only alleviated this sense of isolation but replaced it with a feeling of camaraderie, as this passage demonstrates:

Verity: I loved um how it made Michael feel happy, confident and positive to come to the bodywise afternoons cos he was probably like a lot of young people, wanted to stay inside and he was a loner.

Brian: Yeah I think it was good for them because if they are big kids then they're all coming to a group where they're all on the same page. Whereas if they go do activities with kids that - they end up like you said, the outcast, the loner because they can't keep up with them or they don't get the ball or they -

Verity: They get down and depressed

Brian: So when it was a group like that –I noticed in our group, they all jumped into it cos they were all on the same level. They're all trying to better themselves so…

Trixie: And they encouraged each other too.

This support from others "on the same page" was clearly perceived by parents as crucial in minimising their child's experience as "the outcast, the loner", indicating the social isolation that is so often a reality for 'bigger' children. The identification of their child as different was emphasised by several parents, and many parents described one of the strengths of bodywise was the chance to associate with parents who were 'like them'. Stella described the relief she and her daughter experienced being in a group with other big children:

Stella: And you wouldn't want to stop your child having that group experience, because I think that's what, as a family, what we got most out of um cos that's where we got Penny's buy in, instead of us telling her what to do and how to do it, she was there and she was listening to it and she heard our - the adults goals as well, and I think that was really important that she understood that it was a whole family process and she's not broken and I haven't gone to try and plop her somewhere to fix her, do you know what I mean?

The importance of the bodywise team as professionals in easing the relationship between parent and child was seen as a support by parents, as this dialogue between Steve and Brent shows:

Brent: =Yeah we're not the bad guys any more, for trying to tell them to do the right thing all the time

Steve: Yeah and that's where I think it's one of the biggest things that really helps…because you know it does stop a lot of arguments.

Taken together, these experiences show that importance of social support in reducing negative identities, the parent as the "bad guy" and the child as "the loner" or "broken". For many, the opportunity to share these experiences was as valuable as solving the reason for the negative labels.

Support dealing with bullying

Bullying was a particular focus of bodywise, and both the obesity literature and the experiences shared by the participants confirmed this is part of the landscape for bigger children. Several parents described their child's attempt to apply the recommended strategies for dealing with bullying, including walking away, while others achieved better results by physical retaliation. But the greatest protection against bullying was perceived by parents as their child having at least one close friend, as Brent and Jill shared in this passage:

Brent: …because of her personality she gets on with everybody so she's got a lot of core friends anyway and um like, you were saying Jill those core friends are like an anchor for them.

Jill: It adds with their resilience that gives them that aid, that they realise that I'm ok.

Brent: Yeah they don't despair, think that they're on their own and things like that,

Jill: Even just one - just one REALLY good friend.

Stella and Brianna emphasised the positive contribution the bodywise group made to their children's son's self-esteem and ability to cope with bullying, again through shared experiences that reduced their sense of isolation and through teamwork to come up with strategies to deal with bullying and then, as Brianna said, *"<u>together</u> they would congratulate each other on their progress."*

As with sites of struggle, sites of support were largely centred on the strength gained from the relationships developed during bodywise, both with other participants and with the bodywise team.

Sites of Success under Te Whare Tapa Whā

Sites of success centred on success for the parent, their child or as a family. While the sole measure of success as measured by bodywise was a reduced or maintained BMI (Keene et al., 2010), the parents experienced success across a much wider spectrum than the physical. In the focus groups, parents were asked to reflect on their experiences of success through bodywise. As with their experiences of struggle, the success stories demonstrated the blurred lines between parent and child. As Toni put it, "*when he was happy, I was happy*." However the predominant themes in the parents' data focused on the parents' experiences of their child's success.

I originally categorised the sites of success into four categories, namely physical, emotional, cognitive and social dimensions. However, on further reflection the interpretation of the parents' experiences of success revealed a close parallel with Durie's 1982 Māori health promotion framework Te Whare Tapa Whā (Stephens, 2008). This model is described as a whare nui [meeting house] with four walls; each of these walls correspond to an essential dimension of health, and each is considered equally important under a Maori philosophy of hauora [well-being]. My analysis of sites of success found themes clustered under three of the four dimensions of health, namely taha hinengaro (psychological and emotional); taha whānau (family/social); taha tinana (physical). Therefore these three became the subordinate themes of the sites of success overarching theme. The fourth dimension, taha wairua (spiritual), was not discussed by any parents, possibly because it was not included in the questions I asked. I consider the implications of this in the discussion. This framework proved to be a most relevant and insightful way of interpreting and understanding parents' experiences and is discussed in the next section.

Te taha tinana [physical]

Parents referred to physical successes a little more frequently than they talked about emotional or whānau success, which is not surprising given the programme's biomedical emphasis. Five parents (Toni, Trixie, Claire, Chris, and Kay) described their children achieving success by the bodywise definition of a reduced or maintained BMI either during the programme or afterwards (some children had completed the programme up to four years ago). Toni's son Tawhaiora faced challenges due to a medical condition keeping him wheelchair bound for six months during the 14 month programme, while he was undergoing surgery. Tawhaiora's weight had reduced by 39 kilograms over the four years between bodywise and the time of the focus group interviews. Trixie's son Morris had completed the

programme nearly three years prior to the focus groups and was another example of the bodywise principles being maintained by the children. Trixie explains:

Trixie: Yeah he knew he knew himself I was so pleased that he learned for himself here to three years later knowing that he must have felt that he was putting on weight, he didn't know what to do and suddenly he went "Bodywise! Get the book out. Photocopy a goal sheet!" and off he went. He set them, he wrote it down, and he pinned them on the wall.

Morris' story was a great encouragement for all the parents in Trixie's focus group and his story was known by parents in other focus groups, suggesting his example was not only encouraging but also unusual. Josh had completed the programme 18 months prior to the interview and achieved success during the programme. Chris describes Josh as *"motivated to lose weight. He was not happy with his weight... You know he was wanting to try anything".*

Stella's daughter Penny was not successful in terms of her BMI, but was making healthier food choices, which her mother counted as success. Additionally Stella expressed her hope that Penny would maintain these choices into adulthood. Another major physical success for Stella and Penny was Penny's improved sleep after the bodywise doctor recommended she have her tonsils removed, resulting in Penny no longer waking five or six times a night.

The bodywise emphasis on a maintained BMI (so that weight loss was not the necessary aim) contributed to several parents describing their child as successful even if they did not lose weight. When talking of her son Victor, Kay shared that "whereas he didn't lose weight, he's managed to maintain his BMI" and was "really pleased when he finally got his three month check". Claire counted their bodywise experience as successful because it arrested Samuel's increasing weight.

According to the parents' several children enjoyed increased confidence through weight loss and improved fitness, measuring success as personal improvement, irrespective of their place in the race, as seen in Chris' account:

Chris: = he wasn't the last one and it was, "I wasn't last today, dad. I was 5th to last." Sweet mate. Next time he was 10th to last - just seeing the different changes coming in, "Oh dad, yeah, yeah." Mean.

These accounts demonstrate parents' perceived improved health and BMI scores as positive consequences from their application of bodywise recommendations. Success was also associated with increased fitness and healthier food choices which parents hoped would endure into adulthood. Morris' example was very encouraging for all parents. This theme of *taha tinana* provides a picture of parents who remained key supporters of their child. This

whānau/family support was another subordinate theme under sites of success and as demonstrated in the following section.

Te taha whānau {family/social]

As also seen in *sites of struggle*, several parents described frustration at the deteriorating relationships with their child as boundaries were put in place, particularly when their child entered puberty. Steve and Jill had experienced significant challenges with their daughter JoBob prior to bodywise, living a "nightmare" over their inability to control their daughter's JoBob's snacking. Jill felt physically intimidated by JoBob as the arguments escalated, which was the impetus for them asking for help. Jill and Steve resorted to padlocking the pantry, and this excerpt shows the intensity of the situation:

Catherine: When did the sneaky eating become visible?

Jill: About a year before we joined with bodywise…We got to that stage where we were getting quite desperate. We didn't know what to do, we had major behavioural problems, and arguments...there was a particular time period of the day that was um incredibly difficult which thanks to Natalie, it has um it's just non-existent…We had a particular area in the evening where we would have a full out screaming match because she wanted that pantry and I wouldn't give it to her=

Steve: =We had a chain and padlock on it…

Jill: …And so those are the behaviours that Natalie helped us deal with…and it was magic. We just don't have - I mean, that's just like a nightmare now.

Their daughter JoBob did not achieve BMI success, but the resolution of the pantry wars was a major breakthrough as a family, despite lack of physical success, as Steve explains:

Steve: It didn't achieve what we would have hoped to achieve in the size type thing [laughs] but certainly um we've an understanding and we've a different view from all of us as a family as to what to do…It was successful and as you said, behaviourally it was definitely successful so, so it wasn't a negative thing.

While Steve and Jill experienced their most significant success at home through the support of the bodywise clinical psychologist, Chris described the importance the support of the bodywise community in achieving success, as his son was one of the five children described by their parents as reducing or maintaining their BMI at the time of the focus groups. He also emphasised the enjoyment he and his son experienced at the weekly activity sessions due in part to the group format:

Chris: Oh I enjoyed them. We did them all, I did all the sport physical sessions. Oh we enjoyed them. Josh enjoyed them. I think he enjoyed having a group of kids like minded, like him, to run and play with. And um the people showing us were really good.

Toni also articulated the success of the programme for herself, as the following account captures many of the high points experienced by other parents, with an emphasis on the group dynamic as a key contributor to her enjoyment of the programme. The social contact and support afforded by bodywise, as they participated in physical activities and shared stories with other parents, children and the bodywise team, was experienced by parents as enjoyable and positive, reinforcing that they were not solely focused on a reduced BMI for their child:

Toni: I really loved the programme, that's all. I got a lot of benefit out of the programme, I thoroughly enjoyed it. Umm… I might not have seen the results that I wanted out of it but there was lot of good information that I got out of - from the programme, a better understanding that comes from nutrition even for myself, um and what it's like in other people's lives and how they have to deal with things and how they cope and kinda just feed off that too. That's really good. So I thoroughly enjoyed it.

For Amy's daughter Anna, the influence of the other children was essential to her success, which meant that Anna did not continue with the recommendations once her contact with the other children was over:

Amy: Yeah. And she was keen to lose weight - "I've gotta lose weight because I'm gonna see my friends next week."…That's what it was. As soon as that - the weekly visits stopped it was like, "Oh, I'm not going to see anyone now, I don't need to prove to them that I lost weight."

Boby made a new friend at bodywise and the bond they formed was demonstrated by the song they wrote and shared at bodywise. Boby had continued to keep in touch with her friend after the programme ended. Toni recognised the importance of peer support and when her son Tawhaiora did not make friends with anyone in his group, and she observed him not responding well to her involvement at the outdoor activity sessions, she co-opted the support of his school friend, which was more motivating for her son brought him to the activity sessions held once a week at Sport Waikato. These experiences show parental understanding of the importance of peer support for their children.

Many parents appreciated the support of the team during the five week skills training as a group at bodywise and then continuing for another 12 months via the home visits from one or two bodywise team members. All parents expressed appreciation for the group format of bodywise. When questioned on this, no parents wanted an individual programme, although some liked having the option of occasional one-on-one sessions. The importance of whānau

support in achieving success was paramount, and the most influential whānau in parents' *sites of success* were the other parents and children in the programme and the bodywise team, rather than extended family members, emphasising the importance of a shared experience.

Te taha hinengaro [emotional/mental/psychological]

While parents made fewer references to their child's emotional and mental wellbeing than they made to *taha tinana* and *taha whānau*, the stories they told described experiences that were very meaningful. Many parents described their bodywise journey as enjoyable for both themselves and their children and beneficial for their confidence as parents and for the self-esteem of their child. Brent shared his daughter's experience of excitement at trying something new as a result of perseverance:

Brent: It's hard at the start, getting that routine set into them changing those little things um but the - it's so wonderful when it all comes to fruition and she tries something new and healthy that she has never tried before and she really likes it and she's all excited about it. That that's the part of it that's probably the most enjoyable. Um so yeah when it works it's really awesome and it's worth working towards.

Toni described Tawhaiora's radical change from a child who was bullied and never picked for sports teams to a young man to who now had the "*courage of a lion*" with the confidence to break barriers on a range of dimensions. This passage from Toni describes her understanding of the impact of physical success on her son's psychological well-being, under the wellness dimension of *taha hinengaro*:

Toni: His self esteem's just risen, it's through the roof, so at the moment he's doing really good. …pushing the limits cos there's where you can go, not just to here cos that's where you feel safe, you know?...But pushing them over that line, out of their comfort zone and actually seeing them achieve the things that they didn't think was possible… So you know, it's not necessarily what you see on the chart whether they lost or gained, it's that understanding, the knowledge that they took away from it and the barriers that they can now break.

For some parents, the emotional successes were theirs rather than their children's, again emphasising the journey was a shared one. For Tane the successes encompassed a release of guilt and increased his confidence as a parent, which Matthew attributed to the bodywise team's ability to *"subtly hone your parenting skills*". Stella also experienced a confidence boost as a parent, and this following account gives an insight into the rollercoaster of emotions she experienced:

Stella: And I think as far as parenting skills and confidence the course has just been fantastic for me because now I don't feel so scared.

Jill: Yeah. You don't doubt yourself all the time

Stella: No exactly

Steve: You probably don't think it's your fault

Stella: Oh no I still do [laughs]…When you've got an obese child you have no clue, but you also don't have any faith in your ability to be able to change it. So when it's going up and up and up you're like I have no idea. So now at least I know that what I'm doing is the right thing and whether it's going up or not, I'm still doing the darn best I can.

In this passage, Stella has described her realisation that her confidence as a parent was inextricably linked with her daughter's weight. Her candid admittance of guilt is mitigated by a new assurance that she has new skills and now measured her success as a parent by her commitment to her child's health rather than by her child's weight. This located the measure of her success with herself, and increased her sense of empowerment. The impact of reduced guilt and more confident parenting upon successful parental experiences is the key conclusion in *taha hinengaro*, the third dimension of Te Whare Tapa Whā.

An analysis of success under *taha tinana, taha whānau* and *taha hinengaro*, clarified how parents experienced success across a much wider spectrum than the physical. This analysis describes the rich diversity parents faced on a daily basis and the value they place on the opportunity to share these experiences in a supportive and understanding environment. The analysis of the parents' data under the three superordinate themes of *sites of struggle*, *sites of support* and *sites of success* has provided insight into the trials and triumphs for families as they introduce changes motivated by as assessment of their child's weight as problematic. Parents described uncertainty around their role, and expressed guilt for allowing their child to gain weight while also struggling with the requirement to take responsibility to make changes. Sites of struggle and sites of support were predominantly relational, with parents experiencing both challenges and support from other family members and the bodywise community. Successful BMI reduction or maintenance was not experienced by all, but the majority of parents described the programme as successful, as they valued social, emotional/psychological success as well as success on the physical dimension. All parents viewed the bodywise team as extremely supportive and skilled, and the group format as crucial to their positive experience of bodywise.

Chapter 5: Children's sense-making of their experiences of bodywise

The analysis of the three child participants required a different approach from that used with the parents. With 22 parent participants and 550 minutes of data to analyse, commonalities were relatively easy to identify in the parents' data. But with just three children and 170 minutes of data, children's themes based on prevalence across the dataset were harder to establish. At first glance, apart from gender, the three girls had more differences than commonalities. They were different ages, with Boby at 11 years, JoBob 13 years and Keira at 16 years. The gap between programme enrolment and the interviews also spanned quite a range: JoBob had enrolled in bodywise most recently, at 21 months ago; Boby had enrolled 30 months ago; and Keira, at 55 months ago, was the child with the largest gap between programme enrolment and the interview, not just of these three interview participants, but of all the twenty children of the parents who participated in the focus groups. An additional difference between the three children was ethnicity, with Boby identifying as New Zealand European/Middle Eastern, JoBob as New Zealand European and Keira as Maori. However, the analysis identified thematic commonalities despite these differences, and these themes are discussed in this chapter under two superordinate themes, key *experiences* and *making sense of the impact of bodywise*. The summary of the superordinate and subordinate themes is seen in the table below.

Table 3: Summary of the children's experiences and sense-making of bodywise

SUPERORDINATE	**SUBORDINATE**
KEY EXPERIENCES	
	Commitment to bodywise
	Dealing with bullying
	Family/whanau, friends and the bodywise community
	Fun and enjoyment as success
MAKING SENSE OF THE IMPACT OF BODYWISE	
	The relationship between cause and effect
	A sense of personal agency

Key experiences

Four subordinate themes were identified in the children's data under the first superordinate theme; each is discussed in the next section.

Commitment to bodywise

Each of the children were enrolled in bodywise by their parents and their commitment to the programme varied. As the youngest of the three girls at programme entry (at age 9), Boby expressed the greatest compliance: *"My mum she said that I needed to go so I said OK*." Both Keira and JoBob were 11 at programme entry and described an initial reluctance to participate in bodywise. This reluctance diminished for a time, as they found aspects of the programme enjoyable and beneficial. But the lack of progress all three girls experienced in their BMI results was a source of frustration for each of them, and contributed to a diminishing commitment from JoBob and Keira, but not from Boby. Boby's willingness to accept the bodywise recommendations expressed at enrolment was still evident at the time of the interview. She had excellent recollection of the nutritional information underpinning the programme and continued to apply the bodywise recommendations, including label reading and portion control. When asked if bodywise was successful for her, she replied: "Yeah cos before bodywise I was starting to get more unhealthy. But then we started to get back on track to what was healthy for us".

Of the three child participants, JoBob demonstrated the greatest degree of critical thinking with regard to health and the bodywise programme. She measured her health by comparison with others, and her motivation to make changes was influenced by her perception of herself as least in need on change. In her bodywise group, she was "the one who didn't change as much. But that's only cos I wasn't really that big compared to them. Like I was always the smallest. And I finished the smallest." She made other comparisons with the children who shared her same medical condition and concluded she was the healthiest as the only one who had never been admitted to the children's hospital. JoBob investigated the efficacy of BMI and rejected it as a valid measure of obesity, as it "did not make sense". She therefore concluded that her lack of weight loss was not as a fault in the scale and not in herself, ultimately leading her to not only reject BMI, but the entire programme because it "didn't work for me".

At the time of Keira's enrolment was a period of change for her, as she had just moved from living full time with her father to living with her mother during term time and spending

holidays with her father and older brothers. Keira described her commitment to the programme as compliant rather than committed, as this excerpt showed:

Keira: Um it was Mum's idea, I just went with it. That's what I usually do with mum's ideas. Go with it. Go on and start stuff.

But as the programme continued, Keira "understood the need for it" and was committed to making changes. She experienced improved sleep and more energy and attributed this to increased fitness gained through regular bike rides. But the new behaviours were difficult to maintain especially when she was at her father's because of his financial circumstances. Despite implementing several strategies with the support of her mother and the bodywise team, and her father's willingness to make the changes, the complexity of his household remained a major barrier to introducing healthy change, and Keira's commitment at the time of the interview had been greatly diminished. At the time of the interview, Keira was no longer following many of the bodywise recommendations and described her health behaviours as those things she was not doing. While this demonstrated she remembered what the recommendations were and she recalled some physical benefits from adopting the recommendations, she did not articulate a desire or commitment to reintroduce these behaviours.

Dealing with bullying

Bigger children are frequently the target of weight-related bullying and bodywise provided skills training in managing this. All three children described experiences of being bullied. Keira described an unsuccessful attempt to deal with bullying with the recommended walk away approach:

Keira: …walking away, really, yep it was like, that did not help at all. But ok, well I tried.

She expressed greater concern when her friends were being bullied but was frustrated at her seeming powerlessness, as seen in this account of a friend being bullied at school:

Keira: They kept cornering us…-I really really wanted to do something but I couldn't because that probably would have made it worse and I didn't want to make it worse, I just wanted it to stop.

Keira's sense of self as able to protect those she cares about was a dominant theme. She also experienced being the recipient of this protection from her brother Jimmie, who had a reputation as "the bully's bully". His protectiveness is described in this passage:

Catherine: Do your brothers - if they knew you were needing help, would that be likely to um -

Keira: They'd do a bit more than talk to them [laughs]

Catherine: Yeah, yeah.

Keira: They're really protective of me. They're um every time I come and go and see them, Jimmie's like," So is there anyone I need to beat up?" And I'm like no, just no.

JoBob described having a long history of being bullied, expressing its pervasiveness as "it's just going on". She also questioned how bullying should be defined as her most recent examples of bullying were not first hand but by insinuation, as this excerpt showed:

JoBob: I don't really know how other people really deal - like get with bullying because most of the people don't do it straight up to me. Like recently this year, someone knew who I was, and then I was their friend, and then like "Oh so <u>that's</u> who everyone's talking about." And I was like oh.

She also emphasised the importance of friends as a protection from bullying.

Boby experienced her father's emphasis on healthy eating as bullying, as she explained in this passage:

Boby: ...he's always commenting that I should have water instead of coke and stuff and he wants me to be healthy and he's kinda bullying me because I'm big and saying that 'you're big, you should change' and yeah. He's always done that and stuff.

But among her peers, Boby experienced less bullying as she grew older, although as with her father, she understood bullying to be related to her weight and size, as seen in this account:

Catherine: Do you want to talk a bit more about that, the bullying side of it?

Boby: Umm well, when I was in primary school there was lots of kids who said I was fat and stuff. And kept teasing me. But one girl was bigger than me and she called me fat and I just ignored her and stuff. But now I'm at Intermediate there's more mature people and it kinda they don't really say anything about it and stuff.

Boby: Mmm.

Catherine: So it's not a problem?

Boby: No but I've got afterschool care and they say it a lot.

Catherine: The kids?

Boby: Mmmm

While each of the three girls had experienced bullying, only Boby related it directly to her physical size. Boby and JoBob were still experiencing bullying while for Keira (the oldest) it seemed to be a thing of the past, suggesting Boby's observation of it becoming less of a problem with age and maturity may be accurate.

Family/whānau, friends and the bodywise community

Each of the children described experiences of social support and struggles. For Boby, the most significant social support relating to bodywise came from a friend she made during the programme and with whom she remained in close contact. For JoBob, her parents and school friends were her primary social contacts. Keira's closest bonds were with her father, brothers and her school networks. The most prevalent appreciation of support described by the children from their parents was the provision of resources, predominantly financial. Keira had the complex task of juggling two homes with different access to resources. When with her mother during term time, Keira had the benefit of a "double income family". But at her father's in the holidays, the financial situation was a major barrier to her implementing the bodywise recommendations, as she described here:

Keira: Um he kind of couldn't [make changes] because he didn't get much income. So he wasn't able to so…because it seems that like the healthier stuff is more expensive than the other stuff.

Her older brothers also lived at her father's and their unwillingness to make changes also impacted upon Keira:

Keira: It was difficult in the whole household because it wasn't just me and my dad, it was my two brothers as well. So we had to have them willing to change as well, and I wasn't so sure that they were.

Catherine: And how did it go?

Keira: Um not really, they weren't really that willing.

Keira described the bodywise team as understanding of the complexity of her situation and her mother provided financial support to help Keira eat healthy food when at her father's place. These financial difficulties were still evident at the time of the interview, four years after programme completion, so that it was still difficult for Keira to prioritise healthy choices when at her father's, as she described him as "struggling at the moment. So I don't know if I should push it."

For Boby, her primary family dynamic centred on her having a twin sister, Anna, who was the size of a 'peanut'. She was pleased Anna did not come to bodywise with her, as her twin's smaller build made inevitable, unfavourable comparisons between them. When describing these comparisons, Boby did not criticise her twin at any point, but experienced these comparisons as "sad and annoying", as this account demonstrated:

Boby: Yeah but people- cos we're twins, people like - my friends chose Anna over me cos she's small and cute and they can pick her up and cuddle her and stuff. Yeah that's what most people

do- when people choose Anna over me and they choose Anna a lot, pretty much all the time. And it's kinda sad and annoying.

The difference in the treatment of the two girls by others was experienced at both school and after school care:

Boby: It's frustrating sometimes. Cos this girl like at after school care, they were having donuts and stuff and Anna has a lot of donuts and when I have one or two people say, 'you don't want to put on your pounds and stuff'. Yeah, no-one notices when Anna eats them.

So for Boby, family struggles came not from tension between family members but from comparisons made by others through their surveillance and the associated judgments made by others.

JoBob recounted the conflict in her family that occurred prior to bodywise over her snacking after school. Her parents had described this behaviour as a 'nightmare' and its resolution as the biggest success to come out of bodywise, due to the bodywise clinical psychologist's intervention. It was interesting to hear the story from JoBob's point-of-view, as she experienced it:

Catherine: So how was it when you were sneaking stuff from the pantry? What was going through your mind then?

JoBob: I dunno. Most of the time - I think I was just really bored, I was like arhhh. Or I was actually hungry….

Catherine: Did that cause conflict in the family?

JoBob: No.

Catherine: No? Did the family not know?

JoBob: Um my parents usually - used to lock the pantry actually. My brother had a key and I was like 'Let me in there'

Catherine: How was that?

JoBob: Pretty sad.

Catherine: Yeah.

JoBob: If they had to lock the pantry - something's wrong.

Catherine: What do you think - where do you think there's something wrong?

JoBob: Well I dunno, I mean ... I think the whole bodywise sorta thing kinda put them on it.

JoBob's understanding that bodywise instigated the padlock was in contradiction of her parents' account of it and demonstrates how one event can be experienced and remembered very differently by those living it. The significance of the 'pantry wars' for this family is reinforced by both parents and child including it in their accounts.

The children also experienced support from the bodywise group. When asked what the best thing was about bodywise, Keira said, without hesitation, “getting to know new people”. But despite Keira’s emphasis on social connections, she did not discuss the bodywise team in any detail throughout her interview, nor had she made any enduring friendships. (The team during Keira’s enrolment was made up of different personnel from those currently involved). JoBob described the team as “nice and encouraging”, although this was tempered by a concern that the psychologist had “the power to mess with people's brains.” However the importance of peer support was emphasised by the children rather than the support of the bodywise team, as seen in Boby’s enduring friendship with Melanie, one of the girls in her group and this featured as a pivotal experience in her bodywise journey. Boby preferred the groups sessions with the children rather than the adults, because of the shared experience: “Yeah, it was kinda better with the kids cos they had the same thing as you but the adults didn't really have the same thing.” Keira and JoBob described few experiences of support from the bodywise community, which may have contributed to their disengagement, or the lack of support may have been as a consequence. The length of time between the programme and the interview may also have contributed to their perception of disconnection. By contrast, although Boby shared the lack of BMI improvement with the other two girls, she remained engaged with the programme and was still in regular contact with Melanie which may have contributed to her continued connection to the bodywise recommendations.

Fun and enjoyment as success

For each of the children, success was linked with experiences of fun and enjoyment. Fun was a core theme for each of the girls, with perseverance and continued involvement with bodywise recommendations frequently linked with fun and enjoyment. Keira’s enjoyment did not depend on her skill when playing hockey, as although she found “no I'm not any good at hockey”, it was still “fun”. She skipping roped on the trampoline because this was “more fun” that way. The major breakthrough for Boby came when she discovered she enjoyed physical activity. This enjoyment led to perseverance and practice which in turn resulted in increased skill, and better skills increased her popularity and selection into school teams and “heaps of badges” in recognition of her success. Thus the importance of her BMI was reduced in the light of these other positive, pleasurable experiences.

Fun was especially relevant for JoBob. Despite her ultimate rejection of bodywise, her first descriptor of the programme was that it was “pretty fun” and she made frequent mention

of the fun she had at the activity segment of the programme. When asked directly if bodywise had been a success, this was her reply:

JoBob: Um, well I did learn some things, I enjoyed the sporting things, like the sport and activity part was really good. Like I think that part was perfect. And - I mean I enjoyed it and I'm pretty sure everyone did.

She also enjoyed having her commitment to eating breakfast affirmed at school, "cos when we did health in PE the teacher's like who easts breakfast? And I'm like, yes. Tick!" She was anticipating her five week stay on Waiheke Island would be "cool", despite seeing herself as less sporty than many of her peers. The enjoyment of physical activity was an important factor for both JoBob and Boby continuing their involvement in a range of sports after bodywise.

Making sense of the impact of bodywise

The first superordinate theme described the experiences relating to bodywise discussed by the children, while the second superordinate theme described ways the children attempted to make sense of these experiences, under two subordinate themes which are described in the next section.

The relationship between cause and effect

A key commonality between each of the three child participants was their lack of improved BMI. Each of the girls described an understanding of a relationship between cause and effect, and shared some of the processes they went through as they attempted to make sense of this lack of BMI success. Of the three children, Boby was the one most obviously applying bodywise recommendations to her lifestyle, as she was very active in a wide range of and was still reading labels and monitoring her portion sizes. Despite her acceptance of the programme, Boby experienced frustration through lack of reduction in her BMI:

Catherine: Did you see any change in your BMI through the programme?

Boby: Um ah well first weigh was like I don't remember. But then it got better and better but then when they kept coming back to see us at home, um it wasn't- it was getting bigger. And stuff.

Catherine: And how was that for you?

Boby: Um frustrating kind of… cos I was doing a whole lot of sport and stuff.

Despite not seeing the expected results for her efforts, Boby continued to be very active and to read labels and try to control her portion sizes. Her understanding of the importance of enjoyment and skills as key motivators as seen in the following passage:

Boby: Well I got to know like lots of - I learned how to like use the ball and stuff and the cricket bat and stuff and I liked the ball so I started practicing every break at school and now I'm like really good at basketball at Intermediate. I got heaps of badges for it.

JoBob's understanding of cause and effect was experienced more as a rebellious response to the recommended changes. A major conflict in her family centred on her restricted access to the pantry, which caused the opposite of the desired result, as JoBob explains:

JoBob: I ... used to sneak a lot out of the pantry because they stopped me doing that, it made me wanna do it <u>more</u>!

Where JoBob was conscious of her internal motivators, Keira was especially aware of external factors. Her experiences of cause and effect upon health led her to consider herself at risk of heart disease as she saw numerous family members becoming ill. Both her mother and her father had made lifestyle changes when diagnosed with heart disease. The following passage demonstrates Keira's understanding of external factors motivating change for her father and brother:

Keira: … well dad's kinda gotten back into smoking but that's because of the stress going on at the time. But um things are changing slowly but they are.

Catherine: And how about your brothers?

Keira: Well the eldest one - Ben he has to change because of his baby. He's changing a lot of stuff because of that.

This emphasis on external factors is also apparent in Keira's understanding of her ability to make changes, and is described in more detail in the second of the subordinate themes under this superordinate theme, *a sense of personal control*.

A sense of personal control

This theme dealt with the children's awareness of self-efficacy and power as related to their bodywise experiences. As seen, Boby had the most straightforward attitude toward the programme, with an expectation that persistence would result in the desired improvements. The biggest change for her was in the amount and range of physical activities she was now involved in, and her ability to maintain this high level of activity was dependent upon her mother's support. But as she put it, *"Mum lets us do whatever sport we want*" so Boby's preferences determined her physical activities. She emphasised the importance of practice in achieving a high level of skill which had improved her confidence at school, and resulted in her being chosen first for teams. Overall, the experiences Boby discussed demonstrated her

confidence in the ability of bodywise to lead to positive change, despite the lack of BMI success, and in her ability to contribute to these changes through her choices.

JoBob was also aware of a sense of personal control, but as seen in her understanding of cause and effect, the control was often experienced as resistance to the programme's goals. She described herself as poor at goal setting, stubborn and resistant to change. She also described herself as very shy and with very low self-confidence. But she described increased confidence as her fitness improved – *"I'm the boss!"* After bodywise she was more active at school and had enjoyed working with a personal trainer. At the time of the interview, she was very excited to have been selected to attend a five week camp on Waiheke Island. She looked forward to the physical challenges that she may face during this camp, anticipating that it would be *"cool".*

JoBob's discussion of the various components of the programme demonstrated a pattern, where she considered the recommendation, and when she did not perceive herself as meeting that recommended ideal, she rejected it, as seen with her rejection of BMI as a valid measurement tool. She also located the source of the pantry wars with bodywise, even though the padlock was put in place prior to starting the programme. Her reflection that a locked pantry was an indication that something was wrong hinted at her understanding of dynamics at a deeper level than a desire to snack from boredom or hunger. But as with her dismissal of bodywise by discounting the use of the BMI scale, she attributed the cause of the locked pantry to bodywise rather than to anything in her own behaviour. She struggled with the goal setting requirement of the programme and this *"just didn't work for me"* because she *"knew it wouldn't work anyway. And cos I'm really stubborn."* In this instance, she located the reason for failure with her stubbornness. She did not describe any experiences of struggling with this stubbornness but seemed to accept it as a permanent part of her self.

In addition to a lack of confidence in her ability to change, JoBob also expressed a lack of confidence in the programme, despite her desire for change:

JoBob: So it's kinda frustrating cos you're like, you don't always want to have to get like bigger clothes. But there's nothing I can do. You know it's like...

Catherine: So you don't think the things they were teaching in bodywise had the ability to -

JoBob: - Not really. I think it had like a very minor impact. Didn't really do much.

But while concluding that bodywise was *"not for her",* she described a new internal control over snacking, resulting in the removal of the padlock from the pantry:

Catherine: What about snacking between meals?

JoBob: Um pause I don't think that's really a problem any more. I've finally figured out - I now know when I'm full.

This revelation of recognising satiety as a signal to stop eating was definitely understood as success by JoBob, as she enthusiastically shared in this account:

JoBob: Now I've found that only <u>two</u> is a <u>good</u> thing.

Catherine: Right. So it's portion control

JoBob: Yeah. And it's more self control.

Catherine: And how does it feel to have more self control?

JoBob: It's good. Now I'm like whoop!

JoBob not only described new learning of an embodied experience, she found a label for this new sensation of satiation, and experienced it in positive terms ("whoop!"). This result marked a major developmental milestone for her. However, she did not attribute achieving this milestone to bodywise. Her final assessment of bodywise culminated in an ultimate rejection of any identification as 'obese' as seen in this passage where she responds to my invitation to make recommendations to the programme:

JoBob: Um, try to take <u>their</u> perspective in a little bit more. Because like, I know what they're <u>trying</u> to do, what they were <u>trying</u> to do was good, like the idea was good, but then like nobody really wants to be told their like fat or anything... like I told my mum today when we were talking about it, cos we were at the doctor's and then she [mum] called me obese. And I'm like "No, no, no, I'm tubby. Like a marshmallow."

When I asked her to unpack what this meant, JoBob clarified the importance of rejecting the negative and replacing it with something positive:

JoBob: It's a nicer comparison.

Catherine: So how would that translate...?

JoBob: They had such negative… Yeah you don't really like negative things. No so you compare it to nicer things - marshmallows. I mean sure they're tubby but you know. They're nicer. Unless you don't like marshmallows.

JoBob's rejection of BMI and the term obese can be interpreted as an attempt to protect her sense of self. She is aware that she has consciously replaced a negative (obese) with a positive (tubby). She even recognises that a marshmallow might not be a positive descriptor for everyone.

A sense of personal control was emphasised by Keira in her discussion of her experiences of bodywise. Keira described herself as *"usually able to get some changes to happen*." Woven throughout Keira's talk is an enduring sense of responsibility and a desire to

protect others, as seen in the example of her experience with a friend who was bullied. She says of her brothers and father, *"I always worry about them, even though I'm the youngest, I always do, I always have."* Keira's strong social ties to her family were equaled by her close friendship bonds. The predominant theme in Keira's sense of personal control was the tension between seeing herself as powerful, and a caretaker and protector of others, and her sense of powerlessness. This struggle was the foundation to her recent suicide attempt[4] which she understood to have been precipitated by her sense of responsibility to her friend:

Keira: It wasn't just me feeling bad for myself, it was feeling like I wasn't good enough. Like my friend she - she got raped and I didn't do anything about it and I felt like I could have protected her. Yeah. But it's getting better.

An analysis of Keira's sense of personal control demonstrated how crucial this was for her with Keira's suicide attempt relating to her sense of failure when her friend was raped. Her description of herself as responsible for others and "able to get changes to happen" were accompanied by a sense of frustration and anger when these changes did not occur or were not positive ones. Managing negative emotions was included in of the skills building sessions for the children at bodywise, and when we reached this section in the folder, Keira shared some of the strategies she used to deal with anger and stress. She spoke of holes in the wall as a result of her anger, and described in detail her current anger management technique:

Catherine: [referring to the bodywise folder]. This is talking about controlling your own feelings.

Keira: Yeah you want to know what I do when I get mad. (3)

Catherine: Tell me.

Keira: I I I have a teddy in my room and I kinda beat him. It's actually really good for stress. (2)

Catherine: So you do experience stress?

Keira: Quite a bit

Catherine: So your teddy gets beaten up quite a bit?

Keira: Yeah, yeah he does.

At the time of the interview, Keira was undergoing counselling and described herself as feeling better, but there was no clear integration of Keira's identification as the one responsible to introduce change and her sense of helplessness in making these changes.

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[4] Keira was receiving counselling for issues around this suicide attempt and had support from both her mother and father. I advised both my field supervisor and academic supervisor of the situation to ensure I had met all ethical obligations.

The theme of *a sense of personal control* provided important insights into the complex landscape these girls needed to navigate as they attempted to integrate the recommendation of bodywise into not only their goals and behaviours, but into their sense of self and their social worlds. In summary, each of the participants described a lack of improvement in their BMI. For JoBob and Keira, this resulted in reduced commitment to the programme over time. For Boby, the discovery of an enjoyment and skill at organised physical activities resulted in her maintaining a high level of activity and she remained motivated to persevering with the bodywise recommendations, despite her frustration at the lack of BMI success. All participants, Boby and JoBob in particular, emphasised fun and enjoyment as a key component of the programme, centred on shared physical activities. Like Boby, JoBob continued to be involved in these activities because they were enjoyable more than for their health benefits. All the children experienced and appreciated family support, but for Keira, family dynamics were complicated by living between two households and the financial restrictions when at her father's was the primary and ultimately insurmountable barrier to her making health-related changes. These participants shared experiences of being bullied, although only Boby described this as related to her weight. Peer support was emphasised by all girls as a protection against bullying. Each participant considered the relationship between cause and effect as they described their lived experiences of bodywise: Keira was most aware of external factors, JoBob more focused on her internal motivators, and Boby expressed the most straightforward understanding with a mostly linear expectation of cause and effect.

Finally, the girls all experienced a development in their sense of personal control between enrolment in bodywise and the time of their interviews with me. Boby and JoBob both described an increase in self-esteem and confidence, but Keira had experienced a reduced sense of personal control with life-threatening consequences. Central to JoBob's sense of personal control was her rejection of both the diagnostic tool and the label of obesity, replacing it with her own definition of self as tubby. In the next section, I integrate the parents and children's findings, to identify shared and contrasting themes that may offer insight into the lived experiences of children and their parents as participants in this child weight management programme.

Integrating the findings: A "special journey"

The landscape metaphor of *sites of struggle, sites of support* and *sites of success* highlighted the myriad of structures impacting the lived experiences of parents as participants in bodywise. These structures were predominantly relational, emotional and psychological

rather than physical, culminating in a more holistic perception of success than a sole emphasis on BMI. While parents fluctuated between seeing at times themselves and at times their children as the primary focus of the journey, the three children accepted their parents as the initiator but themselves as the target of the programme. But the lack of improvement in BMI was a source of frustration for all three children and led two of them to reject the programme. Both Keira and her mother Hayley were in agreement regarding Keira's lack of commitment to bodywise, although Hayley attributed this to her daughter's refusal to take responsibility for herself, while Keira saw herself as highly responsible in her concern for others but "not fussed" about herself. JoBob and her parents Steve and Jill showed the greatest congruity in their accounts, with both child and parents highlighting similar experiences, such as the padlocked pantry, and the importance of friends in dealing with bullying.

A difference was seen in the importance attributed to the bodywise team. Support from the bodywise professionals was unanimously positive and central for the parents but of minor significance for the children. This was demonstrated in the different perception of bullying in the parents' findings compared with the children; the parents more commonly emphasised the support received by bodywise in dealing with bullying, while the children's accounts of bullying emphasised the importance of school friends.

Parents and children also differed in their relationships with family. For parents, family members were both sites of struggle and sites of support predominantly via interpersonal dynamics; for the children, while family also featured as important, this was primarily not described as relationships but as resource providers. Several parents discussed their fear of being rejected by their children in response to the changes they were recommended to make. Boby described bullying by her father because she was 'big', but no child indicated any fear of rejection by the parent with whom they were sharing the bodywise journey, suggesting that while the introduction of change brought tension, this was not interpreted by the child as a threat to the relationship.

Both parents and children discussed the impact of negative labels. Stella's concern that enrolment in bodywise would label their child as "broken" and Tane's fear that his son would end up in the "too hard" basket was alleviated by the sensitivity of the bodywise team and the support of other parents. Boby appreciated being with other children like her and the new friend she made at bodywise was very important to her. JoBob showed the most active response to negative labels as she rejected not only the use of BMI as a diagnostic tool, but also the label "obese" redefining herself as "tubby". In Keira's case, an awareness that she was "probably at risk of heart disease" was due to both parents being diagnosed with heart

conditions but her personal agency to reduce the risk was restricted by her perception of these environmental mechanisms, resulting in a fatalistic attitude to future health problems. Both parent and child participants described increased knowledge coming from the programme, but as Keira's example indicates, increased knowledge did not guarantee increased personal agency. Generally, the children had been exposed to most of the knowledge shared at bodywise prior to the programme, while for many parents, this information was either new or changed previously learned recommendations.

Sheryl's description of the programme as a "special journey" for her mokopuna [grandchild], with herself as the "director of the waka" provides a powerful metaphor for integrating the findings. We can envisage the bodywise experience with the metaphor of a waka [canoe] fully stocked by bodywise with all the supplies needed for the journey. The application of this metaphor is very helpful in understanding the relationships and responsibilities of all those involved in bodywise, and I have developed the metaphor in the next section.

If the journey is to be taken on a waka, we can envisage that the parents have 'bought' tickets by investing their time and commitment for themselves and their child and they all get on board. The bodywise team are there to plot the course, but the parents are required to take hold of the paddles. Some parents like Sarah rowed with both paddles, ("cos in my household you ask before you get anything pretty much"). Ideally, the child will take hold of the other oar, as was seen, for example, with Diana and her daughter Boby. While Diana was frustrated in the demands on her time as a single mother in full time study, Boby's enthusiasm for sport and willingness to make changes in her nutrition enabled mother and child to work as a team. This teamwork was also demonstrated by both Boby and Diana reducing their portion sizes to match that of Boby's twin, suggesting cohesive family relationships.

Both JoBob and Keira took hold of the paddles of their waka for a time, and progress was made. Both expressed enjoyment at the physical sensation of rowing and Keira also slept better at night. JoBob had the advantage of two parents pulling on the paddles and she was free to row and rest as she wanted, as long as she didn't duck down to the galley and eat all the supplies. JoBob continues to row and has even planned a solo (without her parents) expedition to Waiheke Island, anticipating the physical challenges with excitement. But Keira's journey was complicated by seeing her dad on a completely different waka, being pulled downstream, and eventually she swam out to help row with him, leaving her mother rowing the bodywise waka alone.

But the bodywise journey continues for those still on the boat and the parents get tired. As their child matures and increases in strength, their parents expect them to take both paddles. Tawhaiora and Morris did just this, and their parents were able to let go of the paddles (but not yet get off the boat). But for others, the child's refusal to row has left the waka going round in circles, until the parent also pulls in the paddles and the journey, at least for now, is over (as it was for parents Amy, Ben and Claire, and Hayley). This metaphor brings the landscape superordinate themes of *sites of struggle, support and success* into clear focus. Struggle and support occurred on both sides of the boat (between parent and child) and with whoever else was along for the ride (spouses, partners, siblings, extended family/whānau and friends). Success was achieved when parent and child pulled together, and was more likely when family and friends got on board and also pulled their weight. Bodywise rowers in their own waka called out encouragement to one another, and shared tips on avoiding blisters and how best to pull on the paddles. But no matter how hard parents rowed, there was nothing they could do to get their child to the desired destination if their child got off the boat.

Envisaging bodywise under this metaphor also brings the other key crew members into view. The members of the bodywise team are central to this journey. They are there to requisition supplies, to give training in oarsmanship, to navigate and to encourage. But they are not there to row the boat. Diana's request for the bodywise team to play "bad cop" is an example of a parent who wanted the bodywise crew to take hold of the paddles leaving her free to play "good cop", like a ship's doctor applying soothing balm to her daughters' blisters after a hard day's rowing. Another parent, Ben, wanted the bodywise psychologist to take the role of Commander and "stomp" on their son, so great was his frustration and exhaustion at rowing alone. But all parents were very appreciative of the bodywise personnel, who they experienced as a strongly bonded team of "experts" and "professionals", with the right mix of skills and a generous and warm commitment to sharing those skills with the novice rowers. The parents' appreciation is a testimony to the bodywise professionals, for ensuring all parents were supported and encouraged, regardless of the children's progress and commitment. The confusion for parents over *Whose journey is it?* is clearly answered by this metaphor. Like all good crews, everyone has a role, but the roles are different and different strengths are required at different stages of the journey.

The description of the bodywise experience as a "special journey" resonated with many parents, who experienced bodywise as a significant and beneficial life event. The results suggested that this was less true for the children, with two of the three opting to disengage from the programme. While there was harmony between parent and child accounts in some

areas, the themes highlighted by the parents when compared with the children's accounts suggested that parents have more in common with other parents' experiences than they do with those of their children. Potential reasons for these differences are discussed in the next chapter, with consideration of the relevance of both differences and commonalities for participants of child weight management programmes.

Chapter 6: Discussion, limitations and reflections

This study aimed to explore the lived experiences of children and their parents as participants in a child weight management programme based in the Waikato, Aotearoa/New Zealand. I have argued that the findings demonstrated that parents experienced bodywise as a more beneficial and meaningful life event than their children. For both parents and children, success was experienced across multi-dimensions including not just the physical but also social and emotional/psychological, suggesting that there are benefits to bodywise not captured by the sole measurement of an improved BMI. The importance of fun and enjoyment was highlighted in the children's findings. I have posited that the development of the metaphor of a "special journey" by waka [canoe] has the potential to clarify the role of each person in the bodywise programme in a way that is accessible and meaningful for all. For the parents, this metaphor could clarify their role as change agents. For the children, the visualisation of the programme as a special journey by waka could increase their engagement with the programme by additional activities that are fun and pleasurable, and by expanding opportunities for their perspective to shape the direction and definition of success of future programmes. In this chapter I discuss a model that incorporates this metaphor and consider my findings in relation to the wider literature.

Motivated by fun and enjoyment

S*ites of success* revealed key differences in measuring success between the programme and the parents, and an analysis of these differences may provide insight as to what might make bodywise more meaningful for the children. Initially, the semi- structured interview questions did not specifically ask what success looked like for parents. After the first focus group, reflections on the findings with my field supervisor highlighted the omission of this potentially meaningful question and it was added to all subsequent focus groups and became a pivotal point for the remaining six discussions with parents and the three child interviews.

As seen, the findings showed parents experienced success across a much wider range than an improved BMI, as they considered success for themselves as well as for their children. An analysis under Te Whare Tapa Whā revealed parents' described their children experiencing success not only in the physical, but also in the social and psychological/emotional dimensions. For the children, when asked to consider success, they emphasised fun and enjoyment. Parker (1996) identified that a critical realist ontology combined with a contextualist epistemology has the capacity to discover the underlying logic and structure of social practices. The logic of

the children in equating success with fun can be understood as success equals involvement which depends upon how enjoyable it was.

The importance of fun and enjoyment has been investigated in a small number of qualitative studies. MacDonald and colleagues sought the views of 13 Australian children aged 7-8 years on activity, bodies and health and found the primary motivator for activity was fun, friendship and enjoyment (MacDonald et al., 2005). Burrows, Wright and Jungersen-Smith's (2002) study of New Zealand children of a similar age to bodywise children (8-13 years) found they mentioned enjoyment more frequently than any other factor when asked what influenced their levels of activity. But in a later study, Burrows (2010) found children rarely mentioned pleasure in their health talk. Pugmire's recent study with nine six and seven year old New Zealand children explored how children talked about bodies and health, and again found few examples of children talking about physical activity or bodily movement in pleasurable terms (Pugmire, 2012).

Kipping et al. (2011) investigated how to increase parental involvement in a school based obesity prevention programme. They found that homework tasks that were novel and included practical activities and social contact were enjoyed by parents and children, leading them to hypothesize that emphasising novelty and fun in assigned homework tasks may encourage child and parental involvement. The accounts of the children in my study support this hypothesis. In 2010, a study of the complex interplay between the various factors influencing children to participate in sport led Cote (1999) to develop a model demonstrating these factors. In this model, the years from 6-13 years are described as the 'sampling' years, characterized by deliberate play, enjoyment and immediate rewards. Boby's account of her involvement in many sports and activities, motivated by her increased skill and enjoyment, fits well with this model.

Macdonald et al. (2005) emphasised the need to listen to children's voices. JoBob's overall criticism of the implementation of bodywise (prior to my research) was exactly this, as she saw a lack of consideration of the children's perspective, which she thought undermined the good ideas and intentions of the programme. Yet of the three children, JoBob's account most frequently described the physical and social components of the programme as enjoyable and fun, which led her to rate those activities as "perfect". Boby and Keira also valued such activities, and all three children enjoyed physical activity for its own sake, irrespective of its impact on their BMI. No child described reduced or changed nutrition as 'fun', but they did enjoy learning how to read labels.

What then can we make of the emphasis of fun and enjoyment in both the literature and the findings? Returning to Parker's (1996) emphasis on uncovering the logic of social structures, if children's logic connects fun with involvement, and social contact, there may be merit in developing a model for child weight management programmes that explicitly incorporates, values and even measures fun and enjoyment. Pleasure and fun was also emphasised by the parents, who described their child's weight loss, their enjoyment of new healthy food and steps to take charge of their health as something pleasurable and counted it as success. As with the children, their experience of success beyond the biomedical supports a broadening of the measure of success. This would help reconcile the incongruity between the low success rate of the programme when measured by BMI and the unanimous affirmations of the 22 parents included in this same evaluation. The tension between a clear-cut quantitative measure such as BMI and the more fluid features uncovered by this qualitative study cannot be ignored. While the political environment continues to express at least acknowledgement of obesity as a health risk, and BMI remains an accepted measurement tool, programmes with a measurable ability to reduce BMI will attract funding advantages. The brief I received as student researcher for the 2013 qualitative study for bodywise was to ignore those factors that were beyond the control of the programme. From a practitioner point of view, this instruction is understandable, for what was the point in learning that a child could not implement healthy changes because of family financial restraints when the programme did not have access to funding to support this family? It is this very point that Clark et al. (2007) identify as a disadvantage of the critical realist approach, with the potentially infinite variations in context making programme adaption near- impossible. But I assert, as do they, that that critical realism is better placed than positivism to embrace this complexity. To this end, a deeper consideration of this complexity is relevant. The application of Parker's (1996) logic model has so far gone no further than to posit a linear relationship between fun, involvement and success. A more complex exploration of possible relationships may be guided by a critical realist model of the self, as outlined by Archer (2002). I consider the application of this model with particular reference to the importance of the theme of *a sense of personal agency* in the children's results.

The importance of personal agency

A major theme for parents was their frustration at their child's lack of commitment to the programme, as seen in each of the subordinate themes under *sites of struggle*. Keira emphasised the importance of goals being relevant to her and it is possible that JoBob's

criticism of the programme's failure to see things from her perspective reflects the primary focus of bodywise on the biological self, without recognition of the emergent selfhood and personal identity.

Archer's model of the self starts with the neurological matter of the brain, which gives rise to the mind, leading to consciousness and an emergent selfhood, which in turn develops into personal identify and social agency. To a certain degree, the bodywise team work alongside families and adapt the content and skills training to best suit individual circumstances. But some components of the programme were experienced by the children with varying degrees of detachment. Often the weekly goals were set by the child according to what they thought was expected of them, and the home visits might take place while the child was at school, which may be interpreted by the child that their involvement was neither necessary nor valued.

So while in practice, bodywise accommodates a wide range of contexts and adapts the programme accordingly, the biomedical measure of success remains fixed for all, and each of the child participants therefore 'failed' under this criteria. Yet, for JoBob she succeeded to the degree she found the programme 'fun', which I suggest can legitimately be taken as a measure of involvement, and contributed to her developing an increasing sense of agency. Fun is active, rather than passive, and may constitute a key way children explore their bodies and their sense of self. The focus on the emerging self reminds us that a child is more than a biological reality; a child is also a culturally contextually contingent self-conscious self, with developing personal identity and social agency.

One of the aims of this study which was to consider if there were any negative consequences resulting from the participants' enrolment in bodywise. What are the consequences for the child when their biological self is measured as a 'failure', as it was for each of the three participants? At the time of the interview, Boby, the youngest child, although still identifying as 'big', was involved in many sports and activities and enjoyed higher social status at school because of her new skills. JoBob reconciled her BMI failure with her sense of self by rejecting both the validity of BMI as an accurate measurement tool and obese as a label. She takes a step further and redefines herself, conscious that she is taking a negative and making it positive, by calling herself "tubby".

As critical realist ontology emphasises the importance of empowerment, what are the implications of JoBob's rejection of the label "obese", and her redefinition of herself as "tubby"? The analysis of her data displayed the most evidence of critical thinking of the three girls, and provides an interesting case study for a critical realist. The realist may be concerned

that her rejection of the diagnosis of 'obesity' and redefinition of the more positive 'tubby' does not change her body weight and therefore leaves her vulnerable to weight-related health risks. An analyst coming from a critical standpoint may argue that it was her rejection of the negative label and identification as something 'nicer' which empowered her to pursue challenging physical activities, including signing on for the Waiheke Island five week residential course, an experience that is likely to improve her physical health and sense of personal agency. JoBob's refusal to be defined by the biomedical term obese, accompanied by her enthusiastic participation in a variety of physical activities, improved relationships with family, increased confidence at school, and a new-found awareness of satiety, contributes to a picture of a healthy, confident, articulate young woman, who refused to be defined by her weight.

The analysis of Keira's talk demonstrated her strong sense of identity as the one responsible for making things happen and for protecting those she cared about. She recounted her extreme sense of powerlessness when a friend was abused, and the life threatening impact this had on Keira. This serves as a poignant reminder of the importance of empowering young people and is worth considering as a skills building component of any child-oriented intervention.

Associated with an aim of empowerment is the question of who is the most appropriate agent of change. Parental confusion over this was highlighted in the theme *Whose journey is it?* Most family and community based weight programmes intervene at the family level with at least one parent attending with their child. Other programmes centre solely on the child (for example, Te Kahui Whai Ora – Healthy Lifestyles & Tamariki Programme), while others focus solely on the parent (for example, Group Lifestyle Triple P). My study did not aim to compare different models, but the application of the waka metaphor emphasises the importance of clarifying the role of all participants regarding responsibilities and expectations. The results indicate that a complex interplay of factors has a direct effect upon the efficacy of the programme, and therefore must be considered, even if they cannot easily be integrated. The bodywise professionals implemented several changes to the programme based on the results of the evaluation study of 2013, which showed the willingness of the team and the flexibility of the programme to make changes informed by past participants (N. Parkes, personal communication, 16th December, 2013). The biomedical measure of success has not changed.

The relevance of three dimensions of Te Whare Tapa Whā in the parents' experiences of success was unexpected and based on the results, offers an holistic and appropriate foundation for a new programme model. However, this model relies upon four walls and only three were seen in the results. The next section considers the implications of the absence of

the fourth dimensions, taha wairua [spirituality] and these four dimensions might integrate with the waka metaphor to develop a future model for holistic family health.

A future model

The application of Te Whare Tapa Whā opened the analysis of *sites of success* in a way that was insightful and relevant. What can be made of the close alignment of the parents' experiences of success with three of the four Te Whare Tapa Whā dimensions? What difference does it make to the results to consider them under this framework? The most obvious impact is the essentially holistic nature of their Māori description of health, which again takes into account a complex myriad of inter-related experiences including but extended beyond the physical. This holistic approach also made sense of the blurred lines between parent and child, as the depiction of Te Whare Tapa Whā is as a whare [house] highlights the interconnectedness of all those dwelling within that whare.

However, the whare nui in this research was supported by only three of the four foundations of this Māori health model, as consideration of *taha wairua (*spiritual health) was neither invited by me nor offered by parents or children. I had discussed with my field supervisor if karakia (prayer) was a part of bodywise group sessions and she said space was given for a parent to offer karakia but that it seldom occurred. At the first focus group I asked if anyone wanted to start with karakia and the awkward silence that followed meant I did not ask this at any of the remaining six groups. I tried to be attentive to any expectation of karakia from participants but without a firm commitment to invite karakia and my uncertainty about its appropriateness meant my attentiveness diminished over the course of the focus groups.

While spirituality is a part of the human experience that psychologists and other health professionals have traditionally avoided, there is a growing body of research considering the relationship between spirituality and health. Over the last thirty years, spiritual or religious health has been consistently associated with mental health (Plante & Sharma, 2001). Several major US journals have published special issues addressing these concerns (for example, Pargament & Saunders, 2007), with a wide range of health care professions advocating for this (J. Campbell & Britton, 2008). A recent PubMed search identified over 47,000 scientific articles addressing spirituality and religion in psychology (Rosmarin, Wacholtz, & Ai, 2011). Numerous studies have demonstrated that both religiosity and spirituality provide a protective factor against many negative health outcomes, both mental and physical (Aukst-Margetic & Margetic, 2005, as cited in Mark & Lyons, 2010). In New Zealand, there has been an emerging emphasis upon an holistic approach with regard to health and well-being, often informed by

Māori health models such as Te Whare Tapa Whā. Consideration of holistic health breaks away from the dominant biomedical model to consider numerous health spheres, including spirituality, to give a multidimensional view of health and wellbeing (Mark & Lyons, 2010).

The results of *sites of success* were informed by an application of Te Whare Tapa Whā and illustrated with a canoe metaphor. I suggest that a new programme design could incorporate the specific aims of each participant within the broad programme aims, and to tailor-make the programme accordingly. In this model, an assessment of strengths and needs by both parent and child under the four core dimensions of Te Whare Tapa Whā would be completed at the beginning of a health intervention. Each programme could then be designed and delivered according to the holistic strengths and needs identified by each intake of families. A consideration of *taha wairua*, the spiritual dimension would need to be included in such a model, and included in programme delivery if identified by families as a priority. Progress throughout the programme would be measured against each parent and child's own blueprint for success, which may or may not include BMI. Concerns raised about the negative impact of surveillance of big children by Burrows (2009; 2010) would be eased by the child themselves choosing what would be measured on their health journey. Surveillance of children upon one another would also be discouraged, as each child would be working towards their own self-identified measures of success. The make-up of the team of professionals may need to change, to reflect the holistic health model of Te Whare Tapa Whā. The programme would conclude with each parent and child completing a second self-assessment based on the four foundations to identify what changes there had been in each of their prioritised dimensions. Success would therefore more closely match the wide range of experiences shared by parents in this present study. With less than a third of the total relevant studies located for the present study including input from parents and children, the suggested model could quite naturally provide its own evaluation, by comparing the goal sheets completed at both the start and the end of the programme. If other family members get on board the waka, their goals could also be included, broadening the ownership and assessment of the programme, as is consistent with taha whānau of Te Whare Tapa Whā.

The metaphor of the waka fits well with Te Whare Tapa Whā, and has the potential to provide an accessible representation of the bodywise journey. When families embark, who is on the boat? Just one parent or the whole family? Is the child actually on board? Where are the health professionals? Are they on the boat or on the mainland, waiting to fill each waka with fresh supplies each week? Can each family's individual waka join with others, to form a

flotilla and share their combined strength when currents are strong or one family needs to rest? Children and parents could design and decorate their paddles to graphically depict their aims and their progress according to their own priorities and experiences. This metaphor has the potential to answer the key questions raised by parents, by clarifying whose journey it is and who is the agent of change. Sport Waikato currently offers a wide range of land-based sports to bodywise families and this could be expanded to include a water-based activity with waka. This hands-on experience would emphasise the need for teamwork and would more easily meet the child's priority of fun and enjoyment. The waka metaphor could also be used to clarify the health professionals' role for families and illustrate how the location of power to make changes was not with the health professionals but in the hands of the rowers, the families themselves.

In taking the holistic approach that is offered by Te Whare Tapa Whā, consideration under *tapa whānau* could identify social strengths and challenges. While the literature locates child weight interventions across a range of settings (family, school and community), the family remains the central social unit for most children, irrespective of the programme setting. As seen in the results, the impact of the wider family's beliefs and expectations greatly impacted the enrolled parent and child's ability to implement recommendations, which a critical lens suggests is to be expected. A more intentional focus on the social environment would inform the integration of extended family/whānau into the programme. This would identify who else in the family wants to take up a paddle and row.

While this study aimed to explore the experiences of a particular child weight management programme, the results suggest the widely recognised framework of Te Whare Tapa Whā offers a potentially relevant and empowering model not just for Māori but for all prospective participants of health promotion programmes. Further research to design, implement and evaluate a model could test how this model works in practice and the impact it has upon the lived experiences of children and their families as they navigate journeys of health.

Limitations

This study aimed to address an absence in the literature of hearing from both parent and child participants in child weight management programmes. The synthesis of data from both parent and child, collected in two distinct phases with two different methods was not without difficulties and I discuss the limitations in the next section.

Data from the adult participants were obtained during the programme evaluation, where the focus was on an evaluation of the programme, rather than the lived experience of the parents. However, the semi-structured interview process allowed flexibility and as the facilitator for both the parents' focus groups and the children's interviews, I attempted to be sensitive to any issues that were important to participants, which overlapped with the exploration of their lived experiences. But it is likely that the stories shared by the parents would have been more closely aligned to an exploration of their lived experience if this had been the research aim at the time of data collection.

The imbalance in the number of participants between the parents (n=22) and the children (n=3) is also a limitation: ideally more children would have been interviewed from the 20 families in the sample. The gender balance is also potentially a limitation, as 15 out of 22 parents and all child participants were female (and the four core bodywise professionals are female). Research strongly suggests parenting is a gendered behaviour and this will very probably have impacted the findings. Research into children's attitudes and behaviour to health, food and physical activity has also demonstrated gendered differences (for example, Brustad's (1996) study of 8-11 years olds found boys attraction to physical activity was more likely to be influenced by parental encouragement, while girls paid more attention to parental enjoyment of sports and activities).

Each of the three child participants had little success under the bodywise criteria of a reduced or maintained BMI which is not the experience of all bodywise children. It is possible their decision to participate in the study was influenced by their lack of success and their experiences may only be relevant for "unsuccessful" children. Parents of children who did achieve BMI success described these children with very different experiences and attitudes towards the programme, as seen in the parents' results under *sites of success*. The small number of child participants is also a limitation. It was difficult to determine patterns between children with only three participants. The length of time between programme completion and the interviews may also have impacted the results, especially with a sample of children as their stage of development when enrolled in the programme would have been different from that at time of the interview. The study aimed to be able to generalise the theoretical and conceptual insights, and a more diverse sample would add to these insights.

Reflections

My decision to frame this study under a critical realist ontology was deliberately positioned to attempt to bridge the divide between two distinct camps in the current obesity literature. The tension between the biomedical and qualitative research made it difficult to harmonise past findings from both sides of the divide. On the one hand the realist literature ignored the valuable contributions of relativist literature, and on the other, many qualitative commentators were highly critical of the realist emphasis on an epidemic in need of urgent intervention (Gard, 2010, for example). This dichotomy was exacerbated by my swaying sympathies for both points of view. In the process, I found myself constantly taking sides, and was tempted to disregard potentially very valuable research if it came from the 'wrong' camp. The bracketing technique recommended in IPA was useful in setting aside my ontological biases towards a realist position, and to consider all studies that offered insight regardless of their ontological or epistemological frameworks. The essential interpretative feature of IPA was at times a challenge, in part because I questioned my right to bring my interpretations to the analysis, being only too aware that my interpretation was only one of many. The clarity of my role as a researcher afforded by the contextualist epistemology helped keep this in perspective, with the explicit acknowledgement that all research involves the researcher's subjectivities.

The divide between my position and that of Burrows was brought sharply into focus when reading her clarification of her poststructuralist-informed version of discourse analysis that starts from "an assumption that children speak themselves and each other into existence through their talk" (Davies, 1994, as cited in Burrows, 2010). I could not reconcile this assertion of self-creation through talk with my position on the existence of a biological body that was 'obese', 'fat', 'tubby'- whatever the term – and the robust if not conclusive evidence of the associated risk of adverse health consequences, irrespective of a child's talk. The division in ontology seemed to relegate the rich, insightful, otherwise highly relevant studies by Burrows and other post-structuralists into a no-go area for me. However, a critical realist ontology enabled both sides of the debate to be considered with the hope that some degree of reconciliation might result.

The key finding of parental insecurity in their role and rights as parents was at first unexpected, but on reflection, not surprising given my understanding of the current socio-political environment for parents in Aotearoa/New Zealand. Parental authority is under pressure from many directions: recent legislation has criminalised smacking of children by parents and caregivers; and screen media and social media often reinforce children's rights

outside of parental controls and protection. I have experienced tension throughout this study, torn between my belief in the rights of children to be heard, respected and empowered, and the rights of parents to guide, protect and make decisions for their children. I remain confident that much can be achieved through respectful, attentive dialogue, which is the basis of my research, and the metaphor of the waka greatly assisted me in conceptualising the shared responsibility of parent and child and bodywise team.

I have also struggled with the emphasis of fun as a key outcome, concerned this is too trivial, and I struggle with a concern that if children are given space to simply enjoy their bodywise journey, they will lack the perseverance to succeed. The critical realist in me insists that the primary aim of a child weight management programme must be to manage weight, and the literature reviewed gives convincing evidence that child obesity is a health risk. The emphasis on fun and enjoyment must therefore be tagged to the aim of weight management, and I accept the challenges in maintaining a balance between these two objectives, as it is hard to define, quantify and plan for playfulness. Still, I believe a tailor-made programme design that is informed by participants' goals is both possible and more likely to succeed, by anyone's definition of success. The children's experiences of success was closely related to the activity components of the programme, suggesting that children enjoy being physically active. For two of the three children this enjoyment motivated them to continue to seek opportunities to engage in sports and activities after bodywise ended, indicating healthy choices can also be fun.

It has been a privilege to share the life stories of the participants in this study and to observe the professionalism and empathy of the bodywise team. Insights gained by the parents' findings has informed changes to the current bodywise programme The current study demonstrates that attending to children's voices may also raise new knowledge and landmarks to guide and support future programmes. Experiences accessed by qualitative research in general and by IPA methodology in particular can provide findings that are relevant and meaningful for practitioner and participant, and potentially add to the growing body of knowledge around child weight management and health.

References

Anderson, Y., Wynter, L., Moller, K., Storey, R., Sigurdsson, K., Law, R., . . . Hofman, P. (2012). Whanau Pakari: A multidisciplinary intervention programme for child and adolescent weight issues in Taranaki – Results of the first intake's baseline assessments. *Obesity Research & Clinical Practice, 6, Supplement 1*(0), 53-54. doi: http://dx.doi.org/10.1016/j.orcp.2012.08.109

Archer, M. (1998). Introduction: Realism in the social sciences. In M. Archer, A. Collier, T. Lawson & A. Norrie (Eds.), *Critical Realism: Essential readings* (pp. 189-205). London: Routledge.

Archer, M. (2000). *Being human: The problem of agency*. Cambridge: Cambridge University Press.

Backett, K. C., & Davison, C. (1995). Lifecourse and lifestyle: the social and cultural location of health behaviours. *Social Science & Medicine, 40*(5), 629-638.

Baker, J. L., Olsen, L. W., & Sorensen, T. I. (2007). Childhood bodymass index and the risk of coronary heart disease in adulthood. *New England Journal of Medicine, 357*, 2329-2337.

Berenson, G. S. (2012). Health consequences of obesity. *Pediatric Blood Cancer, 58*, 117-121.

Bhaskar, R. (1975). *A realist theory of science*. Brighton: Harvester.

Bhaskar, R. (1986). *Scientific realism and human emancipation*. London: Verso.

Bhaskar, R. (1989). *The possibility of naturalism*. Brighton: Harvester.

Bhaskar, R. (1991). *Philosophy and the idea of freedom*. Oxford: Blackwell.

Bhaskar, R. (1998). *The possibility of naturalism: A philosophical critique of the contemporary human sciences*. London: Routledge.

Biro, F. M., & Wien, M. (2010). Childhood obesity and adult morbidities. *American Journal of Clinical Nutrition, 91*, 1499S-1505S.

Boulton, A., Gifford, H., Kauika, A., & Parata, K. (2011). Maori health promotion: Challenges for best practice. *AlterNative: An International Journal of Indigenous Peoples, 7*(1), 26-39.

Boulton, A., & Kingi, T. K. (2011). Reflections on the use of a Maori conceptual framework to evaluate complex health policy: The case of New Zealand's Healthy Eating, Healthy Action strategy evaluation. *Evaluation Journal of Australasia, 11*(1), 5-10.

Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. London: Sage.

Brustad, R. J. (1996). Attraction to physical activity in urban school children: Parental socialization and gender influences. *Research Quarterly for Exercise and Sport,, 67*, 316-323.

Burrows, L. (2008). "Fit, fast, and skinny": New Zealand school students 'talk' about health. *Physical Educator - Journal of Physical Education New Zealand, 41*(3), 26-36.

Burrows, L. (2009). Pegagogizing families through obesity discourse. In J. Wright & V. Harwood (Eds.), *Biopolitics and the 'obesity epidemic'* (pp. 127-140). New York: Routledge.

Burrows, L. (2010). "Kiwi kids are Weet-Bix[TM] Kids"--Body matters in childhood. *Sport, Education and Society, 15*(2), 235-251.

Burrows, L., & McCormack, J. (2012). Teachers' talk about health, self and the student 'body'. *Discourse: Studies in the Cultural Politics of Education, 33*(5), 729-744. doi: 10.1080/01596306.2012.696502

Burrows, L., & Wright, J. (2004). The good life: New Zealand children's perspectives on health and self. *Sport, Education & Society, 9*(2), 193-205. doi: 10.1080/1357332042000233930

Burrows, L., Wright, J., & Jungersen-Smith, J. (2002). 'Measure your belly.' New Zealand children's constructions of health and fitness. *Journal of Teaching in Physical Education, 22*(1), 39.

Campbell, J., & Britton, M. L. (2008). Experiences with an elective in spirituality. *Amercian Journal of Pharmaceutical Education, 72*, 1-2.

Campbell, K., Waters, E., O'Meara, S., & Summerbell, C. (2001). Interventions for preventing obesity in childhood:A systematic review (Cochrane Review). *Cochrane Database. Syst.Rev 1*.

Clark, A. M., Macintyre, P. D., & Cruickshank, J. (2007). A critical realist approach to understanding and evaluating heart health programmes. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness & Medicine, 11*(4), 513-539.

Clark, T. C., Fleming, T., Bullen, P., Denny, S., Crengle, S., Dyson, B., . . . Utter, J. (2013). *Youth'12 overview: The health and wellbeing of New Zealand secondary school students in 2012*. Auckland, New Zealand: University of Auckland.

Cote, J. (1999). The influence of the family in the development of talent in sports. *The Sports Psychologist, 13*, 395-417.

Daly, J. (2013, May 30). 'Racist' cartoon slammed, *The Dominion Post*.

Danaher, T., & Briod, M. (2005). Phenomenological approaches to research with children. In S. Greene & D. Hogan (Eds.), *Researching children's experiences*. London: SAGE.

Daniels, S. R. (2006). The consequences of child overweight and obesity. *The Future of Children, 16*(1), 47-67. doi: 10.1353/foc.2006.0004

de Onis, M., Blossner, M., & Borghi, E. (2010). Global prevalence and trends of overweight and obesity among preschool children. *Amercian Journal of Clinical Nutrition, 92*, 1257-1264.

Dehghan, M., Akhtar-Danesh, N., & Merchant, A. T. (2005). Childhood obesity, prevalence and prevention. *Nutrition Journal, 4*, 24-24.

Durie, M. (1994). *Whaiora: Maori Health Development*. Auckland: Oxford University Press.

Eatough, V., & Smith, J. A. (2008). Interpretative phenomenological analysis. In C. Willig & W. Stainton-Rogers (Eds.), *The Sage handbook of qualitative analysis*. London: Sage.

Epstein, L. H., Myers, M. D., Raynor, H. A., & Saelens, B. E. (1998). Treatment of pediatric obesity. *Pediatrics, 101*, 554-570.

Epstein, L. H., Paluch, R. A., Roemmich, J. N., & Beecher, M. D. (2007). Family-based obesity treatment, then and now: Twenty-five years of pediatric obesity treatment. *Health Psychology, 26*(4), 381-391.

Epstein, L. H., & Wrotniak, B. H. (2010). Future directions for pediatric obesity treatment. *Obesity, 18*(S1), S8-S12.

Ernsberger, P. (2012). BMI, body build, body fatness and health risks. *Fat Studies, 1*, 6-12.

Farsani, S. F., van der Aa, M., van der Vorst, M., Knibbe, C., & de Boer, A. (2013). Global trends in the incidence and prevalence of type 2 diabetes in children and adolescents: A systematic review and evaluation of methodological approaches. *Diabetologia, 56*, 1471-1488.

Finlay, L. (2011). *Phenomenology for therapists: Researching the lived world*. West Sussex, U.K: Wiley-Blackwell.

Fraser, G. E. (2003). *Diet, life expectancy, and chronic disease: Studies of Seventh-day Adventists and other vegetarians*. Oxford: Oxford University Press.

Fullager, S. (2009). Governing healthy family lifestyles through discourses of risk and responsibility. In J. Wright & V. Harwood (Eds.), *Biopolitics and the 'obesity epidemic': Governing bodies*. New York: Routledge.

Gard, M. (2010). *The end of the obesity epidemic*. London: Routledge.

Gill, T., Baur, L. A., Baumann, U., Steinbeck, K., Storlien, L., Fiatarone, M., . . . Caterson, I. (2009). Childhood obesity in Australia remains a widespread health concern that warrants population-wide prevention programs. *MJA, 190*(3), 146-148.

Giorgi, A. (1985). *Phenomenological and psychological research*. PIttsburgh, PA: Duquesne University Press.

Giorgi, A. (1995). Phenomenological psychology. In J. A. Smith, R. Harre & L. Van Langenhove (Eds.), *Rethinking psychology*. London: Sage.

Golan, M., Abraham Weizman, A., Apter, A., & M, F. (1998). Parents as the exclusive agents of change in the treatment of childhood obesity. *American Journal of Clinical Nutrition, 67*(6), 1130-1135.

Golan, M., Kaufman, V., & Shahar, D. R. (2006). Childhood obesity treatment: Targeting parents exclusively v. parents and children. *British Journal of Nutrition, 95*, 1008-1015. doi: doi:10.1079/BJN20061757

Goodman, S. (2008). The generalizability of discursive research. *Qualitative Research in Psychology, 32*, 3-11.

Graham, D., Appleton, S., Rush, E., McLennan, S., Reed, P., & Simmons, D. (2008). Increasing activity and improving nutrition through a schools-based programme: Project Energize. 1. Design, programme, randomisation and evaluation methodology. *Public Health Nutrition, 11*(10), 1076-1084.

Grant, C. C., Wall, C. R., Yates, R., & Crengle, S. (2010). Nutrition and indigenous health in New Zealand.(Report). *Journal of Paediatrics and Child Health*, 479. doi: 10.1111/j.1440-1754.2010.01842.x

Greene, S., & Hill, M. (2005). Researching children's experience: Methods and methodological issues. In S. Greene & D. Hogan (Eds.), *Researching children's experience: Approaches and methods*. London: SAGE.

Gunnarsdottir, T., Njardvik, U., Olafsdottir, A. S., Craighead, L., & Bjarnason, R. (2012). Childhood obesity and co-morbid problems: Effects of Epstein's family-based behavioural treatment in an Icelandic sample. *Journal of Evaluation in Clinical Practice, 18*(2), 465-472. doi: 10.1111/j.1365-2753.2010.01603.x

Henwood, K., & Pidgeon, N. F. (1994). Beyond the qualitative paradigm: A framework for introducing diversity within qualitative psychology. *Journal of Community & Applied Social Psychology, 4*, 224-238.

Hesketh, K., Waters, E., Green, J., Salmon, L., & Williams, J. (2005). Healthy eating, activity and obesity prevention: A qualitative study of parent and child perceptions in Australia. *Health Promotion International, 20*(1), 19-26. doi: 10.1093/heapro/dah503

Hill, J. O., & Peters, J. C. (1998). Environmental contributions to the obesity epidemic. *Science*(280), 1371-1374. doi: 10.2307/2895895

Hill, M. (2005). Ethical considerations in researching children's experiences. In S. Green & D. Hogan (Eds.), *Researching children's experience* (pp. 61-86). London: Sage.

Houston, S. (2001). Transcending the fissure in risk theory: Critical realism and child welfare. *Child & Family Social Work, 6*(3), 219-228. doi: 10.1046/j.1365-2206.2001.00205.x

Humphreys, L. (2013, 13 July 2012). Taranaki scheme tackles obesity head-on: Family backing is basis of trial, *Taranaki Daily News*, p. 5.

International Business Times. (2012). More than half of Australians are overweight or obese.

Jaeger, M., & Rosnow, R. L. (1988). Contextualism and its implications for psychological inquiry. *British Journal of Psychology, 79*, 63-75.

Johnston, M. (2009). Budget 09: Mission off as youth anti-obesity programme scrapped, *The New Zealand Herald*.

Keene, N. A., Stockman, H., Woolerton, D., & McGall, S. (2010). *Bodywise: A multidisciplinary weight management programme for children based in Hamilton*. Paper presented at the Paediatric Society of New Zealand, 62nd Annual Scientific Meeting, New Plymouth, New Zealand.

Kipping, R. R., Jago, R., & Lawlor, D. A. (2011). Developing parent involvment in a school-based child obesity prevention intervention: A qualitative study and process evaluation. *Journal of Public Health, 34*(2), 236-244. doi: 10.1093/pubmed/fdr076

Kopelman, P. (2010). Symposium 1: Overnutrition: consequences and solutions Foresight Report: the obesity challenge ahead. *Proceedings of the Nutrition Society, 69*(01), 80-85. doi: doi:10.1017/S0029665109991686

Kvale, S. (1996). *InterViews*. Thousand Oaks, California: Sage.

l'Allemand, D., Wiegand, S., & Reinehr, T., et al. (2008). Cardiovascular risk in 26,008 European overweight children as established by a multicenter database. *Obesity, 16*, 1672-1679.

Lawson, T. (2003). Theorizing ontology. *Feminist Economics, 9*(1), 161.

Lawson, T. (Ed.). (1998). *Critical issues in economics as realist social theory*. London/New York: Routledge.

Lawton, J. (2000). *The dying process : patients' experiences of palliative care* London: Routledge.

Lochrie, A. S., Wysocki, T., Hossain, J., Milkes, A., Antal, H., Buckloh, L., . . . Lang, J. (2013). The effects of a family-based intervention (FBI) for overweight/obese children on health and psychological functioning. *Clinical Practice in Pediatric Psychology, 1*(2), 159-170. doi: 10.1037/cpp0000020

Luttikhuis, H., Baur, L., Jansen, H., Shrewsbury, V., O'Malley, C., Stolk, R. P., & Summerbell, C. D. (2009). Interventions for treating obesity in children. *Sao Paulo Medical Journal*.

Lyons, A. C., & Chamberlain, K. (2006). *Health psychology: A critical introduction*: Cambridge: Cambridge University Press, 2006.

MacDonald, D., Rodger, S., Abbott, R., Ziviani, J., & Jones, J. (2005). 'I could do with a pair of wings': Perspectives on physical activity, bodies and health from young Australian children. *Sport, Education & Society, 10*(2), 195-209. doi: DOI: 10.1080/13573320500111762

Madill, A., Jordan, A., & Shirley, C. (2000). Objectivity and reliability in qualitative analysis: Realist, contextualist, and radical constructionist epistemologies. *British Journal of Psychology, 91*, 1-20.

Maher, C., De Wilde, J., Ells, L., Hohepa, M., Lissner, L., Ogden, C., . . . Olds, T. (2010). The plateauing prevalence of childhood obesity and overweight—Evidence from nine countries. *Journal of Science and Medicine in Sport, 13, Supplement 1*(0), e13. doi: http://dx.doi.org/10.1016/j.jsams.2010.10.488

Manger, W., Manger, L., Minno, A., Killmeyer, M., Holzman, R., Schullinger, J., & Roccella, E. (2012). Obesity prevention in young schoolchildren: Results of a pilot study. *Journal of School Health, 82*(10), 462-468.

Mark, G. T., & Lyons, A. C. (2010). Maori healers' views on wellbeing: The importance of mind, body, spirit, family and land. *Social Science & Medicine, 70*, 1756-1764.

McLean, R. M., Hoek, J. A., Buckley, S., Croxson, B., Cumming, J., Ehau, T. H., . . . Schofield, G. (2009). "Healthy Eating - Healthy Action":Evaluating New Zealand's obesity prevention strategy. *BMC Public Health, 9*, 452-452.

Ministry of Health. (2003). *Healthy Eating- Healthy Action: Oranga Kai-Oranga Pumua: a strategic framework*. Wellington: Ministry of Health.

Ministry of Health. (2004a). *Healthy Eating-Healthy Action: Oranga Kai-Oranga Pumau: Implementation plan 2004-2010*. Wellington: Ministry of Health.

Ministry of Health. (2004b). *Tracking the Obesity Epidemic: New Zealand 1977-2003*. Wellington.

Ministry of Health. (2009). *Guidelines for weight management in children and young people*. Wellington, New Zealand: Ministry of Health.

Ministry of Health. (2012). *The health of New Zealand children: Key findings of the New Zealand Health Survey 2011/12*. Wellington, New Zealand.

Murray, M., & Poland, B. (2006). Health psychology and social action. *Journal of Health Psychology, 11*(3), 379-384. doi: 10.1177/1359105306063308

Nettleton, S., & Bunton, R. (1995). Sociological critiques of health promotion. In R. Bunton, S. Nettleton & R. Burrows (Eds.), *The sociology of health promotion* (pp. 41-58). London: Routledge.

New Zealand named 12th most overweight country. (11th July 2013). *The New Zealand Herald*. Retrieved from http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10896871

NZPA. (2010, 26/9/2010). Labour, *New Zealand Herald*.
O'Mahoney, J. (2011). Critical realism and the self. *Journal of Critical Realism, 10*(1), 122-129.
Ogden, C. L., Carroll, M. D., Curtin, L. R., Lamb, M. M., & Flegal, K. M. (2010). Prevalence of high body mass index in US children and adolescents, 2007-2008. *JAMA: Journal of the American Medical Association, 303*(3), 242-249. doi: 10.1001/jama.2009.2012
Pargament, K. I., & Saunders, S. M. (2007). Introduction to the special issue on spirituality and psychotherapy. *Journal of Clinical Psychology, 63*, 903-907.
Parker, I. (1996). *Social constructionism, discourse, and realism*. Paper presented at the Day Conference, Discourse Unit, Manchester Metropolitan University.
Parker, I. (Ed.). (1994). *Qualitative research*. Buckingham: Open University Press.
Patterson, M., & Johnston, J. (2012). Theorizing the obesity epidemic: Health crisis, moral panic and emerging hybrids. *Social Theory & Health, 10*(3), 265-291.
Pearce, A., Kirk, C., Cummins, S., Collins, M., Elliman, D., M. Connolly, A. M., & Law, C. (2009). Gaining children's perspectives: A multiple method approach to explore environmental influences on healthy eating and physical activity. *Health and Place, 15*(2), 614-621. doi: 10.1016/j.healthplace.2008.10.007
Pidgeon, N., & Henwood, K. (1997). Using grounded theory in psychological research. In N. Hayes (Ed.), *Doing qualitative analysis in psychology* (pp. 245-273). Hove: Psychology Press.
Plante, T. G., & Sharma, N. K. (2001). Religious faith and mental health outcomes. In T. G. Plante & A. C. Sherman (Eds.), *Faith and health* (pp. 240-261). New York: Guildford Press.
Pocock, M., Trivedi, D., Wills, W., Bunn, F., & Magnusson, J. (2010). Parental perceptions regarding healthy behaviours for preventing overweight and obesity in young children: A systematic review of qualitative studies.(Report). *Obesity Reviews, 11*(5), 338-353. doi: 10.1111/j.1467-789X.2009.00648.x
Pugmire, R. (2012). *"You can tell kind of about the body': Exploring young children's talk about bodies, health, fitness and fatness.* (Msater of Arts), Massey, Manawatu.
Reilly, J. J. (2005). Descriptive epidemiology and health consequences of childhood obesity. *Best Practice & Research Clinical Endocrinology & Metabolism, 19*(3), 327-341. doi: http://dx.doi.org/10.1016/j.beem.2005.04.002
Reilly, J. J. (2010). Assessment of obesity in children and adolescents: Synthesis of recent systematic reviews and clinical guidelines. *Journal of Human Nutrition & Dietetics, 23*(3), 205-211.
Reinehr, T. (2005). Clincial presentation of type 2 diabetes mellitus in children and adolescents. *International Journal of Obesity, 29*(S2), S105-S110.
Reinehr, T. (2011). *Symposium III: Metabolic health, weight management and obesity prevention in childhood and adolescence: Effectiveness of lifestyl internvention in overweight children.* Paper presented at the 70th Anniversary Conference on 'Nutrition and health: from conception to adolescence', Glasgow.
Rice, J., Thombs, D., Leach, R., & Rehm, R. (2008). Successes and barriers for a youth weight-management program. *Clinical Pediatrics, 47*(2), 143-147. doi: 10.1177/0009922807306168
Rosmarin, D., Wacholtz, A., & Ai, A. (2011). Beyond descriptive research: Advancing the study of spirituality and health. *Journal of Behavioral Medicine, 34*(6), 409-413.
Rush, E., Reed, P., McLennan, S., Coppinger, T., Simmons, D., & Graham, D. (2012). A school-based obesity control programme: Project Energize. Two-year outcomes. *British Journal of Nutrition, 107*, 581–587. doi: 10.1017/S0007114511003151
Rush, E., Reed, P., Simmons, D., Coppinger, T., McLennan, S., & Graham, D. (2013). Baseline measures for a school-based obesity control programme: Project Energize: Differences by ethnicity, rurality, age and school socio-economic status. *Journal of Pediatrics and Child Health, 49*, E324-E331.
Sacher, P., Wolman, J., Chadwick, P., & Swain, C. (2008). Mini-MEND: MEND's early years healthy lifestyle programme for 2–4 year olds and their families. *Nutrition Bulletin, 33*(4), 364-367. doi: 10.1111/j.1467-3010.2008.00735.x
Saguy, A. C., & Almeling, R. (2008). Fat in the Fire? Science, the news media, and the 'obesity epidemic'. *Sociological Forum*(1), 53. doi: 10.2307/20110247
Sarjent, J. D., & Blanchflower, D. G. (1994). Obesity and stature in adolescence and earnings in young adulthood. *Archives of Pediatrics and Adolescent Medicine, 148*, 681-687.
Sims-Schouten, W., Riley, S. C. E., & Willig, C. (2007). Critical realism in discourse analysis. *Theory and Psychology, 17*(1), 101-124. doi: 10.1177/0959354307073153
Sithole, F., & Veugelers, P. J. (2008). Parent and child reports of children's activity. *Health Reports / Statistics Canada, Canadian Centre For Health Information = Rapports Sur La Santé / Statistique Canada, Centre Canadien D'information Sur La Santé, 19*(3), 19-24.
Smith, J. A. (1996). Beyond the divide between cognition and discourse: Using interpretative phenomenological analysis in health psychology. *Psychology & Health, 11*, 261-271.
Smith, J. A. (2010). Interpretative Phenomenological Analysis. *Existential Analysis: Journal of the Society for Existential Analysis, 21*(2), 186-192.

Smith, J. A., & Eatough, V. (2007). Interpretative phenomenological analysis. In E. Lyons & A. Coyle (Eds.), *Analysing qualitative data in psychology* (pp. 35-50). London: Sage.

Smith, J. A., Larkin, M., & Flowers, P. (2009). *Interpretative phenomenological analysis:Theory, method and research* Los Angeles ; London : SAGE, 2009.

Smith, J. A., & Osborn, M. (2003). Interpretative phenomenological analysis. In J. A. Smith (Ed.), *Qualitative psychology: A pratical guide to research methods* (pp. 52-80). London: Sage Publications.

Smith, L. R., Chadwick, P., Radley, D., Kolotourou, M., Gammon, C. S., Rosborough, J., & Sacher, P. M. (2013). Assessing the short-term outcomes of a community-based intervention for everweight and obese children: The MEND 5-7 programme. *BMJ: British Medical Journal 3*(e002607). doi: 10.1136/bmjopen-2013-002607

Sonneville, K., La Pelle, N., Taveras, E. M., Gillman, M., & Prosser, L. (2009). Economic and other barriers to adopting recommendations to prevent childhood obesity: Results of a focus group study with parents. *BCM Pediatrics, 9*(81). doi: 10.1186/1471-2431-9-81

Speiser, P., Rudolf, M., Anhalt, H., Camacho-Hubner, C., Chiarelli, F., Eliakim, A., . . . Hochberg, Z. o. b. o. t. O. C. W. G. (2005). *Journal of Endocrinology and Metabolism, 90*(3), 1871-1887.

Stephens, C. (2008). *Health Promotion: A psychosocial approach* Maidenhead: Open University Press : Mc Graw-Hill, c2008.

Taylor, R. W., McAuley, K. A., Barbezat, W., Farmer, V. L., Williams, S. M., & Mann, J. I. (2008). Two-year follow-up of an obesity prevention initiative in children: The APPLE project. *American Journal of Clinical Nutrition, 88*, 1371-1377.

Taylor, R. W., McAuley, K. A., Barbezat, W., Strong, A., Williams, S. M., & Mann, J. I. (2007). APPLE Project: 2-y findings of a community-based obesity prevention program in primary school age children. *American Journal of Clinical Nutrition, 86*(3), 735-742.

Teder, M., Mörelius, E., Nordwall, M., Bolme, P., Ekberg, J., Wilhelm, E., & Timpka, T. (2013). Family-based behavioural intervention program for obese children: An observational study of child and parent lifestyle interpretations. *PLoS ONE, 8*(8), 1-8. doi: 10.1371/journal.pone.0071482

University of Otago. (n.d.).

Walton, M., Signal, L., & Thomson, G. (2013). Public policy to promote healthy nutrition in schools: Views of policymakers. *Health Education Journal, 72*(3), 283-291.

Wellings, K., Branigan, P., & Mitchell, K. (2000). Discomfort, discord and discontinuity as data: Using focus groups to research sensitive topics. *Culture, Health & Sexuality, 2*(3), 255-267. doi: 10.1080/136910500422241

West, F., Sanders, M., Cleghorn, G., & Davies, P. (2010). Randomised clinical trial of a family-based lifestyle intervention for childhood obesity involving parents as the exclusive agents of change. *Behaviour Research & Therapy, 48*(12), 1170-1179. doi: 10.1016/j.brat.2010.08.008

Whitaker, R. C., Wright, J. A., Pepe, M. S., Seidel, K. D., & Dietz, W. H. (1997). Predicting obesity in young adulthood from childhood and parental obesity. *New England Journal of Medicine, 337*(13), 869-876.

Wickens-Drazilova, D., & Williams, G. (2010). Ethical and public policy aspects of childhood obesity: Opinions of scientists working on an intervention study. *Obesity Reviews, 11*(8), 620-626.

Wilkinson, S. (1998). Focus group methodology: A review. *International Journal of Social Research Methodology, 1*, 181-203.

World Health Organisation. (2004). *Global strategy on diet, physical activity and health*. Geneva: World Health Organization.

World Health Organization. (2000). *Obesity: Preventing and managing the global epidemic*. Geneva: WHO.

World Health Organization. (2012). *Population-based approaches to child obesity prevention*. Geneva.

Wright, J. (2009). Biopower, biopedagogies and the obesity epidemic. In J. Wright & V. Harwood (Eds.), *Biopolitics and the 'Obesity Epidemic'*. New York: Routledge.

Wright, J., Burrows, L., & Rich, E. (2012). Health imperatives in primary schools across three countries: Intersections of class, culture and subjectivity. *Discourse: Studies in the Cultural Politics of Education, 33*(5), 673-691. doi: 10.1080/01596306.2012.696500

Appendices

Appendix A: Demographics of parents and children taken at focus groups, February 2013.

Focus group participants' pseudonym	child's pseudonym	relationship to child	child's ethnicity as identified by parent	child's age at enrolment	months btwn enrolment and focus group
Matthew	Tara	father	Philipino/NZ Euro	11y1m	21
Sarah	Ngakarepe	mother	Maori/NZ Euro	10y3m	24
Tane	Manu	father	Maori	11y2m	21
Ben and Claire	Samuel	father/mother	NZ Euro	9y7m	48
Chris	Josh	father	NZ Euro	9y9m	18
Brian	Jonathon	father	NZ Euro	8y10m	54
Trixie	Morris	mother	NZ Euro	11y1m	34
Belinda	Mark	mother	NZ Euro	11y7m	21
Sheryl	Meiani	grandmother	Maori/Samoan	8y8m	6
Verity	Michael	mother	Maori	9y11m	3
Kay	Victor	mother	NZ Euro	11y2m	27
Brianna	Ben	mother	NZ Euro	11y2m	18
Diana	Boby	mother	NZ Euro	8y3m	30
Hayley	Keira	mother	Maori	11y2m	55
Deirdre	Luke	mother	NZ Euro	10y1m	9
Stella	Penny	mother	NZ Euro	9y2m	9
Brent	Mary	father	NZ Euro	7y10m	6
Steve and Jill	JoBob	father/mother	NZ Euro	11y3m	21
Toni	Tawhaiora	mother	Maori	12y	46
Amy	Anna	mother	NZ Euro	11y8m	44

Appendix B: Information to parents – focus groups

bodywise

You are invited you to participate in a group discussion about the Bodywise programme to get ideas to improve it

What will be involved?

- You will talk about your experience of participating in the 14 month bodywise programme with other bodywise parents. There will be about 4-5 parents to each group.
- The meeting will take 1-1½ hours and be led by a trained facilitator. The discussion will be audio recorded to make sure we get all your comments.
- All information will be anonymous (no identifying factors will be transcribed).
- We value your comments and would like to make changes to our programme that will be helpful to future families and make bodywise better.

Contact one of the bodywise team		
Natalie Parkes Clinical Psychologist Ph: 839 8726 ext 23554 Or 021-816 494 (text ok) Email: Natalie.parkes@waikatodhb.health.nz	Helen Stockman Bodywise Dietitian Ph: 021-761 703 (text ok) Email: Helen.stockman@ waikatodhb.health.nz	Soroya McGall Bodywise/Active Families Sport Waikato Ph: 027-278 5867 (text ok) Email: soroyam@sportwaikato.org.nz

Your participation is entirely voluntary (your choice). You do not have to take part in this evaluation. If you do agree to take part you are free to withdraw at any time, without having to give reason and this will in no way affect your future health care. Furthermore, no material that could personally identify you or your child will be used in this study.

This evaluation has received ethical approval from the Northern Y Regional Ethics Committee.

Waikids WAIKATO CHILD AND YOUTH HEALTH

sportwaikato out there and active

Appendix C: Consent Form- Focus groups

CONSENT FORM

For those families wishing to participate in focus groups for the evaluation of the bodywise programme

UNDERSTANDING OF THE STUDY

I have read and understand the information sheet provided on the 'bodywise programme evaluation'. I have discussed any queries I had with researcher, and am aware I can contact the researcher if I have any further queries. I agree to participate in the focus group discussion and understand these will be facilitated by a research assistant under the supervision of Natalie Parkes. The group sessions will be audio taped to enable accurate analysis. Only comments will be transcribed and all data will be anonymised. Data obtained from these focus groups will be used for programme development and positive changes to the current bodywise programme.

I understand that taking part in this evaluation is voluntary (my choice), and that I may withdraw at any time. I understand that participation in this study is confidential and no material that can identify my child will be used in any reports. I know who to contact if I have any further questions about the study.

SIGN HERE TO CONSENT TO THE STUDY

I _____ (Print Name) have read the information provided in relation to the bodywise focus groups.

I_____ (name) consent to take part in this evaluation.

_____ _____

Signature Date

_____ _____

Natalie Parkes, Clinical Psychologist Catherine Trezona

Principal Researcher Research Assistant

Appendix D: Approval for study from Te Puna Oranga, Waikato DHB

11 September 2013

Catherine Trezona

Masters Student-Health Psychology

Massey University

RE: Letter of Support for research project titled:

The lived experiences of children as participants to bodywise, a Waikato District Health Board, Sports Waikato clinical weight management programme. (RD013058)

Tēnā Koe

Thank you for submitting the above proposal to the Waikato DHB Te Puna Oranga Maori Health Research Committee for review.

The committee acknowledges that research applications may at times be governed by international protocols as the study may not have originated in New Zealand, therefore, the committee would expect that consideration has been given to engaging with other indigenous peoples and researchers in other countries. Indigenous peoples are concerned about exploitation, confidentiality and control over research, informed consent, usefulness of research, ownership and control of data. We trust that the other countries part-taking in your research have also involved indigenous people.

Based on the information provided and the review conducted by the committee, we ask that the researchers continue to be vigilant with your ethics protocols of reducing any harm to the patients and/or their whanau and based on this information we are very pleased to provide support to your research with an invitation to:

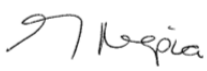
Provide progress updates to Te Puna Oranga regarding the study and a copy of the results at the completion of the study

Te Puna Oranga can offer cultural support and guidance to this research process, particularly with regards to working with Maori patients and their whanau during your trials. We can also provide the links regarding Maori providers to support an increase in Maori participation with these trials.

Please feel free to contact Manaaki Nepia, Service Manager if you need assistance.

We are committed to building on-going relationships with researchers in the hope of improving Maori health, we wish you well with the study/trial and should you have any further queries please feel free to contact me.

Noho ora mai ra



Manaaki Nepia
Service Development Manager
Te Puna Oranga-Maori Health Service
Manaaki.nepia@waikatodhb.health.nz
07 834 3628
021 415 062

Appendix E: Information sheet for child interviews – parent

Massey University
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
Te Kura Pūkenga Tangata

Your child is invited to be a part of an exploration of their experiences of bodywise.

Earlier this year, you kindly took part in a focus group as part of an evaluation of bodywise. During these discussions, some parents suggested their children also have an opportunity to share their experiences. I was the facilitator for the focus groups and have designed a study to include your children's viewpoints as part of my research for my Masters in Health Psychology. This new study is just for the kids, and I will be asking them not just about what they thought about the bodywise programme, but also about their views on health, activity, and nutrition more generally. I am interested in how they think about these things and whether that has changed over time or due to the bodywise programme. (The study is just talking, no weighing or measuring).

What will be involved?

A one hour appointment will be arranged at your home (or at a place most convenient for you) for me to meet with you and your child.

Your child and I will spend about an hour discussing their experience of bodywise (we will use their bodywise folder to get the conversation started) and anything else that matters to them to do with health, fitness, food and their bodies. I will bring felt pens and paper in case they want to draw anything for me, or explain anything on paper.

I will also bring some healthy drinks and snacks to share with whoever is in the house at the time.

The discussion will be video taped and transcribed (typed up), changing all identifying features such as names and places. I will analyse the transcripts. To say thank you to your child for their time, they will receive a $21 family pass to Exscite Science Centre at the Waikato Museum.

The results will be a part of my Masters thesis which will be submitted to my academic supervisor, Dr Antonia Lyons, Massey University. All names will be changed to protect your family's confidentiality.

If you would like your child to take part, please talk about this with your child and if they are also keen, text me (Catherine) on 021 732 237. I will contact you shortly by phone to arrange a suitable time for the interview. If you have any queries, please contact me (Catherine), Antonia (my academic Supervisor) or Natalie (your bodywise psychologist).

Catherine Trezona Student Researcher graceworks@inspire.net.nz 07 8776 795 021 732 237	Antonia Lyons Associate Professor Massey University A.Lyons@massey.ac.nz 04-8015799 xtn 62164	Natalie Parkes Consultant Clinical Psychologist Natalie.parkes@waikatodhb.health.nz Ph: 839 8726 xtn 23554 Or 021-816 494 (text ok)

IMPORTANT: PLEASE READ!

Your participation is entirely voluntary (your choice). You do not have to take part in this evaluation. If you do agree to take part you are free to withdraw at any time, without having to give reason and this will in no way affect your future health care. Furthermore, no material that could personally identify you or your child will be used in this study.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 13/74. If you have any concerns about the conduct of this research, please contact Dr Nathan Matthews, Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5799 x 80877, email humanethicsouthb@massey.ac.nz.

Appendix F: Information Sheet for child interviews - child

Massey University
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
Te Kura Pūkenga Tangata

What do you think of bodywise?

My name is Catherine and earlier this year, I met with a group of parents, including your mum, dad or Nan to talk about bodywise. During these talks, some of your parents suggested that you children should also have the chance to talk about how it is has been for you at bodywise. I have designed a new study - just for the kids - and you are invited to be a part of this.

What do you need to do?

- I will come and visit you at your place at a time that suits you and your family.
- We will spend about an hour talking about your experience of bodywise and anything else that matters to you about health, fitness, and food.
- I will bring coloured pens and paper with me in case you want to draw anything for me, or explain anything on paper.
- I will also bring a bodywise folder with me, to remind you of the programme.
- I will video record our discussion.
- The things you tell me will be a part of my report which I need to write for my school (Massey University).
- I will change your name to make sure no-one will be able to identify you in this report.

To say thanks for taking the time to talk to me, I will give you a family pass to the Exscite Interactive Science Centre at the Waikato Museum.

IMPORTANT! PLEASE READ THIS!!

Getting involved is completely your choice. You do not have to take part. If you do agree to meet with me, you are free to pull out at any time, without having to say why.

Your name will be changed so no-one will know who said what.

If you would like to take part, talk about this with your parents and if they are also keen, please text me (Catherine) on 021 732 237. I will phone you soon to make a time for me to come meet with you. If you have any questions, please phone me (Catherine), Antonia (my teacher) or Natalie (your bodywise psychologist).

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 13/74 If you have any concerns about the conduct of this research, please contact Dr Nathan Matthews, Chair, Massey University Human Ethics Committee: Southern B, telephone 06 350 5799 x 80877, email humanethicsouthb@massey.ac.nz.

Appendix G: Informed consent – child interviews

Massey University
COLLEGE OF HUMANITIES AND SOCIAL SCIENCES
Te Kura Pūkenga Tangata

PARTICIPANT CONSENT FORM – INDIVIDUAL parent/caregiver

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.

I agree that anonymised extracts, including any drawings my child may draw during the interviews, may be used in reports arising from the research, providing they do not identify me or my child in any way.

Signature …….. Date ……
of parent/caregiver

Full name of parent/caregiver ……

Signature …….. Date ……
of child

Full name of child ……

Appendix H: Transcription Notation

[	left brackets indicate the point at which a current speaker's talk is overlapped by another's talk
=	equal signs, one at the end and one at the beginning, indicate no gap between the two lines, where one speaker interrupts another
(2)	Numbers in parentheses indicate time of pauses in seconds
<u>Word</u>	Underscoring indicates some form of stress, via pitch and/or amplitude
[laughs]	square brackets indicates significant behaviour including laughter, sighing, etc
( )	empty parentheses indicate transcriber's inability to hear what was said
(word)	Parenthesized words are possible hearings
Word_	An underscore following a word indicates an extension or drawn out sound
word?	A question mark indicates an upward pitch at the end of a word or sentence, giving it a questioning sound