

‘You can’t hate yourself thin’
Obesity recovery and self-compassion

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Abstract

Obesity is a major public health concern in the developed, and increasingly in the developing world. One theory aimed at understanding the aetiology of obesity proposes that highly palatable foods may have addictive properties, causing a food addiction similar to other forms of drug addiction.

Kia Ākina is an obesity recovery network based on addiction treatment principles. It has been developed by the National Addiction Centre at the University of Otago in New Zealand.

Literature on obesity shows a prominence of relational concepts including relation to self. A compassionate way of relating to self is central to the concept of self-compassion. Self-compassion integrates what have been traditionally Buddhist teachings about the nature of suffering with the science of psychology. Self-compassion raising interventions have been shown to be helpful in several aspects of weight loss interventions and the concept of self-compassion is emphasized in several aspects of the Kia Ākina network.

The current study used a mixed methods approach.

The quantitative part of the study explored the following questions in quantitative analysis, using measures of participation in Kia Ākina, levels of self-compassion, and weight at baseline and six months follow up:

- 1) Do levels of self-compassion change throughout the recovery process?
- 2) Is there an association between changing levels of self-compassion, weight loss, and overall participation in the Kia Ākina network?

The study found that levels of self-compassion increased significantly over the six month period that was measured.

The qualitative part was an exploration of the following questions in qualitative interviews with nine members of the Kia Ākina network:

- 3) How do people with obesity experience their journey of recovery from obesity and what, if anything, does Kia Ākina add to this journey?
- 4) Do perceptions of self-compassion change during participation in Kia Ākina, and if so, how?

Qualitative analysis involved a general inductive approach within a critical realist ontology.

Analysis of the qualitative part of the study identified targets for future research aiming to improve weight loss intervention outcomes. Some of the terminology used in obesity treatment models was either embraced or rejected by the study participants, depending on attributes such as perceived stigma associated with these terms. Such conceptual interactions may be important factors in obesity treatment engagement. The concept of self-compassion was also perceived by the study participants as a different construct than that defined in the academic literature, highlighting the importance of clear communication in research and clinical practice. Additionally, the process of qualitative and quantitative assessment of self-compassion potentially contributed to the rise in self-compassion levels in this study. Consideration of the potential effects of assessment upon self-compassion levels should be considered in future research and intervention.

This research highlights a number of complexities present in obesity recovery, greater understanding of which offers hope for improving obesity treatment outcomes. Individually tailored interventions in the treatment of obesity, especially when applied in accordance with the motivational stance of the person, offer the promise of enhancing weight loss outcomes and improving support for people with obesity.

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1 Literature review

1.1 Obesity

Obesity and being overweight are defined as excessive accumulation of body fat with potential impairment of health (World Health Organisation, 2018b). Body mass index (BMI) refers to a person's weight in relation to their height, using the formula (kg/m^2).

Due to its general applicability to all adult ages and both sexes, it provides a useful measure for overweightness and obesity. A BMI of $\geq 25.0\text{kg}/\text{m}^2$ is considered overweight, and a BMI of $\geq 30.0\text{kg}/\text{m}^2$ as obese (World Health Organisation, 2018b).

Obesity is the result of a positive energy balance, in which more calories are consumed than expended, with resultant weight gain (Mitchell, Catenacci, Wyatt, & Hill, 2011). In addition to this basic equation, many factors have been identified that may contribute to rising obesity levels (Mitchell et al., 2011). Some of the individual differences in body weight and composition can be explained by genetic factors, which affect various components of energy balance (Silventoinen, Rokholm, Kaprio, & Sørensen, 2010). These factors, however, cannot explain the gradual weight gain throughout populations (Mitchell et al., 2011). The environment of the developed world is a result of humankind's success in providing inexpensive, energy dense, and good tasting food consistently, while at the same time reducing the physical effort required to obtain food and other necessities of life (Mitchell et al., 2011). Yet the physiological and mental functions of humans have evolved in an environment where food was often scarce and more physical effort was required to survive. Storing energy in the form of body fat and conserving energy by avoiding unnecessary expenditure were useful traits aiding in survival (Prentice, 2001). These same traits have in the current environment become factors that can facilitate overeating, less exercising, and thus weight gain (J. O. Hill, Wyatt, & Melanson, 2000).

Obesity is a major public health concern in the developed, and increasingly in the developing world. Since 1975 obesity rates have nearly tripled worldwide and most of the world's population now lives in countries where being obese kills more people than being underweight (World Health Organisation, 2018b).

In New Zealand the population mean BMI increased from 26.4 kg/m² in 1997 to 28.3 kg/m² in 2015 (Wilson & Abbott, 2018). An estimate of this trend based on data from the New Zealand national health survey predicts the population mean BMI to exceed 30.0 kg/m², which is the clinical cut off for obesity, by the early 2030s (Wilson & Abbott, 2018). In 2006 health care costs for overweight and obesity in New Zealand were among the highest in the world as a percentage of total health care expenditure (Lal, Moodie, Ashton, Siahpush, & Swinburn, 2012).

There is a large body of evidence, showing obesity being causative to adverse health outcomes such as cardiovascular disease, including coronary heart disease, hypertension, type 2 diabetes mellitus, hyperlipidaemia, ischaemic stroke, cancers of the breast, colon, prostate and other organs, sleep apnoea, liver and gallbladder disease, osteoarthritis, and gynaecological problems (Guh et al., 2009; World Health Organization, 2009), and its association with poor quality of life, internalizing disorders, periodontal disease, poor school performance, altered pre-pubertal hormones, and attention-deficit hyperactivity disorder in children (Pulgarón, 2013), as well as complications in later life such as chronic kidney disease (Wong et al., 2015). Furthermore, obesity has the potential to develop into a spiral of decreased physical activity, which is associated with adverse health consequences, which are associated with health limiting behaviours that are associated with the increase of obesity (Williams, Mesidor, Winters, Dubbert, & Wyatt, 2015).

And yet, obesity is preventable (World Health Organisation, 2018b).

1.1.1 Weight loss interventions

A large body of evidence suggests that changes in eating and increased physical activity can lead to long term weight loss (Avenell et al., 2004; Dombrowski, Knittle, Avenell, Araújo-Soares, & Sniehotta, 2014; Tobias et al., 2015).

In recent decades efforts have been made to develop effective guidelines for the management of obese patients. As new evidence emerges, these guidelines are updated every five years or more, to provide evidence based recommendations for weight loss interventions. Most of these guidelines, including those developed for New Zealand, recommend lifestyle interventions which include dietary, physical activity, and behavioural components as weight loss interventions (Ministry of Health, 2017). For severe cases of obesity pharmacotherapy and surgery may be recommended (Ministry of Health, 2017). A weight loss of five percent is considered clinically significant for the improvement of obesity related risk factors to health (Brauer et al., 2015; Jull, Lawes, Eyles, Maddison, & Gorton, 2009). While diet and activity are related to behaviours, and thus modifiable, health behaviours have been shown to be very resistant to change (Chan & Woo, 2010).

1.1.1.1 Self-control

Self-control has been shown to be relevant to many forms of behaviour, including health behaviours related to weight loss, and low self-control is assumed to be a central factor in obesity (Vohs & Baumeister, 2016).

Self-control is defined as a conscious decision to act in opposition to forces either within the person, such as impulses, habits, desires, or to forces outside the person such as norms, or demands by others (Vohs & Baumeister, 2016). Two forms of self-control can be distinguished, state self-control which is variable across situations and time, and trait self-control which is relatively stable across situations and time (Tangney, Boone, & Baumeister, 2018).

State self-control is more susceptible to situational influences and thus change (De Ridder & Lensvelt-Mulders, 2018). It has been described as functioning similarly to a muscle, which tires from continuous exertion (Baumeister, Vohs, & Tice, 2007). This 'ego depletion' effect has been discussed in various domains of behaviour, including eating (Baumeister et al., 2007).

The relationship between trait self-control and a wide range of behaviours including diet and exercise related behaviours has been reviewed in a recent meta analysis (De Ridder & Lensvelt-Mulders, 2018). Results confirm the relevance of high trait self-control for a

range of behaviours which are generally beneficial and adaptive. However, the analysis also suggests that the strongest associations between trait self-control and behaviours were not related to dieting behaviour. Furthermore, trait self-control was more strongly associated with imagined as compared to actual behaviours, so a person may believe that high self-control will lead to a change in behaviour but may not actually act on it (De Ridder & Lensvelt-Mulders, 2018).

1.1.1.2 Attrition in weight loss interventions

The effectiveness of lifestyle interventions for weight loss is often associated with high attendance and completion rates. However, attendance and adherence to intervention protocols varies significantly (Dalle Grave et al., 2005; Huisman, Maes, De Gucht, Chatrou, & Haak, 2010). A systematic review and meta-analyses of randomised controlled trials of long term weight loss maintenance with non-surgical interventions in obese adults (Dombrowski et al., 2014) reported an average dropout rate of 28% for weight loss interventions, and an additional average dropout rate of 20% for the maintenance of weight loss following intervention.

High attrition rates have been recognised as common factors in reduced efficacy of weight loss interventions (Carels, Cacciapaglia, Douglass, Rydin, & O'Brien, 2003; Dixon et al., 2009; Honas, Early, & Frederickson, 2003). In a systematic review on attrition in weight loss interventions Moroshko et al. (2011) identified factors that were associated with increased attrition. Some of these were related to a person's adaptation and functioning, such as dysfunctional relation to one's body, little exercise, few social connections, low self-efficacy, previous weight loss attempts, and poor mental health; while other factors were of a practical nature, like travel requirements to access treatment or financial cost of treatment (Moroshko et al., 2011).

A recent systematic review (Burgess, Hassmén, & Pumpa, 2017) identified the following factors as barriers to successful weight loss: lack of motivation; shortage of time; pressures related to environment and/or society; limitations due to health conditions; negative affect and thinking; financial constraints; lack of knowledge/awareness; and dislike of exercise (Burgess et al., 2017). Based on these findings, the authors of this review emphasize the

need for individualistic interventions that should be implemented early in treatment (Burgess et al., 2017).

1.2 Food addiction

During the last decades research regarding the causes and consequences of obesity have produced theories aimed at understanding its aetiology. One such theory proposes that highly palatable foods may have addictive properties, causing a food addiction similar to other forms of drug addiction (Meule, 2015).

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) assumes addiction to be identical to substance dependence, characterized by escalated drug intake and the emergence of a chronic drug dependent state (American Psychiatric Association, 2000). This definition is similar to the DSM-V criteria for ‘Substance-Related and Addictive Disorders’, which include impaired control, tolerance and withdrawal (American Psychiatric Association, 2013).

In relation to the definition of substance dependence, food addiction has been defined in the context of the DSM-IV diagnostic criteria for dependence, namely tolerance, withdrawal, and loss of control. Evidence shows that some people lose control over their food consumption, repeatedly fail at reducing their food intake, or refrain from consuming certain types of food, even in the face of negative consequences (Gearhardt, Corbin, & Brownell, 2009a).

Following the development of instruments for measuring addictive overeating, which assessed characteristics such as restraint, disinhibition, impulsivity, and craving (Lowe et al., 2009; Nijs, Franken, & Muris, 2007; Stunkard & Messick, 1985; Van Strien, Frijters, Bergers, & Defares, 1986), a tool specifically for the measurement of food addiction, the Yale Food Addiction Scale was developed in 2009 (Gearhardt, Corbin, & Brownell, 2009b). This scale represents the DSM-IV criteria for substance dependence in its application to eating behaviour. It provides a standardised tool for the measurement of food addiction across populations, and has shown internal consistency as well as convergent, discriminant, and incremental validity (Gearhardt et al., 2012).

A Canadian qualitative study (Curtis & Davis, 2014) which explored the experience of overeating in relation to the DSM-5 symptoms of addiction in obese women with and without binge eating disorder found that food addiction can occur with obesity, whether or not a binge eating disorder may be present. However, with the use of the Yale Food Addiction Scale it was found that food addiction was more strongly associated with individuals who did not present with binge eating disorder. This research highlights a need for further research to clarify these concepts in both their differences and overlapping criteria (Gearhardt et al., 2012).

A working model to explain the addictive nature of excessive food intake in relation to the neuronal circuits involved has been proposed by (Volkow, Wang, Tomasi, & Baler, 2013). This model is based on the notion that resisting a temptation or limiting its use requires opposition of reward predicting conditioned responses, and that this applies to the use of drugs as well as the overconsumption of highly palatable foods.

A recent systematic review evaluated the evidence to date for the construct of food addiction (Gordon, Ariel-Donges, Bauman, & Merlo, 2018). Based on diagnostic conceptions of “neurobiological changes, preoccupation with the substance, impaired control, social impairments, risky use, tolerance/withdrawal, chronicity of the condition, and relapse” (Gordon et al., 2018, p. 4) the authors concluded that there was significant support for the validity of food addiction (Gordon et al., 2018).

Even though food addiction related terminology such as ‘chocoholics’ and ‘carb cravers’ have been used in the public discourse for decades (Pursey, Stanwell, Gearhardt, Collins, & Burrows, 2014), and our scientific understanding of the addictive component of excessive food intake and subsequent obesity is increasing rapidly, an Australian study (Fraser, Moore, & Keane, 2014) suggests that there is still a lack of transference of these new insights into everyday clinical practice and mainstream education. The authors show how our increasing understanding of food addiction is re-shaping our understanding of addiction itself, as well as reframing the issue of obesity as an addiction related problem. The exploration of public representations of obesity and addiction revealed diverse and nuanced realities related to food, eating, and weight among the participants, and that these realities are embedded in complex social relations associated with gender roles, health

narratives, and personal agency. While the interviews in Fraser et al.'s (2014) study were conducted with mothers and childcare workers only, and thus cannot easily be generalised, they highlight the complex and varied nature of individual experiences of obesity and food addiction (Fraser et al., 2014).

In light of this discrepancy between scientific understanding of food addiction and its transference into the public health domain, research that may shed light on the experience of recovery from food addiction might be of benefit to researchers and health care providers alike.

While further research exploring obesity recovery in the context of food addiction might be of great value, at the same time the development of addiction based treatment models may provide useful tools for the treatment of obesity (Volkow et al., 2013).

1.3 Kia Ākina

One such treatment model, Kia Ākina, has been developed by the National Addiction Centre at the University of Otago in New Zealand. Kia Ākina is an obesity recovery network based on addiction treatment principles. It utilises the strategies of “permanent lifestyle change, safe non-stigmatising venue, motivational enhancement principles, abstinence-based food-rules, harm reduction and care of long-term medical conditions and self-help recovery group processes” (Sellman et al., 2017, p. 3). Alongside these strategies, traditional evidence based approaches to weight loss, such as diet modification, behavioural strategies and increased physical activities are suggested. In addition, Kia Ākina provides ongoing psychosocial support to its members.

An important part of Kia Ākina is the weekly facilitated group meetings, where members can share their experiences and support each other. The benefits of group therapy have been described as therapeutic factors (Yalom & Leszcz, 1995), which consist of ‘instillation of hope, universality, imparting of information, altruism, corrective recapitulation of primary family group, development of socialising techniques, interpersonal learning, cohesiveness, catharsis, existential factors, and imitative behaviour’ (Yalom & Leszcz, 1995). However, not all of these factors have been found to apply in the

same way to all group participants, as clients and groups find different aspects of group therapy helpful (Kivlighan & Holmes, 2004).

In a randomised controlled trial Kia Ākina has been tested as an addition to the Green Prescription, which is a government funded health promotion programme in New Zealand. The Green Prescription is a support service for people who are overweight or have other health conditions such as type 2 diabetes, high blood pressure or depression, and would thus benefit from being more active (Ministry of Health NZ, 2018). While Kia Ākina is informed by addiction treatment principles, there is no requirement for participants to identify as having food addiction, and food addiction has not been assessed prior to or during the clinical trial. Obesity and desire to lose weight were the main inclusion criteria for this study (Sellman et al., 2017). The treatment group was the Green Prescription plus Kia Ākina support, and the control group was the Green Prescription only. The addition of Kia Ākina to the Green Prescription resulted in five times greater weight loss as well as improved confidence about recovery, better quality of life, and better satisfaction with the assistance received compared to the control group (Sellman et al., 2017). The authors of this study conclude that further research and development of Kia Ākina is needed to improve weight-loss outcomes.

The current study has in part been developed in response to this need. A major part of this study is the exploration of the recovery experience in Kia Ākina, and what, if anything, Kia Ākina has added to the participants' recovery journey.

1.4 Recovery from addiction

As research on food addiction is a relatively new area of study (Meule, 2015), it has been useful to consult with the much larger body of research on addiction recovery which comes from the alcohol and other drugs (AOD) recovery field (Roberts & Koob, 1997). Qualitative research on the experience of AOD recovery can thus provide context and insight into the exploration of recovery from obesity from an addiction perspective.

Some theories, models and concepts that may be helpful in understanding addiction recovery and behaviour change are introduced below.

1.4.1 The transtheoretical model of behaviour change

Important contributions to understanding the process of recovery from addiction have been made by DiClemente and Prochaska's (1998) transtheoretical model of behaviour change (TTM). The TTM draws on major theories of intervention to consolidate stages of change with processes and principles of change. The six stages of change that people usually experience through their recovery journey, as described in the TTM, are: 'precontemplation' with no intention of action, 'contemplation' with intention of action further in the future, 'preparation' with intention of action in the near future, 'action' with recently changed behaviour, 'maintenance' with ongoing changed behaviour, and 'termination' with full confidence of maintaining the behaviour change and without relapse (DiClemente & Prochaska, 1998). Despite some conceptual and empirical challenges in relation to the prevention of harmful behaviours, the TTM provides a useful model for behaviour change and its application has been shown to contribute to the enhancement of behaviour change interventions (Prochaska, 2013).

1.4.2 Health Action Process Approach

Another model that has been developed to better understand the difficulties associated with behaviour change is the Health Action Process Approach (HAPA) (Schwarzer, 2008). This model differentiates between preintentional motivations which lead to behavioural intentions, and postintentional volitions which lead to behaviour change. It takes into account the importance of factors other than a person's motivation, which may hinder or facilitate behaviour change. These volitional mediators may have the potential to bridge the intention behaviour gap (Schwarzer, 2008).

An important construct that functions as volitional mediator within the HAPA is self efficacy, which refers to a person's beliefs about their ability to influence events that affect their lives via their own actions (Bandura & Wessels, 1997). In the context of addictive behaviours, three forms of self efficacy have been distinguished: action, maintenance, and recovery self efficacy (Marlatt & Witkiewitz, 2002). Action self efficacy involves a person's belief about their ability to perform the desired actions in the future. Maintenance self efficacy is the belief in a person's ability to maintain the desired behaviour. Recovery

self efficacy refers to a person's belief to be able to cope with setbacks and lapses through damage control and restoration of hope (Marlatt & Witkiewitz, 2002).

Another volitional mediator identified by Schwarzer (2008) is strategic planning, which may be conducted as action planning or coping planning. While action planning is concerned with the 'when', 'where', and 'how' of the intended action (Gollwitzer & Sheeran, 2006), coping planning includes the identification of potential obstacles and alternative behaviours to overcome these (Scholz, Sniehotta, Burkert, & Schwarzer, 2007).

The inclusion of volitional mediators into behaviour change modelling has contributed to advancements in explanations of the relationship between intention and behaviour. Furthermore, placing the volitional mediators into two phases of the behaviour change process, a motivational phase and a volitional phase, allows for specific tailoring of interventions and thus improved outcomes (Schwarzer, 2008).

1.4.3 Self determination theory

Another influential theory contributing to the behaviour change literature with focus on human motivation is Deci and Ryan's (2008) Self Determination Theory (SDT). SDT asserts that understanding of human motivation requires consideration of universal human needs for competence, autonomy, and relatedness. These needs are proposed to be intrinsic, and of a psychological rather than physiological nature. In SDT the target value of behaviour is growth-oriented activity. This contrasts with previous theories of motivation where the set point is stability and the purpose of behaviour is need satisfaction to replenish deficiencies. According to SDT, development cannot be optimal when the needs for autonomy, relatedness, or competence are not cared for, whether or not these needs are consciously valued. Psychological wellbeing requires satisfaction of these three needs, not just one or two (Deci & Ryan, 2008).

Motivation can be understood as expending energy (effort) and directing energy (choosing actions) for the satisfaction of needs (Deci & Ryan, 1985). In SDT intrinsic motivation is characterised by the absence of external regulation; while extrinsic motivation is associated with controlling external contingencies to varying degrees. These different styles of extrinsic motivation range from externally controlled to more autonomously experienced

‘integrated’ motivation. Intrinsically motivated behaviours, on the other hand, are engaged in out of a person’s free will and interest, originating in peoples’ natural tendencies toward growth and development (Deci & Ryan, 2008).

Social contexts that support the needs for competence, autonomy, and relatedness have been found to enhance intrinsic motivation, and facilitate the integration of extrinsic motivation, resulting in more autonomous regulation of motivation. Intrinsic motivation and autonomous motivation regulation in turn have been found to benefit performance, mood, health behaviour change, and mental health (Deci & Ryan, 2008).

While the three concepts described in this chapter are by no means meant to comprehensively cover the topic of addiction recovery or behaviour change, each of these concepts may provide some context for the questions explored in this study.

Within the TTM emphasis is placed on distinguishing between the various stages a person may experience on their journey of recovery (Prochaska, 2013). HAPA adds to the importance of stage differentiation the consideration of volitional mediators to bridge the gap between intention and behaviour (Schwarzer, 2008). In SDT the distinction between intrinsic and extrinsic motivation is placed in the context of the core human needs of competence, relatedness, and autonomy (Deci & Ryan, 2008).

1.4.4 Qualitative literature on recovery experience

The main focus of this literature review is on qualitative literature that explores topics related to obesity, recovery experience, and self-compassion. While there is a large body of quantitative research available on these topics, it was necessary to confine this review predominantly to qualitative research, in order to work with a manageable amount of literature within the parameters of a Master's thesis.

1.4.4.1 Alcohol and other drugs

A large amount of literature is available on the recovery from AOD addiction, especially descriptions of experience using a narrative approach. For example, in Flora’s (2012) study, which investigated motivation and ambivalence in AOD recovery during a residential therapy program in Greece from a narrative perspective, seven main types of

narrative have been described: “optimistic, overly optimistic, pessimistic, overly pessimistic, ‘tough life,’ troubled/confused, and balanced” (Flora, 2012, p. 302). The most notable of these was described as the “troubled/confused” narrative, which is marked by confusing thoughts and feelings, highlighting the complexity of the addiction recovery process, especially when transitioning during various stages of recovery. The most common narrative was a “balanced” narrative, which indicated a more stable development of an evolving picture of one’s recovery leading to gradually increasing clarity. These two narratives were found, when compared to the Transtheoretical model of behaviour change (Prochaska, 2013), to correspond to the preparation and action stage respectively. Different phases of addiction treatment therefore, the authors conclude, lead to different interpretations of experience, and various methods might be applied to intervene in the progress of addiction.

Another useful approach for the examination of experiences is the use of focus groups. (Neale, Tompkins, Wheeler, Finch, & Strang, 2014) et al. (2014) explored the views of users as well as providers of addiction recovery services in the United Kingdom. Participants in this study described recovery as a process of growth and a personal journey, rather than a fixed state, and as a highly individualised experience. Besides the rational process of behaviour change, participants reported spontaneous physical and emotional changes as part of their recovery from addiction.

Focus groups have also been used in two studies in the United States to explore the experience of religious components in addiction recovery. One study explored Narcotics Anonymous (NA) long term members’ perspectives on recovery (DeLucia, Bergman, Formoso, & Weinberg, 2015), while another faith based residential recovery program (Men’s Ministry), explored residents’ experiences during their recovery (Voigt, 2013). Both studies highlight the variety and complexity of the recovery experience, both between as well as within individuals during their journey to wellbeing. The long term perspective of DeLucia’s et al.’s (2015) study highlights a sense of community as an important factor for recovery. The residents in Voigt’s (2013) study describe self-awareness and reflection as vital ingredients in their recovery. As small sample sizes are common in qualitative

research, results should be viewed in light of hypothesis generation, as pointed out by DeLucia et al. (2015).

1.4.4.2 Obesity recovery

A range of literature has explored the obesity recovery experience from a qualitative perspective with regard to obesity, eating disorders, and weight loss, which included aspects of recovery such as relational and self-related concepts.

An American study exploring eating disorder (ED) recovery among clinical ED professionals who themselves had a history of ED (Bowlby, Anderson, Lewis Hall, & Willingham, 2012), reflected findings of recovery experiences in the AOD field. Recovery was seen as a complex range of experiences and as a process rather than static, and meaningful relationships were an important ingredient. Physical and emotional changes in addition to behavioural change were also reported as a necessary component for success. Bowlby et al. (2012) also identified some self-related concepts as important. These included a change of attitude towards self, and development of a sense of purpose. Unlike in the AOD recovery experience, participants in Bowlby et al.'s (2012) study made an emphasis on not regarding themselves as being sick, a notion that was described as “de-identification with the illness”. Even though the participants of this study were self-selected, thus potentially differing in their experience from other recovered professionals, these experiences provide valuable insights into ED recovery from a patient as well as a professional perspective. However, these insights may differ from the experiences of non practitioners in ED recovery.

Another American study (Jensen et al., 2014) explored weight loss experience and its maintenance in adolescents who took part in the Adolescent Weight Control Registry, a combined survey and questionnaire study to identify strategies used by successful adolescent weight losers. Participants of this study emphasised intrinsic factors such as better health or improved self-worth as motivators for weight loss and its maintenance over extrinsic ones. No equivalent qualitative study has been conducted with the National Weight Control Registry to date. However, findings from the quantitative analysis of the National Weight Control Registry indicated that the key factors in maintaining weight loss

over time included developing and maintaining behavioural strategies such as regular weighing, eating a healthy breakfast and doing regular amounts of moderate intensity activity (McGuire, Wing, Klem, & Hillf, 1999). Although these reflect similar behavioural strategies to those implemented by the adolescents in Jensen et al.'s (2014) study, the motivations behind this success were not explored. The findings in Jensen et al.'s (2014) study are in line with previous research on motivation within SDT (Deci & Ryan, 2008), which describes intrinsically motivated behaviours as engaged in out of a person's free will and interest, and originating in people's natural tendencies toward growth and development. Intrinsic motivation can thus facilitate behaviour change on a more profound and substantial level than behaviours that are motivated by external influences. The notion of intrinsic motivation may also be reflected in some of the themes that emerged from the studies mentioned above, such as recovery being a process of growth and having an emphasis on emotional change (Bowlby et al., 2012; Neale et al., 2014), and the notion of self-awareness and reflection as essential ingredients for recovery (Voigt, 2013), as well as the self-related concepts of attitude to self and sense of purpose stated in Bowlby et al.'s (2012) study. In addition to intrinsic motivation, Jensen et al.'s (2014) study found life transitions such as transition to high school, and peer and parental support of importance for recovery. Sampling practice may have limited the generalisability of this study, as participants were primarily female, Caucasian adolescents and young adults of middle-to-high socioeconomic status, who self-identified as being successful in weight loss and its maintenance.

An ethnographic approach has been used in a Canadian study (Bombak, 2014a) which explored the perceptions of obese individuals over one year with regard to health, obesity, and weight fluctuations over time, as well as impacts of these on health behaviours and quality of life. The sample consisted of 15 obese and formerly obese individuals, who were either trying to lose weight for health reasons, trying to maintain weight loss, or trying to achieve better health through diet and exercise without being concerned about weight loss, thus covering a wide range of obesity/weight loss related factors. Data was collected through one initial interview with all participants, and three follow up interviews with five participants, as well as field notes from participant observations at locations that had been identified by the participants as meaningful in their experience of being obese (Bombak,

2014a). The study's findings are equally broad ranged, and include but are not limited to: the various ways of relating to one's body; social acceptance, stigma and coping strategies; the meaning of health and wellbeing; ambivalence about change; and the moral evaluation of obesity.

However, in considering the range of findings, the author described three major themes that emerged from the study: "the importance of function to health and quality of-life; compulsion, addiction, and the need for validation; and social impacts of various weight trajectories and perspectives" (Bombak, 2014a, p. iii). Function to health and quality of life was perceived as important in relation to obesity. Such notions included being mobile, being able to play, to work, and not to be impaired by pain. Weight loss related behaviours were by some participants described as compulsive, especially when used to achieve social validation, with the result of an addiction like obsession with health behaviours. The participants' changing body weight was described as strongly connected with changing moral and health belief judgements by self and others, which in turn affected social acceptance and social life. These themes highlight the very complex, individualistic, and continuously changing nature of obesity experience.

An important aspect of this study's findings is the participants' perception of health and wellbeing, what it means, and how it may change according to changing circumstances. The author emphasises the importance of such subjective factors for the development of holistic health behaviour interventions (Bombak, 2014a).

This study provides insight into weight loss related issues from the participants' perspective, and at the same time may help outline a structure for further potential research areas in the domain of weight management.

1.4.4.3 Stigma

While research on the effect of stigma on addiction is sparse compared to mental health stigmatisation (Corrigan et al., 2017a), more literature is available on the effects of stigma on obesity (Latner, Puhl, Murakami, & O'Brien, 2014). Stigmatisation has been shown to impair recovery in AOD addictions (Corrigan et al., 2017a), while its effect on obesity has

been described as more nuanced and dependent on the framing of the cause of obesity (Latner et al., 2014).

The current literature on stigma related to addiction has been summarised in a recent review (Corrigan et al., 2017a), where the term stigma is described as labelling of an outgroup with negative differences, which separate ‘us’ and ‘them’, with the result of discrimination and loss of status for the outgroup members (Link & Phelan, 2001). Corrigan et al. (2017b) distinguished between public stigma, where negative stereotypes are endorsed by the public, self stigma, where prejudice is internalised, and label avoidance with subsequent avoidance of support seeking (Corrigan et al., 2017a). The authors of this review concluded that more research on addiction related stigma is needed, especially with regard to the elucidation of addiction specific social constructs, the identification of social phenomena affecting stereotyping and discrimination, and determination of individual factors that affect stereotypes and discrimination (Corrigan et al., 2017a).

Perceptions about body sizes and shapes have been evaluated in different ways throughout cultures and history (Farrell, 2011). While in the past a large body might have signified wealth and prosperity, in today’s western societies it is often associated with self-indulgence and laziness, which may result in stigmatisation (Farrell, 2011).

Weight stigma has been described in various forms. Weight bias may be expressed implicitly or explicitly, or experienced as internalised stigma (Wu & Berry, 2018a). The notion of personal willpower being the key to weight control has largely contributed to the stigmatisation of obesity (Salsman, 2012). Weight stigma can be very stressful to those being stigmatised, and may result in feelings of shame and guilt for failing to reduce body weight (Farrell, 2011). Eating can become a comfort providing relief to this stress (Tomiya, 2014). A recent review on the associations between weight stigma and the psychological health of obese and overweight adults found weight stigma to have significant effects on feelings of self-esteem, body dissatisfaction, problematic eating behaviour, depression and anxiety (Wu & Berry, 2018b).

However, it is interesting to note that weight stigma has been shown to be reduced when it is discussed in the context of food addiction (Latner et al., 2014). This effect is in contrast with the preconceptions often expressed towards other addictions such as alcohol (Schomerus et al., 2011) or smoking (Bayer & Stuber, 2011) addiction. The framing of obesity in the context of food addiction may shift perceptions of obesity away from blame and beliefs about individual control, and towards addictive components of overeating that are not under a person's immediate control (Latner et al., 2014).

Stigmatisation can thus affect recovery in several ways. It may result in prejudice and discrimination as described in the literature on addiction recovery (Corrigan et al., 2017a; Latner et al., 2014; Link & Phelan, 2001). The notion of addiction in the context of obesity can, on the other hand, reduce stigmatisation by shifting perceptions away from blame, and thus aid in recovery by reducing guilt which is often associated with blame (Latner et al., 2014).

1.4.4.4 Fat acceptance

There is on the other hand, an increasing debate about the framing of obesity in terms of being obese equals being unhealthy, and questioning the aesthetic value of being slim as a social construct (Kwan & Graves, 2013). Questioned are the health benefits of not being overweight/obese as promoted by mainstream science and the World Health Organisation and other health related agencies, especially in the developed world (Bombak, 2014b).

Some authors raise concerns that “the war on obesity is actually a war on fat people” (O’Hara & Gregg, 2012, p. 43) and as such, by creating anti-fat bias, contributing to human rights violations such as stigmatisation and discrimination of overweight and obese people (O’Hara & Gregg, 2012).

Alternative approaches such as Health at Every Size® (HAES) are being discussed within fat acceptance movements, which aim to shift focus away from body size towards an all size inclusive approach to health and wellbeing (Bacon & Aphramor, 2011). HAES advocates healthy intuitive eating, physical activity that is enjoyable, and full acceptance of one's size regardless of weight (Bacon & Aphramor, 2011). Its proponents reject dieting and all negative associations with obesity, which are often described as ‘health fascism’

and regarded as discrimination of overweight and obese people (Bombak, Monaghan, & Rich, 2018). Fat acceptance is not only being discussed in the academic literature, but is also present in popular culture, e.g. advertisement campaigns for women of all sizes (“Dove Campaigns,” n.d.) and social media platforms such as ‘People of Size’ (“PeopleOfSize.com,” n.d.).

Fat acceptance might be described as an opposing force to weight stigmatisation (Bacon & Aphramor, 2011), and may therefore help reduce the negative effects of weight stigmatisation on obesity recovery (Bombak, 2014b).

1.5 Self-compassion

The prominence of relational concepts in obesity, which may be linked to questions of relation to self, warrants further exploration of self-concepts relevant to health, for example self-compassion (Neff, 2003a) and the role self-compassion may play in obesity recovery.

1.5.1 Self-esteem and self-compassion

Self-esteem is a judgement of ourselves in relation to our worthiness to other people, and has long been recognised as an important component of mental health (James, 1890). Self-esteem is generally regarded as an adaptive factor associated with positive outcomes such as better behavioural functioning, better coping strategies for emotional distress, and more comprehensive growth and development through its anxiety buffering capacity (Pyszczynski, Greenberg, & Goldenberg, 2003).

However, self-esteem has been found to be very resistant to change (Swann, 1996). In addition, self-esteem seems to be a result of success rather than its cause (Baumeister, Campbell, Krueger, & Vohs, 2003). Furthermore, several negative consequences have been linked to the desire for self-esteem. Self-enhancement bias can lead to unrealistic views of one’s actual performance, which may prevent necessary learning and growth processes (Sedikides & Gregg, 2008). The pursuit of self-esteem may lead to a perceived need of superiority that involves putting others down in order to maintain one’s ‘above average’ perception of self (Maxwell & Lopus, 1994). High levels of self-esteem may lead

to feelings of entitlement, especially with regard to perceptions of respect owed by others (Baumeister, Smart, & Boden, 1996). Besides these potentially negative consequences of inflated self-esteem or its extensive pursuit, its contingency on continuing success and thus its precarious quality can lead to obsession with performance and associated depression and anxiety (Kernis, 2005).

Given the potential drawbacks on the concept of self-esteem, the concept of self-compassion may thus offer an alternative that is not contingent on failure or success, and does not require judgement or comparison with others (Neff, 2011).

1.5.2 Defining self-compassion

The concept of self-compassion, closely related to the notion of compassion for others as defined by Wispé (1991) involves being affected by suffering and allowing this affection to be, thus being able to respond with kindness and a desire to alleviate suffering (Wispé, 1991). Neff (2003a) defines self-compassion as “... being touched by and open to one’s own suffering, not avoiding or disconnecting from it, generating the desire to alleviate one’s suffering and to heal oneself with kindness. Self-compassion also involves offering nonjudgmental understanding to one’s pain, inadequacies and failures, so that one’s experience is seen as part of the larger human experience.” (Neff, 2003a, p. 87)

The concept of self-compassion has been introduced into the science of psychology following an increased interchange of ideas between eastern philosophical thoughts, especially Buddhism, and psychology in recent decades (Molino, 1998; Nisker, 1998; Watson, Batchelor, & Claxton, 2000).

Self-compassion has been described as a multifarious construct, which has its origin in the Theravada tradition of Buddhism (Brach, 2004). This tradition regards failing and suffering as natural and part of human life, and compassion for self and others is therefore a key element in this world view. The three main components of self-compassion are described as ‘self-kindness’ versus ‘self-judgment’, ‘common humanity’ versus ‘isolation’, and ‘mindfulness’ versus ‘overidentification’ (Neff, Pisitsungkagarn, & Hsieh, 2008).

Self-kindness means responding with warmth and understanding to one's own shortcomings and suffering, as opposed to harsh self-criticism and judgement. Common humanity refers to the acknowledgement that failing and having difficulties is part of the shared human condition, as opposed to the belief that one is the only person experiencing suffering in isolation. Mindfulness in the context of self-compassion is an attentional disposition that approaches painful emotions with a balanced view without judgement, focussed on the here and now, as opposed to losing perspective and identifying oneself with these emotions (Neff et al., 2008).

1.5.3 Measuring self-compassion

To accurately evaluate levels of self-compassion as it is conceptualised in Buddhist philosophy and in psychological research, a scale for the measurement of self-compassion has been developed (Neff, 2003b). This scale contains three subscales measuring the three dimensions of self-compassion: 'self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus over-identification' (Neff, 2003a), and creates a total score representing a person's overall level of self-compassion (Neff, 2003b).

The ability to measure levels of self-compassion made it possible to examine factors of psychological wellbeing such as depression, self-criticism, and rumination in their association with different levels of self-compassion (Neff, Kirkpatrick, & Rude, 2007b).

Despite some criticisms regarding the scale's generalisability in different languages (Costa, Marôco, Pinto-Gouveia, Ferreira, & Castilho, 2016; e.g. Hupfeld & Ruffieux, 2011; Petrocchi, Ottaviani, & Couyoumdjian, 2014), and the use of its six factor structure (Costa et al., 2016; Garcia-Campayo et al., 2014; e.g. Mantzios, Wilson, & Giannou, 2015), which may be related to translation and cultural factors that might impact findings (Neff, 2016), the self-compassion scale has been shown to be a valid psychometric measure that is coherent in its conceptualisation (Neff, 2016).

1.5.4 Mindfulness and self-compassion

Mindfulness is a concept associated with Buddhist philosophy, and involves complete awareness of the present moment, without evaluation or judgement (Shapiro, Carlson,

Astin, & Freedman, 2006). Mindfulness can be practised in the form of meditation, and/or regarded as a dispositional quality in people who do not practise meditation (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006).

A study on the relationships between mindfulness, self-compassion, and psychological wellbeing (Hollis-Walker & Colosimo, 2011), demonstrated that mindfulness is a measurable quality with cognitive elements, such as observation and description, and attitudinal elements related to self-compassion. These elements can be inherent and may be related to personality traits like conscientiousness, or they can be learned throughout a person's life. Hollis-Walker et al.'s (2011) study further demonstrated the prediction of psychological wellbeing by cognitive elements of mindfulness, and that this connection may be mediated by insight into the nature of suffering and the functioning of one's mind (Hollis-Walker & Colosimo, 2011).

1.5.5 Self-compassion and obesity recovery

A therapeutic approach for the enhancement of self-compassion has recently been developed by Paul Gilbert (2010). This 'mindful self-compassion' programme was tested in a US pilot study and randomized controlled trial (Neff & Germer, 2013), with 21 participants who were 95% female, and of whom a large part of 81% had prior meditation experience. The intervention consisted of eight weekly meetings over eight weeks, and included interpersonal exercises for the generation of self-compassion experiences, as well as the teaching of self-compassion facilitating home practises and formal meditation practises such as loving kindness meditation. The authors of the study concluded the mindful self-compassion programme to be an effective method for the long term improvement of several aspects of wellbeing, including self-compassion.

Some recent studies have also been conducted applying self-compassion raising exercises to problematic eating behaviour with promising results, such as Goss and Allan's (2014) study of Compassion Focussed Therapy (CFT) on eating disorders (Goss & Allan, 2014), and Adams and Leary's (2007) study investigating the effect of self-compassion induction on eating behaviour among highly restrictive eaters.

A recent systematic review which reviewed six studies comprising four randomised controlled trials, one non-controlled before-after study and one lab-based manipulation with an average of 80 participants across studies (Rahimi-Ardabili, Reynolds, Vartanian, McLeod, & Zwar, 2018) has examined the effects of self-compassion raising interventions on obesity and obesity related psychological conditions. While the results of this review indicate that self-compassion can be of benefit in obesity treatment including weight loss, healthy eating behaviours, and body image, the authors also mention the limited amount of robust studies available on this topic (Rahimi-Ardabili et al., 2018). Further research may thus be of benefit in the application of self-compassion focussed interventions on health behaviour change including weight loss.

1.5.5.1 Self-compassion, self-forgiveness and behaviour change

The role of self compassion and its various components in behaviour change remains a contested area, for instance with regard to the concept of self-forgiveness.

Self-forgiveness is a concept that is closely related to self-compassion, as it involves self-kindness as opposed to self-criticism (Terry & Leary, 2011). The functions of self-compassion versus self-forgiveness in behaviour change, including changes in health behaviour related to exercise and dieting has been debated in the literature.

Neff (2011) argued that self-compassion, which includes forgiving oneself, also includes caring for one's health and wellbeing, and therefore motivates to push through difficult changes and persevere with challenges (Neff, 2011). Self-compassion has been shown to be associated with greater initiative to make needed changes (Neff, Kirkpatrick, & Rude, 2007a).

Wohl et al. (2017) on the other hand argued that self-forgiveness may hinder positive behavioural change (Wohl et al., 2017). He described self-forgiveness as “abandonment of self-condemnation in the face of acknowledged, self-directed harm-doing” (Wohl et al., 2017, p. 147). The initiation of change requires the understanding of incompatibility with the current harmful behaviour and one's values and self-aspirations, and this understanding will include some self-condemnation (Cibich, Woodyatt, & Wenzel, 2016). Therefore, Wohl et al. (2017) argued, by alleviating these negative emotions that are necessary for the

initiation of change, the status quo would be maintained and re-engaging in the harmful behaviour would be more likely.

1.5.5.2 Self-compassion and Kia Ākina

In the context of the Kia Ākina network the concept of self-compassion is reflected in two of its five key principles.

The principle ‘Persist’ includes notions of being kind and non-judgemental, of being part of a larger human experience, and a desire to alleviate suffering: “Be prepared to have lapses. No one is perfect. Develop a new good friend and/or parent to your struggling obese self. Good parent? This means giving yourself timely forgiveness and kindness on the one hand, and firmness with high expectations on the other.” (Sellman, Schroder, Deering, & Kia Akina Founding Members, 2013, pp. 20–21).

The principle ‘Enjoy life’ can be related to the concept of compassion for oneself as well as for others: “Change your life values around from consuming and having to being and giving. Set aside a few minutes every day to feel thankful for all the good things in your life, or to contemplate the breathtaking beauty right there in front of your nose, and/or think up ways you can help others in your life who are struggling.” (Sellman et al., 2013, pp. 20–21).

The philosophy of the Kia Ākina network is reflected in its name ‘Kia Ākina, which is a Māori term that means “be supported and encouraged” (Sellman et al., 2013, p. 1). This philosophy closely reflects Gilbert’s (2010) compassion focussed therapy which “teaches participants how to motivate themselves as they would a caring friend, by providing encouragement and support rather than punishment and condemnation” (Gilbert, 2010). It thus seems that unlike self-esteem, which has shown to be very resistant to change (Swann, 1996), self-compassion is amenable to change with methods similar to some aspects of the Kia Ākina network.

1.6 Summary

Obesity, the excessive accumulation of body fat with potential impairment of health, is caused by a positive energy balance with the result of weight gain. It is a major public

health concern, and it is preventable. Guidelines for the treatment of obesity include dietary, physical activity, and behavioural components. Lifestyle change interventions have been designed to incorporate these components, however, high attrition rates often contribute to reduced efficacy of these weight loss interventions.

Theories aimed at understanding the aetiology of obesity include the notion of food addiction. Food addiction has been defined in the context of the DSM-IV diagnostic criteria for dependence, and explained in relation to neuronal circuits involved in reward predicting conditioning. The evidence for the construct of food addiction to date shows significant support for its validity.

Despite the rapid increase in the scientific understanding of the addictive component of excessive food intake and subsequent obesity, transference of these new insights into everyday clinical practice and mainstream education is still lacking. Further research to explore obesity recovery in the context of food addiction may be of great value to researchers and health care providers, and the development of addiction based treatment models may provide useful therapeutic tools for the treatment of obesity.

Kia Ākina is an obesity recovery network based on addiction treatment principles, which has been developed by the National Addiction Centre at the University of Otago in New Zealand. Kia Ākina has been tested in a randomised controlled trial, and results showed greater weight loss as well as improved secondary measures including better quality of life, compared to the control group. Further research and development of Kia Ākina is needed to improve weight-loss outcomes. The current study has in part been developed in response to this need.

Some context for the exploration of recovery from obesity from an addiction perspective has been provided by the literature on AOD addiction recovery. A range of international literature has explored alcohol and drug addiction as well as obesity recovery experience from a qualitative perspective. Relational aspects of recovery and self-related concepts, which included notions of stigma and shame, seemed more prominent in the obesity recovery literature. The complexity and variation in recovery experience and the notion of recovery as a process, as highlighted in the AOD recovery literature, may be investigated

in the context of food addiction to explore potential equivalents that may not have been identified in the food addiction literature to date.

While some trends regarding the prevalence of concepts within the AOD recovery and the obesity recovery experience may be extrapolated from these findings, the small amount of studies included in this literature review should warrant caution in generalising such trends. However, the prominence of relational and self-relational concepts in the obesity literature may warrant further exploration of these concepts, for example the role of self-compassion in obesity recovery.

Self-compassion is a multifaceted concept that integrates Buddhist teachings about the nature of suffering with the science of psychology. Self-compassion raising interventions have shown to be helpful in several aspects of weight loss interventions. Self-compassion may be amenable to change with methods similar to some aspects of the Kia Ākina network, as it is reflected in some of its principles.

2 Methodology and methods

This study aimed to answer the following research questions:

- 1) Do levels of self-compassion change throughout the recovery process?
- 2) Is there an association between changing levels of self-compassion, weight loss, and overall participation in the Kia Ākina network?
- 3) How do people with obesity experience their journey of recovery from obesity and what, if anything, does Kia Ākina add to this journey?
- 4) Do perceptions of self-compassion change during participation in Kia Ākina, and if so, how?

The first two questions require the application of quantitative methods, and the second two questions require qualitative methods in their investigation. While the study is using mixed methods, the anticipated low numbers of participants overall led inevitably to it being primarily a qualitative study with a quantitative addition.

The different types of methodology used in the exploration of the research questions will be explained in the next section.

2.1 Methodological approach

2.1.1 Epistemological stance

The main objective of the study was the exploration of obesity recovery, aimed at understanding recovery from the perspective of the participants, in relation to constructs such as ‘food addiction’, ‘recovery process’, and ‘self-compassion’.

Definitions for each of these constructs can be found in the literature, for example food addiction (Volkow & Wise, 2005), recovery process (W. L. White, 2007), and self-compassion (Neff, 2003a). However, it is the participants’ own perceptions and experiences of these concepts, and the potential change in these perceptions over the course of the recovery process that this study aimed to explore.

The paradigm of social constructivism, which assigns authority of knowledge to communities of people who agree about concepts of truths (Kuhn, 1970) thus provides a philosophical framework in which the concept of obesity recovery and the related qualitative research questions can be explored.

The assumptions that underlie social constructivism are that people construct meanings about the world while engaging with it and interpreting their experiences. This is done in the context of their social and historical perspectives, which are derived from the culture they live in. Meaning generation is therefore always a social process (Creswell, 2013).

In light of these assumptions, it can thus be expected that the participants in this study with their unique experience of participation in the Kia Ākina network will interpret their experiences and perceptions in ways that result from and are shaped by this particular experience. In addition, every individual participant of this study, including the researcher, brings their own past and present psychological and social influences into this pool of experience and knowledge, and so in turn influence the recovery experience and its interpretation.

Kuhn argued that all knowledge is an interpretation of perceptions and experiences, as perceptions and experiences are our only true connections to reality. Therefore, "knowledge is intrinsically the common property of a group or else nothing at all" (Kuhn, 1970, p. 201).

2.1.2 Ontological stance

I have embraced the paradigm of social constructivism with some reservations:

Within social constructivism research, there seems to be a cultivation of scepticism to all positive truth claims, especially to claims made by experts such as health professionals (Houston, 2001). Furthermore, the nature of social constructivist enquiry seems to limit itself to focussing on specific areas of investigation or moments in time (Bhaskar, 2010). The ontological approach of critical realism can, I believe, consolidate these concerns.

Critical realism is a philosophical approach that combines components of positivist and constructivist paradigms to a comprehensive philosophy of science (Bhaskar, 2010).

Critical realism positions that the nature of reality (ontology) cannot be reduced to our knowledge of it (epistemology); this means that human knowledge can only capture a part of a larger and deeper reality which operates independently of our knowledge of it. In this way, critical realism addresses shortcomings in both positivism (reduction of ontology to epistemology), and constructivism (reality as being entirely constructed by human discourse) by acknowledging the existence of a real world that can be studied and understood, and that some knowledge of this reality can be more aligned with it than other knowledge (Fletcher, 2017).

Via such a critical realist approach this ontology can unify insights from several epistemological positions, including ‘truths’ of expert health professionals as well as the truth of their clients, and can thus provide a more inclusive and useful depiction of the object of research (Bhaskar, 2010).

In conceiving the world as “being structured, differentiated and changing” (Bhaskar, 2010, p. 326), critical realism allows for the acknowledgement and thus understanding of events and discourses including their underlying structures, and as such empowers people to change these events and discourses (Bhaskar, 2010).

By viewing the paradigm of social constructivism through a critical realist lens, I endeavour to explore the study participants’ experiences and perspectives in their own meaning and in the context of an objective reality that includes the quantitative results of this research.

2.1.3 Reflexivity

Reflexivity, the process of recurrent internal dialogue and self-critical evaluation (Bradbury-Jones, 2007) with regard to my position as the researcher has been very helpful in examining the ways in which my current assumptions and understandings as well as prior beliefs and experiences might influence process and outcomes of my research.

Increasingly recognised as an essential part of knowledge generation in qualitative research (Hughes, 2006), self-reflexivity is an important principle of the constructivist paradigm (Braun & Clarke, 2013). It requires focus on self-knowledge and thoughtfulness about the

role of self in knowledge creation, as well as careful monitoring of the impact of one's biases, beliefs, and personal experiences on the research (Berger, 2015).

As a clinical practitioner working with people with behavioural addictions, I am trained in paying attention to the impact of my own history on my conceptualisations of and interactions with my clients. These skills have been of great value for enabling me to turn the researcher's lens back onto myself and recognise my own stance within the research, as well as its potential effects on the study questions, the participants, and the collection of data and its interpretation.

Having been obese as a young woman myself, I have experienced the internal struggle as well as the stigmatisation that sadly often accompanies this condition. This experience has contributed to my interest in obesity and nutrition, which led me to pursue a career in clinical nutrition before deciding to study psychology and addiction treatment to explore the concept of obesity from a different viewpoint. In reflection, experience of and knowledge about obesity recovery contributed much to my choice of topic for this research project, and placed me in a 'quasi-insider role' from a researcher's perspective.

This insider role had three potential advantages for my research: easier connection and rapport with participants, a head start in understanding of the topic, and appreciation of nuances in participants' reactions (Padgett, 2016).

While 10 years of lived obesity experience did indeed help me in perceiving subtleties in the participants' expressions such as sarcasm or self-mockery, enabling me to see beyond these and to gently probe for deeper meanings and realities, I had to be very careful not to lose the researcher's perspective and interpret my own experiences and assumptions onto the participants' experiences (Drake, 2010). Likewise, having my own experience in obesity recovery contributed to my knowledge of this topic, which enabled me to respond to participants' experiences in an understanding and empathic way, which at the same time provided the potential pitfall of assuming that my knowledge would be everyone else's knowledge. For instance, I was surprised at the range of meanings I encountered when talking about obesity; my own experience of having mentally and physically suffered from being obese had led to the assumption that every obese person is aware of and suffering

from their obesity. This was not so among the participants in this study, and I had to correct my assumptions while conducting the interviews and in the subsequent analysis of the qualitative data.

Despite the advantages of my ‘lived experience’ of the topic of study, I had decided not to disclose my own past obesity to the study participants. On reflection, this hesitation might have originated in my clinical training, which taught me not to bring my own agenda into the client’s space to maximise focus on the client’s story. In clinical practise I am very cautious about assuming that I know ‘what it is like’, as every person’s experience is their own. Hindsight provides awareness that some advantages of disclosure might have been missed: participants might have found it easier to share their experiences on a much deeper level when talking to someone who has had similar experiences, and a sense of hope might have been given to the participants from the notion that the researcher’s obesity was a past experience that can be overcome (Berger, 2015).

I believe that my own experience of obesity and my knowledge of obesity related issues were beneficial in conducting this research. This background enhanced my sensitivity and awareness of many potentially relevant factors that necessitated consideration. At the same time I was also careful to be aware of the potential risks that my experience and knowledge might pose.

2.2 Methods

2.2.1 Kia Ākina

Kia Ākina is an obesity recovery network based on addiction treatment principles. The overall recovery programme at Kia Ākina is guided by five key principles: “take control, get active, eat well, persist, enjoy life” (Sellman et al., 2013, p. 5).

“Take control” includes a commitment to lifestyle change, the setting of specific goals, and monitoring of progress (Sellman et al., 2013).

“Get active” includes any strategies that result in increased physical activity, such as walking or biking instead of driving, or using stairs instead of lifts (Sellman et al., 2013).

“Eat well” includes eating slowly and with attention, eating only at planned meals, and choosing healthy nutritious foods over high calorie low nutrient foods (Sellman et al., 2013).

“Persist” includes continuing with the effort even after a lapse, giving oneself forgiveness and the motivation to keep going at the same time (Sellman et al., 2013).

“Enjoy life” includes gratitude for good things in life, and shifting values towards being, helping, and giving (Sellman et al., 2013).

The Kia Ākina network offers six main components for participants to participate in: six-monthly fresh start workshops, fortnightly Kia Ākina groups, weekly weight monitoring clinic, weekly email messages and ongoing discussion, regular motivational text messages, and joining up with a weight loss buddy (Sellman et al., 2013).

The participants of the Kia Ākina network are encouraged and supported to explore and experiment with these five principles and the various components, and to find individual combinations of strategies that will work for them (Sellman et al., 2013).

2.2.2 Sampling

Members of the Kia Ākina network had recently been participants in a randomised controlled trial to test the effectiveness of the Kia Ākina programme + standard treatment (Green Prescription) versus standard treatment on its own (Sellman et al., 2017). All of these participants were obese at the beginning of the programme with a BMI greater than 30, wanted to lose weight, and were not involved in any other weight loss programme. Excluded from the original study were people with significant medical conditions and those undergoing medical treatment likely to affect body weight. The age of the participants ranged from 23 – 65 years (Sellman et al., 2017).

On completion of this trial those participants who were in the standard treatment only group and who had not withdrawn from the study (n=45) were offered an opportunity to join the Kia Ākina network. Thirty six of these participants chose to be involved with Kia Ākina. These 36 new Kia Ākina members formed the population from which participants

for the current study were recruited. Recruitment was via criterion sampling. The criterion that applied to this population of potential recruits was 'Kia Ākina membership'.

The aim of criterion sampling is to ensure the selection of cases likely to be rich in information relevant to the research (Suri, 2011). Using members of the Kia Ākina network as participants would ensure that the participants in the current study could provide rich information on the experience of obesity recovery in the context of the Kia Ākina network. The appropriateness of the sample would thus contribute to efficient and effective saturation of categories, optimisation of data quality and minimisation of waste, and thereby improving rigour of the research (Morse, 2015).

For the quantitative part of this study all of the 36 new Kia Ākina members were invited to take part in this project via email ([appendix 1](#)) from one of the co-investigators of the randomised controlled trial, containing the study information sheet ([appendix 2](#)), and asking for consent from the participants to be contacted by the researcher.

No additional exclusion or inclusion criteria than those used in the randomised controlled trial were specified for the current study. Twenty seven of the 35 people invited provided consent to be contacted.

Once participants' contact details were received they were stored in a secure database in a password protected PC. This database included ID, contact details and follow up dates of the 27 participants who had provided consent.

Twenty five participants could be contacted. Introductory phone calls were undertaken with these, which included the introduction of the researcher, thanking the potential participants for permission to contact them, discussion of information sheet and answering questions about the study. The potential participants were also reassured that declining to be part of the study would have no effect on any interactions they had with the Kia Ākina network. Details of contact details of those participants who provided verbal consent to participate in the study were checked, and preferred times for contact were noted.

Following the introductory phone call, 19 participants agreed to take part in the current study. Of the six participants who did not take part in this study three declined due to lack

of time, and one due to an upcoming overseas holiday. The remaining two participants could not be contacted again after the initial phone call.

Selection of participants for the qualitative part of the study was conducted from the core group of participants who had agreed to be involved in the quantitative part of the study. Nine of those participants were selected via operational construct sampling, a form of sampling where people are selected on the basis of their potential representation of significant theoretical constructs (Suri, 2011), and invited to take part in the qualitative interviews.

The operational construct sampling was based on the baseline measure of the 26-item Self-Compassion Scale (Neff, 2003b), which had been completed by the 19 study participants. Participants for the qualitative interviews were selected according to their score on the self-compassion scale. Three participants scoring in each of the high, mid and low tertile on the range of obtained self-compassion scores agreed to participate.

2.2.3 Data collection

2.2.3.1 Quantitative data

Quantitative data were collected via an online questionnaire using SurveyMonkey®. The questionnaire comprised of the 26 item 5 point Likert Self-Compassion Scale (Neff, 2003b), a 12 item six point Likert scale measuring the amount of involvement with Kia Ākina, and one question about the participants' current weight ([appendix 3](#)).

The self-compassion scale used in this study was developed by Neff (2003b) as a tool for the empirical examination of self-compassion. It contains three separate subscales, which reflect the three dimensions of self-compassion: self-kindness versus self-judgment, common humanity versus isolation, and mindfulness versus over-identification (see chapter 1.5.3). A total score of self-compassion is created by summing of the subscales (Neff, 2003b).

The scale measuring involvement with Kia Ākina was created specifically for the purposes of this study and was based on the core 12 components of Kia Ākina. Participants were asked to rate the frequency with which they were engaging with each of the 12 components

on the following six point categorical scale: daily-1, weekly-2, monthly-3, every three to six months-4, every six months or less-5, never-6.

Each questionnaire was completed twice, first after the initial phone interview and then six months after first completion.

During the initial phone call, and once participants had agreed to be in the study, they were provided with an explanation about the online questionnaire. Details for completing the survey including preferred means of contact, potential completion date and preferred means of completion (online or pen and paper) were discussed and confirmed. All but one participant completed the questionnaire online. The person who chose to complete as a paper questionnaire was posted each questionnaire and asked to return it in the stamped self-addressed envelope that was provided. Participants were re-contacted via phone, text message or email one week prior to the due date for the second completion of the questionnaire to provide a reminder to complete and/or assist with any issues. Some of the participants were contacted several times over three to four weeks until the questionnaire was successfully completed.

Nineteen participants completed both questionnaires, however, only sixteen of those indicated their weight at both times.

2.2.3.2 Qualitative data

The in depth interviews were conducted with the nine participants of the selected sample between two and six months after the initial quantitative measures were taken. A sample size of 8-10 participants is considered sufficient for data saturation in a relatively homogenous sample (Guest, Bunce, & Johnson, 2006), the point where sufficient data to account for all aspects of the phenomena has been obtained. While the participants had been selected from a range of different scores on the self-compassion scale to allow for the exploration of a wide range of experiences, the sample from which they were chosen was considered reasonably homogenous with regard to the wider criteria of exploration, such as being obese and being members of the Kia Ākina network. Data saturation was pursued to ensure replication of the findings in categories, which in turn improved comprehension and completeness, and thus trustworthiness of the data (Morse, 2015).

The purpose of the study, to discuss experiences and perceptions about social constructs, was exploratory in nature. The use of a semi-structured open ended interview protocol (Frankel & Devers, 2000) was considered to be appropriate, to ensure sufficient openness of the interview questions, yet adequate focus on the research objectives during the conversations. This form of interview is designed with some open ended questions prepared in advance. The subsequent prompts in response to the participants' answers to the initially prepared questions had to be carefully improvised in the context of the social constructs being explored (Wengraf, 2001).

The researcher's experience in conducting assessments as an addiction practitioner, including improvisational skills for use with prompting questions (Wengraf, 2001), was of value in the interview process, especially with regard to rapport building as an essential part of the interview (Devers & Frankel, 2000). However, care needed to be taken when applying these skills, to maintain a researcher's perspective instead of assuming a treatment approach while interviewing the participants.

The interview guide was divided into two parts. The first part focussed on the participants' experience of recovery from obesity and whether Kia Ākina was adding anything to this experience, reflecting the first research question. The second part focussed on the participants' perceptions of self-compassion in the context of obesity recovery and whether these perceptions had changed over time, reflecting the second research question. The interview guide is attached ([appendix 5](#)).

Of the 10 participants invited for qualitative interviews, nine (eight female, one male) agreed to take part. One participant declined the interview due to time constraints.

The face to face interviews were conducted by the researcher between February and June 2017, at individually arranged times that were convenient for participants and researcher. Interviews lasted between 45 and 75 minutes. With the participants' consent ([appendix 4](#)) the interviews were audio recorded and transcribed by the researcher.

Interviews were conducted in a neutral office space, commonly used for clinical interviewing, where access and parking were convenient. Participants appeared to be comfortable in this setting; rapport between researcher and interviewees developed quickly

and easily. Participants were offered tea or coffee on arrival and some time was spent chatting informally with each participant prior to the interview. After establishing rapport with the interviewees, the interviews flowed with ease. The use of open ended questions and reflective listening contributed to both encouraging the interviewee to talk openly and to check back if what was said was understood correctly.

Each participant received a \$10 petrol voucher as acknowledgment for time and effort spent in attending the interviews.

2.2.4 Data analysis

2.2.4.1 Quantitative data baseline

Data of the first survey was entered into an SPSS-25[®] database and included completed baseline survey results exported from SurveyMonkey[®] and the hard copy questionnaire. No identifying information was entered into this database. Self-compassion scores were calculated using a syntax based on instructions provided by (Neff, 2003b). These scores provided the basis for selecting participants for the qualitative interviews.

2.2.4.2 Qualitative data

Both preliminary intermediate and final analysis of the transcripts was carried out by the researcher and checked by the thesis supervisor by means of general inductive approach (Thomas, 2006), using NVivo-11[®] software.

Member checks (Thomas, 2006) were carried out after transcription of the interviews, i.e. each participant was invited to comment on their interview transcript. A deadline was agreed upon with each participant, after which it was assumed that no omissions or revisions were required.

Within a critical realist ontology (Miles, Michael Huberman, & Saldana, 2014) the general inductive approach provides a systematic procedure for qualitative data analysis guided by explicit evaluation objectives (Thomas, 2006).

In this approach concepts or themes are derived primarily by multiple reading of raw data and its interpretation by the researchers, whereby the evaluation objectives provide a focus

for analysis. Categories that emerge from the raw data are developed into a model that contains key themes and concepts created during the coding process (Thomas, 2006).

The following procedure, adapted from Thomas (2006), was used for coding:

1. Data cleaning: formatting, printing, and creation of backup copies of the raw data.
2. Close reading of the text: familiarisation with and understanding of its content.
3. Category creation: identification and definition of specific categories from multiple data readings, and of more general categories based on the evaluation aims. Marked segments of the text were copied into the emerging categories using a word processor, whereby some text segments could be coded into more than one category, while other segments may not have been coded into any categories.
4. Revision and refinement of the category system to reduce overlap and redundancy among the categories: included continued search for subtopics within categories, combination and linking of similar categories, and selection of quotations to convey core meanings of categories or themes.

This process of category creation and continued refinement resulted in three summary categories which captured the key aspects of the themes identified. Findings that consisted of more than eight categories required further analysis and refinement, as too large a category number would not capture the key themes sufficiently and succinctly (Thomas, 2006).

The themes and categories identified during analysis were then interpreted in light of the concepts being explored, and adapted into theories or patterns of meaning within the framework of social constructionism. Continued checking and comparison of the developing theories with the categories and the raw data on which they were based ensured that no cognitive leaps were made, and that theoretical thinking with the aim to ensure rigour, as recommended by (Morse, 2015), was applied throughout the project.

2.2.4.3 Quantitative data follow up

After completion of the follow up questionnaires the dataset was exported from SurveyMonkey® into SPSS-25[®]. The questionnaire that had been completed as hard copy

was again added to the SPSS-25[®] database. The database now included the complete set of baseline and follow up measures. Data was checked and cleaned, and self-compassion follow up scores were computed.

Changes in weight and self-compassion between baseline and follow up were calculated, and paired measures t-test was performed to test for significant changes in weight or self-compassion over time.

For the computation of involvement with Kia Ākina reverse coding was applied to the scores to account for the increase in score with decreasing amount of involvement. Due to the variety of ways that participants could be involved with Kia Ākina and the different level of involvement possible both in terms of frequency and intensity with each of these components it was difficult to capture levels of engagement. Participation rate was calculated as the average of the total percentage of possible involvement points with each of the components considered of equal value for the purpose of this study, despite variation in the actual amount of involvement for each component. The resulting score (0-100%) therefore reflects a proxy rating only of participation in the Kia Akina network.

Due to the small sample size (N=19) and the nature of the sampling process (criterion sampling), normality of the sample could not be assumed. Spearman's rank correlation coefficients (McDonald, 2009) as non-parametric alternative to linear correlation were therefore used to determine any associations between weight change, self-compassion change, and overall involvement.

2.2.5 Ethical considerations

This study was approved by the University of Otago Human Ethics Committee prior to commencement (H16/053).

Obesity is an extremely stigmatizing health condition. The anonymity and confidentiality of participants in this study was paramount and every endeavour was made to ensure that these were maintained for all participants. All identifying information was removed from quantitative data, from the transcripts of the qualitative interviews, and from quotations used in the published study. Study participants were assured that this would happen during

the recruitment phone call, prior to commencing the interview, and as part of the consent forms for the online questionnaire and the qualitative interviews. Audio files of the interviews were stored securely on a password protected PC, and original files were deleted from the recording device after upload.

The qualitative interviews which were conducted with a selected sample of the participants explored the experience of participating in the Kia Ākina programme, and perceptions of self-compassion. Participation in the qualitative interviews could potentially have caused emotional distress due to the sensitive nature of the topics explored. The interviewer was a qualified health care practitioner with experience in conducting clinical interviews and interventions. Careful monitoring of participants' responses and if necessary, offer of referral to the research team's health care clinicians minimized the psychological risks for participants of the interviews.

2.2.6 Māori consultation

Obesity is an even more destructive health condition for Māori than for Pākehā. The mean BMI for Māori adults at the time of proposal of this study was 44.7 compared with 27.8 for European/Other (Ministry of Health, 2015), which highlights the particular importance of this study for Māori. Prior to commencement of the study the research proposal was submitted to the Maori Research Advisor, University of Otago.

3 Results and findings

3.1 Quantitative results

Only minimal demographic data had been collected, as the participants were already part of the larger randomised controlled trial with Kia Ākina (Sellman et al., 2017) at the time of commencement of this study.

Nineteen participants participated in the quantitative part of this study, one male, and 18 female. Eighteen of the participants identified as New Zealand European, and one as Samoan. The age of the participants ranged from 25 years to 65 years with a mean age of 44 years at recruitment. BMI ranged from a minimum of 32.1 to a maximum of 54.5, with a mean BMI of 39.8.

Two key quantitative questions were explored in this study:

1. Do levels of self-compassion change throughout the recovery process?
2. Is there an association between changing levels of self-compassion, weight loss, and overall participation in the Kia Ākina network?

3.1.1 Descriptive statistics

3.1.1.1 Change in weight

Sixteen of the 19 participants reported their weight at baseline and six months follow up.

The mean change in weight was 0.4kg (SD = 5.9) over the six month period between both measures. Maximum weight loss was 10.4kg, while maximum weight gain was 11.3kg (table 1).

TABLE 1: Descriptive statistics of weight change

| N | Maximum weight loss in kg | Maximum weight gain in kg | Mean weight change in kg | Std. deviation |
|----|---------------------------|---------------------------|--------------------------|----------------|
| 16 | 10.4 | 11.3 | 0.4 | 5.9 |

3.1.1.2 Change in self-compassion

All 19 participants completed the ‘Self-compassion’ scale at baseline and six months follow up.

The mean change in total self-compassion (TSC) was 0.2 (SD = 0.3) over the 6 month period between baseline and follow up measures. Maximum TSC loss was 0.3, while maximum TSC gain was 0.7 (table 2).

TABLE 2: Descriptive statistics of change in total self-compassion

| N | Maximum loss | Maximum gain | Mean change | Std. deviation |
|----|--------------|--------------|-------------|----------------|
| 19 | 0.3 | 0.7 | 0.2 | 0.8 |

3.1.1.3 Overall involvement

All 19 participants completed the ‘Involvement with the Kia Ākina network’ scale at baseline and six months follow up.

The mean involvement was 23.9% (SD = 13.0) of the total percentage of possible involvement points. Minimum involvement was 0.0% and maximum involvement was 50.0%. Some participants had not been involved with Kia Ākina at all, while some participants had made use of half of the components that could have been utilised (table 3).

As mentioned previously, involvement percentages reflect only a proxy rating of participation due to all involvement components being considered (for the sake of this research) of equal value.

TABLE 3: Descriptive statistics of involvement with Kia Ākina

| N | Minimum % involvement | Maximum % involvement | Mean % involvement | Std. deviation |
|----|-----------------------|-----------------------|--------------------|----------------|
| 19 | 0.0 | 50.0 | 23.9 | 13.0 |

3.1.2 Inferential statistics

3.1.2.1 Change in weight

A paired-samples t-test was conducted to compare the mean weight at baseline and follow up measures. There was no significant difference between mean baseline weight of 103.6kg and mean weight at 6 months of 104.0kg; $t(15) = 0.3$, $SEM = 1.5$, $p = 0.80$, suggesting that mean weight had not significantly changed over the six month period between baseline and follow up measures.

3.1.2.2 Change in self-compassion

A paired-samples t-test was conducted to compare mean total self-compassion at baseline and follow up measures. There was a significant difference between mean total self-compassion at baseline of 2.8 and mean total self-compassion at 6 months of 3.0; $t(18) = 2.62$, $SEM = 0.06$, $p < 0.05$. These results suggest that total self-compassion has significantly increased over the six month period between baseline and follow up measures.

3.1.2.3 Relationships between weight change, self-compassion change, and overall involvement with Kia Ākina

A series of Spearman rank-order correlations was conducted in order to determine the relationships between weight change, self-compassion change, and overall involvement.

A two-tailed test of significance indicated that weight change was not significantly related to change in self-compassion; $r(15) = -0.1$, $p = 0.64$, or to the overall involvement with Kia Ākina ; $r_s(15) = 0.1$, $p = 0.82$. Likewise, change in self-compassion showed no significant relationship with the overall involvement with Kia Ākina $r_s(15) = -0.1$, $p = 0.70$ (table 4).

TABLE 4: Correlations for weight change, change in total self-compassion, and overall involvement with Kia Ākina

| | Weight change | Change in self-compassion | Overall involvement |
|---------------------------|---------------|---------------------------|---------------------|
| Weight change | 1.0 | -0.1 | 0.1 |
| Change in self-compassion | -0.1 | 1.0 | -0.1 |
| Overall involvement | 0.1 | -0.1 | 1.0 |

3.1.3 Summary

No significant change was found in mean weight over the six months period. However, total self-compassion levels increased significantly between baseline and six months follow up. No significant correlations were found between weight change, change in self-compassion levels, and overall involvement with Kia Ākina.

3.2 Qualitative findings

The qualitative part of this study focussed on the following two questions:

3. How do people with obesity experience their journey of recovery from obesity, and what, if anything, does Kia Ākina add to this journey?
4. Do perceptions of self-compassion change during study participation, and if so, how?

This chapter presents the qualitative findings as they correspond to each of the two questions, starting with an exploration of the participants' motivations driving obesity recovery and barriers that might impede this recovery. Kia Ākina's contributions to the participants' recovery journey are then discussed in the context of what factors prevented

participants to engage more fully with Kia Ākina, what terms and concepts of the Kia Ākina philosophy were found to be challenging, and what aspects of Kia Ākina were found to be helpful and beneficial in obesity recovery. The section on self-compassion first describes the participants' understanding of this concept. This description is then compared with Neff's (2003) definition of self-compassion to determine whether the concept of self-compassion discussed in the qualitative interviews is consistent with the concept measured in the quantitative part of the study. The participants' perceived changes in self-compassion are explored in the context of influences experienced through participation in Kia Ākina and other factors not related to Kia Ākina. Barriers to such changes are also discussed. The final part of this chapter focuses on how self-compassion might be helpful and beneficial in obesity recovery.

3.2.1 How participants with obesity experience their journey of recovery from obesity

While the journey of recovery from obesity was a very individual one for each participant, for all participants it appeared to be a complex experience which did not occur in isolation but in context of other circumstances. Such complexities involved different motivations driving obesity recovery, and barriers and enablers to weight loss. The terms 'obesity' and 'recovery' were contested by some participants.

3.2.1.1 Different motivations driving obesity recovery

The motivation to lose weight varied considerably between participants, who perceived the need for weight loss at varying levels of importance. Some talked about it being very important while others indicated that it was not at all important to them.

For those who saw the importance of losing weight the key drivers for this were related to health and quality of life. Other reasons were associated with being a parent: in terms of being a good role model as well as being there for their children in the future.

The relative prominence of the various motivational factors described by the research participants is summarised in word cloud format created in NVivo-11[®] software (figure 1). Larger word size corresponds with higher frequency of word use.

Other motivations were related to being a parent. Some participants stated that they were motivated by the wish to be a part of their children's future:

'I want to be around for my daughter's children. I want to be a grandma. So obviously I want to be healthy.' (Caroline)

Others emphasised that they wanted their children to be healthy:

'I would like to be more active. Partly for myself, but partly also for, I've got three daughters. And one of them I see has been really inactive, and the other two are fairly active and sporty, but the youngest one, I can see already that she's got weight issues, and so I want to be a good role model.' (Barbara)

Almost half of the participants stated that weight loss was currently not very important to them. Distinction between health and obesity, the importance of other issues such as medical problems, and self-acceptance were reasons some of the participants gave for currently not focusing on weight loss.

Several participants stated that they did not associate obesity very much with their health as they were not currently experiencing any negative physical health effects associated with their weight.

'But as long as I'm healthy, as long as I've got no heart issues or, you know. I don't smoke or drink, and you know, so even though I'm overweight, I'm reasonably healthy.' (Barbara)

Others questioned BMI to be an indicator of health:

'You know, it [obesity] is like a clinical recognition. And it's based on your BMI, and we know that BMI isn't as accurate, and it doesn't measure, it measures other things as well. You know, bodybuilders can have a high BMI. So it's not actually an indicator. And it doesn't indicate your health status. It just indicates a ratio. And I think that's, it's been researched so much now, that BMI is actually quite old. But we still use it, and it's like 'Why?' You know, and it doesn't tell you whether you're healthy or not.' (Emily)

Some mentioned medical issues that were currently more important and that were also likely to be a barrier to losing weight. For example, one participant who had lupus indicated the importance of focussing on managing that disorder in order to improve health rather than focus on weight loss:

'I think if I can find a balance between metabolic needs and food, fuel, with the right amount of exercise, I think that would result in me feeling better and not going through flare ups as much. You know, so my body won't go into shock, and I'll be able to stay or maintain stabilised. Will that mean I will lose a huge amount [of weight], or maybe my [body mass] index change, probably not. I think that my metabolism is what it is now, because of my health condition. I can't expect huge changes.' (Caroline)

Others stated that they had come to accept the weight that they were, including being okay without losing weight, and appreciating the improvement in self-worth resulting from this attitude:

'But now I've got to the attitude where if I lose weight, it's cool. If I don't lose weight, it actually doesn't matter. And I feel better with myself, because I have this attitude.' (Dorothy)

3.2.1.2 Barriers to weight loss

Despite the variation in motivations to lose weight, all of the interviewed participants felt that their weight loss could be hindered by factors that were out of their control. Such factors included a lack of resources, medical conditions interfering with weight loss, emotional aspects surrounding their weight loss efforts, and the effect of other's behaviour as well as implications of weight loss efforts for others.

Not having enough energy was the most prominent barrier described by participants:

'I only have so much energy and if I have to put it into other parts of my life, then I lose it from the energy. And I do need lots of energy to deal with the weight. It's all consuming.' (Fiona)

Financial constraints and not being able to afford healthy food was also regarded as an impediment to weight loss by several participants:

'And then there's the cost as well, because once you start changing things, then things get a lot more expensive and I'm just not going to go there. That's what makes it hard as well, finding foods at a reasonable price.' (Irene)

Some participants felt that their efforts were hindered by medical conditions that interfered with weight loss:

Okay, sorting out this polycystic, and how much it actually contributes to keeping the weight on, or not being able to lose it. I know it makes it really really difficult to lose weight. I know it's possible. But it's very very slow and very gradual.' (Anne)

Emotional factors like stress, counterproductive self-talk, an aversion to exercise, negative affect and shame were other barriers to weight loss identified by the participants. The most prominent of these was stress:

'And I think just life stress. If I can hopefully, life can just be a bit more calm. Then I will have less reasons to delay recovery.' (Gina)

In addition, some participants described counterproductive self-talk as their

'... own worst enemy. The arguments that I've had in my head. Like "You don't need that. Yes, you do. Why do you need that? Because you did something stressful today, so you need something nice." And just that endless argument in your head, it's exhausting.' (Gina)

Others described how their dislike for exercise was making it hard to lose weight:

'And being motivated to keep that up, because I don't enjoy exercising. People love it, yeah, my husband loves it, he loves exercising, and I just think, I wished I could love it.' (Barbara)

Negative affect such as feelings of self-loathing and hopelessness were also associated with impairment to weight loss by some participants:

'So I was wallowing in self-pity for quite a while. And self-pity leads, if I wasn't feeling good about myself, then I was feeling the injustice of it all. And so there was "It's not fair, why should I?" you know, there was no motivation, and then there was self-loathing involved in it, you know what I mean, I was just this bundle of spiralling downwards. ... And that struggle, that hopelessness of "Do I have to fight this for the rest of my life?" You know, this kind of overwhelming feeling of hopelessness. Like "This is hard. And if it's still going to be hard at ten years' time, have I got the energy to still be fighting?" you know.' (Fiona)

Other people and specifically implications for other people, including family, was also identified as an obstacle to weight loss by the majority of participants:

'Having young children is totally, puts you in an odd place. Because you care for nothing but them, so you just eat when you eat, and eat what you can, and eat on the run, and that sort of stuff. But now that they're old enough to look after themselves a little bit more, I can focus more on myself. (Dorothy)

Similarly, many participants described how competing interests and responsibilities would often get in the way of weight loss efforts:

'And sometimes it's 'Oh, I've got all these jobs to do, and by the time you get through them, and it's not really physical, and you think, oh, now there's no time to go for a walk or whatever. And there are just days when I'm regularly doing all the walks and other times, it's like, too tired, too busy, got things on, social things that might be happening, or stuff with the kids, and being a mum, and a wife, and that. It just gets really really busy at times, so I need to set aside more time for me.' (Anne)

Others said that they found temptations such as watching their spouses eat things that they denied themselves in order to lose weight particularly difficult:

'And then probably the next one would be my husband. Because he is, well he bikes to and from work. And he comes home from work and he has four bits of toast. No matter, even if tea is on the way, he still eats tea. And he'll cook toast at midnight if he's hungry. He has a very fast metabolism, and so it's very hard when there is someone

who can eat anything, and do anything. And he's incredibly supportive, he is not when it comes to not feeding himself. Like "Toast smell at eleven o'clock at night, are you kidding me! Throw me a bone here! Can't you do something that doesn't smell delicious?"' (Fiona)

The reaction of others to obese people was often described as shaming. Judgement by others was therefore perceived as another barrier to weight loss:

'(They) just try to shame you into, that seems to be the whole idea, shame people into not being fat. Whereas that is not my experience, it's not about whether or not I feel enough shame. ... It makes things worse. It makes you hide away.' (Fiona)

Some participants mentioned work related obligations which resulted at times in a requirement to eat unhealthy foods:

'If you're entertaining in a work environment, you know, it's consumption of alcohol and you know, so that tends to be one of those things. It can get in the way. Especially if some of the food choices are a little less healthy.' (Henry)

3.2.1.3 Enablers to weight loss

Some factors that might be beneficial to losing weight were identified by some participants, including social support, more self-control, and better knowledge about food. The shortness of this section compared to the previous section on barriers to weight loss reflects the perceived struggle that many participants described with regard to weight loss. Some expressed a desire for more social support:

'I would have thought that having a buddy, and if we'd gone walking together that would have been really cool.' (Emily)

One participant found that more self-control and better understanding of food choices would be helpful for her:

'I don't always know what to look for when I go to the supermarket. What does that mean on the packet, compared to that, you know, how much more sugar has that got, what shall I be reading. ... I think the thing is willpower for a lot of people who are

overweight. Everyone wants to lose weight, but it's having that willpower, that's the thing. If you don't have that, it's a slow road.' (Irene)

3.2.2 What Kia Ākina adds to the obesity journey

3.2.2.1 Contested terminology and concepts

Kia Ākina was developed as an obesity recovery network, based on addiction treatment principles, and thus utilises treatment related terminology, including the terms 'obesity' and 'recovery'. These two terms were strongly contested by a majority of research participants for their perceived meaning and associations. In addition, the notion of overeating as being addictive was contested by some participants. The introduction of Kia Ākina philosophy thus provoked rejection by some participants, or reflection on connections between obesity, recovery, and addiction, and subsequent change in thinking about these topics by others.

'Obesity'

For some participants the concept of obesity seemed to be problematic due to their perceptions of how obesity was defined and the apparent normalisation of being overweight. In particular, there was a perception that obese people are 'massive' and that 'normal overweight' people such as themselves should not be depicted as obese:

'If you hear it you think fat I guess, or overweight. Because there can be, like I've had friends who have been to the doctor, and they look like healthy people, and they get told they're obese. And you just look at them and laugh, and they're like 'Oh yeah, whatever.' I guess it's one of those terms that you can either think a really massive person, or someone who looks like a normal weight.' (Irene)

Some participants rejected the notion of being obese themselves due to this perceived view of obesity:

'When they first mentioned obesity, I went home and I was like "they've put me in this class for obese people. I'm not obese." That kind of put me down a little bit, thinking that they put me in this group of people that are unhealthy, can't move and play with their children on the beach, and that kind of stuff.' (Dorothy)

The term 'obese' was associated with shame and social pressure by some participants:

'Because nobody wants to be socially excluded. And obesity is a thing that people look at and judge instantly. ... Obesity is worse than just putting on weight, it's putting on lots of weight. So therefore someone must have just sat on the sofa, and eaten chips for weeks and weeks and weeks. That's the kind of impression obesity sounds like.'
(Caroline)

Not all participants found the use of the term 'obese' problematic. Some expressed acceptance of their own obesity:

'It is what I am. I have been obese for most of my adult life, and it's been hard. I didn't want to be obese. ... And yeah, so obesity is a term that I had to sit well with, I've had to get to know it.' (Gina)

'Recovery'

Similarly, the concept of recovery prompted various responses. Some were challenged by it, others were more accepting of the idea of recovery in relation to obesity but also perceived its applicability differently in relation to their own obesity.

For a majority of participants the term 'recovery' seemed loaded with negative meaning. Similar to the term obesity, the term recovery appeared to imply blame:

'I hate the title: recovery from obesity. Because that just sounds like somebody allowed themselves to get to a point where they're so obese, that they have to recover from it.' (Caroline)

Another implication was the stigma of addiction:

'Okay, it's like recovery as in addict.' (Henry)

Others felt that recovery was incompatible with obesity, as it would refer to a time limited process with an end point, rather than to a lifelong journey:

'Recovery is odd with regard to obesity. It means that it's something that's done and dealt with. For me it's something that you have to maintain for the rest of your life.'
(Dorothy)

Some also perceived that recovery was not necessary for obese people unless there were associated health problems:

'I suppose I don't see it as quite, maybe not quite the health issue that needs recovering from. I mean in as much as "Okay, I'm overweight, but my blood pressure is fine, my cholesterol is fine, you know, all those other indicators are okay". I'm actually reasonably happy with the way things are. And I don't see necessarily the need for drastic change.' (Henry)

Several participants stated that the notion of recovery from obesity was a new idea which led to a change in their thinking about obesity:

'I felt a little bit resistant at the start to the term recovery. I was like "I'm not recovering from anything, I'm fine. I'm, you know, I'm not, I associate trauma with recovery, so those, yeah." I really didn't understand where they were coming from for a bit. And then I was like "Yeah, but", then I realised that I have, my eating patterns and my use of food as comfort have come out at stressful times. Maybe not traumatic, but definitely stressful times. And I was like "Oh, actually that might apply a little bit more than I am willing to admit right now." So I sort of warmed to the term.'
(Gina)

'Addictive overeating'

Opinions were also divided on the question as to whether overeating can be seen as an addiction. A majority agreed with this concept. Some participants referred to neurological aspects of addiction:

'I was like "Oh man!" I hadn't realised that I was in that category of people that had an addiction. Who had a thing that they were not managing. And it does, it does resonate, it does make sense. And it really does very, very much bring it home, and I was like "Oh, yeah, okay. I really have that, I really do have to admit it." Because

it is the same as alcohol or drugs or smoking, it's the same thing. It's the same neurons, it's the same response.' (Gina)

Others likened addictive overeating to the concept of ongoing recovery that is described in alcohol addiction:

'I feel a little bit like, when you talk about alcoholics. You know, kind of go back to drinking, I sorted that now, I can just drink normally like everybody else. That's kind of how I feel like, I could be wrong though. And that would be nice. But I have a sneaking suspicion that it's not so much going to be recovery, just learning to be more automated with the right sort of behaviours.' (Fiona)

Some spoke of physiological craving:

'It's like, you know, if you're gambling, it's like these are the things, and the dependency comes from something. And this is why they've put obesity in with addiction. Because they're saying carbohydrate addiction. But then of course, there's a real physiological reason, if you've got insulin resistance and everything, it's right there. It's right there, and it's going to make you feel, crave carbs, which is the addictive substance.' (Emily)

Some participants said they were not sure how they felt about the notion of overeating as an addiction:

'So I was thinking, what it could be, and yeah, so I suppose I've been making connections, and thinking more about, you know, how I feel when I eat things and things. So that's probably a thing I've never really considered before, so as food as a, like, I suppose I haven't used it as a reward, but in other instances I probably do acknowledge I have cravings too. So yeah, maybe yeah, it is an addiction for me. I still don't think I'm a hundred percent there, thinking it's an addiction. Because it's such a new idea to me.' (Anne)

Others rejected the notion based on their understanding of addiction as being out of control:

'It doesn't really sit very well with me. Because I don't see myself as an addict. I don't drink, I'm not an alcoholic, I don't have, and I don't see myself as a food addict. I eat breakfast, lunch, and evening. So I don't see myself as a, you know, I don't sit there and eat cream cakes all day, you know. If there's something that I know is particularly bad for me, I don't do it. I don't eat a lot of junk food, you know.'
(Henry)

3.2.2.2 Barriers to engagement with Kia Ākina

In addition to discussions about the theoretical concepts underpinning Kia Ākina, several components of the Kia Ākina network were discussed in the interviews: the weekly meetings, weekly emails, text messages, daily weighing, the Kia Ākina website and booklet, the buddy system, and individual weigh ins at Kia Ākina. Individual reasons for using or not using the various components were given by each participant.

A wider range and larger number of reasons were given for not using the Kia Ākina network than for using it, reflecting the low overall participation rate in Kia Ākina among this group of participants.

For some participants Kia Ākina, therefore, added very little to their journey of recovery, primarily because they had little engagement with Kia Ākina. This was due to problems related to communication and logistics, to incompatibilities between participants and facilitators, and a mismatch between style and content of the Kia Ākina components and the perceived needs and preferences of participants.

For some, lack of involvement with Kia Ākina was related to logistical issues where requests for information on involvement were not responded to, e.g. the text messages, the Kia Ākina website, and the buddy system:

'So she [facilitator] said that if you want us to text you, you know, "Hey, healthy option, or whatever", then they would do that. But then, nothing ever came of that either. No one contacted me regarding that.' (Dorothy)

'And I was supposed to be getting an email from someone else regarding the website. And I don't think I've received that email. It could have been in there and I've just missed it.' (Dorothy)

'So when I did the survey today, they said there's like a buddy system, I am not familiar with that part of it. So, maybe, I don't know if it's new, or I haven't been offered that part of it.' (Anne)

Lack of clarity on how to get involved with the various components of Kia Ākina prevented some participants from making better use of it:

'They did talk about getting text messages, which would work quite well for me. I don't know if it's a daily thing or a weekly thing. So something like that would be quite good.' (Anne)

While some liked the idea of various components of Kia Ākina such as the buddy system, the ways they were able to access this became a barrier to their involvement:

'I would rather someone came up to me and say "Hey, would you like to be my buddy?" than me going up to someone saying "Would you like?", and they'll say "Oh no, I've already got one." or "Oh no, I haven't got time." Or, you know, and I'd feel rejected.' (Emily)

For others the means of communication via electronic media was a barrier:

'And there is the text thing, they said you can get a text. But I don't agree with everything being electronic, I think if you're going to connect with people, connect with them. In the old fashioned way.' (Emily)

Others were put off by the available meeting times and locations:

'The meetings that they hold regularly, they don't suit, because I do shift work, they always seem to be at the time that I'm working.' (Anne)

'But I could have made that work though, if it was a bit closer. And I guess, I know it's in the early stages, so I'm guessing if it's successful, later there'll be lots of groups

around the city that you could sort of, that would, I'd say that would be one suggestion. That you could have them located around the city instead of one place and you could go to the one that suited you.' (Barbara)

Incompatibility with Kia Ākina facilitators also became a barrier for a few participants, due to a perceived mismatch between the participants' and the facilitators' beliefs about weight loss:

'But it was easy for me to drop out, once I was getting, I felt [the facilitator] was challenging me, when I talked about the [name of weight loss author] principles and stuff. And [the facilitator] didn't agree. ... Like I say, it came a bit, it felt conflicting. And I was trying to keep the positive thing going in my life with [name of weight loss author], and then I'll be going like, oh gosh, now I have to go and defend what I'm doing.' (Emily)

Others struggled with the physical appearance of the facilitators who were not themselves overweight:

'It was like all these big girls sitting around [talking to] two really really thin people. And then just sitting there listening, I guess. That, I don't know. I didn't find it useful. Yeah, it was weird.' (Dorothy)

The perception of the content as well as style of the Kia Ākina network varied between participants, with some finding it not useful or not well matched to their needs. Some participants found some of the components emotionally discouraging:

'But sometimes I found them a bit depressing. Because I'm quite happy go lucky, and I found the other people there were in a different headspace, I guess.' (Irene)

'Because your body does retain fluid at different times. I find that if I put weight on, and knew I'd been really, really good, I think I'd find that [daily weighing] really disheartening.' (Irene)

Others found the content to be too restrictive and, in comparison with other weight loss programmes they had experienced, too much focussed on guilt:

'Every email that comes through tells you what not to do.' (Emily)

'He [name of weight loss author] tells you to enjoy it. So it's okay to have something, whereas if you do all this controlled eating, it's so guilt ridden.' (Emily)

For some the approach was too superficial:

'I mean you can get, like some of the emails that I've read gave some advice on how to feel better, you know. Open the curtains, look outside, and that kind of stuff. ... I think it needs to be a lot deeper than just having a chat with someone and making them feel good about themselves.' (Dorothy)

Some participants thought that a more individualised approach might be more helpful:

'It's hard to help everybody, because everybody will be so different. I think one on one would be way better than as a group for that sort of thing.' (Dorothy)

Others found the style lacking activity and fun:

'So those activities [Green Prescription], and that nutrition course, it was so much more fun than sitting in the room listening to everybody's stories about how they ate too much at the holiday.' (Dorothy)

Some participants felt that they did not need the kind of support offered by Kia Ākina:

'I didn't attend the meetings also because I didn't think there was anything that I needed to go for, to be supported for.' (Caroline)

Some of the participants had experienced other weight loss programmes which offered more physical interventions, or faster weight loss:

'The Green Prescription, yeah. So I think it's quite therapeutic in a variety of ways. Especially after a stressful day, you know, it can be quite therapeutic. But otherwise I suppose I'm not a great lover of psychological stuff.' (Henry)

'I have done other weight loss programmes, not really like this, but more of the drinking diet, like your shakes. I've been on the [brand] diet, do you know that one? It's

quite good. So I did that, and I lost sixteen kg in about a month and a couple of weeks. ... And that's been really good, and I've been able to keep it off, which has been really really good. But that's not due to the programme [Kia Ākina] unfortunately.' (Dorothy)

Although a number of participants identified a range of reasons for not engaging with Kia Ākina, for those participants who did engage some of the benefits they experienced went beyond weight change. Some re-evaluated their understanding of concepts like obesity, recovery, and addictive overeating. Others derived emotional benefits, changed their thinking around food and eating, and incorporated a more holistic view on weight loss.

3.2.2.3 Benefits of Kia Ākina

Utilisation of the different components offered at Kia Ākina varied considerably between participants. For some participants, Kia Ākina participation was perceived as useful due to the emotional benefits of encouragement, motivation, and hope; the informative and holistic content of the network resources; and the non-judgemental and personal style of the meetings which provided a safe venue for sharing the recovery experience. Practical considerations like no charge for participation were of benefit, especially for participants who had tight budgets to consider.

Emotional and behavioural benefits

Several participants cited encouragement as one of the reasons for using the weekly emails and text messages:

'So they send one out every week on one of the five areas that Kia Ākina covers. And it's just an encouraging message, it often has an idea in it of something you can do, based around that. So it just gives you some fresh ideas, or gives something to focus on for the week.' (Fiona)

'I've decided I need something encouraging. At the times when I'm at my weakest.'
(Fiona)

Motivational effects were mentioned with regard to use of the Kia Ākina booklet and the weekly meetings. Some participants felt that being able to go at their own pace while engaging with the Kia Ākina philosophies helped in preparations for change:

'Reading the booklet is probably the most helpful for just having some quiet time and just having a look at it, and just keeping it in my mind. Just keeping the philosophies around it, and just going, okay, when I'm ready, and it doesn't have to be a big, you know, calendar date, I can just pick up some more threads of it and start it a little more seriously.' (Gina)

Others described the sense of being part of a group where people care for one another as a motivator to keep going:

'And I've heard others say 'I had to come back this week, even though things aren't going so well for me. Because I was dying to find out how that had gone for, you know, whoever.' You know, and so helping to keep each other motivated.' (Fiona)

Also mentioned was the motivational effect of accountability with daily weighing:

'We talked about weighing yourself daily, which I had always kind of been told that you shouldn't do that, and I quite liked that idea, because it does make you accountable. And I'm still doing that.' (Barbara)

Hope was also cited as a reason for attending the meetings:

'You feel in control when you understand. Like if I understand it, then maybe I can change it. It's not as hopeless as.' (Fiona)

Several participants said that they found the experience of meeting others who were experiencing similar issues of value in the meetings:

'I really find being with other people who have the same sort of issue, that when you can say something, they're all like "Oh yeah, yeah.", not "What?". You know, and for me that being part, instead of being the only one different, being part of a group of people, all with the same sort of goal has been really encouraging.' (Fiona)

Prioritising small successes over ‘failure’ was also noted as being a useful part of the Kia Ākina philosophy:

‘And they're not, I mean, I got help with a dietician before I went to Kia Ākina, and it was just so black and white. And I was just failing all the time. ... And I felt like I was letting her [dietician] down, because every time I didn't quite make it, I was a failure. Whereas Kia Ākina is about celebrating the small steps.’ (Fiona)

Compared with other weight loss programmes the personal approach of Kia Ākina was valued by participants:

‘The personal approach definitely. It [Weight Watchers] was kind of “Go and weigh yourself”, talk at you rather than with you, and then you went.’ (Barbara)

Content

Some participants said that they appreciated the cognitive changes they experienced, due to attending the weekly meetings or reading the weekly emails:

‘But why I do the things I do. Or why is it when I'm feeling sick or stuff I just want something nice. I just want something nice to eat. Why is it that food is the thing that I, you know, and why is it when I know that things are going badly I go “Oh well, I've already failed, I may as well make it worse.” instead of “I've had a lapse. I can go back.” Why would I think “Oh, I've already done that bad thing, so therefore I might as well do all these bad things.” You know, sort of that illogical thinking which I was doing, but not really realising I was thinking that.’ (Fiona)

‘I'm an avid reader of the weekly emails. I do find them very useful for helping me to think about the way I use food.’ (Gina)

Another cognitive change attributed to Kia Ākina participation was a shift towards long term weight loss maintenance rather than quick weight loss:

‘Because I know I can do it. I've done it before. But yeah, like I say, maintaining it, and making those habits just part of your life forever, not just for a little while. And I

think that's where Weight Watchers falls down too, because it's like a little while.'
(Barbara)

Other reasons for using the Kia Ākina network included the holistic content of the weekly emails:

'And they sort of choose quite random little things, and that's quite holistic, which I really like. It's not just [a focus] on that weight. It might be a bit more focussed on your movement or the way you think, with positivity and things like that.' (Anne)

The focus on health rather than on weight loss only was also appreciated:

And they [Weight Watchers] just let you eat rubbish as well, so, which wasn't, I didn't think it was a good thing. If you ate a chocolate thing, you still get so many points, so that comes off your allocation. I'd rather not have a chocolate bar, I'd rather have some other things that are healthier things, healthier options.' (Anne)

The evidence based foundation of the Kia Ākina network was valued by some participants:

'I think Kia Ākina works because it's so evidence based. Whereas so much of the rest of them are just so much stuffing the science in after they've designed the miracle cure, so yeah.' (Gina)

Practical considerations

The advantage of being cost free was also talked about as an important factor for participants:

'I just really liked the kind of New Zealandish approach. It wasn't a giant corporation from the states, or some of the Australian ones, you know, the Slimfast and Optifast, and it's not there to make money. So they're not obliged to have you fall off the wagon so that you can come back and give them more money.' (Gina)

3.2.3 How perceptions of self-compassion changed

The second part of the qualitative interviews was focussed on the participants' conception of self-compassion. In this section participants definitions of self-compassion and what it would mean to be self compassionate are described. The emerging categories of these definitions are then compared to Neff's (2003) definition of self-compassion which was used in this study to measure quantitative changes in self-compassion. Participants' perceptions of how their self-compassion had changed over time, and what influences had contributed to these changes are discussed. Barriers to self-compassion and findings highlighting the potential impact of self-compassion on the participants' journey of recovery from obesity are outlined.

3.2.3.1 Participants' understanding of self-compassion

The discussions on self-compassion started with a conversation about the participants' understanding of what self-compassion meant to them. All of the participants understood self-acceptance to be a major part of self-compassion. Other interpretations of self-compassion were related to notions of self-care and assertiveness.

The majority of participants saw 'being kind to yourself' and 'not being so hard on yourself' as a way of being self-compassionate:

'Being kind to myself, I think. That's what it is, it's accepting what I am at the moment and yeah, that's self-compassion.' (Anne)

'Being kind to yourself. And giving yourself a bit of a break. Not being so hard on yourself.' (Emily)

Some participants envisaged that taking good care of themselves by taking time out or doing something comforting would be self-compassionate:

'I would spend time on my own. That's my way of being compassionate to myself, it's not overcommitting myself.' (Barbara)

'A quiet bath with no children.' (Irene)

For others self-compassion included being assertive and setting boundaries:

'Knowing when it's okay to say "Enough is enough".' (Caroline)

3.2.3.2 Comparison of the participant's understanding of self-compassion with the research based definition

In the quantitative part of the study a self-compassion scale (Neff, 2003b) was used to measure the participants' levels of self-compassion over time. This scale is based on Neff's definition of self-compassion which comprised of three dimensions: 'self-kindness versus self-judgement', 'common humanity versus isolation', and 'mindfulness versus over-identification'.

To determine whether the concept of self-compassion as discussed in the qualitative interviews was consistent with what was measured in the quantitative part of the study, both the participants' definition and Neff's (2003a) definition of self-compassion were compared using cross tabulation in NVivo-11[®] software (table 5).

First the participants' understanding of what self-compassion means to them was coded by the researcher. Three separate categories emerged in this node of 'participants' understanding of self-compassion': 'self-acceptance', 'self-care', and 'assertiveness'. Then a coding matrix was created to compare the participant's understanding of this concept with how self-compassion is understood in clinical and scientific research. Three separate coding nodes were generated representing the three dimensions of self-compassion as defined by Neff (2003a).

Each of the participant's quotes coded for 'understanding of self-compassion', was then re-coded into nodes representing Neff's definition of self-compassion. An additional node labelled 'other' was created to represent quotes that did not fit into any of Neff's (2003a) three dimensions of self-compassion.

Cross tabulation of the participants' understanding of self-compassion with Neff's dimensions of self-compassion including 'other' resulted in the following coding matrix (table 5):

TABLE 5: coding references for categories (participants' understanding) versus dimensions (Neff's (2003a) definition) of self-compassion

| | A: Self-acceptance | B: Self-care | C: Assertiveness |
|---|--------------------|--------------|------------------|
| 1: Self-kindness versus self-judgement | 25 | 1 | 2 |
| 2: Common humanity versus isolation | 4 | 0 | 0 |
| 3: Mindfulness versus over-identification | 6 | 1 | 0 |
| 4: Other | 0 | 15 | 10 |

The coding matrix shows the greatest similarity between Neff's dimension of self-kindness versus self-judgement and what was categorised in this study as self-acceptance. The way the participants of this study described their understanding of self-compassion was mainly in terms of self-acceptance. They did not seem to identify with the other two key dimensions of Neff's (2003a) definition.

In addition, the participants described their understanding of self-compassion in notions that were not coded into any of Neff's (2003a) three dimensions, but were coded into the categories 'self-care' and 'assertiveness'.

This finding indicates that the construct of self-compassion as understood by the participants of this study and discussed in this section does not reflect the construct of self-compassion as it has been measured in the quantitative part of this study.

3.2.3.3 Changes of perceptions of self-compassion over time

The interviews included questions about changes in perception and practise of self-compassion that participants might have perceived since being eligible to participate in Kia Ākina. Self-compassion in this context refers to the concept as it was understood by the participants, rather than Neff's (2003a) definition.

Some participants experienced changes in their understanding and practise of self-compassion since exposure to Kia Ākina, while others had experienced similar changes prior to Kia Ākina which had been facilitated by factors not related to Kia Ākina participation.

Similar to the notion of food addiction, the notion of being compassionate to oneself was new to some study participants, and changes in thinking around this topic resulted from exposure to this concept through Kia Ākina:

'I hadn't really tried to change that way, the way I thought about myself, or my actions, or my choices, or whatever before.' (Barbara)

'So definitely that has changed. Because I've started really thinking about the messages I send myself. And whether I'm actually being kind and helpful and constructive in my messages to me.' (Fiona)

For others self-compassion was a concept that they had been exposed to prior to their association with Kia Ākina:

'I know it's important, from reading, and all these magazines, and I need mindfulness, and time for yourself and all that sort of stuff.' (Anne)

Similarly to the motivations for weight loss, some participants felt motivated to develop self-compassion through the experience of being a parent:

'Not knowing how hard I was being on myself. Yeah, not being aware of it. Until I heard her [daughter] repeating my words, and I was like "Oh that's horrendous, wow. Okay, let's not do that." So trying to yeah.' (Caroline)

Others felt that they were at a point in their life where some self-care was deserved and justified:

'I think there's a time in life where being just a little bit selfish is not a bad thing. You make it out like you're really, really bad, but you're not. You're just having a bit of 'me' time.' (Henry)

Barriers to changes in self-compassion

In the context of developing the practise of self-compassion participants were also asked to explore what obstacles might get in the way of being more self-compassionate more often. A person's role in society as a woman or as parent was perceived as strong impairments to self-compassion. Social disparagement and lack of resources were also perceived to hinder self-compassionate actions.

Some participants perceived women's traditional role in society as an impairment to self-compassion:

Women are told to put themselves last, they're supposed to do this, they're supposed to do that, women do everything they can for other people, and they put themselves last. And they feel bad, because they're not meeting other people's expectations.'
(Caroline)

For others being a parent impeded on taking time for self-compassion:

I try and take more time out for myself, like I got my nails done the other day, and these are things I would never have done for myself. And maybe I go out for a meal with my husband or, just stuff for us, because our children take up so much time.'
(Anne)

Negative or hurtful comments from other people made it more difficult to be compassionate to oneself for some participants:

'Yeah, it's hard to be kind to yourself when everyone else is being mean. Because you take on board what they say.' (Fiona)

One participant felt that lacking financial resources and being predisposed to depression made it hard to do activities related to self-compassion:

One thing I did use to do last year, but I stopped, I stopped for financial reasons, but I'd go for a massage.' (Emily)

'And I mean my depression, I've had predispositions for it, and it's definitely doing the basics at the moment. I'm just going to work, and getting by really. So enjoyment is kind of like, I don't know what it would be.' (Emily)

3.2.3.4 Participants' perceptions of how self-compassion might impact on recovery from obesity

As previously indicated, analysis of the quantitative data in this study showed a significant increase in self-compassion over the six month period between baseline and follow up measures. Some of the components of the Kia Ākina network emphasise self-compassion, for instance: "Be prepared to have lapses. No one is perfect. Develop a new good friend and/or parent to your struggling and obese self. Give yourself timely forgiveness on the one hand, and firmness with high expectations on the other. Change your life values around from consuming and having to being and giving. Enjoy life" (Sellman et al., 2013, pp. 20–21)

In the qualitative interviews each of these notions was discussed in the context of the participants' concept of self-compassion and whether it might be helpful in their journey of recovery from obesity. These and other views of how self-compassion might affect the participants' recovery journey are presented in the remainder of this section.

Overall, participants showed a variety of responses to the self-compassion related notions from the Kia Ākina booklet. Some participants indicated that they related well to it and found most of it helpful. Some saw some notions as potentially helpful, but their application seemed challenging. Others questioned and/or rejected some notions.

'Be prepared to have lapses. No one is perfect.'

Almost all of the participants were able to relate well to this concept. Several participants understood it to be encouraging of self-acceptance:

'Not being, I guess, not being too hard on yourself, not beating yourself up for making a wrong choice.' (Irene)

Others valued the notion that one can move on after a lapse:

'That 'Just move on, tomorrow is another day; it's a new day.' So that is one thing I have taken from it. That has been valuable.' (Irene)

'Develop a new good friend and/or parent to your struggling and obese self. Give yourself timely forgiveness on the one hand, and firmness with high expectations on the other.'

A majority of participants, especially those who were parents themselves, found the notion of parental guidance helpful:

'That really does resonate very well with me. And that's the approach that I'm taking to self-compassion that I'm thinking about is, you know, leading my obese self along like 'It's okay, we'll get there.' (Gina)

'Change your life values around from consuming and having to being and giving. Enjoy life.'

Opinions were divided on this quote. Some participants felt that a shift in values might be beneficial with regard to their weight loss journey:

'That's definitely probably one of the main ones that I'm working on. Because it's so positive and good. And it's just, I think about that in the supermarket, oddly enough. When I'm there doing my weekly drudgery, and I'm like "No, no. We're not thinking about consuming. We're just getting the things that we need in order to carry on with everything else." So yeah.' (Gina)

Others questioned the association between life values and obesity:

'I don't see how that has anything to do with being overweight. I guess you should be giving and sharing anyway, instead of taking and feeling miserable for yourself.' (Dorothy)

Some rejected the idea that they held materialistic life values:

'I give quite a lot. I do, until recently I have always done two voluntary jobs, ... and I'm not very materialistic at the best of times.' (Emily)

While the notion of enjoying life was generally approved of by the participants, some found its actualisation challenging:

'Enjoy the life you have. Don't wait for it to change. Or dream about the changing, and hating now. Find something now that you can enjoy. That's not as easy as it sounds. It sounds quite simple, but it's not. It's not an easy thing to do.' (Fiona)

3.2.3.5 Notions of self-compassion not related to Kia Ākina components

Other aspects of self-compassion described by participants were related to notions of indulgence. Some felt that being self-compassionate was associated with indulging in overeating:

'I would see it as a not necessarily a positive thing. I see that as a negative thing, like "It's only a big mac or a burger, whatever", you know.' (Henry)

Others understood self-compassion to be more associated with caring for themselves, and therefore concluded that to be self-compassionate meant not to indulge in overeating:

'If I wasn't compassionate? About not overeating or so? I'd continue to overeat.' (Barbara)

3.2.4 Summary

In summary, the journey of recovery from obesity was an individual experience for each participant, which occurred in the context of their individual circumstances. The complex conditions surrounding obesity recovery involved differences in motives for obesity recovery, and in barriers and enablers to weight loss.

The Kia Ākina philosophy includes notions of recovery from obesity and the concept of addictive overeating. The term obesity was largely associated with 'being huge' as opposed to 'normal overweight', and thus contested by participants who did not consider themselves as 'huge persons'. The term 'recovery' was challenged by some participants, as it seemed loaded with negative meaning, in particular blame and the notion of 'something being wrong that needs recovering from'. The notion of addictive overeating was also challenged by some participants due to its association with being out of control. However,

other participants could relate well to this concept, and felt inspired to reflect on the connections between obesity, recovery, and addiction.

The necessity to lose weight was described as being of varying levels of importance. While some participants felt losing weight to be a very important matter, others did not consider it to be currently important at all. Health and quality of life were the main drivers for those who appreciated the importance of losing weight.

Despite the varying levels of motivation to lose weight, all participants faced obstacles in their weight loss efforts. Lack of resources including physical and mental energy as well as financial means, medical problems interfering with weight loss, emotional aspects surrounding weight loss efforts including negative self-talk, and the effect of other's behaviour including shaming were the most common cited barriers.

Some participants felt that their weight loss efforts might be aided by more social support, or having more willpower and better nutritional knowledge.

The addition of the Kia Ākina network to the participants' recovery journey from obesity had varying impact on this journey. For the majority of participants Kia Ākina had very little impact due to little or no engagement with Kia Ākina. Lack of engagement was due to problems related to communication and logistics, to incompatibilities between participants and facilitators, and a mismatch between style and content of the Kia Ākina components and the perceived needs and preferences of participants.

For some participants the engagement with the Kia Ākina philosophy led to reflection on connections between obesity, recovery, and addiction, and subsequent change in thinking about these topics. Those participants who utilised the various Kia Ākina components profited from emotional benefits of encouragement, motivation, and hope; the informative and holistic content of the network resources; and the non-judgemental and personal style of the meetings which provided a safe venue for sharing the recovery experience. Participants who were considering tight budgets benefited from the cost free aspect of Kia Ākina.

The discussion of the participants' understanding of self-compassion showed that all of the participants understood self-acceptance to be a major part of self-compassion, other components were self-care and assertiveness. The way the participants understood the concept of self-compassion was similar in some aspects, and varied in other aspects from Neff's (2003a) definition of self-compassion.

Changes in self-compassion over time were experienced by most of the participants, either motivated by Kia Ākina participation or by other factors at different times in their lives. For some participants the notion of being compassionate to oneself was a new concept and changes in thinking about how to relate to oneself resulted from exposure to this concept.

Barriers to self-compassion were felt to be related to one's role in society and resulting commitments, to parenting demands, to the motivation draining effects of social disparagement, and to a lack of resources.

The impact of self-compassion on obesity recovery was discussed in the context of concepts from the Kia Ākina booklet that related to self-compassion. Most participants saw a connection between self-compassion and obesity recovery in these concepts and found their content to be helpful and encouraging. For some participants application of some of these notions was challenging, other notions were questioned and/or rejected.

Other connections between self-compassion and obesity recovery were also discussed in this chapter. These were associated with an interpretation of self-compassion as license for indulgence that may result in overeating, or conversely with caring for self that may result in not overeating.

4 Discussion

4.1 Study limitations

At the outset of this discussion it is important to acknowledge several of the limitations of this study that impact the generalisability of the quantitative results. These primarily were the smaller than expected sample size and the lower than expected level of engagement with Kia Ākina by the study participants.

In addition, capturing levels of engagement with Kia Ākina was difficult due to the variety of ways in which participants could be involved and the different levels of involvement possible both in terms of frequency and intensity with each of these components. As the participation rate was calculated as the average of the total percentage of possible involvement points with each component considered of equal value for the purpose of this study, the resulting score reflects only a proxy rating of participation in the Kia Ākina network. The low participation rate is also reflective of a low overall rate of participation in the Kia Ākina network.

This study is descriptive in nature, therefore any conclusions about the relationship between the measured variables must be correlational rather than causal.

Due to the small sample size and the nature of the sampling process, i.e. all participants were members of the Kia Ākina network, representativeness and generalisability of the quantitative results to the New Zealand population cannot be assumed. However, the sample for the interview participants in the qualitative part of the study covered a range of engagement amounts with the Kia Ākina network, from being fully engaged to having completely withdrawn from participation, as well as a range of self-compassion levels in the low, medium, and high tertile of the scores on the self-compassion scale at baseline measure. The themes discussed in the interviews likely affect obese people in general, and may therefore be of value for clinicians as well as in further research on this topic.

4.2 Quantitative results

The goal of the quantitative part of this study was to determine any changes in weight or self-compassion levels over a six month period after joining the Kia Ākina network, and to test for associations between weight change, changes in self-compassion, and overall involvement with Kia Ākina.

4.2.1 Weight loss/gain

No significant mean weight change had occurred over the six month period measured. The lower than anticipated levels of involvement with Kia Ākina, as discussed below, may have contributed to the lack of significant mean weight loss in this group.

However, it is also important to point out that this study was never intended to measure weight loss outcomes associated with Kia Ākina as a whole, as it was focussed only on a subset of participants in the Kia Ākina network who had recently been invited to join the network.

The low sample number also meant that the power to detect significant weight changes in this study was low, therefore only large differences between baseline and follow up would be detected.

The maximum weight loss by one individual of 10.4kg reflects the maximum recommended weight loss goal of 2kg/month recommended in the Kia Ākina network (Sellman et al., 2013); however, this excellent result is offset by weight gains of up to 11.3kg in other individuals.

Previous research on weight loss programmes in primary care settings show generally modest results. A recent systematic review and meta-analysis (Booth, Prevost, Wright, & Gulliford, 2014) found that primary care weight loss interventions in obese adults result in minor weight loss less than the 5%, which is considered to be the minimum weight loss to be clinically significant (Booth et al., 2014). Similarly, a systematic review and meta-analyses of 45 randomised controlled trials involving 7788 obese adults found small, but significant results on weight loss maintenance after 12 months (Dombrowski et al., 2014).

In the context of the modest weight loss and weight loss maintenance results of weight loss interventions reported in the literature (Booth et al., 2014; Dombrowski et al., 2014) and given worldwide rising trends of obesity (World Health Organisation, 2018a) and its implications for health outcomes (Guh et al., 2009; Pulgarón, 2013; Wong et al., 2015), this finding adds urgency to the need for improvements of weight loss interventions. Interventions at the population level such as sugar taxes (Robertson, Thyne, & Green, 2018), dismantling of marketing of unhealthy foods, especially to children and young adults (Sadeghirad, Duhaney, Motaghipisheh, Campbell, & Johnston, 2016), and reducing accessibility to unhealthy foods (Sushil, Vandevijvere, Exeter, & Swinburn, 2017) may be adjunct measures that could be of benefit in the prevention and treatment of obesity.

4.2.2 Self-compassion

Self-compassion has increased significantly among the participant group over the six month period between baseline and follow up. However, the mean change in total self-compassion of 0.16 is modest compared to increases in self-compassion that have been achieved with interventions directly aimed at raising self-compassion, such as 0.81 for a self-compassion group intervention (Smeets, Neff, & Alberts, 2014), or 0.89 for a Mindful Self-Compassion program (Neff & Germer, 2013). However, while the Kia Ākina network emphasises self-compassion in some of its components (Sellman et al., 2013), the increase of self-compassion is not its main focus.

As mentioned earlier, involvement percentages were difficult to capture due to the variety of ways that participants could be involved with Kia Ākina, and the different levels of involvement possible with each of these components, and thus the availability of only a proxy rating of participation. For instance, engagement with the reading material which included weekly email messages, daily text messages, the Kia Ākina booklet, and the website, might involve reading the material, contemplating its content, discussing it with others. These participants might still have scored low in participation rate, while having given considerable time and attention to the material that was offered. Likewise, participants who only attended the initial Kia Ākina meetings might have drawn inspiration and motivation by contemplating the content of the meetings and rethinking

their own cognitions. This form of engagement would also not have been reflected as a high engagement score in the questionnaire used for the quantitative measures.

Given also the overall low level of participation it is difficult to attribute the increase in self-compassion to participation in the Kia Ākina network. However, it is possible that some participants may have drawn inspiration for a kinder relationship with themselves from the reading material they were given and from the initial Kia Ākina meetings they attended. Some support for this conclusion can be drawn from the qualitative data.

Another reason for the increase in self-compassion may be found in the measuring of self-compassion levels using online questionnaires, and in depth discussion of self-compassion in the individual interviews. This opportunity to rate and discuss self-compassion may have inadvertently become an intervention in and of itself and resulted in increased levels of self-compassion among the participants.

Some ways in which assessments can become therapeutic interventions have been described in the literature on psychotherapy (Tschacher, Junghan, & Pfammatter, 2014). Factors like active participation in the assessment process (C. E. Hill, Lambert, & Lambert, 2004), the experiencing of emotions related to the problem (Karasu, 1986), and the confrontation with the problem as well as gaining awareness and insight into the complexity of the problem (Grawe, 2004) have been shown to have therapeutic benefits in itself while being part of an assessment.

In addition to the questionnaires measuring self-compassion, this concept had also been discussed in qualitative interviews with nine of the 19 participants. About half the time in the one hour interviews had been occupied with the discussion of self-compassion. There are a number of possible ways in which these discussions may have further contributed to the participants' increase in self-compassion levels. In order to facilitate rapport with the interviewees, affirmation and empathy were shown which may have created an alliance between interviewer and interviewee similar to that of a therapeutic alliance (Nienhuis et al., 2018). Furthermore, discussions on self-compassion with a compassionate and understanding interviewer may have helped reduce feelings of social isolation as well as increase the interviewees' readiness to change (Pannekoek, Byrne, & Fursland, 2015).

Some of the interviewees reported cathartic effects of the interview, which may have been another contributor to the rise in self-compassion levels (Soto, 2017). Finally, the interviews might have helped create a new narrative of the interviewees' situation, leading to a change in meaning with regard to the concept of self-compassion (Jørgensen, 2004).

Whether the factors related to the assessment of self-compassion may have contributed to its overall increase during the six month period between measures can only be assumed with caution, due to the observational nature of this study. However, further research might provide interesting insights into the relationships between quantitative assessments, qualitative interviews, and quantitative outcomes regarding self-compassion. Possible implications of this potential effect should be considered in future studies so as to minimise potential impact on outcome results.

4.2.3 Overall involvement

There was great variation in overall participation rates in the Kia Ākina network, ranging from 0.0% to 50.0% with a mean participation rate of 23.9% (SD = 13.04).

The low participation levels are in line with previous research summarised in a recent systematic review (Burgess et al., 2017) on attendance rates in weight loss related lifestyle interventions, which often show poor outcomes due to low participation rates (Burgess et al., 2017).

Some explanations for this low participation rate and the wide range of engagement levels have emerged from the qualitative data. Participants spoke of their reasons for joining the Kia Ākina network and of obstacles that prevented greater participation in Kia Ākina. These will be discussed in detail below.

Given the low participation rates in weight loss interventions reported in the literature (Burgess et al., 2017), and the negative effect of low participation on weight loss outcomes (Burgess et al., 2017), this finding supports the need for a better understanding of the various factors that contribute to people's adherence or non-adherence to weight loss lifestyle interventions. The qualitative part of this study aims to contribute to the identification of some of these factors.

4.2.4 Correlations between weight change, change in self-compassion, and overall participation

No significant correlations were found between weight change, change in self-compassion, and overall participation. Due to the small sample size, and thus the low power to detect significant correlations between the variables, this result was expected.

4.3 Qualitative findings

In the qualitative part of this study the following key research questions were explored with the use of qualitative interviews and general inductive analysis:

- 3) How do people with obesity experience their journey of recovery from obesity and what, if anything, does Kia Ākina add to this journey?
- 4) Do perceptions of self-compassion change during participation in Kia Ākina, and if so, how?

The interviews started with exploration of the experience of obesity recovery. The experience of recovery from obesity was unique for each participant. It was driven by a range of different motivations like health or attractiveness. The amount of motivation also varied considerably among participants. The recovery journey was compromised by various obstacles which reflected each participants' individual circumstances.

The next point of discussion focussed on the Kia Ākina network. Engagement with the Kia Ākina network was impeded by a wide range of barriers, which differed from the obstacles identified as hindering weight loss. The participants challenged some of the concepts and terminology used at Kia Ākina. Benefits for those who participated included emotional aspects and factors related to the content of the network resources.

In the second part of the interviews the concept of self-compassion was discussed. The concept of self-compassion was understood by the study's participants as consisting of self-acceptance, self-care, and assertiveness. This understanding shared some similarities with, and showed some differences to the concept of self-compassion as described by Neff (2003a), which was used to measure levels of self-compassion in the quantitative part of

the study. A range of changes in perceptions of self-compassion were described by participants, some but not all relating to their involvement with Kia Ākina. Barriers to improvement of self-compassion were also identified by all participants.

Finally, the interviews explored the role of self-compassion in the participants' recovery from obesity. Awareness of a connection between self-compassion and obesity recovery varied between participants with most participants perceiving self-compassion to be beneficial in obesity recovery and some regarding it to be disadvantageous. Notions of self-compassion expressed in the Kia Ākina booklet were discussed in the context of obesity recovery.

4.3.1 How participants with obesity experience their journey of recovery from obesity

4.3.1.1 Different motivations driving obesity recovery

Interviewees perceived the need to lose weight differently. While some regarded weight loss as very important, almost half of the interviewees did not think that weight loss was important to them.

This finding was surprising insofar that all study participants were obese, and had agreed to be part of the Kia Ākina network which has as its primary goal recovery from obesity, which is a definition based on weight loss. It had therefore been assumed that the participants were aware of their obesity and associated health risks, and that this awareness might be a strong motivator for all participants to lose weight.

However, the variation in the perceived need to lose weight is in line with previous research on addiction recovery (Flora, 2012) as well as on weight loss experience (Jensen et al., 2014). Flora (2012) described a 'troubled/confused' narrative of AOD addiction recovery as the most notable, and a 'balanced' as the most common narrative, and placed these into the transtheoretical model of behaviour change (TTM) (Prochaska, 2013) as preparation and action stage respectively. Not all narratives of obesity recovery in this study can be described as corresponding with the preparation and action stage in the TTM, indeed some of the narratives might better be described as contemplative. Nevertheless, findings from the current study are in line with Flora's (2012) conclusion that different

stages of recovery are experienced and thus interpreted in different ways, resulting in different motivational stances regarding recovery.

The sources of motivation for obesity recovery also varied considerably between participants. Self-determination theory (SDT) distinguishes between two categories of motivation: intrinsic aspirations that relate to internal goals such as self-development, and extrinsic aspirations relating to external goals like wealth (Deci & Ryan, 2008). Both types of motivations were described by the participants. Intrinsic motivations in this study most commonly related to being healthy, while extrinsic motivations were associated with factors like attractiveness.

Further research on the relationship between TTM and SDT in addiction treatment (Kennedy & Gregoire, 2009) suggests an association between the source of motivation - intrinsic or extrinsic according to SDT, and the stage of change - precontemplation, contemplation, or action stage according to TTM. It can thus be assumed that the stage of change a person is at can be influenced by the type of motivation that drives this change (Kennedy & Gregoire, 2009).

The different stages of recovery and subsequent variation in the amount of motivation to lose weight might therefore in part be explained by the wide range of motivations for weight loss expressed by the participants of this study, as these different motivations may have influenced the stages of recovery the participants did or did not move through.

Other influences on the participants' motivation to lose weight might be related to the cultural discourse on obesity. While there is a vast amount of evidence linking obesity to increased health risks and adverse health outcomes (Guh et al., 2009; Pulgarón, 2013; Williams et al., 2015; World Health Organisation, 2017), some of this evidence is questioned by proponents of fat acceptance movements such as Health at Every Size® (HAES) (Bacon & Aphramor, 2011) and campaigns in popular culture e.g. ("Dove Campaigns," n.d.) and social media e.g. ("PeopleOfSize.com," n.d.). Some elements of the philosophy promoted in the fat acceptance movement were reflected in the qualitative interviews, such as challenging the notion of BMI to be an indicator of health.

While none of the fat acceptance campaigns were specifically mentioned by participants in this study, the public discourse on body weight in relation to health and wellbeing may have influenced the motivation of some study participants to lose weight by casting doubt on the existing link between obesity and associated health risks. At the same time, the contradictory nature of the messages regarding weight loss that participants may have received from media, medical professions, the Kia Ākina network, and probably other sources like friends and family might be worthy of consideration. Such messages might have included health warnings, stigmatisation, fat acceptance philosophy, and a range of diet advice which in itself may be contradictory (Sacks et al., 2009). This mix of information and opinions might have contributed to a sense of confusion about the perceived need for weight loss.

These findings illustrate the complexity of motivational factors such as stage of recovery, intrinsic and/or extrinsic motivations, and the cultural context of the discourse on obesity, which all interact to determine the amount of motivation a person feels to make weight loss related changes. They highlight the need for individualistic interventions in the treatment of obesity (Burgess et al., 2017). Such interventions might be more effective when the motivational stance of the person is taken into consideration. The cultural discourse on obesity might benefit from being better informed by the consensus of scientific evidence with regard to obesity and its health implications, for obese people to be able to make informed decisions about weight loss.

4.3.1.2 Barriers to weight loss

A wide range of barriers to weight loss were identified by the study participants, reflecting the range of circumstances that characterised the participant's individual life situations. This finding is in line with results of a recent systematic review which identified barriers and predictors of adherence to lifestyle interventions in adults with obesity (Burgess et al., 2017).

All of the barriers identified in Burgess et al.'s (2017) review were also reflected in the barriers identified by the participants of this study. Poor motivation was expressed by almost half the participants. Lack of time was reflected as competing interests and

responsibilities which would hinder weight loss efforts. Environmental, societal and social pressures were discussed as shaming, judgements by others, and societal obligations. Health and physical limitations were described as medical conditions interfering with weight loss. Negative thoughts and moods found their expression as thoughts and feelings associated with self-loathing and hopelessness as well as counterproductive self-talk that impaired weight loss behaviours. Socioeconomic circumstances were reflected as financial constraints that limited food choices. Lack of enjoyment of exercise was discussed as dislike for exercise behaviours conducive to weight loss. Finally, in Burgess et al.'s (2017) review a barrier to weight loss was described as gaps in knowledge. The participants of this study cited better nutritional knowledge as a potentially beneficial factor for weight loss, which can be interpreted as the reverse of Burgess et al.'s (2017) notion of gaps in knowledge.

Some additional barriers that were discussed by the participants of this study included lack of energy and willpower, stress, and frequent temptations to eat due to living with family members who were not restricting their food intake. These additional factors mentioned by the participants of this study highlight again the very individualistic nature of the recovery journey, and the importance of weight loss interventions to be adapted to individual needs of the participants.

The current study is thus in line with the conclusions of Burgess et al.'s (2017) review. It also highlights the significance of motivation as an important factor that can affect weight loss success. Individualised treatment models may benefit from consideration of factors that impact on a person's motivational stance. Future research may provide further insights into the interrelatedness of these factors in obesity treatment.

4.3.1.3 Enablers to weight loss

Enablers to weight loss were primarily identified by the participants of this study as social support, more self-control, and better nutritional knowledge.

A meta-analysis of factors that promote weight loss intervention adherence (Lemstra, Bird, Nwankwo, Rogers, & Moraros, 2016) found that social support, including buddy programmes, is an important factor for successful behaviour change (Lemstra et al., 2016).

A systematic review (Faruqi et al., 2015) on interventions targeting health literacy and their effect on weight loss found interventions that focussed on improving skills and knowledge, including nutritional knowledge, to be effective. However, the relative effectiveness of individual interventions, for instance interventions that focussed on nutrition literacy only, could not be determined in this review due to insufficient evidence (Faruqi et al., 2015).

The provision of social support and the teaching of health literacy may therefore be valuable additions to existing, and in the development of future weight loss interventions.

Another enabler to behaviour change including weight loss often described in the literature includes self-control. Both state and trait self-control have been linked to weight loss related behaviours including eating and exercising (Baumeister et al., 2007; De Ridder & Lensvelt-Mulders, 2018).

While trait self-control has been found to be of value for some types of behaviour change, those commonly associated with weight loss appear not to be so clearly associated with trait self-control (De Ridder & Lensvelt-Mulders, 2018).

As state self-control may be susceptible to depletion with continuous exertion but more amenable to change than trait self-control (Baumeister et al., 2007), the factors that influence levels of state self-control may be important to consider in weight loss interventions.

One of the core symptoms of addiction is the impairment of self-control (Tang, Posner, Rothbart, & Volkow, 2015). In cases where addictive overeating is a contributor to obesity, impaired self-control might be a significant contributor to the risk of relapse. Identification of addictive overeating in participants of weight loss interventions may therefore be of value in weight loss interventions, so that treatment strategies can be adapted according to individual risk factors.

These findings highlight the need for further research on the complexity of factors associated with behaviour change to better understand their interrelatedness in the context

of weight loss interventions and particularly the role that ‘food addiction’ may play in the treatment of obesity.

4.3.2 What Kia Ākina adds to this journey

4.3.2.1 Contested terminology and concepts

‘Obesity’

The term obesity was strongly contested by some participants, with normalisation of being overweight being a main contributor to this contestation. As discussed previously, different motivations driving obesity recovery and the discourse on obesity in the media, especially fat acceptance movements such as (HAES) (Bacon & Aphramor, 2011) may have contributed to some of the participants’ reluctance to accept the term obesity. In addition, the negative meaning and associations that obesity has due to the normalisation of overweight, e.g. ‘Ginormous. To me, it's ginormous.’ may be reflected in the strong rejection of this term.

Other negative associations with the term obesity arise from the stigmatisation of obese people (Salsman, 2012). The strong rejection of this term may in part be explained by the stressful effects that this stigmatisation has on overweight and obese people (Tomiyaama, 2014). In this context the message of fat acceptance might provide a less stressful narrative for obese people.

These findings confirm the literature on obesity perception in that obesity has negative associations and is therefore often stigmatised, and that less stigmatising narratives on this concept are welcomed by some people with obesity (Tomiyaama, 2014).

A distinction should be made between contestation of obesity itself, as in the rejection of the term due to normalisation of being overweight, and contestation of the use of the term obesity due to the stigmatisation of obese people. While some participants did not see themselves as being obese, thus rejected obesity as a reality, others accepted that they were obese but did not want this term used due to the negative and stigmatising associations with it.

Movement from pre-contemplative to contemplative stage in the TTM (Prochaska, 2013) requires awareness of the consequences of the harmful behaviour, in order to move towards action stage and initiate change (Prochaska, 2013). Stigmatisation of obesity and normalisation of being overweight are factors that affect perceptions of obesity, and whether this term is rejected or accepted as reality. Perceptions of obesity and the factors that affect these perceptions may therefore be an important factor to take into account in the design and promotion of weight loss interventions.

‘Recovery’

Similarly to the term obesity, the term recovery was strongly contested by some participants. The notion that recovery implies cure rather than a lifelong journey, and would therefore be an inappropriate term in relation to obesity, is expressed by the participants of this study and also reflects findings in the literature on AOD recovery (Neale et al., 2014).

In addition, participants of this study discussed the association of the term recovery with addiction, which led to its contestation due to the negative consequences associated with the stigma of addiction. This finding is in line with research on addiction stigmatisation (Corrigan et al., 2017a), especially with notions of label avoidance and self stigma (Corrigan et al., 2017a).

Another reason for contesting the term recovery given by the participants of this study was related to the notion of obesity as an illness requiring recovery. This finding reflects research on eating disorder recovery (Bowlby et al., 2012) which placed an emphasis on “de-identification with the illness”, and not regarding oneself as sick (Bowlby et al., 2012). This notion was not reflected in the literature on AOD recovery.

The contestation of the term recovery is thus not unique in the context of obesity recovery, but reflects similar perceptions as described in the literature on AOD recovery, addiction, and eating disorder recovery.

The notion of recovery as it was discussed by the participants of this study seems to reflect the use of this term in the meaning of ‘recovery from’, i.e. recovery from a disease or condition. While the Kia Ākina philosophy also uses the term ‘recovery from’, its focus is

on the ‘recovery of’ a healthy and worthwhile life: “to recover from obesity through permanent lifestyle changes, with the aim of living a better life and reducing the risk of long-term health conditions and disabilities as a result of being significantly overweight” (Sellman et al., 2013, p. 1). The rejection of the term recovery may therefore be in part the result of some participants using the term differently than the developers and facilitators of the Kia Ākina network. This finding highlights the importance of clear communication of concepts and awareness of different usages of words and concepts by developers of weight loss interventions.

Similarly to perceptions of obesity, the notion of recovery may be affected by stigmatisation, but also by association with illness. Perceptions of recovery and whether or not this notion may apply to one’s own situation, may have significant consequences for framing one’s recovery journey, including the need for recovery. It is therefore important to consider differing perceptions of recovery similarly to differing perceptions of obesity in weight loss interventions.

‘Addictive overeating’

The notion of overeating as an addiction was less contested among the participants of this study. Participants spoke of the neurological similarities with substance addictions, cravings, and of the notion of ongoing recovery similar to that of AOD recovery. This finding reflects the current literature on food addiction, which has described neurological changes in food addiction similar to other substance addictions, tolerance and withdrawal in food addiction, and the chronicity of this condition among other diagnostic criteria (Gordon et al., 2018). A minority of participants did not agree with the notion of being addicted to food, due to their perception of addiction as being out of control. This finding is in line with research on the concept of food addiction being a scientific rather than public reality (Fraser et al., 2014).

Given that a majority of participants in this study agreed with the notion of food addiction based on their understanding of this concept, which reflects the scientific evidence for its validity, it would seem that the insights gained from research on food addiction are increasingly becoming general knowledge and topic of public discourse. The gap between scientific understanding of food addiction and clinical practise and mainstream education

as described by (Fraser et al., 2014) may thus have reduced over recent years. However, better education on the potential of overeating as addiction might help reduce this gap further and thus help people who addictively overeat to better understand their difficulties. This finding also lends support to the idea of addressing the concept of food addiction in weight loss interventions, and its integration in therapeutic models of obesity.

4.3.2.2 Barriers to engagement with Kia Ākina

The participants of this study described a range of barriers to engaging with the Kia Ākina network, which differed from the barriers to losing weight. While barriers to weight loss were more related to the self, with the exception of financial restraints, the reasons that limited the participants' engagement with Kia Ākina were mostly described as external factors such as logistics and communication, or were associated with the Kia Ākina network itself. This finding adds to previous literature on weight loss intervention adherence, which identified factors predictive of attrition in weight loss interventions (Moroshko et al., 2011). While none of the factors mentioned in Maroshko et al.'s (2011) review, which related mainly to adaptation and functioning, were mentioned by the participants of this study, other aspects of treatment barriers were reflected in this study's participants' experiences. Such aspects related to practical issues like travel to the place of intervention and cost of participation, although as the Kia Ākina network is free of cost, this factor was mentioned as a positive factor enabling access to the intervention. Both Moroshko et al. (2011) and the participants of this study described factors that hinder access to the intervention as related to the intervention itself. However, in Moroshko et al.'s (2011) study these factors were associated with how much weight was initially lost, or was expected to be lost during the intervention. The participants of this study on the other hand cited factors related to the quality of the intervention. In particular, the participants placed importance on how well the intervention was matched to their specific needs. Some for instance found it too restrictive, some too depressing, others would have liked something more proactive and fun. The relationship with the facilitators was also a barrier for some participants with regard to the facilitator's appearance as well as differences in their approach to weight loss. Other barriers that limited the participants' engagement with

the Kia Ākina network were related to how accessible the various components of the network were to participants.

It thus seems that while some factors can be generalised as predictive of attrition in obesity treatment, the findings of this study emphasise the individual needs of each participant as well as the context of each weight loss intervention with its individual capacities and challenges.

The barriers discussed in the last two sections, barriers to weight loss and barriers to weight loss interventions, refer to very similar concepts, and as weight loss interventions have the aim of achieving weight loss for the participants, this similarity is not surprising. The literature on this topic reflects this convergence. The two reviews (Burgess et al., 2017) and (Moroshko et al., 2011) for instance cite similar factors like time pressure or socioeconomic constraints as impairments to weight loss (Burgess et al., 2017), and weight loss treatment adherence (Moroshko et al., 2011). In the context of this study, however, the participants referred to barriers to losing weight and barriers to participating in the Kia Ākina network in different ways.

These findings add to a better understanding of factors that affect weight loss intervention adherence, such as practical considerations like cost and logistics, and elements that relate to how well the intervention is matched to individual needs. It emphasises again the value of individualistic treatment models.

4.3.2.3 Benefits of Kia Ākina

Kia Ākina is an obesity recovery network based on addiction treatment principles, which provides ongoing psychosocial support to its members (Sellman et al., 2017). The motivational effect of being part of a group, sharing their experiences, and giving each other encouragement and hope was an important benefit of Kia Ākina participation for many participants.

This finding is consistent with the literature on the therapeutic benefits of group therapy (Yalom, 1995), specifically the three of the eleven therapeutic factors ‘instillation of hope’, ‘cohesiveness’, and ‘catharsis’ as identified by Yalom (1995). The personal approach of

Kia Ākina was also valued by some participants, a factor that may be likened to Yalom's metaphor of 'throw-ins', something that is not part of the description or strategy of therapy, and can nevertheless be an important ingredient (Yalom, 2010).

Later research on group therapeutic factors suggests that different group members benefit from different aspects of the group process (Kivlighan & Holmes, 2004). The variation in benefits that Kia Ākina members who utilised the group meetings reported is in line with this research, and supports the need for the consideration of individual needs in weight loss interventions, including support groups.

Other emotional benefits of Kia Ākina were derived from the reading material given to participants and text and email messages. These were described as inspirational and encouraging. This finding supports Burgess et al.'s (2017) notion that individual recipients of a weight loss intervention will receive different benefits from various therapeutic strategies (Burgess et al., 2017).

Kia Ākina encourages members to weigh themselves daily. This accountability was also found to be helpful. This finding is in line with conclusions of a systematic review of the literature on the value of self-monitoring in weight loss (Burke, Wang, & Sevick, 2011).

Some of the study participants appreciated content related benefits of Kia Ākina, such as its educational value, its holistic focus on more than just weight loss, and its evidence based approach. This range of perceived benefits of Kia Ākina participation again illustrates the very individualistic nature of the recovery journey, as emphasised in Burgess et al.'s (2017) review.

The cost free aspect of Kia Ākina was also appreciated, and this finding is reflected in Moroshko et al.'s (2011) notion that cost can be a significant barrier to treatment adherence in weight loss interventions (Moroshko et al., 2011). Given the high cost of overweight and obesity in New Zealand, which is among the highest in the world as a percentage of total health care expenditure (Lal et al., 2012), there is an urgent need for funding of evidence based interventions for the treatment of obesity, especially in low socioeconomic areas.

4.3.3 How perceptions of self-compassion changed

The concept of self-compassion, how it is understood by the participants of this study, how it changed over time, and how it might be related to recovery from obesity was discussed in the second part of the interviews.

4.3.3.1 Participants' understanding of self-compassion and how it compares to the research based definition

Three categories emerged from the discussion on how participants understood the concept of self-compassion: 'self-acceptance', 'self-care', and 'assertiveness'. Cross tabulation of these categories with Neff's (2003a) definition of self-compassion resulted in a comparison of the participants' understanding of this concept with the concept as it is used in research on self-compassion, including its measurement in the quantitative part of this study.

'Self-acceptance' was associated with self-compassion by almost all of the participants, and this concept was similar to the dimension of 'self-kindness' in Neff's (2003a) definition of self-compassion. However, the participants identified less with Neff's (2003a) other two dimensions 'common humanity' and 'mindfulness', but instead associated the categories 'self-care' and 'assertiveness', as coded in this research, with self-compassion.

The strong similarities between the notions of 'self-kindness' and 'self-acceptance' reflect the similarities in the definitions of these terms. 'Self-kindness' is reflected in Neff's (2003a) description of this notion: "Extending kindness and understanding to oneself rather than harsh judgment and self-criticism" (Neff, 2003a, p. 89), while 'self-acceptance' is described by Schoenleber and Gratz (2018) as follows: "self-acceptance involves demonstrating self-kindness, understanding that flaws make us human and enable interpersonal connection, and appraising the self using facts/evidence (vs. vague judgmental terms)" (Schoenleber & Gratz, 2018, p. 76).

The dissimilarities between the participants' categories 'self-care' and 'assertiveness' and Neff's (2003a) dimensions 'common humanity' and 'mindfulness' may in part be due to the different functions that knowledge and understanding have in different contexts. In scientific inquiry, knowledge is developed by asking questions, using systematic

observation or experimentation to generate data, interpreting data, and drawing conclusions, which are then incorporated into theories explaining the nature of concepts (B. Y. White & Frederiksen, 1998). Within scientific inquiry the definition of a concept like self-compassion thus needs to be developed using the above mentioned strategies and the result will be a clearly defined model that fits existing theories and adds to their understanding. This type of knowledge generation requires deliberate work. It can be described as slow thinking that is associated with a large effort (Kahneman, 2011). In everyday life on the other hand, people tend to acquire information in a less effortful way, which Kahneman described as fast thinking. This type of thinking is more efficient although often less accurate. It tends to result in knowledge generation that is based largely on intuition and simplified narratives. The two different forms of thinking, fast and slow, serve different functions and their application to concepts can therefore yield different meanings depending on the type of thinking applied. A concept like self-compassion which is subject to scientific research while at the same time being popularised in media and self-help literature e.g. (Brown, 2010; Desmond, 2017; Germer & Salzberg, 2009) may therefore yield different meanings in different contexts. The notion of self-compassion as ‘self-acceptance, self-care, and assertiveness’ may be the result of an intuition based narrative or fast thinking, while Neff’s (2003a) definition which results from scientific research might be based on deliberate and effortful slow thinking. It thus seems important to clarify the meanings of terms and concepts especially where the two types of thinking interact, for instance in qualitative research and in clinical practise, to avoid misinterpretation of research and misunderstanding between clinicians and patients.

It is important to note that the concept of self-compassion explored in the qualitative interviews does not correspond to the significant increase in self-compassion measured in the quantitative part of the study. In the remaining part of this discussion the term self-compassion will refer to the concept of self-compassion as it is understood by the participants of this study.

4.3.3.2 Changes of perceptions of self-compassion over time

Changes in self compassion over time were noted for participants. While some participants attributed this change to concepts of self-compassion they were introduced to through Kia

Ākina, others were already familiar with the need for self-compassion prior to their involvement with Kia Ākina. This finding is consistent with existing research that indicates that components of self-compassion have different origins, as a mindful disposition for instance can be inherent or acquired (Hollis-Walker & Colosimo, 2011). This finding illustrates the multiple factors and contexts that may contribute to increased self-compassion.

Some participants of weight loss interventions may have high innate or acquired levels of self-compassion, and would thus not benefit as much from self-compassion focussed interventions as participants with low self-compassion levels. This finding also highlights the importance of inclusion of various components addressing different needs in weight loss interventions.

4.3.3.3 Barriers to changes in self-compassion

When exploring what barriers might get in the way of being more compassionate to themselves, the participants referred mainly to the notions of self-acceptance and self-care as components of self-compassion.

The notion of self-acceptance was explored by participants with social disparagement raised as an obstacle to showing self-compassion through self-acceptance. Research on weight stigma has indeed shown that external devaluation can lead to internalised negative self evaluation (Ratcliffe & Ellison, 2015).

Obstacles participants perceived to showing self compassion through self-care included feeling depressed and the traditional expectations of women. Depression was described by participants as a factor that reduced available energy and thus the ability to enjoy otherwise pleasant activities, and consequently impaired self-compassion. Depression is characterised by low hedonic capacity, and impairs a person's ability to undertake enjoyable or pleasant activities (Meehl, 1975).

The traditional expectations of women, such as caring for others and '*.. putting themselves last*' was another barrier to taking better care of themselves identified by the participants of this study. This notion is also supported by the existing literature. A theory of social

heuristics (Peysakhovich & Rand, 2016) posits that women are expected to behave more altruistically than men, that they are punished for not doing so, and that they may therefore internalise this altruism as intuitive response. This internalisation could then become an obstacle to prioritising care of themselves.

Notions of self-acceptance and self-care are thus valid and important factors in obesity recovery, and the development of therapeutic models for obesity treatment might benefit from consideration of potential barriers to these factors.

4.3.3.4 Participants' perceptions of how self-compassion might impact on recovery from obesity

The concept of self-compassion is emphasised in the philosophy of the Kia Ākina network. Some notions of how self-compassion might impact on the participants' recovery journey were discussed in the qualitative interviews.

Self acceptance was appreciated by participants in its ability to enable the continuation of recovery after a lapse through '*Not being so hard on yourself*'. This finding is supported by research showing the beneficial effects of self-compassion for self-efficacy (Iskender, 2009; Smeets et al., 2014).

The kindness and at the same time firmness often shown by compassionate parents toward their children (Neff, 2003a) resonated well with participants, especially those who were themselves parents, as it was found to be compassionate and at the same time motivating to push further in their weight loss efforts. This finding is in line with research on self-compassion and its ability to facilitate motivation (Neff, 2003a).

There was some ambivalence on the question of whether "consuming and having" (Sellman et al., 2013) was associated with being obese. Some participants made a connection between consuming and overeating, by describing a value shift away from consuming toward a focus on being and giving, and thus being more compassionate towards self and others. This compassionate attitude was associated with a decreased focus on eating, and therefore better success in weight loss. This finding is supported by literature on materialism. Fromm (1976) suggested that the pursuit of possessions may be a

reactionary response to insecurity. More recent evidence indicates that endorsement of materialism is linked to obesity, increased storing of food at home, and the use of food for emotional comfort. This link is thought to originate in childhood food insecurity, and to be maintained into adulthood without present day food insecurity (Allen & Wilson, 2005).

Participants also discussed the question of whether or not being self-compassionate would mean to overindulge with food. Some participants found that to be self-compassionate meant to refrain from overeating. This finding is supported by Neff et al.'s (2007a) study, which links self-compassion with greater initiative for change (Neff et al., 2007a). Others felt that being self-compassionate would give permission to overindulge with food. Some evidence suggests that self-forgiveness, which is closely related to self-compassion, may indeed be a barrier to positive health behaviour change including weight loss (Wohl et al., 2017).

Weight loss interventions might benefit from inclusion of self-compassion related components, such as self-acceptance and kindness.

The potentially causative role of endorsement of materialism to obesity might be of importance in the development of therapeutic models for obesity. The ambivalence of some participants toward a connection between consuming and overeating would suggest a role for discussions of this topic in weight loss interventions.

Similarly, given the varied perceptions of participants on the value of self-forgiveness in obesity recovery, discussion of this topic might be beneficial in weight loss interventions.

The potential benefits of these self-compassion related components on weight loss outcomes might be explored in future research.

4.4 Summary

The goal of the quantitative part of this study was to determine any significant changes in weight or self-compassion levels and to test for associations between weight change, changes in self-compassion, and overall involvement with the Kia Ākina network. The following key research questions were explored in the qualitative part of the study:

3. How do people with obesity experience their journey of recovery from obesity and what, if anything, does Kia Ākina add to this journey?
4. Do perceptions of self-compassion change during participation in Kia Ākina, and if so, how?

4.4.1 Change in weight

Mean weight had not changed significantly over the six month period measured. This result is not surprising given the low engagement participants in this study had with Kia Ākina, and the general findings that showed great variation on the participants' motivation to lose weight. This finding is in line with previous research on weight loss interventions which report modest results on average, and highlights the need for the development of improved weight loss interventions.

Potential barriers and some enablers to weight loss have been discussed in the qualitative interviews. These factors were related to the range of different motivations that were driving obesity recovery, and to barriers and enablers to weight loss identified by the participants.

The need for weight loss was perceived with varied importance among the participants. This finding is consistent with previous research on weight loss interventions and the transtheoretical model of behaviour change which considers an individual's readiness for change. There was also considerable variation in the types of motivation which included intrinsic as well as extrinsic motivation. This finding is in agreement with self-determination theory which distinguishes between these two types of motivation in the context of readiness for change. The current cultural discourse on obesity with its mixed messages regarding obesity and need for weight loss may have also contributed to the variation in motivations for weight loss among the participants of this study.

Barriers to weight loss that were identified by the study participants reflected a range of individual circumstances. Poor motivation was described as a main factor that hindered weight loss efforts. The literature on factors that affect adherence to lifestyle interventions supports this finding. The participants of this study identified some additional barriers to

weight loss, which have not been widely discussed in the existing literature. This finding highlights the very individualistic nature of the recovery journey, and the importance of interventions being adapted to individual needs of participants of weight loss interventions. The importance of motivation as a factor affecting weight loss outcomes suggests that individualised treatment models may be more successful when an individual's motivation to lose weight is taken into consideration. Further research may enhance our understanding of the interrelatedness of these factors in obesity treatment.

Some factors that might be helpful in recovery from obesity such as social support, and better nutritional knowledge were also identified by the participants of this study. These factors have also been identified in the existing literature as important in increasing success in obesity recovery. Another factor that was perceived to be helpful in weight loss by participants in this current study and in the existing literature was self-control. The value of self-control for a range of behaviours including weight loss related behaviours is generally agreed upon in the literature, albeit with some caveats with regard to the depletion effect of state self-control, and the applicability of trait self-control to diet related behaviours. Consideration of factors that might contribute to a depletion of state self-control, including the effect of addictive processes, may therefore be of value in the development of weight loss interventions. These findings highlight the need for further research on the complexity of factors associated with behaviour change to better understand their interrelatedness in the context of weight loss interventions and particularly the role that 'food addiction' may play in the treatment of obesity.

4.4.2 Change in self-compassion

Participants' levels of self-compassion as measured by Neff's (2003b) self compassion scale increased significantly. Despite low reported participation levels at Kia Ākina, it is possible that the initial Kia Ākina meeting and reading material may have contributed to a change in participants' relationship with themselves. This possibility is supported by some participants talking about how some of the concepts, that can be associated with self-compassion, made a significant impression on them early on.

It is also possible that the repeated measurement of self-compassion alongside the in depth discussion about self-compassion in the interviews may have contributed to increased awareness of self-compassion among the participants. While it is beyond the scope of this observational study to infer causal factors to its findings, future research might provide more insights into the relationships between quantitative assessments, qualitative interviews, and changing levels of self-compassion.

The concept of self-compassion and its meaning to the participants were discussed in the interviews. Three categories emerged from the discussion on how participants understood the concept of self-compassion: 'self-acceptance', 'self-care', and 'assertiveness'. A comparison of these categories with Neff's (2003a) definition of self-compassion revealed that while 'self acceptance' was associated with self-compassion by almost all of the participants, they did not seem to identify with the other two key dimensions of Neff's (2003a) definition. They did however, talk about 'self-care' and 'assertiveness' being important aspects of self-compassion for them. These aspects of self compassion did not fit clearly into any of Neff's (2003a) three dimensions of self-compassion. The construct of self-compassion that was discussed in the qualitative interviews is therefore different from the construct that was measured in the quantitative part of this study. The different cognitive functions of knowledge and understanding in everyday life and in scientific research might in part explain the discrepancy between the participants' understanding of self-compassion and Neff's (2003a) definition of this concept. This finding highlights the importance of clarifying the meanings of terms and concepts used in research and clinical practise to ensure clarity around common understandings and to reduce misunderstandings.

However, changes in self-compassion as measured by self report were noted for participants. These changes were either attributed to exposure to the various Kia Ākina components, or reported to have occurred prior to Kia Ākina involvement. This finding illustrates the multiple factors and contexts that may contribute to increased self-compassion. While self-compassion focussed components of weight loss interventions can be beneficial for some participants, others may not benefit from such interventions. The importance of inclusion of various components addressing the different needs of participants is highlighted by these findings.

Potential barriers to self-compassion were also discussed in the interviews. These were explored with regard to notions of ‘self-acceptance’ and ‘self-care’ as components of self-compassion. Social disparagement was raised as an obstacle to showing self-compassion through self-acceptance. Obstacles to showing self-compassion through self-care included feeling depressed and the traditional expectations of women to behave altruistically. Notions of self-acceptance and self-care are valid and relevant factors in obesity recovery, and awareness of their importance and potential barriers to these factors is important in the development of therapeutic models for obesity treatment.

4.4.3 Involvement with Kia Ākina

There was great variation in participants overall involvement with Kia Ākina. Different motivations for weight loss as well as for joining Kia Ākina might be contributing factors to this.

A number of barriers specific to engaging with the Kia Ākina network were identified by the participants, that were different to the more general barriers to weight loss participants described. Barriers to engaging with Kia Ākina mostly related to external factors such as logistics and communication, or were associated with the Kia Ākina network itself. This finding adds to previous literature on weight loss intervention adherence in highlighting once more the complex and individualistic nature of obesity recovery.

Some of the terminology used in the Kia Ākina philosophy was strongly contested by some of the study participants. These included the terms ‘obesity’ and ‘recovery’. Normalisation of overweight, the cultural discourse on obesity, stigmatisation of obesity and its negative association, might be contributors to the contestation of the term obesity. The participants’ understanding of recovery as a lifelong journey, its association with addiction, and de-identification with obesity as an illness may have contributed to the rejection of the term recovery. These findings emphasise the importance of acknowledging that people involved in weight loss interventions may perceive concepts and terminology used in these interventions in different ways. These may be in contrast to the way the designers of the programme intended and may impact participants willingness and ability to engage.

The concept of addictive overeating was less contested, and many participants were familiar with aspects of this. Given the effect that addictive processes have on self-control of behaviour including dieting and exercise, it might be useful to address the concept of food addiction in weight loss interventions, and to emphasise its relevance as a possible contributor to obesity.

Benefits of Kia Ākina participation were also discussed. These included emotional support derived from group membership and from the inspirational content of reading material. Educational benefits were also derived from the content of the Kia Ākina network. Accountability and the cost free aspect of Kia Ākina were valued. While not all aspects of Kia Ākina were utilised by all participants, the combination of emotional, inspirational, educational, and practical aspects seemed to be able to accommodate a range of different needs experienced by people with obesity in different stages of their recovery journey. The inclusion of different components addressing different needs may be an important factor in the utilisation of weight loss interventions.

4.4.4 Correlations between weight change, change in self-compassion, and overall participation

No significant correlations were found between weight change, change in self-compassion, and overall participation in Kia Akina. This may have been due to the smaller than expected number of participants in this study.

The potential impact of self-compassion on obesity recovery was discussed in the qualitative interviews. Aspects of self-compassion such as self-acceptance and kindness combined with firmness were found to be helpful in that they encouraged continuation of the weight loss journey even after experiences of relapse and provided the motivation to push through difficult times. As utilised by the participants in this study, it would seem that these aspects of self-compassion are helpful factors in obesity recovery especially in situations of relapse and when the going is particularly tough.

A value shift from ‘consuming and having’ towards ‘being and giving’ was considered by some participants to be helpful as they saw a connection between consuming and overeating. However, this concept was not agreed upon by all. Given the potential

causative role of endorsement of materialism in obesity, discussions of this topic may be of value in weight loss interventions. However, given the distinct dislike shown by some participants towards such a stance it is also important that any weight loss intervention consider how and where concepts as these should be placed.

The notion of self-forgiveness, which is closely related to self-compassion, was perceived by some participants as helpful after a lapse, and by others as giving permission to indulge. Awareness of the potential benefits and pitfalls of self-forgiveness may therefore be an important factor in weight loss interventions.

5 Recommendations

5.1 Need for weight loss interventions

Obesity is a major public health concern and rates of obesity are continuing to rise throughout the world. Existing literature on obesity treatment reports generally modest weight loss and weight loss maintenance results. Improvement of existing weight loss interventions and research into the further development of weight loss interventions continues to be urgently needed.

In addition, adjunctive public health measures are urgently needed in the face of relatively poor outcomes from individualistic treatment approaches. Population level approaches such as sugar taxes, the dismantling of marketing of unhealthy foods, and reducing accessibility to unhealthy foods, are important changes to promote rather than placing an over-reliance upon individually-based interventions.

5.2 Adherence to weight loss interventions

The literature on attrition in lifestyle interventions for weight loss has shown that success depends to a large extent on adherence, however, participation rates for weight loss interventions are generally reported to be low. This study adds to the existing literature in the identification of factors that may be barriers or enablers to adherence in weight loss interventions. Given the importance of adherence rates to the success of weight loss interventions, the consideration of factors that contribute to increase or decrease of adherence rates might be of value in the improvement of weight loss outcomes.

Another potential barrier to intervention adherence, which has been identified in this study and is consistent with existing literature, is the cost of the intervention itself, or of related costs. Given the high health and economic costs of obesity in New Zealand, there is an urgent need for the development of publicly funded weight loss initiatives that are evidence based, especially in low socioeconomic areas. In addition, consideration of initiatives that reduce the cost barrier to accessing healthy food may be advisable. This could include an adjustment of food taxation according to health related benefit versus

harm, or subsidies for local production of fruit and vegetables and its distribution to consumers.

5.3 Individualised weight loss interventions

One of the main themes identified in this study is the highly individualistic nature of every person's recovery journey. A range of factors with the potential to affect adherence rates have been identified in this study, adding to existing literature on adherence in weight loss interventions. Given the prominent role that adherence plays in the success of weight loss interventions, consideration of factors that may affect adherence rates might be of value in the development and improvement of existing weight loss interventions.

Members of the Kia Ākina network who utilised its various components reported a wide range of benefits, which accommodated a range of different needs of the participants according to the different stages of their recovery journey. Awareness of and response to the differing and changing needs of participants might therefore be considered as an integral part of weight loss interventions, which could include a range of options for participants to choose from.

There was considerable variation in the amount of motivation to lose weight, and in the sources of motivation among the participants of this study. Motivation was affected by competing motivational priorities and external influences. It might be useful to consider factors that affect motivation in individualised weight loss interventions, which could be designed to take participants' motivations for weight loss into account. In addition to ascertaining individual motivations at the outset of the programme, findings from this study, which have shown that motivations change over time and can be influenced by internal and external factors, suggest that programmes might also need to focus on how to harness and enhance motivation. Future research to explore the best ways for this to happen is also recommended.

5.4 Food addiction and weight loss interventions

Findings in this study showed some awareness and acceptance among the participants of the potential of food addiction as a contributing factor to obesity. The effect that addictive

processes have on self-control of behaviour including dieting and exercise was also recognised by some participants. It might therefore be useful to increase the number of weight loss interventions that seek to address food addiction and/or to increase the visibility of food addiction as a possible contributor to obesity in other weight loss interventions.

This study also revealed self-control to be an important factor in weight loss. Addictive processes affect a person's ability to exert self-control. Identification of addictive overeating might therefore be included as a useful component of weight loss interventions, so that treatment strategies can be adapted according to individual risk factors.

While trait self-control is relatively stable over time and situations, state self-control is more amenable to change, and may deplete with continuous use. Future studies might examine factors that affect state self-control and consider possibilities for their inclusion in weight loss interventions going forward.

Further research on the role that 'food addiction' may play in the treatment of obesity, its interactions with state self-control, and ways to improve the regulation of state self-control is recommended.

5.5 Self-compassion and weight loss interventions

Findings in this study indicate that aspects of self-compassion as perceived by the participants may be helpful in the recovery from obesity. Future research to explore the relationship between the various aspects of self-compassion and their effect on weight loss would be valuable, and could inform the possibility of integrating self-compassion related factors into weight loss interventions.

Potential barriers to self-compassion were explored in the interviews with regard to notions of self-acceptance and self-care as components of self-compassion. Future research exploring self-compassion related factors and their barriers in their potential for integration into weight loss interventions might be of benefit.

Changes in self-compassion, as perceived by the participants in this study, were noted and attributed to a range of different causes. The multiple factors and contexts that may

contribute to increased self-compassion, and the resulting variation in self-compassion levels among the participants of weight loss interventions, suggest variation in the need for improved self-compassion. While self-compassion focussed components may be of value in individualised weight loss interventions, the assessment of self-compassion levels at the outset would help establish which participants may likely benefit and thus receive such components.

5.6 Assessment of self-compassion as intervention

Self-compassion levels as measured in the quantitative part of the study increased significantly. Future research might provide interesting insights into the relationships between quantitative assessments, qualitative exploration, and quantitative outcomes regarding self-compassion. Consideration of such effects might be of value, so as to minimise potential impact on interpretation of treatment results, and to harness the positive therapeutic effect assessment processes may offer as part of actual full assessment and treatment regimens.

5.7 Perceptions of terminology and concepts

Some of the terminology used in the Kia Ākina philosophy, such as the terms ‘obesity’ and ‘recovery’ were strongly contested by some of the study participants. This contestation may impact on the participants’ willingness and ability to engage with the intervention. Weight loss interventions may therefore benefit from awareness and consideration of differences in perceptions with regard to the terms and concepts used, so as to minimise barriers to engagement.

The concept of self-compassion and its meaning to the participants were discussed in the interviews. While there were some similarities in notions of kindness and self-acceptance, other aspects of the participants’ understanding self-compassion were dissimilar to Neff’s (2003a) definition of this construct, which had been used for the quantitative assessment of self-compassion in this study. Clarity around common understandings of concepts used in research and clinical practise may thus be helpful in reducing misunderstandings and/or misinterpretation of results.

The potentially causative role of endorsement of materialism to obesity was acknowledged by some, but not all participants. Similarly, the notion of self-forgiveness, which is closely related to self-compassion, was by some participants perceived as helpful and by others as unhelpful. While the discussion of such topics may be of benefit in weight loss interventions, their potential for controversial interpretation warrants care in their introduction.

6 Conclusion

Obesity is a major public health concern and rates of obesity are continuing to rise throughout the world, including in New Zealand. Given the high health and economic costs of obesity, development of evidence based weight loss initiatives is essential. Lifestyle interventions to support obesity recovery are important but need to be part of a bigger picture of public health initiatives. Where lifestyle interventions are used they are likely to benefit from tailoring to better match the individual needs and motivational stance of participants, and from consideration of factors that affect adherence rates.

The current cultural discourse on acceptance versus stigmatisation of obesity likely contributes to motivational ambivalence about the benefits of losing weight, via social norm effects and confusion about health knowledge.

Common terminology used in obesity recovery interventions may be embraced or rejected by some participants, depending on preconceptions associated with these terms, with resulting impact on treatment engagement. Perhaps surprisingly, the terms ‘obesity’, and ‘recovery’ were terms frequently contested. Food addiction is a scientifically supported concept that seemed to be relatively accepted and less disputed by participants. The interaction between food addiction and self-control in the context of overeating warrants further exploration.

Self-compassion has the potential to positively impact obesity recovery, though participant preconceptions of self-compassion may be discrepant with common research and clinical conceptualisation, complicating associated assessment and intervention. Detailed assessment of self-compassion may also be a therapeutic educational intervention in itself.

Future research to provide further information about the value of these components and how they fit together is urgently needed. This study reiterates the need for continuing and concerted resource at both a research, practice and policy level to ensure that efforts to support obesity recovery are increased.

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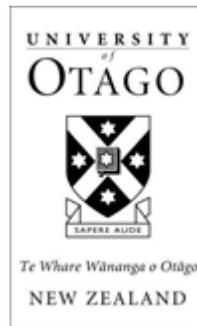
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8 Appendices

Appendix 1: Email invitation



You can't hate yourself thin: The role of self-compassion in obesity recovery

As a member of the Kia Akina network you are invited to participate in this research project, which is being conducted by Katrin Ottley as part of a Master of Health Science Thesis. This research is being supervised by Dr Ria Schroder and Professor Doug Sellman.

The purpose of the study is to explore participants' perceptions of the role Kia Akina plays in recovery from obesity, and to explore the concept of self-compassion within the context of people's recovery from obesity.

Information from this study will provide you with an opportunity to talk about your obesity recovery journey and help us improve the treatment options available for you and other people wanting to recover from obesity.

[This study has been reviewed and approved by the University of Otago Human Ethics Committee, (Health). Reference: H16/053]

This study will involve you completing some online questionnaires that will take about 15 mins to complete and you may also be invited to take part in an interview that will be 45-60 minutes in length.

This email is seeking your consent for me to pass on your contact details – name, email address and phone number to Katrin Ottley, a Masters student being supervised by Doug Sellman and myself, so that she can talk to you more about the study and give you an

opportunity to ask questions about the study. Please note, at this stage you are not giving your permission to be involved in the study you are only giving your permission to hear more about the study. Once you have talked to Katrin you can then decide whether or not you would like to be involved in the study.

If you do not consent to me passing your details on to Katrin please let me know by email, text or phone no later than [date allowing 10 days to opt out]. Please note your participation in this study is voluntary, and while we encourage you to participate, not doing so will not impact on your involvement in the Kia Akina network.

Please don't hesitate to contact me if you have any questions about this study.

With many thanks. Ria.

Dr Ria Schroder,

National Addiction Centre, Terrace House, 4 Oxford Terrace, Christchurch

Phone: 033640480, or 0800233428 or 0272017152

Email: ria.schroder@otago.ac.nz

Appendix 2: Participant Information Sheet

Locality: **Christchurch, New Zealand** Ethics committee ref.: **H16/053**

Lead investigator: **Dr Ria Schroder** Contact phone number: **03 3640480 or 0800233428**

You are invited to take part in a study on recovery from obesity. Whether or not you take part is your choice. If you don't want to take part, you don't have to give a reason, and it won't affect your involvement in the Kia Akina network. If you do want to take part now, but change your mind later, you can pull out of the study at any time.

This Participant Information Sheet will help you decide if you'd like to take part. It sets out why we are doing the study, what your participation would involve, what the benefits and risks to you might be, and what would happen after the study ends. We will go through this information with you and answer any questions you may have. You do not have to decide today whether or not you will participate in this study. Before you decide you may want to talk about the study with other people, such as family, whānau, friends, or healthcare providers. Please feel free to do this.

This document is 4 pages long, including the consent form. Please make sure you have read and understood all the pages.

WHAT IS THE PURPOSE OF THE STUDY?

The community based obesity recovery network Kia Akina (meaning “be encouraged and supported”) has been developed and piloted by the research team from the University of Otago, Christchurch.

Kia Akina members are invited to participate in this research project, which will be conducted in association with the Kia Akina network.

The purpose of the study is to explore participants' perceptions of the role Kia Akina plays in recovery from obesity, and to explore the concept of self-compassion within the context of people's recovery journey from obesity.

Information from this study will help us improve the treatment options available for people wanting to recover from obesity.

If you would like further information about this study please contact Dr Ria Schroder on ph. (03) 3640480 or 0800233428 or at ria.schroder@otago.ac.nz.

WHAT WILL MY PARTICIPATION IN THE STUDY INVOLVE?

Following initial recruitment, your contact details will be relayed to Katrin Ottley, a Master's student working with Doug and Ria at the National Addiction Centre, who will arrange for you to complete a brief online questionnaire on self-compassion. If you are not able to access the questionnaire online you will be able to complete a paper copy of the questionnaire.

Some participants will also be invited to take part in an interview. These interviews will explore your experience of participating in the Kia Akina programme, and your perceptions of self-compassion. The interviews will take approximately 1 hour of your time, and you will receive a \$20 petrol voucher as reimbursement for time and travel costs.

WHAT ARE THE POSSIBLE BENEFITS AND RISKS OF THIS STUDY?

The risks of participating in this study are minimal. But if you do feel upset as a result of participating in this study you should contact Ria or Doug and they will help you to access any support you might need.

WHO PAYS FOR THE STUDY?

This study is being conducted by Dr Ria Schroder, Prof Doug Sellman and Master's student Katrin Ottley from the University of Otago. This study has been funded by the Department of Psychological Medicine, University of Otago.

WHAT IF SOMETHING GOES WRONG?

If you have private health or life insurance, you may wish to check with your insurer that taking part in this study won't affect your cover.

WHAT ARE MY RIGHTS?

Your participation is entirely voluntary (your choice). You do not have to take part in this study and choosing not to do so you will not affect your membership in the Kia Akina network. You are free to withdraw from the study at any time without having to give a reason.

The information that you give in this study will be treated in the strictest confidence. All identifying data will be removed and any publication of results will be produced in a way as to ensure that any participant involved in the study could not be identified. After completion of the project the de-identified paper records and electronic files which represent the data from the project will be placed in secure storage and kept for at least ten years.

WHO DO I CONTACT FOR MORE INFORMATION OR IF I HAVE CONCERNS?

If you have any questions, concerns or complaints about the study at any stage, you can contact:

Dr Ria Schroder, Principal Investigator

Phone: (03) 3640480 or 0800233428

Email: ria.schroder@otago.ac.nz

Or

Professor Doug Sellman

Phone: (03) 3640480 or 0800233428

Email: doug.sellman@otago.ac.nz

If you want to talk to someone who isn't involved with the study, you can contact an independent health and disability advocate on:

Phone: 0800 555 050

Fax: 0800 2 SUPPORT (0800 2787 7678)

Email: advocacy@hdc.org.nz

You can also contact the University of Otago Human Ethics Committee Health (UOHEC-Health) that approved this study on:

Phone: 64 3 479 8956; Email: jo.farronediaz@otago.ac.nz

Appendix 3: Online questionnaire

| | |
|---|--|
|  <p>UNIVERSITY of OTAGO <small>To Whare Wānanga o Ōtago NEW ZEALAND</small></p> | <h1>National Addiction Centre</h1> <p>(Aotearoa New Zealand)</p> |
| <p>'You can't hate yourself thin' study</p> | |
| <p>Welcome to Our Survey</p> | |
| <p>Thank you for participating in our survey. Your feedback is important.</p> | |
| <p>Contained in this survey is a questionnaire that asks you various questions about yourself.</p> | |
| <p>Before starting this survey you will need to enter the participant ID that was given to you in the email that you received with the link to this survey. You will not be able to start this survey until you have entered this ID number.</p> | |
| <p>Please read each statement carefully before consenting to take part in the survey.</p> | |

1. I have read the Information Sheet concerning this study and understand the aims of this research project.
2. I have had sufficient time to talk with other people of my choice about participating in the study.
3. I confirm that I meet the criteria for participation which are explained in the Information Sheet.
4. All my questions about the project have been answered to my satisfaction, and I understand that I am free to request further information at any stage.
5. I know that my participation in the project is entirely voluntary, and that I am free to withdraw from the project at any time without disadvantage.
6. I know that as a participant I will provide self-report measures of my weight, complete some questionnaires on self-compassion and I may be invited to participate in an interview.
7. I know that this questionnaire will explore the concept of self-compassion. I know that if the line of questioning develops in such a way that I feel hesitant or uncomfortable I may decline to answer any particular question(s), and /or may withdraw from the project without disadvantage of any kind.
8. I also understand that I can choose to take part in the online questionnaire part of the study and that I can choose not to do the interview even if I am selected to do this.
9. I understand the nature and size of the risks of discomfort or harm which are explained in the Information Sheet.
10. I know that when the project is completed all personal identifying information will be removed from the paper records and electronic files which represent the data from the project, and that these will be placed in secure storage and kept for at least ten years.
11. I understand that the results of the project may be published and be available in the University of Otago Library, but that I agree that any personal identifying information will remain confidential between myself and the researchers during the study, and will not appear in any spoken or written report of the study.
12. I know that there is no remuneration offered for this study, and that no commercial use will be made of the data.

* 1. I agree to the above statements and would like to now complete online questions.

- Yes
- No



National Addiction Centre (Aotearoa New Zealand)

'You can't hate yourself thin' study

ID

Please read each statement carefully before consenting to take part in the survey.

* 2. Participant ID Number:



National Addiction Centre (Aotearoa New Zealand)

'You can't hate yourself thin' study

How I Typically Act Toward Myself in Difficult Times

The following 26 questions ask you about how you typically act toward yourself in difficult times. Please read each statement carefully before answering. In the rating scale below each question, indicate how often you behave in the stated manner.

3. I'm disapproving and judgmental about my own flaws and inadequacies.

Almost never

Almost always

4. When I'm feeling down I tend to obsess and fixate on everything that's wrong.

Almost never

Almost always

5. When things are going badly for me, I see the difficulties as part of life that everyone goes through.

Almost never

Almost always

6. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.

Almost never

Almost always

7. I try to be loving towards myself when I'm feeling emotional pain.

Almost never

Almost always

8. When I fail at something important to me I become consumed by feelings of inadequacy.

Almost never

Almost always

9. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.

Almost never

Almost always



10. When times are really difficult, I tend to be tough on myself.

Almost never

Almost always



11. When something upsets me I try to keep my emotions in balance.

Almost never

Almost always



12. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.

Almost never

Almost always



13. I'm intolerant and impatient towards those aspects of my personality I don't like.

Almost never

Almost always



14. When I'm going through a very hard time, I give myself the caring and tenderness I need.

Almost never

Almost always



15. When I'm feeling down, I tend to feel like most other people are probably happier than I am.

Almost never

Almost always



16. When something painful happens I try to take a balanced view of the situation.

Almost never

Almost always



17. I try to see my failings as part of the human condition.

Almost never

Almost always



18. When I see aspects of myself that I don't like, I get down on myself.

Almost never

Almost always



19. When I fail at something important to me I try to keep things in perspective.

Almost never

Almost always



20. When I'm really struggling, I tend to feel like other people must be having an easier time of it.

Almost never

Almost always



21. I'm kind to myself when I'm experiencing suffering.

Almost never

Almost always



22. When something upsets me I get carried away with my feelings.

Almost never

Almost always



23. I can be a bit cold-hearted towards myself when I'm experiencing suffering.

Almost never

Almost always



24. When I'm feeling down I try to approach my feelings with curiosity and openness.

Almost never

Almost always



25. I'm tolerant of my own flaws and inadequacies.

Almost never

Almost always



26. When something painful happens I tend to blow the incident out of proportion.

Almost never

Almost always



27. When I fail at something that's important to me, I tend to feel alone in my failure.

Almost never

Almost always

A horizontal scale consisting of a light gray bar with five white radio buttons spaced evenly across it, used for rating the statement above.

28. I try to be understanding and patient towards those aspects of my personality I don't like.

Almost never

Almost always

A horizontal scale consisting of a light gray bar with five white radio buttons spaced evenly across it, used for rating the statement above.



National Addiction Centre (Aotearoa New Zealand)

'You can't hate yourself thin' study

My involvement with the Kia Akina network

The following 12 questions ask you about your involvement with the Kia Akina network. Please read each statement carefully before answering. In the rating scale below each question, indicate how much you are involved with each of the Kia Akina components.

29. The Kia Akina 'Introductory' workshops

| | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|
| Daily | Weekly | Monthly | Every 3-6 months | Every 6 months or less | Never |
| <input type="radio"/> | <input type="radio"/> |

30. The Kia Akina 'Fresh Start' workshops

| | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|
| Daily | Weekly | Monthly | Every 3-6 months | Every 6 months or less | Never |
| <input type="radio"/> | <input type="radio"/> |

31. The Kia Akina network groups (weekly/fortnightly groups)

| | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|
| Daily | Weekly | Monthly | Every 3-6 months | Every 6 months or less | Never |
| <input type="radio"/> | <input type="radio"/> |

32. Reading the Kia Akina message

| | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|
| Daily | Weekly | Monthly | Every 3-6 months | Every 6 months or less | Never |
| <input type="radio"/> | <input type="radio"/> |

33. Participating in the Kia Akina weekly message discussion

| | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|
| Daily | Weekly | Monthly | Every 3-6 months | Every 6 months or less | Never |
| <input type="radio"/> | <input type="radio"/> |

34. The Kia Akina booklet

| Daily | Weekly | Monthly | Every 3-6 months | Every 6 months or less | Never |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> |

35. The Long and Happy Journey weight chart

| Daily | Weekly | Monthly | Every 3-6 months | Every 6 months or less | Never |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> |

36. Monthly weigh ins with Kia Akina staff

| Daily | Weekly | Monthly | Every 3-6 months | Every 6 months or less | Never |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> |

37. Receiving the motivational Kia Akina text messages

| Daily | Weekly | Monthly | Every 3-6 months | Every 6 months or less | Never |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> |

38. Weighing yourself regularly at home

| Daily | Weekly | Monthly | Every 3-6 months | Every 6 months or less | Never |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> |

39. Interactions with your Kia Akina buddy

| Daily | Weekly | Monthly | Every 3-6 months | Every 6 months or less | Never |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> |

40. Visiting the Kia Akina website

| Daily | Weekly | Monthly | Every 3-6 months | Every 6 months or less | Never |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> |

41. Please indicate your current weight in kilograms (kg) in the box below.

Thank you for taking the time to complete this survey. If you have any questions or comments about this survey please contact

Katrin Ottley at gilka567@student.otago.ac.nz or Ria Schroder at ria.schroder@otago.ac.nz.

Appendix 4: Consent form for interviews



UNIVERSITY
of
OTAGO
Te Whare Wānanga o Ōtago
NEW ZEALAND

National Addiction Centre (Aotearoa New Zealand)

Following signature and return to the research team this form will be stored in a secure place for ten years.

You can't hate yourself thin

Principal Investigator: Dr Ria Schroder (ria.schroder@otago.ac.nz, 033640480)

CONSENT FORM FOR INTERVIEW PARTICIPANTS

Following signature and return to the research team this form will be stored in a secure place for ten years.

Name of participant:

1. I have read the Information Sheet concerning this study and understand the aims of this research project.
2. I have had sufficient time to talk with other people of my choice about participating in the study.
3. I confirm that I meet the criteria for participation which are explained in the Information Sheet.
4. All my questions about the project have been answered to my satisfaction, and I understand that I am free to request further information at any stage.
5. I know that my participation in the project is entirely voluntary, and that I am free to withdraw from the project at any time without disadvantage.
6. I understand that my interview will be audio-recorded and a written transcript of this interview will be made. This transcript will have all identifying details removed from it. I understand that I can request a copy of the transcript of my interview.
7. I know that the interview will explore my experiences with Kia Akina and my perceptions of my obesity recovery journey and the concept of self-compassion. I know that if the line of questioning develops in such a way that I feel hesitant or uncomfortable I may decline to answer any particular question(s), and /or may withdraw from the project without disadvantage of any kind.
8. I understand the nature and size of the risks of discomfort or harm which are explained in the Information Sheet.
9. I know that when the project is completed all personal identifying information will be removed from the paper records and electronic files which represent the data from the project, and that these will be placed in secure storage and kept for at least ten years.
10. I understand that the results of the project may be published and be available in the University of Otago Library, but that I agree that any personal identifying information will remain confidential between myself and the researchers during the study, and will not appear in any spoken or written report of the study.
11. I know that there is no remuneration offered for this study, and that no commercial use | will be made of the data.

I agree to the above statements.

Signature:

Date:

Appendix 5: Interview guide

How do people with obesity experience their journey of recovery from obesity, and what, if anything, does Kia Akina add to this journey?

1st stem: The term 'recovery' is often used in Kia Akina. With regard to recovery from obesity, what does the term recovery mean for you?

Prompt: Where would you say you are at on your recovery journey?

Prompt: What are the most important things that have changed for you?

Prompt: What has not changed?

Prompt: Tell me about some of the things that you have achieved/that you have reached and/or are planning to reach during your recovery.

Prompt: What does achieving these things mean to you in terms of recovery success?

Prompt: How do you picture yourself when you have 'achieved' recovery? What does obesity recovery look like for you?

Prompt: What are some challenges and obstacles that you think might get and/or got in the way of your obesity recovery?

2nd stem: Kia Akina is an obesity recovery network aimed at long term lifestyle change. Describe your experience of being a member of Kia Akina.

Prompt: How is it different to other programmes/weight loss initiatives you have experienced? How is it the same?

- Prompt: What are the good things that come to mind when you think of Kia Akina?
- Prompt: What are the not so good things?
- Prompt: What parts of Kia Akina have you found and/or expect to be most helpful for your recovery?
- Prompt: What parts of Kia Akina have not been helpful to you/have impeded your progress?
- Prompt: Which of the things you have learned in Kia Akina do you think you will continue practising for the rest of your life, and why?

Do perceptions of self-compassion change during participation in the Kia Akina program, and if so, how?

- 1st stem:* What does the term self-compassion mean to you with regard to your obesity and your recovery from obesity?
- Prompt: What might a self-compassionate self (approach?) feel and look like to you?
- Prompt: Are there any changes you would like to see with regard to your feeling of self-compassion during your recovery, and if so, what would they look like?
- 2nd stem:* Self-compassion can be changed over time with practise. Some of the components of Kia Akina are similar to the practise of self-compassion.
- Prompt: Have you noticed changes in how compassionate you feel towards yourself since starting Kia Akina?

- Prompt: What aspects of Kia Akina do you think help you focus on self-compassion?
- Prompt: What other things could KA do to help you with self-compassion?
- Prompt: What if any changes in self-compassion have you noticed since you became involved in the KA network? Tell me about some of the things that you think might have influenced your changing feeling of self-compassion.
- Prompt: What effects if any did the changes in self-compassion have on your journey of obesity recovery?
- Prompt: Are there any further changes you would like to see with regard to your feeling of self-compassion during your recovery, and if so, what would they look like?