Weight Management in Obese Adults: The Role of Internalized Weight Stigma and Self-compassion

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Thesis Abstract

Background: Obesity is now considered to be a global epidemic, with rates of obesity continuing to rise. Despite the increase in public health messages, many obese individuals struggle to manage their weight. Moreover, obese individuals are frequently subjected to stigma, which becomes internalized and may have an impact on weight management outcomes. Interestingly, the psychological construct of self-compassion has been identified as a potential protective factor against Internalized Weight Stigma (IWS) in obese adults and has been found to be related to better weight management outcomes.

Thesis Portfolio Aims: This thesis explores the role of IWS and self-compassion during weight management in obese adults. Weight management behaviours were defined as any adaptive or maladaptive behaviours to increase, maintain or reduce weight.

Design: A systematic review and mixed-methods synthesis was conducted to explore what is currently known about the role of IWS on weight management behaviours in overweight and obese adults. Weight management behaviours were categorised into physical activity and eating behaviours. The empirical paper explored the influence of self-compassion during weight management in nine obese adults accessing NHS Tier 3 weight management services, using a qualitative constructivist Grounded Theory Lite approach.

Results: Fifteen studies met the inclusion criteria for the systematic review, of which, ten were quantitative and five were qualitative. The results from the systematic review highlighted that IWS was related to maladaptive eating behaviours and reduced engagement in physical activity. The empirical paper presents a grounded theory of self-compassion during the weight management process. Five categories were constructed within the data: relating to self, interacting with others, relating to food, difficulty managing weight and developing self-compassion.

Conclusions: IWS and self-compassion may have fundamental roles in weight management for obese adults. Findings are discussed in relation to the current literature and recommendations for future research are suggested.

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This is a moment of suffering/ *I'm having a really hard time right now*

Suffering is a part of life/ *It's not abnormal to feel this way, many people are going through similar situations*

May I be kind to myself in this moment/ *I'm here for you, it's going to be ok*

-Self-compassion break: guided meditation, *Kristin Neff*

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Chapter One: Introduction to Thesis Portfolio

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Introduction to Thesis Portfolio

This Thesis Portfolio focuses on psychological aspects of the experience of obesity. In order to set the context for the portfolio, a brief introduction to psychological constructs related to obesity and a brief overview of the current National Health Service (NHS) position on obesity in England and are provided. Two key terms, which are used throughout this thesis, are also defined.

Obesity: Stigma, Shame and Self-compassion

Global obesity rates have risen significantly over the last fifty years (World Health Organization, 2017). Due to the number of known physical health conditions associated with obesity, obesity is a serious concern for public health. A recent NHS publication reported that obesity accounted for 525,000 hospital admissions between 2015 and 2016, a 19% increase on the previous year (National Statistics, 2017). Obese adults are considered to be at significantly increased risk of developing a range of physical health conditions including Type II diabetes, asthma, sleep apnoea, metabolic syndrome, cardio-vascular disease, cancer of the colon, kidney and liver disease and hypertension. In addition to the range of physical health implications, those in the obese range are also more likely to experience mental health problems including depression, anxiety, and low self-esteem. The prevalence of mental health difficulties amongst obese adults is higher than the general population, with estimates that 20-70% of adults seeking bariatric surgery have experienced a serious mental health condition. As a result, obese individuals can experience a poorer quality of life.

Despite the global focus on reducing obesity, many people struggle to achieve and maintain weight loss. Further exploring the psychological components involved in weight management in obese adults, may allow clinicians to better support obese adults to achieve their weight management goals.

Much attention in the literature has been given to the roles of low self-esteem (Friedman, Schwartz, & Brownell, 1998), poor body image (Schwartz & Brownell, 2004), emotional eating (Canetti, Bachar, & Berry, 2002) and binge eating (Dingemans, Bruna, & Van Furth, 2002) in the development and maintenance of obesity. However, a common theme across these constructs is the experience of stigma and shame (Conradt, Dierk, & Schlumberger, 2010; Myers & Rosen, 1999). Given the pervasive nature of stigma and shame, psychological literature has started to focus on the implications of stigma and shame during weight management within the obese population.

Stigma and shame. It is now widely accepted that societal stigma has a detrimental impact on the emotional wellbeing of obese adults. With the increase in public health messages around the consequences of obesity, coupled with the political climate and public efforts to save the NHS, the media in the United Kingdom has gone as far to indicate responsibility for the NHS's financial challenges lies with the increased prevalence of 'preventable diseases' (Age UK, 2014). This dangerous media portrayal is widely considered to further contribute to a culture of obesity stigma in the United Kingdom (Flint, Hudson, & Lavallee, 2016; Hilton, Patterson, & Teyhan, 2012; Puhl & Heuer, 2010), which feeds into the western world's 'thin ideal'(Couch et al., 2016). Combined, these perceptions serve to perpetuate obesity stigma.

For many obese adults, the obesity stigma becomes internalized, eliciting high levels of shame (Durso & Latner, 2008; Luoma & Platt, 2015). Shame is a powerful and insidious negative emotion, triggered when an individual assumes personal responsibility for failing to meet a societal or personal standard. The experience of failure is then attributed to be indicative of an inherently damaged or bad self (M. Lewis, 1992, 1998). The experience of shame in the context of obesity stigma is further intensified by the perceived personal responsibility and societal beliefs about the controllability over the condition (Weiner, 1993; M. Lewis, 1998). As such, obese adults are likely to experience

high levels of shame in response to the internalized societal stigma. Further compounding the experience of stigma and shame for obese adults, is the finding that experiencing weight stigma may, ironically, negatively impact on weight management behaviours (Nolan & Eshleman, 2016). Although the experience of obesity stigma has been well researched, further research is required to explore the impact of internalized weight stigma on weight management behaviours.

Self-compassion. A range of psychological interventions developed to support obese adults with weight management, highlight changes in key constructs which may negate the impact of stigma and shame in this population and improve health behaviours (Armstrong, Mottershead, Ronksley, Hemmelgarn, & Sigal, 2010; Goss, 2011; Lillis & Kendra, 2014; Mantzios & Wilson, 2014). One construct that has received particular attention across different theoretical frameworks, is self-compassion (Neff, 2003). Although research into this area is fairly limited, self-compassion is considered to be a psychological resource for those with weight management difficulties (Hilbert et al., 2015) and has been linked to improved health-related behaviours (Rahimi-Ardabili, Reynolds, Vartanian, McLeod, & Zwar, 2017). Interventions that capitalise on self-compassion to support obese adults overcome the impact of stigma and shame are gaining traction, particularly amongst third-wave cognitive-behavioural psychological interventions (P. Gilbert, 2005; Luoma & Platt, 2015). These promising findings warrant further exploration, given the potential positive impact improving self-compassion may have on the emotional wellbeing and physical health of obese adults.

NHS Response to Obesity

Recognising the physical and mental health implications of obesity, in 2011 the British government commissioned ‘a call to action on obesity’ in England (Department of Health, 2011). Within this report, it was reported that 61.3% of all British adults were overweight or obese. Considering the extensive range of obesity related physical health

comorbidities, it was estimated that by 2050, this would equate to an NHS cost of £9.7 billion per annum. In the Five Year Forward View (National Health Service, 2014), the NHS committed to reducing obesity. This resulted in a public commitment to prioritise and 'tackle obesity' (NHS, 2017), improve services for those who needed additional support with weight management and the introduction of preventative public health strategies to reduce obesity.

Commissioning of NHS weight management services. In line with the Five Year Forward View, the NHS Commissioning Board proposed a four-tier pathway for weight management services to manage obesity. Services in line with these recommendations were commissioned by the NHS in 2014 (National Institute for Health and Clinical Excellence, 2014; Royal College of Surgeons England, 2014) and now comprise the standard care pathway for the assessment and management of obesity.

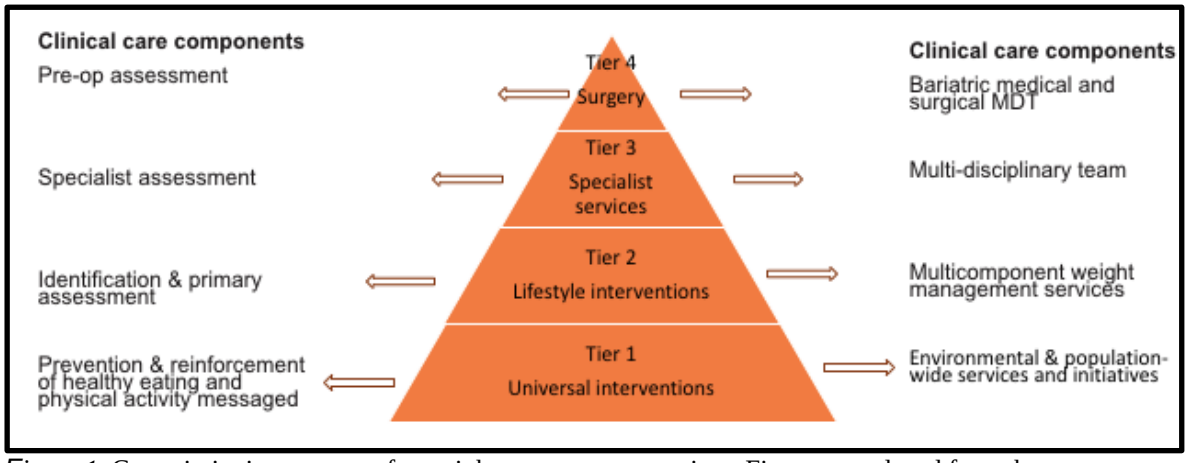

Figure 1. Commissioning structure for weight management services. Figure reproduced from the Commissioning Guide for Weight Assessment and Management Clinics (The Royal College of Surgeons England, 2014)

Tier 3 Specialist Complex Weight Management Services (CWMS). CWMS's are commissioned to provide weight management support to adults with a Body Mass Index (BMI) over 40 or 35 with obesity related physical health comorbidities. Patients who meet the criteria for a CWMS often have a complex physical and psychological presentation, requiring specialist support and intervention. Multi-disciplinary teams should include bariatric physicians, clinical psychologists, specialist nurses, specialist dieticians

and liaison psychiatry to reflect the complexity of the presentations (Royal College of Surgeons England, 2014).

To date no information has been published regarding the delivery and efficacy of CWMS's. Furthermore, due to the relatively new inception of CWMS's, few psychological research studies have been carried out within Tier 3 services. Given the range of physical and mental health comorbidities presented, research into the experience of weight management in this population is of particular interest considering how much potential contact this population may have with the NHS.

CWMS overview. Following the initial assessment in the CWMS, patients are placed on the waiting list to begin treatment. The service contains two treatment pathways. Patients are allocated to either an 'intensive milk' pathway (Very Low Energy Diet; Royal College of Surgeons England, 2014) or the supportive diet pathway (solid food diet) to begin weight loss treatment. Choice over pathway is determined by physical health conditions, clinician recommendation and patient choice. Irrespective of pathway, patients are closely monitored within the service, with regular dietetics, nursing and medical appointments. Following completion of the aforementioned pathways, patients may choose to continue their weight management with diet and lifestyle changes or request a referral for bariatric surgery.

Thesis Aims

Given the NHS focus on reducing obesity and the negative impact of obesity on emotional wellbeing, it is imperative that psychological constructs related to obesity are further investigated. This thesis aims to further explore two psychological constructs related to obesity: internalized weight stigma and self-compassion, and to explore their relationship to weight management behaviours.

Epistemological and ontological positioning of the thesis portfolio. This Thesis Portfolio approaches the roles of IWS and self-compassion in weight management from

two philosophical paradigms: constructionism and critical realism. The systematic review takes a critical realist position (epistemological contextualism and ontological critical realism) as it explores, evaluates and ultimately integrates quantitative and qualitative literature in order to answer the research question 'What is known about IWS and Weight Management Behaviours in Overweight and Obese Adults'. The reviewed papers consider IWS from perspectives that range across the epistemological spectrum of positivist to social constructionist.

The contextualist epistemological position poses that contextual factors shape what can be said to be known about the world. Whilst acknowledging and retaining the original epistemological and ontological positions of the included papers through a segregated design, the critical realist position of the systematic review is maintained throughout the design and conduct of the review, by recognising and engaging with the multiple contexts, in order to make conclusions regarding the research question, drawing upon all available studies.

The empirical paper takes a constructivist position (epistemological subjectivism and ontological critical realism) as it explores the phenomena of self-compassion in the context of weight management in obese adults through the methodology of Constructivist Grounded Theory Lite (Charmaz, 2006; Braun & Clarke, 2014). The subjectivist epistemological position acknowledges that meanings are co-created through the subjective interaction between researcher and participant. As such, the resultant constructionist grounded theory is an "interpretative portrayal" of the world (Charmaz, 2006, p.10).

The bridging together of the two epistemological positions (contextualism and subjectivist positions) begins with the acknowledgement that the underpinning ontology of both paradigms is shared, anchoring the epistemological journey throughout the Thesis Portfolio. The critical realism ontological position opines that there is "a real and knowledgeable world that sits behind the subjective and socially-located knowledge"

(Braun & Clarke, p. 27). Critical realism states that as such, researchers are only able to partially access this reality.

The challenges, tensions and limitations of moving between the contrasting epistemological positions within the philosophical paradigms of the systematic review and empirical paper during the development, conduct and write up of the Thesis Portfolio are critically discussed within the Discussion and Critical Evaluation chapter.

Overview of Thesis Portfolio

Chapter Two: Systematic Review. Chapter two presents a systematic review and mixed-methods synthesis. In light of the increased focus on societal stigma around obesity, the synthesis aimed to review the literature surrounding the role of internalized weight stigma on weight management behaviours. Fifteen studies met the inclusion criteria for the review. Narrative synthesis was conducted on the quantitative studies, with a thematic synthesis completed on the qualitative studies. The two syntheses are brought together in an integrative synthesis which uses the qualitative data to interrogate the quantitative data. Using this robust method, gaps in the evidence base are identified and recommendations for future research are proposed.

Chapter Three: Empirical Paper. Subsequently an empirical study was completed on the construct of self-compassion within the obese population. Chapter three presents a constructivist Grounded Theory Lite study exploring how self-compassion influences the weight management experience. Nine participants were recruited from an NHS CWMS. Semi-structured interviews were conducted and five categories were identified within the data. A diagrammatic representation of the grounded theory is presented.

Chapter Four: Extended Methodology and Design. Chapter four provides an extended methodology section. The chapter provides a detailed description of the

Grounded Theory Lite approach, with a focus on the transcription process, data management, memos, reflections on researcher position and the reflexive diary.

Chapter Five: Discussion and Critical Evaluation. A discussion and critical evaluation of the Thesis Portfolio brings together the findings of the empirical project and systematic review. The chapter considers the Thesis Portfolio in relation to the evidence base and critically appraises the Thesis Portfolio quality and rigor. Reflections on the research process are presented.

Key Terms

Throughout this Thesis Portfolio two key terms are used. These key terms are defined below.

Body Mass Index. The Body Mass Index (BMI) is a mathematical formula for measuring body fat based on a person's height to weight ratio (World Health Organisation, 2017). The formula provides a numerical score which corresponds to weight brackets. A person with a BMI under 18.5 is considered to be underweight. A person with a BMI between 18.5 and 24.9 is considered to be within the normal weight range. A BMI of 25-29.9 is classified as overweight. BMI scores of 30 and obese indicate obesity. Obesity has been further categorised into three grades in order to provide a more accurate description of a person's level of body fat. Grade I obesity is defined as a BMI between 30- 34.9. Grade II obesity is considered to a BMI between 35- 39.9. Grade III obesity is a BMI score over 40 (National Health Service, 2017). BMI is now considered the universal way to assess and convey a person's body fat. However, the BMI calculation has been controversial. BMI is considered a rudimentary measure, as it does not take into consideration muscle mass, particularly as muscle is denser than fat, therefore weighs more. Therefore, those with significant muscle mass may be inaccurately considered to be overweight. As such, the NHS recommends using BMI in conjunction with waist

circumference measurement to more accurately measure excess fat (National Health Service, 2016).

Weight management behaviours. For the purpose of this thesis weight management behaviours are defined as any changes to diet and exercise in order to increase, reduce or maintain weight. This includes both adaptive and maladaptive behaviours, that may be indicative of eating psychopathology (Mulgrew, Kannis-Dymand, Hughes, Carter, & Kaye, 2016).

Chapter Two: Systematic Review

Prepared for submission to the journal Body Image.

Although the journal does not have specific guidelines regarding paper length or word count, the journal requests that review paper submissions are kept under 35 pages long (see appendix A for author guidelines).

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Internalized Weight Stigma and Weight Management Behaviours: A Mixed-methods Synthesis

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Conflict of Interest Statement

Conflicts of Interest: None

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Abstract

Internalized Weight Stigma amongst overweight and obese adults is widely acknowledged to have a negative impact on emotional wellbeing. However, it is unclear whether Internalized Weight Stigma impacts on weight management. From a critical realist position, a systematic review and mixed-methods synthesis were conducted, finding fifteen studies that explored Internalized Weight Stigma and weight management behaviours (defined as eating behaviours and physical activity). The review highlighted that current literature surrounding Internalized Weight Stigma and weight management behaviours is highly heterogenous and limited. From the reviewed papers, tentative evidence indicates Internalized Weight Stigma is related to poorer weight management behaviours. In the quantitative literature, participants reporting high levels of Internalized Weight Stigma engaged in lower levels of physical activity and higher levels of maladaptive eating behaviour. The qualitative literature explored how Internalized Weight Stigma was experienced by overweight and obese adults, describing negative sense of self, negative experiences of weight management, social exclusion and poor quality of life. Gaps in the evidence base and limitations of the systematic review are discussed. Recommendations for future research are made.

Keywords: Internalized Weight Stigma, Obesity, Mixed-methods synthesis, Weight Management

Introduction

Recent estimates indicate that 63% of British adults are overweight or obese, and it is suggested this number is continuing to rise (Baker, 2017; National Health Service, 2017). Excess body fat in adults is classified using the Body Mass Index (BMI). Adults with a BMI between 25.0- 29.9 are considered to be overweight, whilst a BMI greater than 30.0 places adults within the obese range (World Health Organization, 2017).

However, despite the increasing prevalence of obesity in the United Kingdom, stereotypes of overweight and obese adults remain prevalent within the work place, amongst medical professionals and mainstream media (I. Brown, Thompson, Tod, & Jones, 2006; Flint, Cadek, et al., 2016; Flint, Hudson, et al., 2016). It is well documented within existing literature that as a result of these stereotypes, overweight and obese individuals experience high levels of weight related stigma within their daily lives (Puhl & Brownell, 2006), which can have a significant impact on the emotional wellbeing of overweight and obese adults.

Essential to understanding the impact of weight stigma is the wealth of qualitative literature, which emphasises the unrelenting nature of experiencing weight stigma in daily life (S. Lewis et al., 2010; Malterud & Ulriksen, 2011;Depierre & Puhl, 2012). Weight stigma is experienced from a range of sources (S. Lewis et al., 2011) including direct stigma (i.e. hurtful comments from others), environmental stigma (i.e. clothing sizes, narrow aeroplane seats and weight-limited exercise equipment) and indirect stigma (i.e. fear of humiliation in restaurants and media messages regarding the 'thin ideal'). Parallels have been drawn between the prevalence and overtness of societal stigma towards overweight and obese adults and other highly-stigmatized populations (Ebneter & Latner, 2013; Hatzenbuehler, Phelan, & Link, 2013; Puhl & Brownell, 2001; Zwickert & Rieger, 2013).

Continuous experiences of weight stigma can lead to these stereotypes becoming internalized by the overweight or obese individual. Internalized Weight Stigma (IWS) is defined as when an overweight/obese person believes weight-based stereotypes about themselves (Durso & Latner, 2008). Corrigan, Larson, & Rüsch (2009) proposed the 'why try' model, which depicts the process and outcomes of internalized stigma. Within the model, Corrigan et al. emphasize that it is the application of the societal attitudes to the self, which can have detrimental impact on the stigmatized individuals wellbeing, resulting in a 'why try' effect. The 'why try' effect describes how internalized stigma has a significant impact on the individuals self-efficacy, which can lead to the individual engaging in a range of behaviours that are incongruent to their life ambitions. In line with the 'why try' model, recent research has suggested that experiences of weight stigma can have an adverse impact on eating behaviours, exercise and weight loss within the overweight and obese adult populations (Major, Hunger, Bunyan, & Miller, 2014; Nolan & Eshleman, 2016; Puhl & Brownell, 2006).

In order to further understand the psychological processes of IWS, models specific to the maintenance of IWS have been posed (Ratcliffe & Ellison, 2015; Tomiyama, 2014). Central to these models is the experience of shame, experienced by the overweight or obese individual. The role of shame may be particularly important in the case of weight related stigma, as overweight and obese individuals have been found to be more sensitive to being triggered by socially shaming experiences than 'normal weight' controls (Westermann, Rief, Euteneuer, & Kohlmann, 2015). Shame is a powerful, uniquely social emotion, which is triggered in response to negative appraisal from the self or others, during which the self is perceived as 'bad' (P. Gilbert & Andrews, 1998). The experience of shame is so intolerable that in order to avoid the shame affect, strategies to avoid or defend against shame are utilised (Nathanson, 1997). This can include passive interpersonal routes such as social withdrawal and avoidance or active interpersonal routes including anger and

aggression (Tangney, Wagner, Hill-Barlow, Marschall, & Gramzow, 1996). Experiencing shame in the context of weight stigmatizing experiences is considered to precipitate and perpetuate the cognitive and incongruous behavioural weight management responses to IWS. Therefore, shame may play an important role in understanding the behavioural responses to IWS.

Current Paper

Understanding the influence of IWS on weight management behaviours remains crucial for the development of appropriate treatment to support overweight and obese adults with weight management. To date, there has been no systematic review of the role of IWS on weight management behaviours in overweight and obese adults. Furthermore, the qualitative literature focussing on IWS appears to have received comparatively limited attention. Given the subjective nature of the experience of IWS, equal attention should be given to both the qualitative and quantitative literature in order to develop a rich understanding of the construct. This review paper aims to address this gap.

Review Questions

The following review question has been posed:

1. What is known about IWS and weight management behaviours in overweight and obese adults?

Sub-review questions:

1. What is the role of IWS on weight management behaviours in overweight and obese adults?
2. How do overweight and obese adults experience IWS and weight management?

Materials and Method

Search Design

For the purpose of the current paper, the term ‘weight management’ relates to any behaviour that contributes to weight maintenance, loss or gain i.e. eating behaviours and

physical activity/exercise. Due to the idiosyncratic nature of the phenomena of IWS, it was considered that the inclusion of both quantitative and qualitative literature would be most appropriate to answer the review question. Therefore, a mixed-method synthesis method with a segregated design (Sandelowski, Voils, & Barroso, 2006) was utilised in the current paper. Mixed-method syntheses are regularly used within health, education and policy development fields, with the qualitative synthesis component often used to provide context to the quantitative literature (Harden, 2010). The quantitative and qualitative literature are asked different questions, the results of which are brought together to answer the overall review question.

Whilst there is a general consensus on methods of quantitative synthesis, there remains debate about the most appropriate method of synthesising qualitative literature (Barnett-Page & Thomas, 2009). Given the exploratory nature of the review question, a thematic synthesis methodology was adopted (Thomas & Harden, 2008).

Eligibility Criteria

Eligible studies were required to explore IWS and weight management behaviours in overweight and obese adults. The PICOS framework (Centre for Reviews and Dissemination, 2009) was applied to identify eligible studies (see Table 1). Scoping searches highlighted that findings related to IWS were frequently treated as a secondary outcome. As such, articles that dealt totally or partially with IWS within overweight and obese adults were included. This was particularly relevant for qualitative articles where evidence of IWS was present, which although not addressed within the results, was briefly commented on in the discussion. An additional inclusion criterion was applied to qualitative articles to address this. Qualitative articles were excluded if 'internalized stigma' or 'shame' were not explicitly discussed within a theme included in the findings.

Articles that considered participants with a BMI lower than 25 to be overweight/obese were excluded from the current study. Studies that controlled for BMI,

deeming extraction of the overweight/obese group data not possible, were not eligible for inclusion.

Table 1
PICOS framework for search strategy

PICOS elements	
Population	Adults aged 18 and above with a BMI >25
Interest/Intervention	Internalized weight related stigma/ bias
Context	Inpatient, outpatients, community samples
Outcome	Obesity, weight loss, BMI, exercise frequency, exercise intensity, eating behaviours
Study Design	Any

Search Strategy

To identify relevant literature, a search of the electronic databases MEDLINE, PsychINFO, PSYNDEX, NHS Evidence, SCOPUS was conducted. Grey literature was searched using EThOS and PROQuest databases of unpublished theses. Reference lists of relevant articles were hand-searched. Combinations of the following search terms were used in AND combinations ‘adult’, ‘obese’ ‘obesity’ ‘overweight’, ‘internalized’ ‘self’ ‘stigma’ ‘bias’ ‘attitude’ ‘experience’. The above search terms were combined with the following search terms in or AND/OR combinations ‘diet’, ‘weight loss’, ‘weight maintenance’, ‘eating’, exercise’, ‘physical activity’ (see Appendix B).

The search period 2007- 2017 was applied, in line with when the IWS phenomenon began to generate significant interest amongst researchers. Database searches were conducted in June 2017, resulting in included papers spanning nine years and six months.

Database and search engine searches yielded 998 potential articles. Article titles were screened to remove obviously irrelevant articles. Duplicates were removed and abstracts reviewed to identify articles that appeared to meet the inclusion criteria, leaving 44 papers eligible for full review (see Figure 2). Fifteen articles were eligible for inclusion in this review, of which, ten were quantitative and five qualitative.

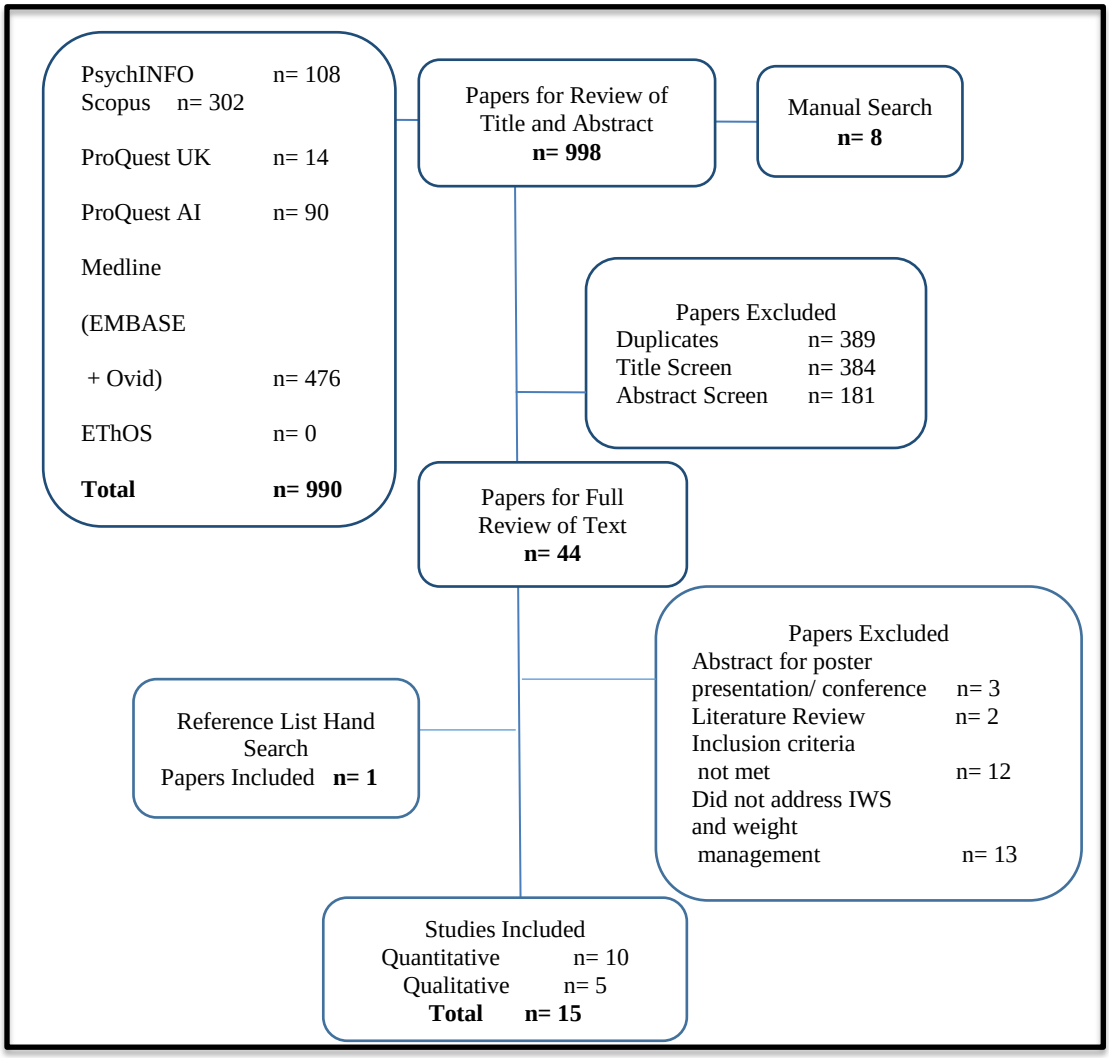

Figure 2. PRISM diagram of search strategy

Quality Appraisal

Quality of the included studies was assessed using tools relevant to their methodology. Quantitative literature was assessed using the Quality Assessment Tool For Quantitative Studies (QATQS; Effective Public Health Practice, 1998a). The QATQS rates study quality against six components. Papers are given an overall rating of strong, moderate or weak. Moderate ratings were awarded when one component had a rating of weak. Studies that received a rating of weak on two or more criteria are given an overall rating of weak (Effective Public Health Practice, 1998b). The QATQS is widely used to rate the quality of health related studies, therefore was deemed the most appropriate tool.

Qualitative literature was appraised using the Critical Appraisal Skills Programme Qualitative Research Checklist (CASP; Critical Appraisal Skills Program, 2014). The CASP checklist consists of ten questions that comprehensively guide the user to consider the quality of a study's research question, methodology, data analysis, findings and conclusions. CASP advises against applying a scoring system to the tool and encourages the user to take a holistic approach to appraisal when rating the overall quality of the study.

Process of Data Synthesis

Figure 3 displays the process of the mixed methods synthesis.

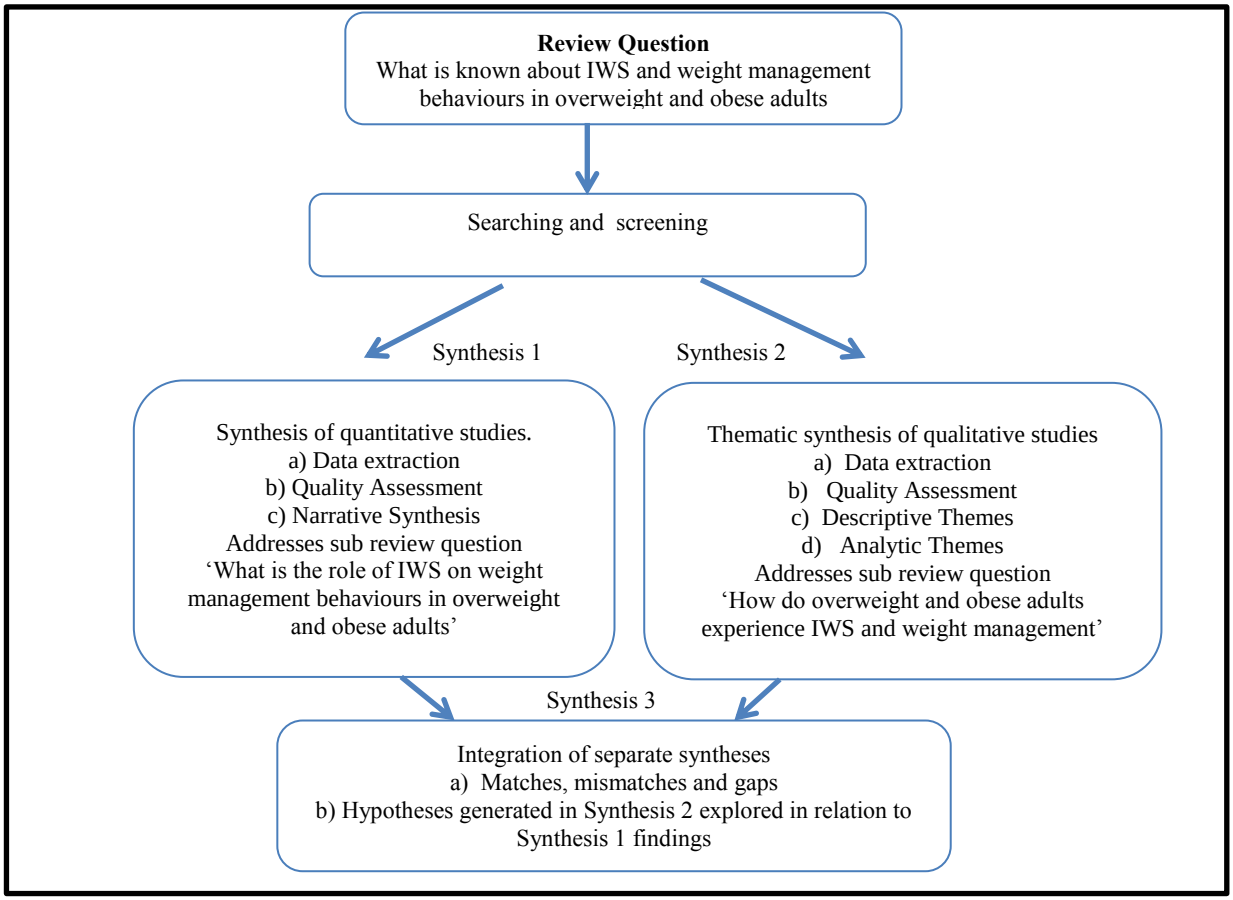

Figure 3. Mixed-methods synthesis process

Quantitative synthesis. Meta-analysis of quantitative studies is encouraged where appropriate (Thomas & Harden, 2008). However due to the heterogeneity of the included studies, meta-analysis was not possible. Therefore, a narrative approach to synthesis was used for quantitative studies. Data related to IWS and weight management behaviours within the studies was extracted. In order to operationalize the term 'weight management

behaviours', quantitative papers were categorised and synthesised by studies that address the behavioural outcomes 'eating behaviours' and 'physical activity' (Ryan, 2013). Similarities, differences and patterns in findings are presented and summarized (Boland, Cherry, & Dickson, 2014).

Qualitative synthesis. Due to the heterogeneity of qualitative papers, only the relevant theme that directly referred to 'IWS' or 'shame' from the original article was extracted and included in the thematic synthesis. Thematic Synthesis involves three stages: coding text, developing descriptive themes and generating analytic themes (Thomas & Harden, 2008). The qualitative synthesis was conducted using NVivo computer software. Once relevant themes were extracted from eligible sources, inductive line-by-line coding was used to generate 178 initial codes. Initial codes were systematically grouped to reveal ten descriptive themes, closely related to the original article data. The next step of developing analytic themes requires an element of interpretation, whereby the descriptive themes undergo thematic analysis within the context of the research question (Harden & Thomas, 2010). Descriptive themes were considered conceptually and relationally, to develop four analytical themes, presented as statements, in answer to the research question.

Integrative synthesis. An integrative synthesis was created from the syntheses of the quantitative and qualitative data. The analytic themes were developed into hypothetical testable hypotheses that were used to explore and "interrogate" the quantitative data (Harden, 2010, p. 6). The analytic theme statements present different aspects of IWS and hypothesise its impact on weight management behaviours. By evaluating whether these aspects have been explored within the quantitative literature, the depth that IWS and weight management behaviours have been explored is appraised.

Results

Data from the 15 included articles were extracted and are presented in Tables 2-4. In line with mixed-method synthesis methodology, the findings from the quantitative and qualitative studies will first be synthesised independently then integrated.

Quantitative Synthesis

Study characteristics. All studies included in the quantitative synthesis were published articles. Eight studies were conducted in the United States of America, with two studies conducted in Germany. Studies utilised a range of samples including participants in weight loss programmes, community samples and pre-bariatric surgery samples. As such, the studies are relatively heterogeneous. Participants were largely female, making up 84.5% of the sample, across all studies within the review. The most commonly used tool to measure IWS within the studies was the Weight Bias Internalisation Scale (WBIS; Durso & Latner, 2008).

Study quality. Two studies within the review utilized a Randomized Control Trial design, with the remaining eight utilizing a cross sectional design. As such, study design of the reviewed studies was commonly the weakest component. Six studies received Global QATQS scores of 'moderate', with four studies receiving a score of 'weak'(see Table 2). For a detailed breakdown of QATQS quality scoring, see Appendix C.

Physical activity. Three studies explored the relationship between IWS and physical activity. In a sample of 177 overweight and obese women Pearl, Puhl, & Dovidio (2015) found higher IWS predicted reduced levels of exercise behaviour. Furthermore, IWS was significantly negatively correlated with reduced exercise self-efficacy and exercise motivation. Interestingly, IWS mediated the relationship between Weight Stigma Experiences and current exercise behaviour.

Hübner et al. (2015) supported these results, finding IWS mediates the relationship between General Self-Efficacy and moderate-intense and vigorous- intense physical activity in a sample of pre-bariatric surgery patients.

In a Randomized Control Trial of a 'healthy living programme' of 80 participants, Mensinger and Meadows (2017) found that the relationship between 'healthy living programme' and engagement in moderate intensity physical activity was moderated by IWS. Within the trial, physical activity occurred mostly in participants with low IWS, who significantly increased their engagement in physical activity over the course of the trial. Conversely, participants with high IWS did not demonstrate any significant change in their engagement in physical activity. Within the mediation model, participants who reported improvement in levels of IWS over the course of the programme, also reported increased enjoyment of physical activity, which explained the relationship between programme type and engagement in moderate intensity physical activity. Together, these studies suggest that IWS may play a role in moderating and mediating physical activity in overweight and obese adults.

Eating behaviours. Seven studies examined the relationship between IWS and eating behaviours. Namely, binge eating behaviours, intuitive eating and eating disorder psychopathology.

Binge eating. Four studies utilised a cross-sectional correlational design to analyse the relationship between IWS and binge eating. In a community sample, Puhl, Moss-Racusin, & Schwartz (2007) found that participants who believed weight-related stigma statements were true, reported more frequent binge episodes. When IWS was measured using the WBIS, these findings have been further supported
(Carels et al., 2013; Carels et al., 2010). However, in samples of adults who met the diagnostic criteria for Binge Eating Disorder, IWS did not significantly correlate with binge episodes (Durso et al., 2012; Pearl, White, & Grilo, 2014).

Table 2

Key findings of quantitative research examining associations between Internalized Weight Stigma and weight management behaviours

Author (year); Country	Weight Management Behaviour	Sample Size (% Female)	Sample Type	Study Design	Key Measures of Interest	Main findings:	Global QATQS Score
Puhl, Moss, Racusin and Schwartz (2007) *United States of America*	Eating Behaviour	1013 participants (100%)	Community	Cross-sectional	Myers and Rosen's Stigmatizing Situations Inventory; Myers and Rosen's Coping Responses Inventory; Beck Depression Inventory; Attitudes Toward Obese Persons Scale; Questionnaire on Eating and Weight Patterns- Revised; Open ended questions regarding internalization	Participants who believed stereotypes to be true were not more likely to have Binge Eating Disorder. Participants who reported more frequent binges per week reported they believed stereotypes to be true. Participants who reported beliefs that stereotypes were true were more likely to cope with stigma by refusing to diet compared with those who reported stereotypes to be false or sometimes true. Depression scores were not found to be different in those who believed stereotypes to be true.	Moderate
Carels et al. (2010) *United States of America*	Eating Behaviour	54 participants (81.8%)	Community-Weight Loss Programme	Cross-sectional	Center for Epidemiological Studies-Depression; The Multidimensional Body Self-Relations Questionnaire; The Weight Bias Internalization Scale; The Obese Persons Trait Survey; The Binge Eating Scale; Implicit Associations Test	Participants demonstrated significant implicit, explicit, and internalized weight stigma. Higher baseline weight was associated with greater IWS but not explicit or implicit bias. Greater IWS was associated with greater depression, poorer body image, and increased binge eating.	Moderate
Durso et al., (2012) *United States of America*	Eating Behaviour	100 (65%)	Clinical-Patients with a Binge Eating Disorder Diagnosis	Cross-Sectional	Weight Bias Internalization Scale; Fat Phobia Scale- Short Form; Beck Depression Inventory –II; Eating Disorder Examination; Objective Binges	IWS was not significantly correlated with frequency of binge eating. IWS was significantly correlated with Global EDE-Q Scores. Depression symptoms significantly correlated with IWS.	Weak
Carels et al., (2013)	Eating Behaviour	62 participants taking part in a	Community-Weight Loss	Cross-Sectional	Weight Bias Internalization Scale; The Obese person Trait Survey; The Centre for	IWS was positively related to binge eating and depression.	Moderate

United States of America		behavioural weight loss program. (79.1%)	Programme		Epidemiological Studies- Depression scale; The Binge Eating Scale		
Pearl, White and Grilo (2014) *United States of America*	Eating Behaviour	255 participants (71%)	Clinical- Patients with a Binge Eating Disorder Diagnosis	Cross-Sectional	Weight Bias Internalization Scale; Beck Depression Inventory-II; Short-Form 36 Health Survey	Neither BMI nor Binge Eating Disorder symptom severity significantly correlate with IWS. IWS negatively predicted ratings of physical health and mental health, indicating that more IWS was associated with poorer self-reported health. Higher Binge Eating Disorder symptoms severity and higher IWS predicted worse self-reported health. Binge Eating Disorder symptom severity did not significantly impact the relationship between IWS and health. Depression mediated the relationship between IWS and physical health.	Moderate
Baldofski et al., (2016) *Germany*	Eating Behaviour	240 participants (68.75%)	Clinical- Pre-bariatric Surgery Patients	Cross-Sectional	Weight Bias Internalization Scale; Difficulties in Emotional Regulation Scale; Eating Disorder Examination Questionnaire; Yale Food Addiction Scale; Dutch Eating Behaviour Questionnaire-Emotional Eating; Eating in the Absence of Hunger Questionnaire	Emotion dysregulation fully mediated the relationship between IWS and Emotional eating and Eating in the absence of hunger. IWS directly positively predicted eating disorder psychopathology and food addiction symptoms.	Weak
Mensinger, Calogero and Tylka (2016) *United States of America*	Eating Behaviour	80 participants (100%)	Community- Weight Loss Programme	Randomized Control Trial	Weight Bias Internalization Scale; Eating Disorder Examination; Intuitive Eating Scale	Participants with high IWS did not show any improvements in disordered eating or intuitive eating following weight loss intervention. Participants with low IWS showed significant reductions in disordered eating and improvements in intuitive eating following weight loss intervention.	Weak

Pearl, Puhl and Dovido (2015) *United States of America*	Physical Activity	177 participants (100%)	Community-Weight Loss Programme	Cross-Sectional	Weight Bias Internalization Scale - Modified; Godin Leisure-Time Exercise Questionnaire; The Self-Efficacy to Regulate Exercise Scale; Fat Phobia Scale; Beliefs About Obese Persons Scale	IWS predicted exercise motivation, self-efficacy, fat phobia, and weight controllability beliefs. IWS scores predicted lower levels of exercise. IWS mediated the relationship between Weight Stigma Experiences and Current Exercise Behaviour.	Moderate
Hübner et al. (2015) *Germany*	Physical Activity	179 participants (67.6%)	Clinical-Pre-bariatric Surgery patients	Cross-Sectional	The General Self-Efficacy Scale; The Weight Bias Internalization Scale; 9-item short-form of the International Physical Activity Questionnaire	Lower general self-efficacy predicted greater IWS, which predicted a smaller amount of walking, moderate-intense physical activity, and vigorous-intense physical activity. IWS mediated the relationship between General Self-efficacy and physical activity.	Weak
Mensinger and Meadows (2017) *United States of America*	Physical Activity	80 participants (100%)	Community-Weight loss Programme	Randomized Control Trial	Weight Bias Internalization Scale; Two items from the health behaviours subscale of the Red Lotus Quality of Life questionnaire	Participants low in IWS demonstrated a positive effect on engagement in moderate intensity physical activity during the 'healthy living' intervention. Participants who were high in IWS did not respond as well to weight loss intervention (moderate intensity physical activity) as those who were low in IWS. IWS mediated the relationship between the 'healthy living' programme and change in moderate intensity physical activity engagement.	Moderate

Eating disorder psychopathology and intuitive eating. In three studies (Durso et al., 2012; Baldofski et al., 2016; Mensinger, Calogero, & Tylka, 2016), the Eating Disorder Examination (EDE-Q; Fairburn & Beglin, 1994) was used to assess the relationship between global eating disorder psychopathology and IWS in samples of overweight and obese adults. In all three studies, global EDE-Q scores were significantly positively correlated to IWS. In their randomized control trial, Mensinger et al. found that, irrespective of the trial arm, participants with low IWS reported reduced eating psychopathology both six and 24 months post a weight management intervention. However, participants high in IWS did not show any improvements in EDE-Q scores at either six or 24-month time points. Furthermore, participants with low levels of IWS reported significantly improved intuitive eating. In contrast, those with high levels of IWS did not indicate improvements in intuitive eating. These preliminary findings may tentatively indicate relationship between IWS and maladaptive eating in treatment-seeking overweight and obese adults.

IWS and emotional wellbeing. Measures of emotional wellbeing were used in six studies. Four studies reported on the relationship between IWS and depression in the context of disordered eating behaviours (Carels et al., 2013; Carels et al, 2010; Durso et al., 2012; Pearl et al., 2014). Pearl et al. reported that depressive symptoms mediated the relationship between IWS and physical functioning, bodily pain, general health, vitality, social functioning and mental health. These studies show a significant positive relationship between IWS and depression. However, specific analyses were not conducted to establish the relationship between IWS, depression and eating behaviours. Conversely, Puhl et al. (2007) commented on depression scores within their sample. There was no reported difference between depression scores in those who described IWS (believed stereotypes to be true) and those who did not. Using a mediation model, Baldofski et al. (2016) found that in a sample of pre-bariatric surgery patients, emotional dysregulation fully mediated the

relationship between IWS and a number of maladaptive eating behaviours. Although the evidence is limited, these studies may suggest that there may be a relationship between emotional wellbeing IWS and eating behaviours.

Summary of quantitative results. The review of quantitative papers aimed to address the question 'What is the role of IWS on weight management behaviours in overweight and obese adults?'. Due to the heterogeneity of the articles both across and within subcategories (Physical Activity and Eating Behaviours) it was not considered appropriate to synthesise the data within a meta-analysis. The highly heterogeneous nature of the literature prevents any strong conclusions being drawn. However, this synthesis highlights a small body of evidence that suggests IWS may be positively related to maladaptive eating behaviours, binge eating (in community samples) and lower levels of physical activity. IWS can act as both a moderator and mediator to weight management behaviours in overweight and obese adults. Furthermore, there is tentative evidence to suggest a relationship between emotional wellbeing and IWS within in the context of disordered eating.

Qualitative Synthesis

For a detailed breakdown of study quality scoring and study data, see Tables 3 and 4.

Study characteristics. Qualitative articles included in this review were considerably heterogeneous. The studies were conducted internationally (Australia, Saudi Arabia, United Kingdom, United States of America, with one international study), with the number of participants ranging from seven to 141. Semi-structured interviews were used within all studies, however the methodology of collecting data varied, from face to face interviews, telephone interviews and internet video calls (Skype). In terms of data analysis, two studies used a thematic approach. Interpretive Phenomenological Analysis, Grounded Theory and Framework Analysis were used by the remaining studies. One study

(Whetstone, 2015) within the qualitative synthesis was found within the grey literature, however the remaining four articles are published.

Study quality. Assessing the quality of the qualitative papers revealed general themes of weaknesses in recruitment strategy, impact of interviewer relationship on data and rigor of data analysis. These areas received little or no attention in the resulting papers.

Table 3
Quality appraisal for qualitative studies using the Critical Appraisal Skills Programme (CASP)

CASP Criteria	S. Lewis et al., 2011	Dickins et al., 2011	Alqout and Reynolds, 2014	Homer et al., 2015	Whetstone, 2015
1. Was there a clear statement of the aims of the research?	Yes	Yes	Yes	Yes	Yes
2. Is a qualitative methodology appropriate?	Yes	Yes	Yes	Yes	Yes
3. Was the research design appropriate to address the aims of the research?	Yes	Yes	Yes	Yes	Yes
4. Was the recruitment strategy appropriate to the aims of the research?	Can't Tell	Yes	Yes	Yes	Yes
5. Was the data collected in a way that addressed the research issue?	Yes	Yes	Yes	Yes	Yes
6. Has the relationship between researcher and participants been adequately considered?	Yes	Yes	Yes	Can't tell	No
7. Have ethical issues been taken into consideration?	Yes	Yes	Yes	Yes	Yes
8. Was the data analysis sufficiently rigorous?	Can't Tell	Yes	Yes	Yes	No
9. Is there a clear statement of findings?	Yes	Yes	Yes	Yes	Yes
10. How valuable is the research?	Moderate	High	High	Moderate	Moderate

Table 4

Key findings of qualitative research examining associations between Internalized Weight Stigma and weight management behaviours

Paper Number	Author (year); Country	Sample Size (number of females)	Sample Type	Method of Data collection	Method of analysis	Main findings: Relevant Theme *Stage 1 Extraction and coding text*	Main findings: Descriptive Themes *Stage 2 Thematic Synthesis*
(1)	S. Lewis, Thomas, Warwick Blood, Castle, Hyde and Komesaroff. (2011) *Australia*	141 participants (105)	Community	Audiotaped telephone interviews.	Thematic approach	• Impacts of Stigmatizing Experiences	• Home As Safe Place • Emotional Wellbeing • High-Risk Weight Management Strategies • Others As Barriers To Traditional Weight Management Methods • Thin Is Accepted • Impact Of Stigmatizing Comments From Family And Friends • Fat As Identity
(2)	Dickins, Thomas, King, Lewis, & Holland. (2011) *International*	44 participants (36)	Community-Bloggers using the 'Fatosphere'	Semi- structured interviews using telephone and Skype	Grounded Theory	• Early Experiences With "Fatness"	• High-Risk Weight Management Strategies • Thin Is Accepted • Strangers 'Think My Body Is Hideous' • Impact Of Stigmatizing Comments From Family And Friends • Fat As Identity • Self-Criticism, Shame And Embarrassment

(3)	Alqout and Reynolds (2014) *Saudi Arabia*	7 participants (7)	Clinical- Pre-bariatric Surgery patients	Face to face semi structured interviews	Interpretative Phenomenological Analysis	• It affects my social relationships ': The experience of obesity within social relationships	• Home As Safe Place • Emotional Wellbeing • Thin Is Accepted • Strangers 'Think My Body Is Hideous' • Impact Of Stigmatizing Comments From Family And Friends
(4)	Homer, Tod, Thompson, Allmark and Goyder (2015) *United Kingdom*	18 participants (14)	Clinical- Pre-bariatric Surgery patients	Face to face semi- structure interviews and Photovoice	Framework Analysis	• Negative Experiences of Obesity	• Home As Safe Place • Emotional Wellbeing • High-Risk Weight Management Strategies • Others As Barriers To Traditional Weight Management Methods • Challenges Of Daily Activities • Thin Is Accepted • Strangers 'Think My Body Is Hideous' • Impact Of Stigmatizing Comments From Family And Friends • Fat As Identity • Self-Criticism, Shame And Embarrassment

(5)	Whetstone (2015) United States of America	7 participants (0)	Community	Face to face semi- Structured interview	Thematic Analysis	• Negative Affect	• Others As Barriers To Traditional Weight Management Methods • Challenges Of Daily Activities • Emotional Wellbeing • Strangers 'Think My Body Is Hideous' • Impact Of Stigmatizing Comments From Family And Friends • Fat As Identity • Self-Criticism, Shame And Embarrassment

Analytic themes. The analytic themes capture the experience of stigma, obesity, IWS and weight management choices. For a pictorial representation of the descriptive and analytic themes, please see Figure 4.

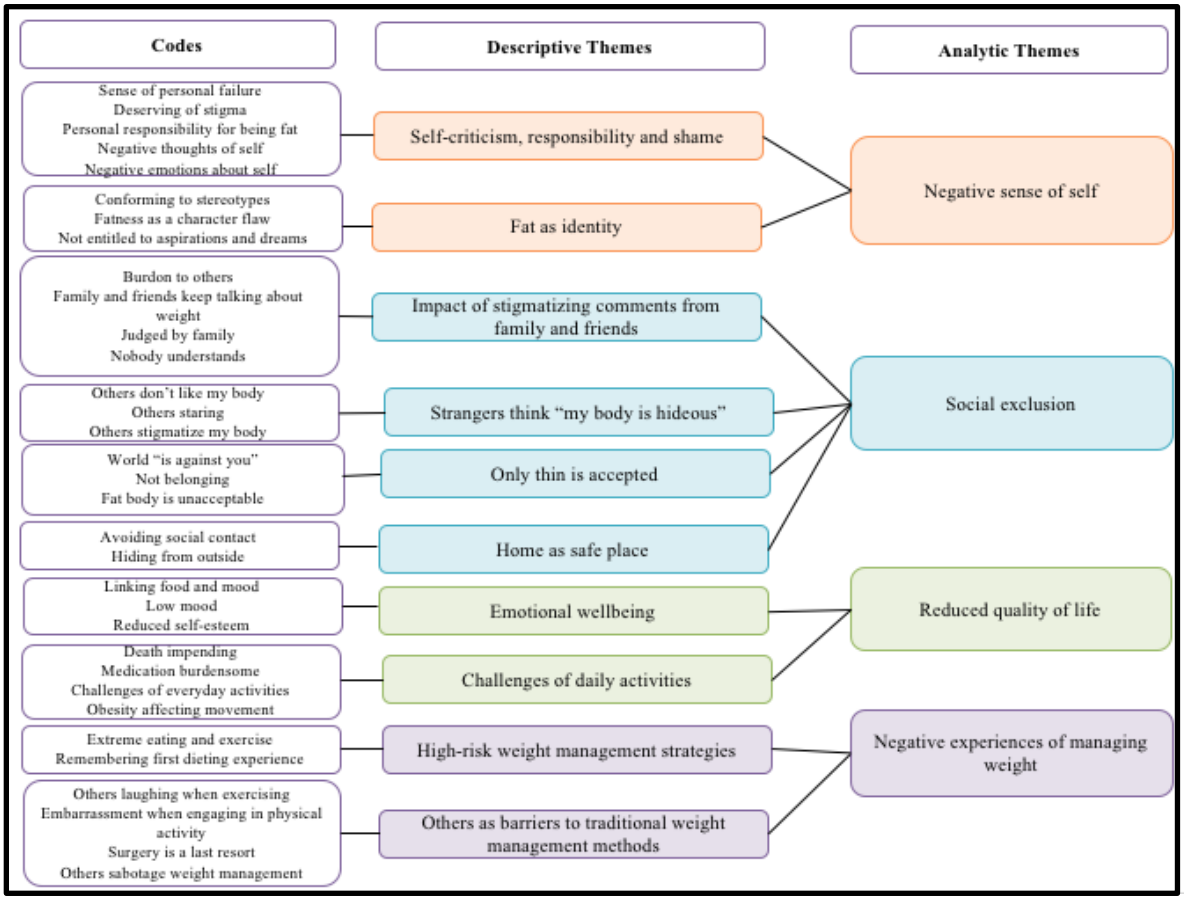

Figure 4. Descriptive and analytic themes map

Analytic theme: Negative sense of self. Across all five included articles, participants reflected on how they held a negative sense of self.

"There was something wrong with me. It was a defect of my character, a defect of me; I was defective, per se. I lacked control. I needed to lose weight. I didn't have discipline." (2)

Participants described strong self-directed negative affect in relation to their weight which included high levels of self-criticism, shame, embarrassment and increased self-blame.

"Because you know it's your weight and it's your own fault" (4)

"You're fat, it's your own fault "(4)

"I was embarrassed of myself" (5)

Participants described a struggle with integrating the 'fat identity' into their sense of self. Some participants actively fought against the 'fat identity', whereas for others this challenged their self-efficacy, eventually feeling there was no alternative but to conform to the stereotypes.

> "I think sometimes I would eat junk just because no one expected anything different from me. Why not just be who people believe that I am?" (5)
>
> "When someone says something negative towards you about what you look like, then for the whole day and into the next that is exactly how you portray yourself." (1)

In doing so, this prevented some participants from following their dreams, entering relationships and pursuing their career goals (2).

> "I am a college dropout, and I dropped out because of my weight. It's one of the major regrets in my life—not pursuing an education. (2)
>
> "My younger sisters are already engaged and I am not because I am fat and my body structure does not qualify me for marriage. I am tired of myself and I wish to marry." (3)

Analytic theme: Social exclusion. Many participants described social exclusion as a result of their weight.

> "I would like somebody to walk in my shoes every day and see what I have to put up with, the gestures that you get off people saying oh fat this, fat that." (4)
>
> "People are not very polite. They don't mind staring, they are judging and they don't know my story." (5)

Whilst many participants reported to 'expect' negative comments about their weight from others, participants found stigmatizing comments from their close family the most distressing.

> ‘In particular, experiences of direct stigma from family members and friends created extreme feelings of loneliness’. (1)

> “My family does not permit me to go out with them to attend functions and go to public places as they find me a source of shame for them.” (3)

> “[my family] keep talking about me being fat and it’s just totally depressing.” (1)

> “What [my mother] did was make me very, very aware of my body and what was right and what wasn’t. ‘Oh, no, you don’t want to do that. You’ll be fat.’” (2)

The combined impact of wider societal stigma, stigma from family members and their own sense of personal self-criticism, resulted in participants feeling as though they were not accepted within the world on the basis of their weight.

> “The whole world is against you,” (3)

In order to escape the negative appraisals of others, many described isolating themselves and staying at home.

> “That’s sort of the window in the door, meaning like to go outside, and the blinds are closed because then I can’t see the outside and it can’t see me…. It’s a protection thing, it’s complete protection. If I don’t have to go outside into the outside world then I’m safe in here. This is my safe place.” (4).

Analytic theme: Reduced quality of life. For many it was the daily impact of their weight on quality of life that prompted decisions to manage their weight.

> “It’s [obesity] affecting my life in that I can’t run around, I can’t walk far.” (4)

> “I’ve got to do something about it, I realise that, because I know I’ll be in a wooden box if I don’t do anything about it." (4)

> “When you weigh 310 pounds, you are moving a lot of dead weight...It was embarrassing walking 60 feet and you’re sweating and out of breath.” (5)

Participants described a complex interplay between their weight and emotional wellbeing. For some, it was difficult to differentiate whether low mood or weight gain was

the precipitating factor. It was also highlighted that low mood made it difficult to make the lifestyle changes to reduce their weight.

> "But when you feel that low it's not easy" (4)
>
> "I've battled depression my whole life, so eating always became my crutch." (5)
>
> "You get down. That is how you feel and that is how you act." (1)
>
> "It seems like most of my childhood memories are of me being ashamed and depressed. I felt totally out of control in all areas of my life." (5)
>
> "The main behavior that impacted my determination was my depression. The days I couldn't even get out of bed, were the days I felt ugliest, or the most worthless and like I wouldn't ever be successful...My barrier is still my depression and anxiety, or the days when I want to continue to eat out for a full week, I have to fight my emotional urges." (5)

For many who were embarking on the 'last resort' (4) of bariatric surgery, it was the long-term consequences of obesity and physical health comorbidities that brought them to seek professional support to manage their weight.

> "Let's say I've got to do it [bariatric surgery] because I know that I'd be dead if I didn't... it's [obesity] affecting my life in that I can't run around, I can't walk far. I've got to do something about it, I realise that, because I know I'll be in a wooden box if I don't do anything about it." (4).

Analytic theme: Negative experiences of managing weight. Participants described many previous attempts at trying to lose weight to varying degrees of success; nevertheless many quickly regained more weight than they initially lost.

> 'years of weight cycling through attempts at weight loss techniques, diets and exercise regimes' (1)

> ‘For most participants, weight loss and restrictive eating were actively promoted as the only way they could help their body conform to an aesthetic ideal of thinness’ (2)

One participant reported that colleagues would even ridicule her during her attempts to make dietary changes to manage her weight.

> “When I follow a diet, all the people around me work to shatter me by saying ‘You did not reduce your weight and you have no change in your weight. Oh! Fatty, reduce your weight.” (3)

Across four of the five studies, participants reported that they felt unable to participate in physical activity to manage their weight, despite the knowledge that this would be a beneficial weight management method. Comments from others prevented many participants from joining gyms through fear of being abused by others, feeling “on display” (1).

> “I guess I always felt like I had to get in shape before I could go to a gym” (5)
>
> “I felt like if I went there and people saw me working out, they would know that acknowledged I was fat.” (5)

These experiences made these ‘traditional’ weight management methods felt unobtainable for participants, with some participants eventually turning to bariatric surgery.

> “Someone on my tram called me a ‘fat pig’. I was so upset with that idiot. I felt miserable. I was feeling very, very upset. Now I am in the process to try to permanently lose some weight [through gastric band surgery].” (1)

These unsuccessful weight management experiences appeared to erode the sense of self-efficacy in participants, whilst paradoxically, simultaneously increasing the experience of felt personal responsibility for their weight management difficulties.

Summary of qualitative results. The review of qualitative papers aimed to address the question 'How do overweight and obese adults experience IWS and its influence on weight management behaviours?' This thematic synthesis found four analytic themes within the data: negative sense of self, social exclusion, reduced quality of life and negative experiences of managing weight. These themes capture a range of emotional and behavioural responses indicating that the experience of IWS may impact on overweight and obese adults experience of themselves, others and the world.

Integrative Synthesis

The findings of the integrated synthesis are presented in Table 5. The integrative synthesis seeks to interrogate the quantitative studies in relation to the qualitative findings. By asking how the qualitative findings answer the research question (Thomas & Harden, 2008), third order interpretations of the four analytic themes produced four hypothetical analytic theme statements in the form of testable hypotheses (Britten et al., 2002; Shepherd et al., 2006; Thomas & Harden, 2008). The qualitative and quantitative studies are reviewed in relation to the hypothetical analytic theme statements to answer the sub-review question 'what is the role of IWS on weight management behaviours in overweight and obese adults (Harden & Thomas, 2010).

Analytic theme statement: IWS may lead to a negative sense of self, which may have implications for the self-concept and self-efficacy to manage weight. Overweight and obese adults expressed that IWS has a detrimental impact on their sense of identity, which in turn may impact on their self-efficacy to successfully engage in weight management behaviours. In the quantitative literature, the relationship between self-efficacy and IWS has been explored in relation to physical activity (Hübner et al., 2015; Pearl et al., 2015) with findings appearing to support the experience that IWS mediates the relationship between general self-efficacy and physical activity. However, no studies were identified which looked at the impact of IWS on the self-concept. Shame was identified

within this theme. Given the detrimental impact shame can have on self-concept and the potential for avoidance and withdrawal behaviours to avoid experiencing shame, the effect of IWS on identity and self-concept may have a detrimental impact on engagement in adaptive weight management behaviours. Therefore, further quantitative and qualitative research exploring IWS and identity and self-concept may be beneficial.

Analytic theme statement: Current quality of life can be both a motivator and barrier to manage weight. Within the qualitative studies, overweight and obese adults reported that their emotional wellbeing impacted on their engagement in weight management behaviours. This was supported within the quantitative literature, with three studies reporting a significant negative relationship between symptoms of depression and IWS in treatment-seeking adults with frequent binge eating behaviours (Durso et al., 2012; Carels et al., 2010; Carels et al., 2013). However, these findings were not supported within a community sample (Puhl et al., 2007).

A novel finding from Baldofski et al. (2016), proposes that emotional dysregulation may mediate the relationship between IWS and maladaptive eating behaviours. Whilst there was no indication of emotional dysregulation within the qualitative accounts, participants did describe the intensity at which they experienced low mood, shame and anxiety. The measure of emotional regulation used in this study aims to measure a general sense of difficulties with emotional modulation, without tapping into which specific emotions are challenging to modulate. Further research to differentiate whether specific emotions trigger emotional dysregulation in this client group may be beneficial.

The relationship between subjective general health and IWS was an interesting finding within the qualitative literature, which requires further exploration. Within the qualitative literature, participants reported that once their physical and mental health began to deteriorate, their desire and ability to engage in weight management behaviours changed. It is possible that good subjective general health may act as a moderator or

protective factor against IWS, with weight stigma becoming internalized when general health is experienced as deteriorating. This review found only one quantitative study that explored this relationship (Pearl et al., 2014), however further research in this area is encouraged as it may produce some interesting results.

Analytic theme statement: Social exclusion may make accessing the community for weight management support more challenging. Pearl et al. (2014) tentatively explored the relationship between IWS and social functioning in adults who met the criteria for Binge Eating Disorder. Within this study, IWS was significantly negatively correlated with social function, as measured by the Short-Form 36 Health Survey (Jenkinson, Layte, Wright, & Coulter, 1996). Within the mediation model, depressive symptoms mediated the relationship. Within the qualitative literature, social exclusion presented a notable barrier to engaging in 'traditional' community based weight loss approaches, which may further negatively impact on the self-concept. Further research into the relationship between social support and IWS may be particularly beneficial in the development and outcomes of community weight management programmes.

Analytic theme statement: Experiences and outcomes of previous weight management attempts increase sense of personal failure which may prohibit future attempts at 'traditional' weight management approaches. The impact of IWS on 'traditional' weight management strategies has been tentatively explored through the Mensinger et al. (2016) and Mensinger and Meadows (2017) studies. These studies suggest that those with lower IWS are better able to succeed at physical activity changes and improvements in eating behaviours through weight management programmes than those with high IWS. Together, these studies suggest that IWS could explain why for some obese adults, traditional weight management approaches are ineffective. This experience may be the catalyst for the 'sense of personal responsibility and failure' within participants.

Overall, the qualitative and quantitative studies are considered to be complementary, although illuminate different aspects of the relationship between IWS and weight management behaviours. In doing so, the complexity of the construct IWS is emphasized.

Table 5

Integrated Synthesis Matrix (Shepard et al., 2006; Thomas & Harden, 2008)

Overweight and obese adults experiences of IWS on weight management behaviours from the qualitative literature	Quantitative studies which explore the psychosocial factors identified by overweight and obese adults in the qualitative literature
Analytic Theme: Negative sense of self **Analytic Theme Statement:** IWS may lead to a negative sense of self, which may have implications for the self-concept and self-efficacy to manage weight	**IWS and self-efficacy** Examined the role of IWS as a moderator and mediator of physical activity in preoperative patients accessing bariatric surgery *Hübner et al (2015)* Relationship between IWS and exercise self-efficacy reported *Pearl et al. (2015)* **IWS and self-concept** None identified
Analytic Theme: Social Exclusion **Analytic Theme Statement:** Social exclusion may make accessing the community for weight management support more challenging	**IWS and social exclusion** Reported the relationship between social functioning and IWS *Pearl et al (2014)*
Analytic Theme: Quality of life **Analytic Theme Statement:** Current quality of life can be both a motivator and barrier to manage weight	**IWS and emotional wellbeing** Reported on the relationship between depression and IWS *Puhl et al. (2007)* Reported on the relationship between depression and IWS in overweight and obese treatment seeking adults *Carels et al. (2010)* Reported on the relationships between IWS and depression *Carels et al. (2013)*

	Reported on the relationship between IWS, depression and binge eating in adults who met the diagnostic criteria for with binge eating disorder *Durso et al. (2012)* Reported the relationship between mental health and IWS *Pearl et al. (2014)* Reported emotional dysregulation mediates the relationship between IWS and a range of maladaptive eating behaviours *Baldofski et al. (2016)*
	IWS and subjective general physical health
	Reported the relationship between physical health and IWS *Pearl et al (2014)*
	IWS and 'traditional weight management strategies'
Analytic Theme: Negative experiences of managing weight	Reported the relationship IWS and intuitive eating during a weight loss intervention *Mensinger et al., (2016)* Reported on the relationship between IWS and engagement in moderate physical activity during a weight loss intervention *Mensinger and Meadows (2017)*
Analytic Theme Statement: Experiences and outcomes of previous weight management attempts increase sense of personal failure which may prohibit future attempts at 'traditional' weight management approaches	**IWS within bariatric surgery patients** Baseline measures of IWS reported in pre-bariatric surgery patients *Hübner et al. (2015)* Baseline measures of IWS, maladaptive eating behaviours and emotional dysregulation reported within pre-bariatric surgery patients. *Baldofski et al. (2016)*

Discussion

The review aimed to answer the question 'what is known about IWS and weight management behaviours in overweight and obese adults?'. A mixed-methods synthesis found that high levels of IWS may be related to maladaptive eating behaviours, lower levels of physical activity and poorer emotional wellbeing. IWS was experienced as an intensely unpleasant experience that elicited negative self-appraisals, excluded people from their social networks and was perceived to limit weight management choices. These findings were supported by both quantitative and qualitative studies, which when combined, provide preliminary evidence that high levels of IWS in overweight and obese adults may be related to poorer engagement in adaptive weight management behaviours.

The findings from this review may provide preliminary support for the 'why try model' (Corrigan et al., 2009) and its application to clinically overweight and obese adults. The analytic themes identified within this review encapsulate a range of reinforcing beliefs and emotions, including the affect shame. Once the societal stigma has been applied to the self, beliefs and emotions manifest themselves behaviourally, as captured within the quantitative literature. This reflects the experience of IWS as complex and multifaceted, as highlighted by the literature reviewed in the current paper.

An interesting secondary finding from the review is the relationship between IWS and emotional wellbeing. The reviewed papers suggest overweight and obese adults with high levels of IWS also show higher levels of depression and emotional dysregulation. The analytic theme statements posited that poor emotional wellbeing impacted on motivation to make changes to weight management behaviour, which maintained and reinforced IWS. Thus, the interaction between emotional wellbeing and IWS requires further exploration.

The hypothetical analytic theme statements and integrative synthesis highlight a number of areas for further research and potential treatment development to reduce IWS. For example, Mensinger and Meadows' study highlights how although physical activity

increased for some participants, high levels of IWS remained, which moderated engagement and enjoyment in moderate intensity physical activity. Therefore, psychological interventions to reduce IWS may have a positive impact on physical health outcomes. Adaptations of third-wave psychological interventions have been developed to target internalised stigma and shame in overweight and obese adults, drawing upon commonly used psychological models that focus on the development of self-compassion (Goss, 2011; Lillis, Hayes, Bunting, & Masuda, 2009). Broadening and developing our understanding of the role of IWS and expanding the evidence base is imperative and could help support the development and delivery of effective treatments.

Mixed-methods Methodology

This review utilises a critical realist position (critical realist ontology and contextualist epistemology) which integrates the assumptions of constructivism and positivism (Maxwell & Mittapalli, 2010). By asking different questions of the quantitative and qualitative literature (Harden, 2010) the critical realist approach to this mixed-methods synthesis allows for the epistemological position of the original data to be retained adding further integrity to the findings and synthesis. The inclusion of obese adults' experiences through the qualitative thematic synthesis is a particular strength of this review. IWS is a highly emotionally charged experience which can get lost through the sole use of quantitative methods of assessment. Simultaneously reviewing the obese adults' experiences alongside the quantitative measure of IWS and its impact on weight management behaviours creates depth to this review, to answer the question what is known about the IWS and weight management behaviours in overweight and obese adults. The use of a mixed-methods synthesis in psychological research is novel and whilst current guidelines were followed to conduct this review (Thomas & Harden, 2008), it is acknowledged that as mixed-methods synthesis become more established in the review field, guidance on how they are best conducted may change and improve.

Limitations and Future Directions

Despite the inclusion of both quantitative and qualitative literature, the number of eligible studies included in this review is minimal. The mixed-methods synthesis approach allowed for the quantitative and qualitative studies on IWS to be given equal weighting during the review. This is particularly important when the literature on IWS is in its infancy. The quality of quantitative studies included in synthesis one were given global QATQS score of weak to moderate. This suggests that the quality of studies requires further improvement, to allow strong conclusions to be drawn from the evidence base. Moreover, the heterogeneity of the included papers (both quantitative and qualitative) renders the drawing of any strong conclusions from the current evidence base infeasible.

Whilst the interest in IWS in the quantitative literature has grown over the last ten years, interestingly, this is not reflected in the qualitative literature. Although IWS was referred to in the qualitative papers, this review did not find any qualitative papers that primarily explored the experience of IWS. An in-depth qualitative exploration of IWS would be invaluable to the literature and could potentially begin to close some of the gaps in evidence base.

The current paper has sought to review what is known about IWS and weight management behaviours. Although the eligible papers have attempted to address their explorations from the position that it is IWS that directs the resulting effect on weight management behaviours, it is possible that in fact the reverse is true and that the increase in maladaptive weight management behaviours (i.e. increased eating psychopathology and/or reduced physical activity) results in an increase in IWS.

Both the qualitative and quantitative literature reported on the IWS and emotional wellbeing (i.e. depression) in the context of weight management behaviours. Although IWS and depression have been treated as separate constructs within the quantitative papers and qualitative papers, the review highlights the frequency at which these two constructs

appear concurrently, which warrants further attention. It is possible that in the context of weight management behaviours, IWS and depression overlap rather than being separate experiences that are involved in an overarching process. Whilst the latter has been posed in current literature (Baldofski et al., 2016; Carels et al., 2010; Pearl et al., 2014; Whetstone, 2015), further research into the nature and features of IWS is necessitated to explore this further.

A full theoretical discussion of the plausibility of this direction of effect and the composition of the relationship between IWS and depression is beyond the scope of the current review paper. However, further exploration of these questions could be addressed through a longitudinal study (either quantitatively or qualitatively). In doing so, researchers may be able to explore the development and impact of IWS within overweight and obese adults.

Conclusions

Although there is a clear need for further high quality research, this review highlights that IWS may have a role in the weight management behaviours of obese adults. It is possible that reducing IWS may have an impact on weight management in overweight and obese adults, with associated effects on emotional wellbeing and physical health of obese adults. However, this paper highlights the importance of further research to be conducted in this area to address the limitations of the current evidence base.

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Chapter Three: Empirical Paper

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Self-compassion and Weight Management in Obese Adults: A Grounded Theory Study

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Abstract

As obesity continues to be a major public health concern with the western world, identifying protective psychological resources is crucial. Self-compassion has been repeatedly found to be beneficial in fostering good health-related behaviours, with initial evidence suggesting self-compassion can support weight management. Further understanding how self-compassion may support weight management in obese adults could have significant clinical implications for weight management treatment. However, little is known about the processes involved. This study aimed to qualitatively explore how self-compassion influences weight management. Nine participants who were classified as obese were recruited from a Tier 3 NHS weight management service. Using semi-structured interviews, a constructivist Grounded Theory Lite study was conducted and an initial grounded theory is proposed. Five main categories were identified that conceptualised how self-compassion influences weight management: relating to self, interacting with others, relating to food, difficulty managing weight and developing self-compassion. The clinical and theoretical implications are discussed.

Keywords: Obesity, Self-compassion, Weight Management, Grounded Theory, Qualitative, Treatment Seeking Obese Adults

Introduction

The western world continues to see a rise in obesity and obesity related illnesses, with obesity now considered to be serious public health concern (World Health Organization, 2017). Recent estimates indicate that 27% of adults living in England are obese (National Statistics, 2017). In line with the increase in public health messages, the number of adults attempting to manage their weight is increasing. A recent poll by Mintel (2016) found that in the last year 48% of British adults had tried to lose weight. Furthermore, of those who had attempted to diet, 64% reported that they continually tried to lose weight. Although a range of commercial community weight management options are available, a significant proportion of adults with difficulties managing weight, struggle to sustain weight loss through these methods (Lowe, Kral, & Miller-Kovach, 2008; Ahern et al., 2014).

Despite the increase in prevalence of obesity, obese individuals continue to be widely stigmatised within the United Kingdom, which is further fuelled by the increase in public health messages surrounding obesity and media attention (Flint, Hudson, et al., 2016; Hilton et al., 2012). Obesity stigma is widely recognised to have a detrimental impact on the emotional wellbeing of obese individuals (Puhl et al., 2007). Obesity stigma frequently becomes internalized (Durso & Latner, 2008) which can lead to experiencing high levels of shame and self-criticism (Corrigan et al., 2009). Experiencing high levels of shame and self-criticism can lead obese adults to engage in a range of coping responses, some of which are counterproductive, serving to further maintain their maladaptive eating patterns and body dissatisfaction (Nolan & Eshleman, 2016). Crucially, these experiences can prevent obese adults from accessing medical weight management support sooner, particularly when stigma is experienced in the context of healthcare (Ekeagwu, 2017; Malterud & Ulriksen, 2011).

Tier 3 Complex Weight Management Services (CWMS)

In 2014, the National Health Service (NHS) committed to reducing obesity in the United Kingdom (NHS England, 2014). Following an update of the National Institute of Clinical Excellence guidelines, there was a renewed focus on offering tertiary care services to support and treat adults with weight management difficulties (National Institute for Health and Clinical Excellence, 2014). With the introduction of the four-tiered pathway, a previously overlooked population of Tier 3 patients emerged with complex weight management difficulties, highlighting a significant gap in the literature. Little, if any, research has been carried out exploring the experiences of weight management in individuals accessing tertiary care weight management services. It is recognised that Treatment Seeking Obese Adult (TSOA) accessing tertiary services present a complex clinical picture of physical health and psychological complexities, requiring specialist multi-disciplinary support with weight management (Hughes, 2015). As such, measuring success at weight management through BMI alone can be misleading (Jennings et al., 2014). Therefore, deepening the understanding of the psychological factors involved in weight management for this population is fundamental to successful outcomes.

Self-compassion and Obesity

More recently, the literature has focussed on identifying psychological resources that can protect against the detrimental effects of internalized stigma and shame. Through this search, the construct self-compassion has emerged, receiving significant attention across a range of stigmatised populations, with studies finding that self-compassion can protect against self-stigma and shame (Hilbert et al., 2015; Luoma & Platt, 2015; Yang & Mak, 2017). Self-compassion has been conceptualised from a number of different perspectives (Elices et al., 2017; C. Strauss et al., 2016), however the most commonly used definition within the health literature is that posed by Neff (2017). Neff describes self-compassion as treating oneself with kindness, recognising that suffering is a shared human

condition and mindfully observing and accepting thoughts and feelings without judgment. Being self-compassionate provides an emotionally safe and containing space to honestly reflect on personal failings, allowing for personal development and growth (Neff, 2003).

Self-compassion may be particularly relevant to the TSOA population as overweight and obese adults with low levels of self-compassion have been found to have higher levels of self-stigma and eating psychopathology, which can have implications for weight management (Hilbert et al., 2015; Palmeira, Pinto-Gouveia, & Cunha, 2017). Moreover, increases in self-compassion have been linked to positive improvements in health-related behaviours across a number of long-term health conditions that can present co-morbidly with obesity (Friis, Consedine, & Johnson, 2015; Terry & Leary, 2011; Wren et al., 2012). A recent systematic review reported interventions that fostered self-compassion had positive outcomes in supporting weight loss and improving nutritional and eating behaviours in overweight and obese adults (Rahimi-Ardabili et al., 2017). However, the review also highlighted the paucity of literature in this area, indicating that the relationship between self-compassion and weight management behaviours requires further exploration.

Although these studies highlight the potential benefits of self-compassion to weight management, this quantitative literature raises the question of how does self-compassion influence weight management (Mantzios & Egan, 2017). Furthermore, as studies have primarily been carried out within non-clinical community samples, it difficult to generalise these findings to the TSOA population, seeking weight management support through the NHS, whom constitute a significant proportion of the obese population.

A literature search found only one qualitative study that explored the understanding and experiences of compassion in TSOA (J. Gilbert et al., 2014). J. Gilbert et al. identified that although participants were able to describe their experiences of compassion towards

others, they were less likely to be compassionate towards themselves in relation to their own weight loss, becoming self-critical and eating in response to associated negative emotions. Whilst this paper provides a tentative exploration of self-compassion during weight management, further qualitative research is required to understand and explore self-compassion and how it may influence or be influenced by weight management in TSOA.

Current Paper

Little qualitative research has been conducted with the clinically obese population, exploring self-compassion during weight management. This study will be novel in its endeavour to explore the role of self-compassion during weight management in TSOA. As such, the following research questions have been posed:

1. Do TSOA perceive themselves to be self-compassionate during weight management?
2. If so, how does self-compassion influence the weight management experience in TSOA?

Materials and Method

Study Design

A qualitative design was utilised to explore the phenomenon 'self-compassion' within TSOA. As self-compassion is experienced subjectively, a constructivist Grounded Theory Lite (Braun & Clarke, 2014; Charmaz, 2006) was conducted. The constructivist paradigm is positioned as ontologically critical realist and epistemologically subjectivist, which shaped the research design and analysis.

Grounded Theory Lite. Braun and Clarke (2014) recognised that although many qualitative research studies adopt the analytic techniques of grounded theory (line-by-line coding, axial coding, constant comparative analysis, concept development), the extent to which the grounded theory principles are applied can vary. As such, Braun and Clarke

describe a Grounded Theory Lite, which utilises the grounded theory methodologies of data analysis and concept development but does not necessarily fully engage in all aspects of a grounded theory methodology (i.e. theoretical saturation, immersion in literature, theoretical sampling). Grounded Theory Lite therefore is considered to be appropriate for smaller, time-limited qualitative projects (Braun & Clarke, 2014). The current study adheres to the principles of a Constructivist Grounded Theory Lite through the use of the grounded theory data analysis techniques and limitedly engaging with the principles of theoretical saturation, immersion in literature and theoretical sampling, within the constraints of a time-limited research project.

Ethical Considerations

Ethical approval was granted by the South Cambridge NHS Research Committee (see Appendix D). During the design phase the study was presented to the Inspire service user involvement panel, who reviewed the study documentation, providing feedback on the recruitment process and interview guide.

Participants

Nine participants were recruited from an NHS Tier Three CWMS in England, United Kingdom (see Table 6). Participants were eligible for the study if they were aged 18 and above, had a current BMI over 35, were fluent in English and had attempted to manage their weight independently, prior to their referral to the CWMS. Participants were excluded from the study if they had previously engaged in a psychological intervention where compassion was the primary treatment target.

All participants consented to their medical records being accessed to obtain demographic information. All participants were White British and of working age. Five participants were in employment or full-time education. Two participants had retired on unrelated medical grounds, and two participants were not currently employed. All participants had co-morbid physical health conditions, and three participants had historical

or current diagnoses of depression. At their initial assessment, as measured by the Hospital Anxiety and Depression Scale (Zigmond & Snaith, 1983), participants anxiety scores ranged from the normal to severe range, and the mild to severe range for depression. All participants have been assigned pseudonyms for confidentiality purposes.

Table 6.
Participant demographics

Participant Pseudonym	Gender	Age Range	Months in service (since initial assessment)	BMI at assessment	Most recent BMI
Katherine	Female	40-50	>12	62	59.9
Linda	Female	40-50	6-12	35.3	39.6
Vicky	Female	30-40	<6	51.7	51.3
Charlotte	Female	30-40	<6	58.9	58.9*
Evelyn	Female	40-50	>12	59	52.6
Carol	Female	50-60	>12	53.3	53.9
Mollie	Female	30-40	6-12	47.4	47.4*
Gemma	Female	30-40	>12	43.3	40.6
Barry	Male	40-50	6-12	55.7	59.1

* No new BMI available

Recruitment. Participants were recruited through posters advertised during clinic times or through their clinician during routine appointments. All participants were invited to enter a prize draw for a £20 voucher for taking part in the study.

Researcher

This research was designed and conducted by the first author (M.C.), a Black British female who at the time was 27-years old, with a BMI in the 'normal' range and a 'petite' build. The researcher was studying for a Doctorate in Clinical Psychology at a university local to the CWMS. The researcher spent time at the CWMS in order to familiarise with how the service operated and the different stages within the treatment pathways. This created a richer research experience, allowing the researcher to better understand participant experiences.

Procedure

Charmaz views constructivist grounded theory as providing "flexible guidelines" (Charmaz, 2006, p. 9) to constructing a grounded theory. Grounded theory is an iterative

process, which requires data collection and data analysis to be completed in parallel. For a diagram of the study procedure, please see Figure 5.

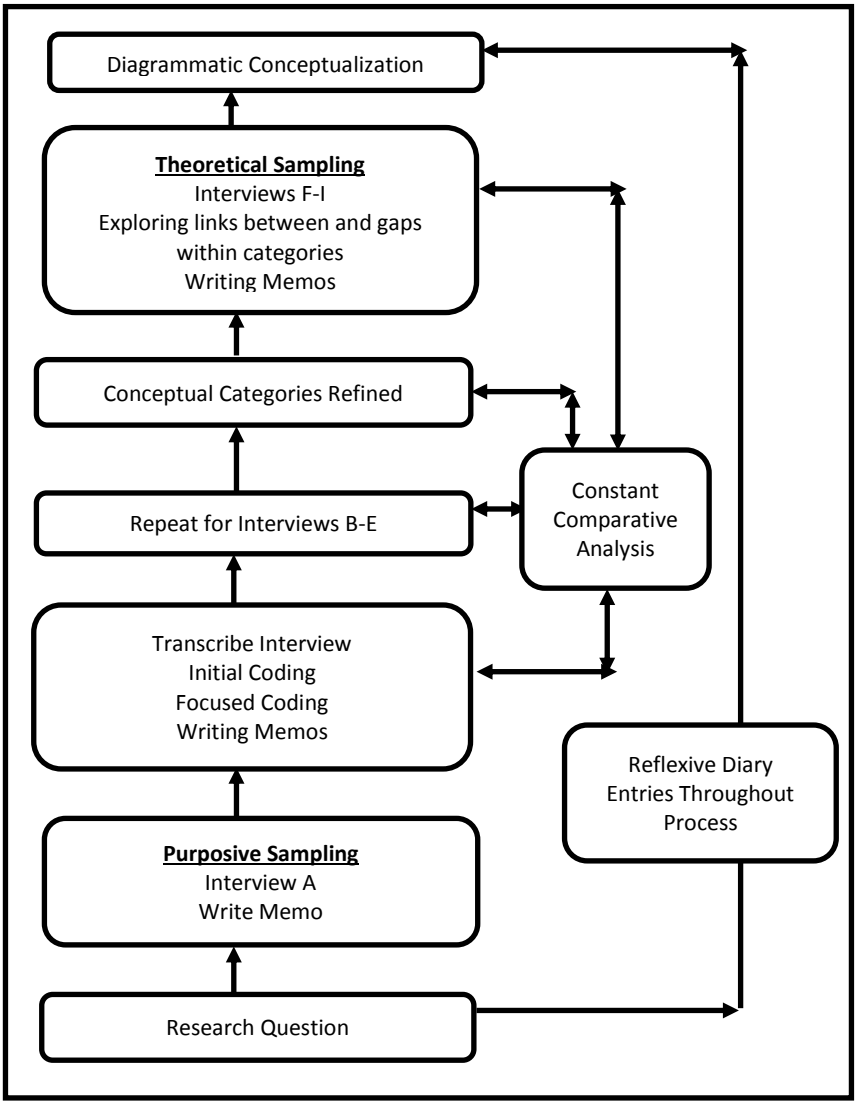

Figure 5. Procedure of Grounded Theory Methodology

Interviews and transcription. Depending on participant preference, individual semi-structured interviews took place either at the weight management clinic or at the participant's home. Prior to the interview beginning, participants were provided with a definition of the key terms 'self-compassion' and 'weight management' (see Appendix E). Participants were able to refer back to the definitions throughout the interview. Interviews ranged in length between 37 minutes and 83 minutes. An intensive interviewing (Charmaz, 2006) approach was utilised to help build rapport with participants whilst allowing the

researcher to gather rich data. Once interviews were transcribed, interviews were listened to and read a number of times, to allow the researcher to become fully immersed in the data.

Data Coding and Analysis

Initial coding. Line by Line coding (Glaser, 1978) was used to generate initial descriptive labels for the data. Where possible, in vivo coding was used to ensure participants' words were used to create codes, so that meanings were preserved.

Focussed coding. Using Constant Comparative Analysis (Braun & Clarke, 2014), focussed coding was employed to begin to analytically categorize the data. By grouping together focused codes, initial categories were developed from the first five participants. Categories were labelled using gerunds (-ing suffix), to ensure categories remained action focused (Charmaz, 2006).

Axial coding. Through axial coding (Strauss & Corbin, 1990), properties of a category were analysed to form subcategories, adding depth and texture to each category (see Table 7). Categories and subcategories were developed in order to develop a tentative data-driven theory.

Diagrammatic representation. Once categories and subcategories were established, a diagrammatic representation of the categories was developed. The diagrammatic representation aimed to capture the categories and indicate the relationship between them.

Theoretical Sampling

Once the initial categories had been identified within the first five interviews, theoretical sampling was employed for the remaining four participants (Birks & Mills, 2015). Charmaz (2006) describes theoretical sampling as sampling specifically to explore links between categories and further develop the theory. Categories and subcategories were developed in order to develop a tentative data-driven theory. Theoretical sampling within

this study aimed to further explore the initial categories, to enhance the development of sub-categories through continuing to recruit participants at different stages of their treatment. Some questions were amended to allow for the exploration of emergent themes and to discover links between categories in response to participants answers. However, sampling to further explore the relationship between the categories and sub-categories was not an explicit component of the theoretical sampling phase within the current study. This distinguishes the presented tentative theory from those developed as part of a Full Grounded Theory (Braun & Clarke, 2013).

Theoretical Saturation

Theoretical saturation is considered to have been achieved when no new properties of a category are identified within the data (Strauss & Corbin, 1990). After interview seven, during theoretical sampling phase, no new properties emerged within the data (see Appendix F for category audit trail). As such, theoretical saturation was tentatively considered to be achieved. However, as the study focussed on the experience of 'self-compassion', it was recognized that the categories relating to the weight management process and the relationship between the categories, may not have reached saturation.

Memo Writing

Memo writing is a fundamental component of Grounded Theory (Braun & Clarke, 2014). Memos are intended to be reflexive documents which evidence the development of the theory. Memos were written during all stages of data collection and analysis, to capture thoughts about and links between categories and subcategories within the data. By examining focussed codes theoretically, writing memos allowed for focussed codes to be 'raised' from 'grounded descriptions' (Charmaz, 2006) to analytic codes that helped identify the nuances of the social processes within the data.

Reflexivity

The first author was the primary researcher, completing all stages of the research independently. As this study used a constructivist approach, which recognises the impact the researcher has on the process of data collection and interpretation, validity was ensured by the keeping of a reflexive diary, which was kept alongside all phases of the study design and conduct. The reflexive diary was shared in supervision with the second author to allow for reflexive discussions around epistemology, categories and researcher interpretations, ensuring rigour.

Table 7
Interacting with others coding example

Raw Data	Line-by-Line Coding	Focused Coding	Axial Coding	Category
"well they know if I've got an appointment it's like 'oh what've you lost this time' and that. And I feel that's really encouraging and I feel good about that."	Colleagues know about appointment	Others showing interest is encouraging	Others supporting	Interacting with others
"They were great, they were like 'I don't know what you're talking about, you're a great person'. You know,' it's a shame that you feel that way'"	Recalling friend's comments	Experiencing others as supportive		
"I do stop and start, and she will say, "Next time. In a year's time, you won't need that. You can go out and do walking." But I'm gradually getting there."	Can go out walking	Others supporting with exercise		
"I was judging myself because I'd heard other people say, "Look at her,""	Judging myself	Internalizing others judgment	Others Judging/Stigmatizing	
"Well they make comments you know, they nudge. I'm always getting that."	Others making comments	Experiencing weight related negative comments		
"And then when I was at school, noticing I was the biggest person in the class and not being able to keep up when we done sports activities and what not"	Biggest person	Noticing biggest person in the class	Making Social Comparisons	
"the rest of my siblings were all like normal sized and I was the only big one"	Only big one	Comparing self to siblings		
"And, still couldn't get down to the normal size that they were as well, so I just got really fed up with it all to be honest"	Can't get to normal size	Viewing others as 'normal size'		

"We will drink and we tend to have a good time and no one - because we're balancing it, we are drinking more than we should but we are balancing it and we are walking about."	Balancing foods	Balancing foods whilst socialising	Socialising influences food choices
…because I know that sometimes I would have eaten more, especially if [Name]'s here, I know I would have sat here and could have eaten more."	Would have eaten more	Eating more with others	
"…do you accept me now? I've lost weight.'"	Questioning acceptance	Looking for others acceptance	Seeking acceptance from others
"so I think because of that, I've just eaten and eaten and eaten, because if I'm not worth anything to her, I'll just…"	Not worth anything to her	Wanting to be worth something to others	

Results

Five categories were constructed within the data. Two core categories were identified: relating to self and developing self-compassion. The resulting grounded theory contains two interacting process: the weight management process and developing self-compassion. The conceptualisation of the grounded theory is presented in Figures 6- 12 and the links between the categories are described.

Weight Management Process

Four categories specifically related to the weight management process are first presented.

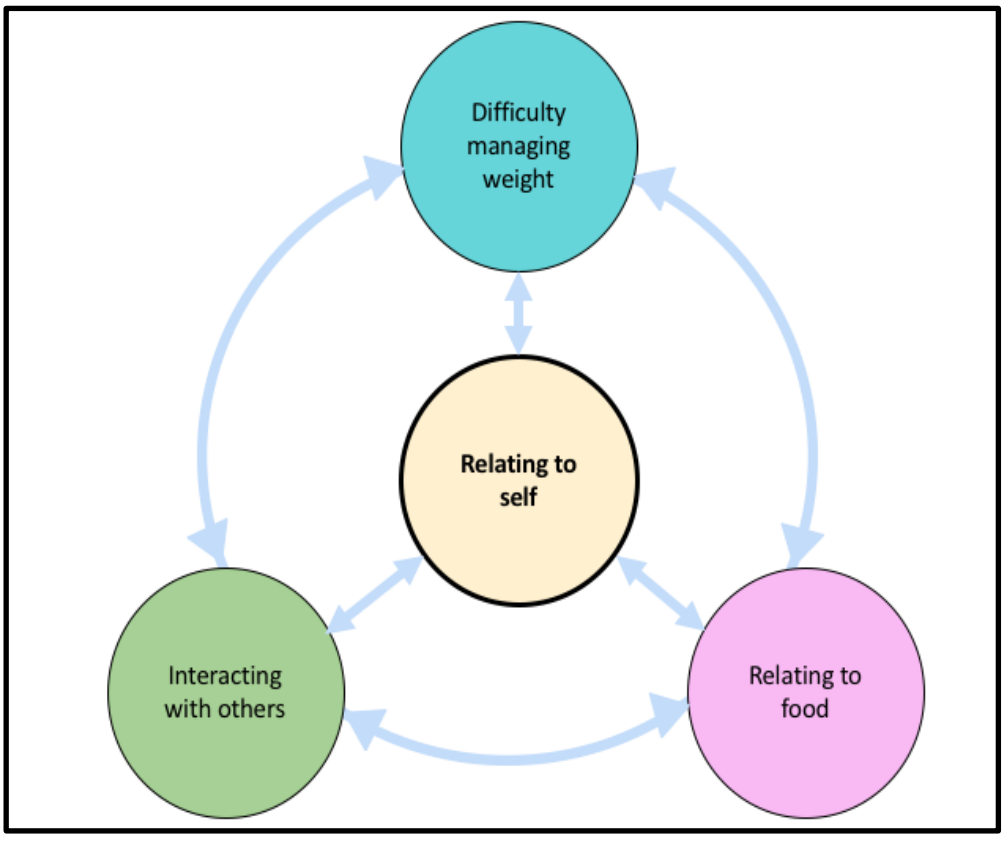

Figure 6. Diagrammatic representation of the weight management process

Participants described the overarching process of weight management, which contextualised the development of self-compassion. The process of weight management was described as a continual ongoing challenge which appeared to be present irrespective of whether or not the participant was actively engaging in weight management treatment at

that time. The preliminary model of the weight management process is presented in figure 6. Central to the process of weight management was the way in which the participants related to themselves. Holding a negative self-image and beliefs influenced the way in which the participants interacted with others, related to food and their response to difficulties managing weight. These interactions were reciprocal, reinforcing the negative relationship with self. The categories Interacting with Others, Relating to Food and Difficulty Managing Weight also interacted with each other in a bidirectional manner. The bidirectional relationship between the categories is indicated by the blue double headed arrows. Each category is summarised and its relationship to the others will be presented in turn.

Category One: Relating to Self

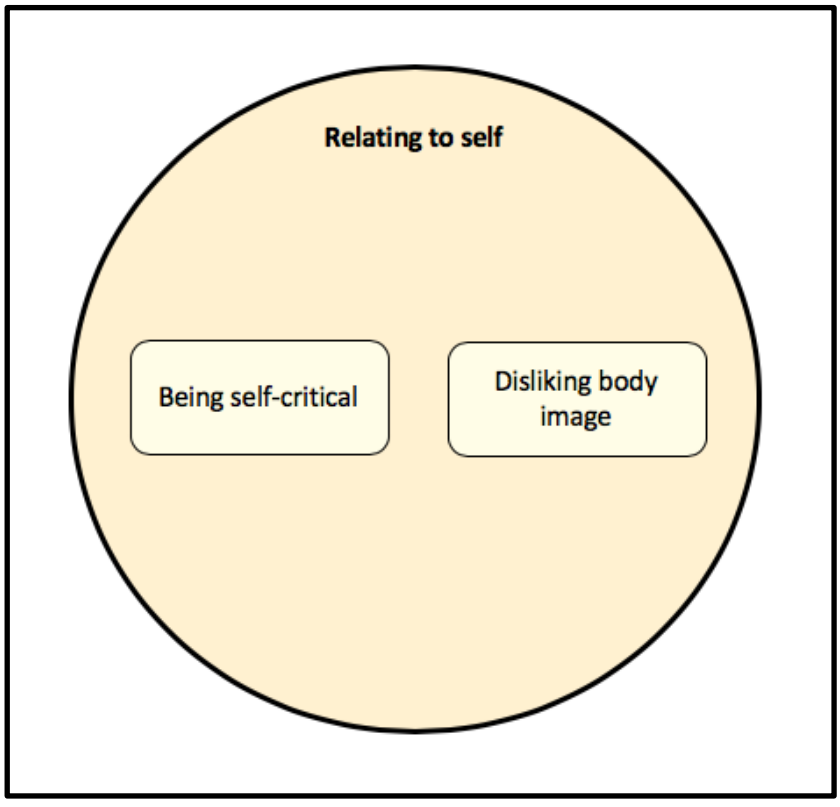

Figure 7. Diagrammatic representation of relating to self

Participants described primarily engaging in negative ways of relating to themselves. This way of relating to themselves developed from a young age and was often related to their weight. This was characterised by strong negative feelings towards

themselves, a sense of shame and negative appraisals about their weight. Here, Gemma captures the essence of the Relating to Self category:

> "I grew up thinking I was fat, I was worthless. I wasn't worth anything." (*Gemma, 51-52*)

The category Relating to Self contains two subcategories: being self-critical and disliking body image.

Being self-critical. All participants described becoming highly self-critical in relation to their weight management. The self-criticism was pervasive across the weight management process, in relation to their perceived effort and perceived progress.

> "Because I shouldn't be like this. I should be doing a little bit more, helping myself, but I don't." (*Carol, 205-206)*

Disliking body image. Some participants described having strong negative emotional reactions to their body image, which further reinforced the self-critical relationship they had established with themselves.

> "Just seeing myself as this thing…" (*Mollie, 126-127*)
>
> "This isn't how I want to look. 'Look how bad you look in this, look how bad you look in that. That don't fit you anymore.'...you're looking at yourself and thinking, "Oh God, look at the state of you."" (*Linda, 385-389*)

Combined, these attributions and negative affect resulted in a negative self-to-self relationship.

Category Two: Interacting with Others

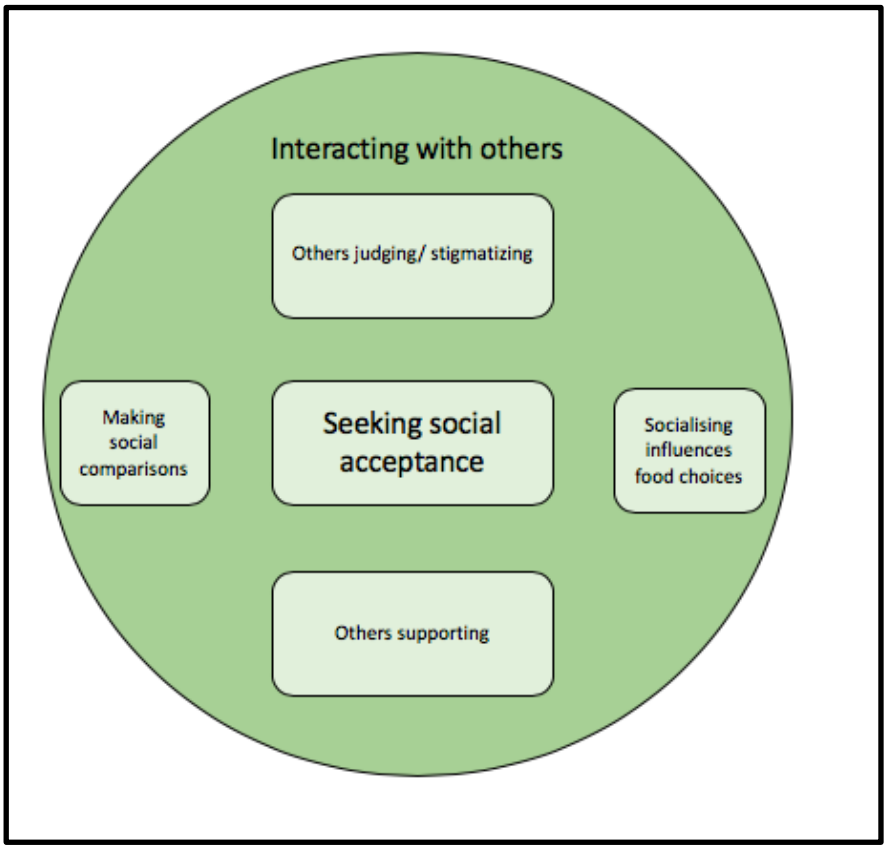

Figure 8. Diagrammatic representation of interacting with others

Interacting with family, friends, colleagues, professionals and strangers played a large role in participants experiences of weight management and how they related to themselves. 'Others' were presented dichotomously, as either supportive or judgmental, both of which had an impact on the weight management process. This category contains five subcategories: others supporting, others judging/stigmatizing, making social comparisons, seeking social acceptance and socialising influences food choices. Through these subcategories, the Interacting With Others categories interacts with the Relating to Self, Difficulty Managing Weight and Relating to Food categories, as depicted in Figure 6.

Making social comparisons. Participants described negatively comparing themselves to others. This included comparing their body weight and shape to others, finding themselves to be the 'biggest' person in their vicinity. This social comparison led to feelings of anxiety, even when in weight management settings. At times making social

comparisons would generate feelings of unfairness or frustration that others appeared better able to manage weight compared to them. Making social comparisons and perceiving themselves negatively, further reinforced the self-criticism and dislike of their body image. Here, Charlotte describes this experience and demonstrates the link between the Interacting with Others and Relating to Self categories.

> "I'm like thinking, why aren't you like the size of the bus. And this is just hard, I sit there and I hear people eating and munching and its, it's just annoying really. I just try and sit there and their there, opening their crisps and what not. And they're all just normal size people." (*Charlotte, 184-187*)

Others judging/stigmatizing. All participants reflected on the negative impact of interacting with others. For some these experiences started from a very young age with bullying at school or within their family system and continued until the present day.

> "I got called names a lot by her [mum] and the rest of the family…." (*Gemma, 41*)

Linda describes how, experiencing stigma from others influenced her relationship with herself, leaving her more self-critical and demonstrates the relationship between the Interacting with Others and Relating to Self categories:

> "No one was judging me but I was judging myself because I'd heard other people say, "Look at her," from other people and you get, you're then judging yourself." (*Linda, 383-385*)

Often participants experienced overt stigma about their weight when accessing the community. These experiences left participants feeling highly distressed.

> "A woman had said as I was walking past her 'Jesus look at the state of that, look at the size of it'. But of course, you're taken a back when someone says something like that and I had to actually stop and sit down on

a bench opposite these people and that, when she said that, that really upset and hurt me" (*Vicky, 482-486*)

These experiences of stigma became so internalized that participants began to assume others were constantly judging them due to their weight, demonstrating how the Relating to Self category influences the Interacting with Others category:

"Yeah, but to me it was always they are looking at me because I'm fat." (*Vicky, 470*)

Socialising influences food choices. The category Interacting With Others could both positively and negatively interact with the Relating to Food category. Engaging in social interactions could have both positive and negative influences on eating habits. Katherine describes how interacting with others negatively influenced how much she would eat:

"I know that sometimes I would have eaten more, especially if [Name]'s here, I know I would have sat here and could have eaten more because she eats and at the minute she's got eyes bigger than her belly all the time." (*Katherine, 205-207*)

For others, socialising encouraged them to make diet consistent food choices, which prevented them from relating to food in their typical way, by emotionally eating. Here, Linda describes how through the subcategory socialising influences food choices, the Interacting with Others Category positively influenced the Relating to Food category:

"We've all got this little thing where we'll bring carrot sticks and grapes and we'll have things all prepared and done. So you've got that… Instead of eating chocolate and crisps, you're eating carrot sticks and Hummus…" (*Linda, 450-454*)

Others supporting. Despite the negative interactions with others, many participants recognised that people within their social network were highly supportive with

their weight management, which they came to rely upon, particularly when faced with 'Difficulty Maintaining Weight'. Through the subcategory others supporting, Interacting With Others could have a positive influence on the Difficulty Managing Weight category.

> "I do stop and start, and she will say, "Next time. In a year's time you won't need that [mobility aid]. You can go out and do walking." But I'm gradually getting there." (*Carol, 155-156*)

For some participants, it was the practical support which was most highly regarded, however for others the emotional support from others enabled them to continue with the weight management process:

> "I think if I didn't have the support network it would be so much harder. If I was doing this on my own I wouldn't be able to do it, I don't think I'd have even gone to the appointment." (*Vicky, 728-730*)

Seeking social acceptance. Through the negative experiences of others judging and making social comparisons, participants felt they were not accepted due to their weight and shape. The desire for social acceptance was a significant motivator for some participants to continue with weight management.

> "I feel obviously when I lose the weight I feel more accepted by people, which I think that makes me kind of like makes me feel obviously better about myself." (*Charlotte, 369-371*)

> "I was constantly trying to lose weight because it was like are you gonna be nice to me if I lose weight and things like that." (*Gemma, 45-46*).

Category Three: Relating to Food

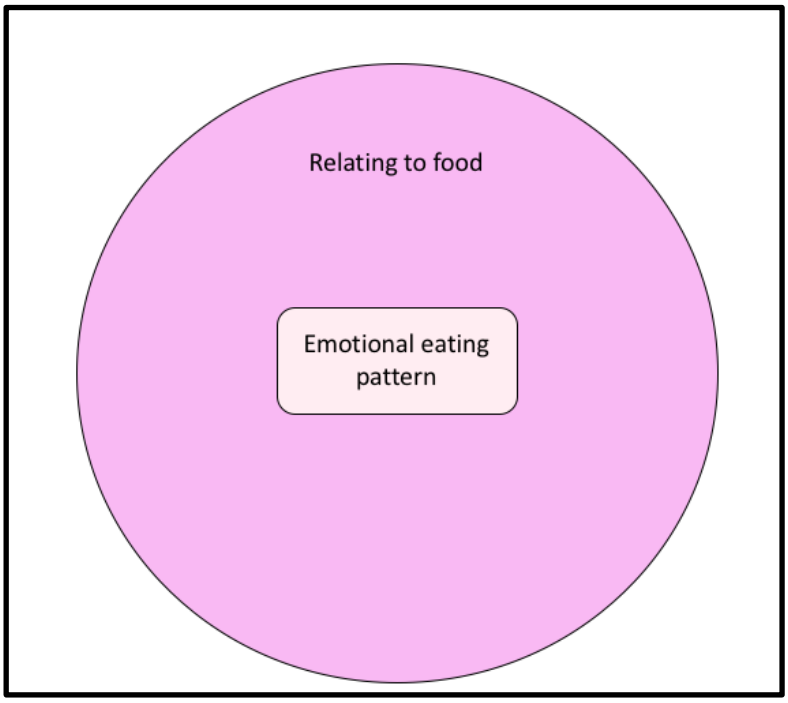

Figure 9. Diagrammatic representation of relating to food

This category contains one subcategory: emotional eating pattern. Participants described the early development of a complex way of relating to food. The relationship with food started from childhood, during which many participants described that food was their main source of comfort within the context of difficult interpersonal earlier life experiences. The relationship with food influenced food choices on a daily basis. This complex relationship with food resulted in a reliance on food as a coping strategy, creating the conditions for participants to engage in emotional eating.

Emotional eating pattern. All participants vividly described the process of engaging in emotional eating.

> "I think I just sometimes I have feelings that I don't know how to deal with and… I've been using food for a long time as a strategy to deal with feelings. So it's just second nature to me, it just seems natural to do it, go and get something to eat." (*Evelyn, 180-183*)

Using food as a coping strategy to manage emotional challenges was recognised by participants as continuous cycle which undermined their weight management efforts. All participants reflected on their desire to change the way in which they related to food. Linda describes the relationship between the Relating to Food and Relating to Self Categories. For Linda, engaging in the emotional eating pattern influenced the negative relationship with herself, reinforcing the emotional eating.

> "You get in this little cycle of you eat badly and you feel guilty, so you get more stressed and then you get… So that whole circle becomes unbreakable after a while." (*Linda, 49-51*)

The relationship between Relating to Food and Interacting with Others was described by some participants. Interactions with others could trigger the emotional eating pattern, particularly in the context of judgment/stigma. Here, Vicky describes her experience following being verbally abused about her weight by a stranger in her community:

> "And luckily for me there were no other shops to go into, like you know to go and get something to comfort" *(Vicky, 467-468)*

In addition to the self-criticism, participants reflected on how engaging in the emotional eating pattern negatively contributed to the difficulty in managing weight, describing the relationship between the categories Relating to Food and Difficulty Managing Weight:

> "Knowing that it's bad. Wanting it so badly that you have that maybe thirty seconds of 'eeeee yeah. Endorphins yay' then that kind of 'oh no, look what I've done to myself'. You know that kind of knowing that will lead to possibly putting more weight on, then you've got the vicious circle of putting more weight on, then it's harder to lose the weight, then you end up in a perpetual circle of 'look what

you've done, it's your behaviour it's your, you know you've done that to yourself'." *(Vicky, 271-275)*

Category Four: Difficulty Managing Weight

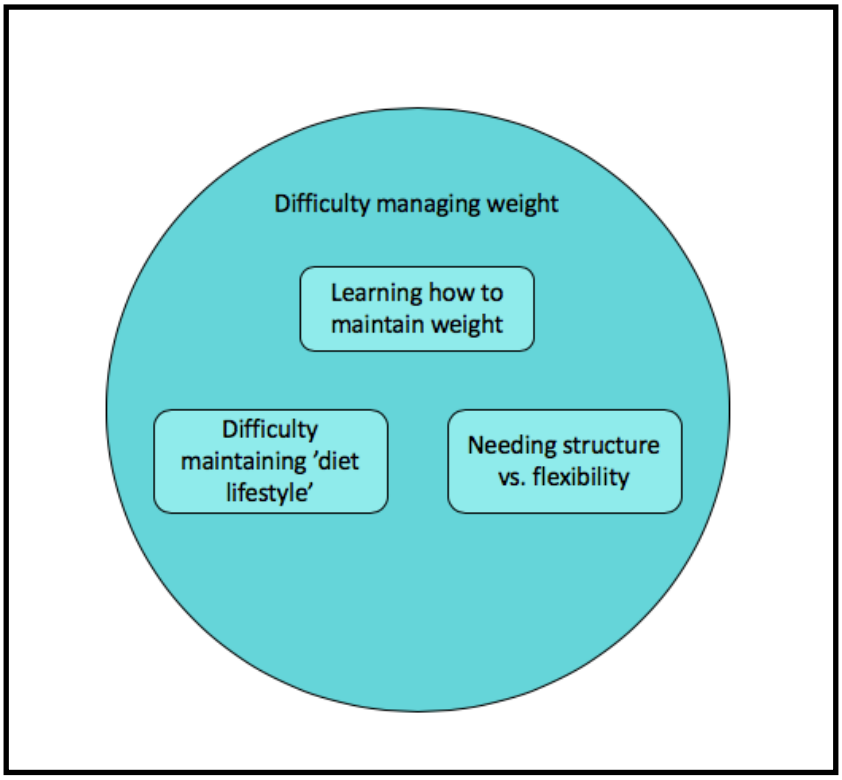

Figure 10. Diagrammatic representation of Difficulty Managing Weight

Managing weight was described as an ongoing challenge for participants that impacted on all areas of life. Managing weight presented a number of challenges that appeared to further intensify once they reached a weight they wanted to maintain. Participants described Difficulty Managing Weight as a delicate and frustrating experience. The category contains three subcategories: difficulty maintaining 'diet lifestyle', needing structure vs. flexibility and learning how to maintain weight. Through these subcategories, the category Difficulty Managing Weight interacts with the categories Interacting with Others, Relating to Self and Relating to Food.

Difficulty maintaining 'diet lifestyle'. Participants described the challenges of maintaining the diet lifestyle. Integrating new rules and meal choices into their lifestyle felt

almost all consuming. Participants described a feeling of pressure around numbers, counting and weighing, which inevitably they are unable to sustain.

> "I can't keep up that day-to-day working out. It all of a sudden just falls by the wayside… Yes, that whole tracking of what you're eating kind of thing is the quite time-consuming, difficult thing." (*Linda, 80-86*)

The difficulty of maintaining the diet lifestyle could be particularly challenging when socialising, demonstrating the relationship between the categories Difficulty Managing Weight and Interacting With Others. Charlotte describes the challenges of maintaining the diet lifestyle when socialising with others:

> "I don't know if I get fed up with weighing and cause when you have to reintroduce food you have to like weigh everything, obviously when you go out to restaurants it's hard." (*Charlotte, 153-155*)

Finding a realistic diet and exercise routine that they were able to successfully integrate in to their life was considered to be one of the biggest challenges.

Needing structure vs. flexibility. Participants described a tension between wanting to relax and not have to think about the new rules they had implemented, however the thought of relaxing invoked anxiety that they will regain the weight. Some participants found the rules associated with the 'diet lifestyle' to be helpful, keeping them on track.

> "Structure I think, having a structure. That weekly weigh-in, that App on your phone, that constant thinking and writing down everything, that is a big factor. If you've got nothing to aspire to and you've got no plans, you'll get yourself into a cycle that I'm in now." (*Linda, 266-269*)

However for others the rules were viewed as inflexible. As the 'diet lifestyle' felt so challenging, when they did bend the rules or make an incompatible food choice, this appeared to lead to participants "falling off the wagon" and becoming highly self-critical,

demonstrating the link between the categories Difficulty Managing Weight and Relating to Self.

> "If it's in black and white as soon as you stray from one little thing, you know that you've [messed*] it up. And that doesn't feel so good." (*Evelyn, 410-414*)

Learning how to maintain weight. After spending so long, for some since early childhood, learning how to reduce their weight, once participants had achieved their desired weight, they described the challenge of learning how to maintain weight without the support of a weight management service. Participants described the relationship between the Difficulty Managing Weight and Relating to Food categories. Participants feared 'slipping back' into "old habits" of emotional eating and trying to 'create new habits' to overcome this:

> "Keeping the weight off. It's my biggest challenge. I know I can lose it, I lost the seven stone, I've lost two stone in five weeks now. I know I can lose the weight, it's just getting to the point where I hit my target, then keeping it steady at that without putting it on again. That's my biggest problem." (*Charlotte, 148-151*)

> "It's trying to find a happy balance of knowing that when you can stop trying to lose weight, you can up your calories a bit, but it's trying to work out where and when…and then you find over time, your brain will almost start to slip into the 'oh its ok, I'm not going to gain any weight, I'm just trying to maintain anyway'. And if I gain a pound I can easily lose it. It never works out that way." (*Gemma, 713-719*)

When gaining weight during the maintenance phase, Gemma described the temptation to return to short-term diet strategies:

> "Yeah. But usually by fad diets. You know, if it's only like four pounds, it's like 'oh I can lose that in a few days, do shakes for a few days', instead

of going 'I really should go back to the method that got me to lose the weight in the first place'." (*Gemma, 757-759*)

Self-compassion Process

The process of developing self-compassion is presented in Figure 11. The self-compassion process consists of one category containing five subcategories.

Category Five: Developing self-compassion

Participants described themselves as not inherently self-compassionate, particularly in relation to their weight management.

"I've always been too rough on myself, like a self-beater." (*Katherine, 387*)

"I'd say I'm not very self-compassionate at all really." (*Vicky, 269*)

Mollie described how for her, the more weight she gained, the harder it was to be self-compassionate.

"I'm probably not as compassionate as I used to be. Because my journey is a lot longer, I need to lose a lot more weight to get a healthy BMI, blah, blah, blah. Because that process is so long, it's harder to see the end result, and it's harder to see a healthier me." (*Mollie, 66-70*)

However, some participants were able to reflect on how they were able to become more self-compassionate during weight management. The preliminary model of developing self-compassion in presented in Figure 11. The model depicts five developmental stages that the participants moved through in order to develop self-compassion. The direction of the process is indicated by the solid blue arrows. Participants experienced four distinct stages in their development of self-compassion related to weight management (Perceiving Self-compassion as Conditional, Redefining Acts of Self-compassion, Receiving Compassion Facilitates Self-compassion and Self-compassion Influences Perspective Taking). Whilst in the process of developing self-compassion, participants begin to notice the change in self-compassion, which creates the fifth

subcategory (Noticing Change in Self-compassion) and is indicated by the yellow arrows, which parallels the developing self-compassion process. However, participants described that in response to significant life events, weight management and the process of developing self-compassion could falter and become lost, taking them back to perceiving self-compassion as conditional. This could occur at any stage during the self-compassion process and is represented by the dotted blue lines in the model.

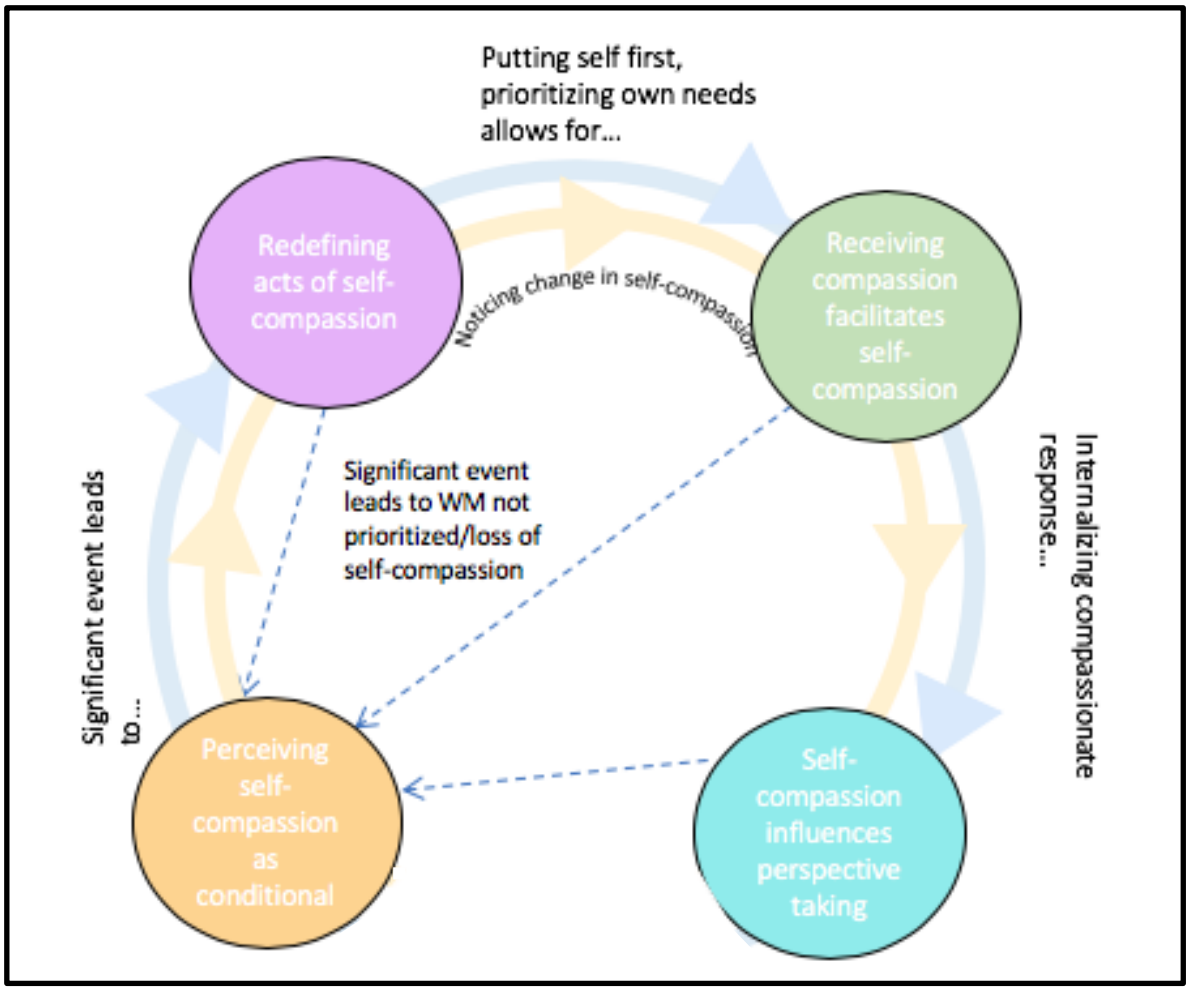

Figure 11. Diagrammatic representation of developing self-compassion

Perceiving self-compassion as conditional. Many participants described that initially they perceived self-compassion as conditional and synonymous with reward. This lead to a belief that that they could only be self-compassionate if they deserved it or had achieved a weight loss, despite recognising times when it would be most helpful to be self-compassionate such as during challenges or slip-ups during weight management. Their

underlying assumption was that they did not deserve self-compassion as they had not achieved their desired goal:

> "If you've put weight on you feel well that's not a reason to be compassionate to yourself because in a way you've failed. That's not the overall outcome that you want." (*Vicky, 388-390*)

Here, Charlotte describes how perceiving self-compassion as conditional interacts with her negative relationship with self, triggering self-criticism, characteristic of the Relating to Self category:

> "I think I'm more critical of myself around that time and probably don't feel as kind to myself because I feel as though I'm judging myself more. Trying to keep the weight off, I feel probably I'm judging myself more that, kinda like I need to do more exercise and if I don't then do it, I feel 'ah I could have done it I had the ten minutes spare', I can easily do ten minutes of exercise and I do feel like when I'm at that stage I am more, much more critical of myself and that and probably more harder to kind of like say to myself 'oh well done, I've done that'. (*Charlotte, 499-504*).

Participants described a process of redefining acts of self-compassion, that started with a life event. This could be a change in living circumstances, change in relationship or an experience during which they began to accept their body shape. Gemma describes how seeing a photograph of herself triggered the process of developing self-compassion from Perceiving Self-compassion as Conditional:

> "I was like 'do you know what? I don't look too bad'! And it was literally from that minute, I was like, 'wow'. That was the first time I'd actually said to myself 'that's ok you're ok'. And that kind of led on. It sounds really odd, but that's how it worked for me. Like accepting myself in that state and not thinking 'when I get thinner, when I get thinner'. But just accepting who I was, from that point on."

(*Gemma, 423-427)*

Redefining acts of self-compassion. The significant life event prompted participants to both consciously and subconsciously redefine acts of self-compassion. Participants described holding counterproductive conceptualisations of self-compassion which related to emotional eating and the Relating to Food category:

> "…you're not thinking about the after effects of having it because all you're eating about is 'oh I'm being kind to myself because it will make these horrible feelings I've got go away. It will either make this sadness that I'm feeling go away or this loneliness that I'm feeling go away' so you sort of think that's being kind and compassionate to yourself, but I've realised now it's not, but at the time I thought it was." (*Vicky, 343-348*)
>
> **"**So, the self-compassion… would come with the food but it would quickly pass with the bloated stomach." (*Barry, 626-628*)

Following the significant life events, participants moved from a definition of self-compassion involving maladaptive behaviours and 'rewarding' themselves with food, to a definition more synonymous with self-care and wellbeing:

> "I feel, it sounds stupid, but I feel happy about that, that I can go out and do that and I find that's like my treat. Instead of so, like I used to go out and get a bag of chocolate buttons or something and now I save up and get something that I want. It might be like a duvet set, or like I said a pair of trainers or something. I feel I'm probably being kind to myself." (*Charlotte, 219-225*)
>
> "If I can be more kind to myself and recognise things and changes that I can make and have made, then that will definitely benefit me." (*Mollie, 196-198*).

By redefining acts of self-compassion and the conditions under which they are able to be self-compassionate, participants began to prioritize their own needs. In doing so, this enabled them to seek support and receive compassion from others and move along to the next stage in developing self-compassion. Charlotte describes her experience of this process:

> "I felt I had to share more with them to kind of like get the support not from just family and friends. That I kind of like need it to get through it, and I know that they're nice people and they'd be there for me, which they are. (*Charlotte, 559-561*)

Receiving compassion facilitates self-compassion. Participants described utilising the support of others to support the development of their self-compassion, indicating a relationship with the Interacting with Others category. This often involved the risk of sharing the self-critical thoughts with a trusted person.

> "You can vent. You can speak honestly, truthfully, and just go "I did this, I feel this way, I feel really [bad*]". And you know, they're there, they've either been through it, or even if they're like my friends that have never had issues with their weight, per se, they'd be like "come on, don't beat yourself up right now. You've come this far, look at what you can do"."(*Gemma, 491-495*)

By receiving compassion from others, it became easier to internalize the self-compassionate way of relating to themselves, which they could then apply to their weight management.

> "[They'd say] "it's not that bad, all you've had is fish and chips or, that was last night, this is this morning. Don't let it, you know yeah" and actually, hearing it from them does help me putting it into perspective and I

> actually now know, obviously because that's helped me putting it into perspective, I now know that I can do that." (*Evelyn, 312-316*)

Self-compassion influences perspective taking. As the self-compassionate response is enhanced through the receipt of compassion, as illustrated in Figure 11, participants described how becoming more self-compassionate during weight management allowed them to distance themselves from their negative emotions, improving their ability to perspective take during the difficulties of weight management, thus interacting with the Difficulty Managing Weight category.

> "You'll have a bad day or a bad few days and you think, "No, hang on that's okay because I've had a really good few weeks," and you've just fallen-off and you can get back on it and I sort of talked myself through it and just thought, 'Well, come on, we can do this. Tomorrow's another day…. you can level that out and start again tomorrow." (*Linda, 241-246*)
>
> "It's the same with food, it turned out anything you fail at I would really have a go at myself for and if you went down the shop and bought cake and crisps and then just ate loads I would really be at myself for doing it. Actually, when you change that and don't do it you think, "You chose to do that, it's no biggy, you can start again tomorrow." It's just like it wipes it all and it's just like, "What the hell have I been stressing about because you can do it and it's your choice to do it"…. It's too odd, I don't even understand it, it's just too odd." (*Katherine, 285-292*)

Reaching this point in the development of self-compassion appeared to positively change the participants approach to weight management.

Noticing change in self-compassion and weight management. The process of noticing change in self-compassion appeared to be a mesmerising experience, described as a sense of acceptance and happiness with themselves and their progress to date.

Participants reflected that they noticed the change in self-compassion at different stages throughout the process of developing self-compassion. Katherine describes how she noticed the change in her self-compassion later on in the process, whilst in the Self-compassion Influences Perspective Taking stage.

> "I never thought that there was much going on but there's so much going on all the time and you only know that now when you look back. I'm nowhere near what I was, even though there's not much more weight off me, it might be a stone or something in the year, it's ridiculously little weight, but I don't eat like I did. So I like that and I like the way that I deal with myself, if that makes sense, that I'm nicer to myself, that I'm not usually ranting at myself." (*Katherine, 592-602*)

How Does Self-compassion Influence the Weight Management Process? A Grounded Theory

Figure 12. Grounded Theory Model of how self-compassion influences the weight management process

It would appear therefore, that the development of self-compassion during the weight management process may protect the person from the negative influences of the weight management process, drawing on the more supportive components. Crucially this process appears to support the development of a healthier relationship with the self, overcoming the self-criticism which has become the automatic way of responding during weight management. The change in the self-to-self relationship is central to the experience of self-compassionate weight management.

Perceiving self-compassion as conditional may prohibit the development of self-compassion during the weight management process. By redefining acts of self-compassion, the person may no longer solely rely upon their relationship with food to be kind to themselves, freeing them up to find alternative acts of self-compassion. In seeking the compassion of others to facilitate self-compassion, the individual may utilise the positive aspects of interacting with others, 'others supporting', to support the development of their self-compassion.

Through the enhancement of perspective taking during challenges, self-compassion provides a space to critically think, creating an attitude that can accept and overcome the daily challenges and associated negative emotions experienced during weight management. In doing so this supports the prevention of a short-term difficulty from escalating into a relapse from their weight management approach.

Discussion

This study aimed to explore how self-compassion influences the weight management process in TSOA. This constructivist grounded theory found five categories related to the weight management process and the development of self-compassion.

Developing Self-compassion

Crucial to the development of self-compassion, as conceptualised in the current study is overcoming the perception of self-compassion as conditional to achievement. This is an interesting finding, which may have both theoretical and clinical implications for increasing self-compassion in the TSOA population. Specific beliefs underlying this perception have previously been explored within a range of mental health populations, with P. Gilbert, McEwan, Matos, & Rivis, (2011) describing this phenomenon as a 'fear' of self-compassion (P. Gilbert & Procter, 2006). To the authors' knowledge, this study is the first to recognise the existence of a belief-based barrier to self-compassion in the TSOA population. Furthermore, the model poses that this belief must be overcome in order

to allow for the development of self-compassion in relation to weight management. This finding may have specific clinical implications when working with TSOA.

Redefining acts of self-compassion was a significant element in the development of self-compassion. The importance of transitioning from health-neglecting to health-promoting behaviours in the context of self-compassion has received attention within the field (Mantzios & Egan, 2017; Sirois, Kitner, & Hirsch, 2015). However, whilst the movement to health-promoting behaviours has been considered as fundamental to the understanding of self-compassion (Mantzios & Egan, 2017), how this change occurs remained unclear. The current grounded theory poses that in order to begin this transition the beginnings of an attitude of self-acceptance must first take place. By accepting themselves (and their body shape) for who they are, TSOA begin taking care of their body in the present, rather than waiting for the ideal body shape to engage in health promoting behaviours. In doing so, TSOA are able to renegotiate their relationship with food and move away from behaviours that provide immediate gratification and consider themselves outside of their current emotional state.

The category "Relating to others" poses some interesting questions in relation to the existing literature. It is well documented that social interactions can both positively and negatively impact on body image, self-esteem and weight management behaviors. However, little literature exists exploring the influence of others in the development of self-compassion. Understandings of compassion and self-compassion have been tentatively explored in obese adults (J. Gilbert et al., 2014), however the drawing upon the compassion of others to facilitate self-compassion is a novel finding within this study. Although it is recognized that others are supportive during the weight management process, within the current grounded theory it is not until self-compassion has begun to develop in the TSOA, that the support and compassion can be internalized. Whilst this is a novel finding which requires further exploration, there appears to be a qualitative

difference in how compassionate acts resonate with TSOA when they themselves are better able to be self-compassionate.

Limitations and Future Directions

Participants within the study were not homogenous in their experiences of self-compassion. Some participants were better practiced at self-compassion, whilst others were aware of the benefits of self-compassion yet struggled to practice self-compassion. As such, the process of developing self-compassion was experienced to different degrees by participants. It is possible that the recruitment process contributed to the range of experiences of self-compassion as the majority of participants were recruited following appointments with the CWMS clinical psychologist. Psychological assessments are a mandatory aspect of the assessment process. However, patients are able to access further psychological support if struggling with their weight management pathway during treatment. Therefore, participants who were seen by the psychologist whilst experiencing challenges with the weight management process, may have been less able to reflect on their experiences of self-compassion, therefore considering themselves to be less self-compassionate, as they may have been experiencing current challenges. Whilst it may have been beneficial to seek only the experiences of participants who considered themselves to be more self-compassionate, the participant composition of the current study allowed for an understanding of the cognitive and emotional barriers to embarking on one's development of self-compassion. As such it is considered that the inclusion of both participants who struggled with self-compassion and those who were more able to be self-compassionate enhanced the theoretical understandings of the process.

Although no new properties emerged within the data by participant seven, the claim of theoretical saturation remains very tentative within this study. Although it is recognised that theoretical saturation can typically be achieved between six twelve interviews (Guest, Bunce, & Johnson, 2006), it is acknowledged that given the small sample size and the

complexity of the researched phenomena, it is possible that theoretical saturation may not have been reached. However, this grounded theory does not claim to capture the experience of all TSOA and should be considered accordingly.

This study was conducted in the United Kingdom, a western society that culturally, socially and politically subscribes to the 'thin-ideal' (Hermiston, 2010). Therefore, the participants' experiences of being obese, accessing a specialist weight management service and managing weight are likely to be heavily influenced by the western culture and narrative that obesity is a serious health concern on both a personal and societal level (Pieterman, 2007). As such, it is acknowledged that the presented grounded theory may not be generalisable to obese adults from other cultures, within which obesity is less stigmatized or celebrated (Gordon, 2001). Moreover, as all participants within the present study were White British, it can be assumed that they were less likely to have been influenced by alternative cultural constructions of obesity, where being larger is desirable. Furthermore, as ethnic minorities are disproportionally represented within the obese population in the United Kingdom (Comegna, 2017), the lack of ethnic diversity within the current study is a limitation. Therefore, it is recommended that further research is conducted into self-compassion and weight management in ethnic minorities within the United Kingdom.

This study adds to the literature base around the role of self-compassion in the weight management behaviours of obese adults. Providing psychological interventions that focus on self-compassion may better support the weight management process for TSOA. It is possible that experiencing successful weight management may open up alternative options for long-term weight management, encouraging patients to consider continuing with diet and lifestyle changes instead of seeking surgical solutions to weight management. Further research around the role of self-compassion and weight management is recommended.

Conclusions

This is one of the first studies to explore TSOA experiences of self-compassion and weight management. The resulting grounded theory indicates how self-compassion may influence the weight management process, acting as a psychological resource, improving the self-to-self relationship during weight management.

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Chapter Four: Extended Methodology and Design

Word Count: 2092

Extended Methodology and Design

Researcher Position

Grounded theorists recognise the influence that a researchers pre-assumptions, world view and experiences have on the design and conduct of grounded theory research. Researchers are strongly encouraged to reflect on their pre-existing knowledge, interests and assumptions to enhance the quality of the study (Birks & Mills, 2015; Charmaz, 2006).

The researcher (MC) is a 27-year old Black British female training to be a clinical psychologist. The researcher's professional background and training has required her to develop into a reflexive practitioner (The British Psychological Society, 2014). Engaging in daily reflection whilst training has shaped the researcher on both a personal and professional level to be curious about her experiences, and how her own actions, emotional responses and pre-assumptions shape the interactions she has with clients. The researcher does not believe in one 'truth', and is comfortable holding ambiguity and conflicting positions together. It therefore seemed natural to the researcher to carry this approach into the research. Holding this world view is beneficial in researching the socially constructed phenomenon 'self-compassion' and how this phenomenon is experienced as influencing weight management in obese adults. This worldview has allowed the researcher to sit comfortably with the uncertainty experienced, as she navigated the plethora of literature and guidelines to find a philosophical approach and analytic procedures appropriate for the study.

The researcher was introduced to the concept of self-compassion through formal teaching in the context of clinical psychology training. The concept immediately appealed to the researcher on a personal level as she recognised that being self-compassionate was extremely helpful when faced with personal failures, although quite challenging to cultivate and implement. The researcher does not claim to have reached a definitive

position on how to define self-compassion, and continues to explore her personal definition of self-compassion and integrate self-compassionate acts into her life.

The researcher was raised in a family that encouraged independence and instilled body confidence from a young age. The message within the family narrative was a priority of health, with a focus on finding a balance between diet and exercise. These beliefs were further reinforced through exposure to environments that celebrated health and beauty within all body shapes and sizes. The researcher has a BMI in the 'normal' category. Although her weight has slightly fluctuated within this range, it has not (to her knowledge) entered another BMI category. Reflecting on how her own experiences and beliefs around how body confidence, body image and understanding of health-behaviours formed, the researcher developed a curiosity in exploring the psychological factors that contribute to health related behaviours in the context of body weight and size. In doing so, the researcher was able to reflect on her own experiences of self-compassion in relation to health-behaviours. The combination of these factors shaped the development of the current study.

Constructivist Grounded Theory Lite

A number of different philosophical approaches to grounded theory exist (Levers, 2013). Constructivist Grounded Theory Lite was chosen in the development of the study as this approach epistemologically and ontologically fit with the studied phenomenon, research question and position and world view of the researcher (Nagel, Burns, Tilley, & Aubin, 2015). Constructivist Grounded Theory Lite combines 'ontological critical realism with epistemological subjectivism' (Levers, 2013 p. 4), asserting that one can only offer an interpretation of a reality, which is co-constructed between the researcher and the interviewee. Constructivist Grounded Theory Lite recognises that researchers do not enter their research as a 'blank slate' and bring their own background and experiences into the research. As such, constructivist grounded theorists recognise how the researchers

assumptions and experiences may influence how the data is collected and analysed, considering the researcher to be active rather than passive in the data gathering and analysis processes (Braun & Clarke, 2006; Charmaz, 2006). Constructivist Grounded Theory Lite emphasises therefore, that any resulting theory can only offer an interpretive view of the world. As such, Constructivist Grounded Theory Lite recognises the importance of reflexivity and explicitly acknowledging the researcher position.

Immersion in literature. The aim of all Grounded Theory methodologies is to construct a theory that is grounded in the data. As such, traditional post-positivist grounded theorists (Glaser, 1978) specifically instruct researchers to avoid the existent literature in the field to prevent theoretical contamination by placing preconceived theoretical frameworks on the data. In doing so, the researcher reduces bias (Birks & Mills, 2015). Whilst this is considered to be the original approach to Grounded Theory, it is well recognised that this stance is not always practical or possible. Particularly, in the context of obtaining ethical approval and completing doctoral research, where engagement with the literature is necessitated (Birks & Mills, 2015; Nagel, Burns, Tilley & Aubin, 2015).

Fundamental to Constructivist Grounded Theory is the recognition that the phenomenon of interest is socially constructed between the researcher and the interviewee. Therefore, any data collected can only be a representation of the participant's truth. As such, the constructivist approach pre-positions itself as able to balance how the researcher interacts with the data based upon their pre-existing knowledge of the literature. In order to manage a priori theoretical knowledge, Charmaz encourages constructivist grounded theorists to limit their immersion in the data until initial categories are developed following the purposive sampling phase (Charmaz, 2006).

The necessity to engage somewhat in immersion in literature is a key consideration that demarks the presented research methodology as Grounded Theory Lite as opposed to a 'full Grounded Theory' (Braun & Clarke, 2006, 2014; Bryant, 2012). Consequently, it was

necessary to carefully consider the approach to literature immersion in the design of the current study. As the development of this study required engagement with the literature in order to meet the academic and ethical requirements, a priori immersion in the literature was managed using two strategies. Initial engagement in the self-compassion literature was undertaken during the development of the research question and design of the study. As such, limited engagement with core theoretical models and definitions of self-compassion was necessary (P. Gilbert, 2005; Goss, 2011; Neff, 2003) as was an understanding as to whether these concepts had been explored in the TSOA population, in order to meet the requirements of novelty for doctoral research. However, specific theoretical literature related to the nature of self-compassion within the context of health behaviours and debates within the literature was limited until the point at which the categories were developed, defined and considered relationally (Glaser, 1992). Throughout the data collection and analysis processes, the reflexive diary was used to support the analysis and separate the developing grounded theory from pre-existing theoretical frameworks. Reflections on the challenges of maintaining theoretical neutrality during the analysis stage were discussed reflexively within qualitative forums and supervision. In doing so, the eventual theory remained grounded in the data. For reflections on the challenge of immersion in literature, please see Chapter 5.

Extended Methodology

Interview guide. Semi-structured interviews were conducted with participants. The initial interview guide (see Appendix E), was developed in line with Intensive Interviewing Methodology (Charmaz, 2006) and existing qualitative research with overweight and obese adults (J. Gilbert et al., 2014). The interview guide contained main topics, however the phrasing of questions was adapted to ensure accessibility for participants. Some questions were modified to allow for tentative exploration of and links between emerging categories during the theoretical sampling phase (Braun & Clarke, 2014).

Transcription. The process of transcription is considered to be essential in ascertaining the rigor and validity of qualitative research (Poland, 1995). Critical reviews of qualitative research suggest that the lack of transparency around how interviews have been transcribed challenges the integrity of the research (Wellard & McKenna, 2001). As such, the transcription methods used in the empirical paper are described.

Interviews were transcribed upon reaching the end of the participant withdrawal period, using in the style of intelligent verbatim (Hickley, 2018). Interviews were transcribed verbatim with the exception of filler utterances (e.g. "erm") and habits of speech (e.g. "do you know what I mean") that did not infer meaning. Behaviours that provided emotional context to the comments i.e. laughter or becoming tearful, were added to the transcript (Poland, 1995). Pauses in speech were captured within the transcript, with a differentiation made between long and short pauses. This method of transcription allowed for a clean transcript, whilst retaining the voice and style of speech of the participant (Charmaz, 2006). In order to ensure anonymity, names, locations and dates were removed from the transcripts (McLellan, MacQueen, & Neidig, 2003).

The transcription process facilitated the process of immersion in the data, as in order to transcribe and quality check the transcripts, the researcher listened to each interview in full on at least two occasions. In order to meet the timeframes for the thesis submission, the researcher transcribed five of nine interviews, with four interviews transcribed using a professional transcription service. The benefits of utilising a professional transcription service for qualitative research have been comprehensively discussed (Poland, 1995; Wellard & McKenna, 2001). It has been recognised that novice researchers who conduct their own transcription are likely to succumb to fatigue and loss of enthusiasm, which can have significant impacts on the quality of the transcription (Seidman, 2006). This can result in errors such as interpolation, which can significantly change the meaning of the data. Utilising professional transcription services reduces the

likelihood of interpolation. By combining both researcher transcription and professional transcription services, the empirical paper endeavoured to ensure data quality and validity, without compromising the opportunity for further data immersion. In order to comply with the ethical requirements of this study, the transcription service was bound to a non-disclosure agreement (Wellard & McKenna, 2001).

Data management. Given the large amounts of data generated during the grounded theory, a data management strategy was developed to allow for the researcher to work with a substantial data set. With the recent advances in qualitative computer software, many grounded theorists utilise computer based software, such as Nvivo to manage data (Hutchison, Johnston, & Breckon, 2010). However, given the large number of codes generated within grounded theory, it is recommended, that a combination of manual and computer coding is most pragmatic (Birks & Mills, 2015). Therefore, data was managed using a number of different tools, moving between manual and computerised approaches. The process of data management evolved in-line with the stage of data analysis. Line-by-line coding was completed manually on paper transcripts. Focussed coding was completed within a Microsoft Word document next to the raw transcript. Axial coding was initially completed using post-its and later transferred into Microsoft Excel, as this software allowed for codes to be easily manoeuvred between categories during the analysis process. Categories and sub-categories and their properties were recorded using Microsoft Word. Data extraction tables were developed for supporting quotes. For a pictorial representation of the data management process, please see Appendix G.

Memo writing. Memo writing is a critical component of grounded theory (Birks & Mills, 2015). Memos capture thoughts on the research process from its inception through to the final write up. Although there are no specific guidelines regarding when and how to memo, Charmaz highlights that memo writing is fundamental to the analysis process within constructivist grounded theory (Charmaz, 2006). Memos are used to explore and

theoretically postulate on individual focussed codes and links between focussed codes. In doing so, focussed codes are 'raised' to categories (Charmaz 2006, p. 91). In the current study, case based memos were written following each interview (Birks & Mills, 2015). These memos reflected on the process of the interview, highlighting specific moments in the interview which the researcher had a particularly strong response to, and new perspectives gained. Conceptual memos on focussed codes and categories were kept throughout the analysis process. Although Charmaz (2006) encourages writing stream of consciousness textual memos, a combination of textual and diagrammatic memos were kept during the analysis process in order to fit the researchers' thinking style given their tendency to think more constructively in diagrams . For examples of Memo writing, please see Appendix H.

Reflexive diary. As noted, a reflexive diary was kept throughout the research process by the researcher (MC). The reflexive diary was used to enhance theoretical sensitivity in the study through increasing awareness of her own experiences. The reflexive diary was used to capture any pre-assumptions and beliefs so that they did not influence the data and analysis. The reflexive diary was used to capture and explore personal reflections from the inception of the thesis. Excerpts from the reflexive diary were discussed as a part of the supervisory process. A reflective piece on the research process is presented in Chapter Five.

Chapter Five: Discussion and Critical Evaluation

Word Count: 8041

Discussion and Critical Evaluation

Overview of Results

This thesis aimed to explore psychological constructs related to weight management behaviours in obese adults. A systematic review and mixed-methods synthesis highlighted that although literature focussing on Internalized Wight Stigma (IWS) is limited, experiencing high levels of IWS was related to maladaptive weight management behaviours. The empirical paper qualitatively explored the influence of self-compassion during weight management for obese adults. Being self-compassionate during weight management was recognised to be challenging. However once self-compassion began to develop, it helped to support weight management. The subjective change in the weight management experience wasn't necessarily measured by weight lost, but measured through the self-to-self relationship. The resulting grounded theory also highlighted that the obese adults in the study experienced stigma, self-criticism and shame in relation to their body weight, supporting the findings of the systematic review.

Self-compassion and Health Behaviour Literature

In considering the relationship between self-compassion and weight management, this thesis provides a model that tentatively explain the existing literature, that self-compassion may support weight management in obese adults (Hilbert et al., 2015; Kelly, Vimalakanthan, & Miller, 2014; Mantzios & Wilson, 2014). As self-compassion developed in the participants, it appeared able to interact with different components of the weight management process. Previous hypotheses around the role of self-compassion and weight management behaviours have primarily focussed on the interaction between self-compassion and perspective taking when experiencing a set back with diet or exercise, which could fall under the grounded theory category in the current study 'difficulty managing weight' (Adams & Leary, 2007; Sirois et al., 2015). However the current grounded theory suggests that the role of self-compassion in weight management can be

broader, with specific influences on the relationship with others, relationship with food and relationship with self, which is a novel finding.

Understandings and definitions of self-compassion in the context of health-behaviours have recently been scrutinised (Mantzios & Egan, 2017). The empirical paper provides novel evidence to suggest that the definition of self-compassion in the context of TSOA health behaviours may be more universally misconstrued. Whilst this is not a new consideration in relation to other clinical populations, current evidence relating to the impact of mis-defined self-compassion is primarily anecdotal (Mayhew & Gilbert, 2008). Furthermore, the current grounded theory proposes that for obese adults, holding misconstrued definitions presents a significant barrier in the development of self-compassion and therefore may have a negative impact on weight management. Certainly for the obese adults in the current paper, redefining self-compassion was crucial. Once the definition of self-compassion is redefined and more aligned with self-care, health behaviours improve. Based on the current paper, the personal definition self-compassion appears to have a considerable impact on health behaviours in obese adults.

Self-compassion and IWS

A small but developing evidence base suggests that self-compassion can buffer against the internalised stigma across a number of conditions (Heath, Brenner, Lannin, & Vogel, 2016; Wong, Mak, & Liao, 2016), with a key paper exploring how self-compassion may protect against IWS (Hilbert et al., 2015). The grounded theory resulting from the empirical paper supports this growing literature base and provides a preliminary theoretical model to understand this process within obese adults.

As was described, there was an interaction between the categories ‘relating to self’ and ‘interacting with others’, with an emphasis on the sub-category ‘others judging/stigmatizing’ and it is possible these experiences may create the conditions for the development of IWS. Furthermore, the identification of a shame response provides further

evidence for IWS within the participants. Given that IWS may be generated through the interaction of multiple components in the grounded theory's weight management process, the impact of IWS is likely to be experienced as negatively affecting all categories within the weight management process (i.e. during relationships with others, within the relationship with food, relationship with self and the challenges of managing weight), ultimately further contributing to weight management challenges.

In the present study, self-compassion appeared able to draw upon the positive components of weight management to enhance the self-to-self relationship. Thus, improving the experience of weight management and potentially creating the 'buffering effect' (Hilbert et al., 2015). Moreover, as the apparent development of IWS within the proposed grounded theory involves multiple related categories, this finding may explain why in previous studies self-compassion has been found to be such a significant protective factor against IWS (Hilbert et al., 2015), as self-compassion may influence a number of different areas within weight management.

IWS and Obesity: A Critical Health Psychology Critique

Over the last three decades, a Critical Health Psychology field has emerged from within the health psychology field. Critical Health Psychology opines that mainstream health psychology is aligned with the medical model and therefore leans towards the positivist epistemological position, which is inherent in the medical model (Lupton, 1994). Whilst this alignment has been beneficial in raising the profile of psychological aspects to health in western society, there are a number of critiques to this alignment. The positivist medical model, and therefore, health psychology is recognised to be heavily influenced by politics and culture, which has led to health psychology research offering primarily individualistic theories, models and explanations for health behaviours. This focus comes at the expense of examining the social, cultural and political influences on health behaviour (Lyons & Chamberlain, 2006). Therefore, mainstream health psychology has

been critiqued for placing the focus on voluntary behaviour change (i.e. change in the individual) rather than challenging the mandatory illness efforts (i.e. government or societal level change) of the culture (Albee & Fryer, 2003). Moreover, Critical Health Psychology describes the existence of a 'multi-level coercion' (Albee & Fryer, 2003, p.72) on what is perceived as voluntary behaviour change. In the context of obesity, this refers in part to the focus on the individual and their responsibility to make healthy food choices, rather than challenging the policy makers and fast food industry about their advertising and product development. The fast food industry brings billions of pounds into the United Kingdom's (UK) economy each year. Thus, if it were targeted by mandatory illness efforts (i.e. a society where nutrition within the fast food industry was more tightly regulated), fast food may not be as attractive to consumers and therefore, profitable which would have widespread economic and social impacts on the UK (IGD, 2017). By targeting voluntary behaviour change whilst neglecting to address mandatory illness efforts, Critical Health Psychology proposes that main stream health psychology leads to a culture of 'victim-blaming' (Albee & Fryer, 2003). Although in the UK, the critical health perspective is beginning to influence policy decisions in the context of childhood obesity (Department of Health and Social Care, 2018), adults potentially remain the 'victims' of this individualistic focus on health behaviours.

This Critical Health Psychology critique could be applied to the conceptualisation of IWS. The identification of the construct IWS may be influenced by medically aligned positivist research, which places emphasis on the individual to change their IWS (Ratcliffe & Ellison, 2015), rather than attempting to address the social and cultural factors that result in the stigmatization of obese and overweight adults struggling with weight management. Through this lens, the inference that reducing IWS in overweight and obese adults may lead to an improvement in weight management behaviours could be perceived as 'victim-blaming', particularly when the concept of 'multi-level coercion' around obesity is

considered. However, it is acknowledged by Critical Health Psychology that the individualistic treatment approach to health and mental health is often preferred by the individual seeking relief from their problems (Albee & Fryer, 2003). Therefore, some overweight and obese individuals may prefer the positivist conceptualisation of IWS as a psychological phenomenon which can be treated on an individual basis, and this should also be respected by researchers.

Qualitative research in Critical Health Psychology. Another critique of the health psychology field is that due to its alignment with the positivist medical model, less emphasis is placed on the meaning and experience of ill health (Lyons & Chamberlain, 2006). As such, critical health psychologists align themselves with the social constructionist epistemological position, that the experience and understanding of ill health and disease are influenced by societal and cultural discourses (Pieterman, 2007). Therefore, social constructionist qualitative research is encouraged to enhance the field of health psychology (Lupton, 1994).

A Critical Health critique on the thesis portfolio. By taking a critical realist position, the systematic review paper within the current Thesis Portfolio acknowledges the perspectives of IWS inherent within the positivist and social constructionist epistemologies of the reviewed papers and is able to integrate these two seemingly opposing viewpoints. It is acknowledged throughout the systematic review that the reviewed quantitative papers are embedded within the positivist epistemological position and are therefore treating IWS as a phenomenon that can be directly investigated and potentially changed within the individual. The reviewed qualitative literature, however, is more aligned with the social constructionist epistemological position and focuses on the experience of IWS.

By including both the qualitative literature and quantitative literature, the systematic review aims to address the Critical Health Psychology critique that qualitative literature is overlooked in health psychology. Within the thematic synthesis, the wider

societal and cultural influences on the experience are noted within the analytic themes, which begin to describe the influence of society and culture on the IWS experience. This is most evident within the themes social exclusion and negative experiences of managing weight. However, the systematic review did highlight the paucity of qualitative literature in this area and it is recommended that further qualitative research be carried out within this area.

The empirical paper takes a constructionist approach to the Grounded Theory Lite (Charmaz, 2006). The Constructionist Grounded Theory Lite seeks to explore and interpret the participants experiences of self-compassion and weight management through their social and cultural context. In doing so, the empirical paper makes novel contributions to the theoretical understandings of the experience of managing weight and of self-compassion during this process. As such, the empirical paper begins to address some of the gaps in the health psychology literature as outlined by the Critical Health Psychology movement.

Validity and Rigor

Assessing and critically evaluating the validity and rigor of the systematic review and empirical paper is a marker of research quality (Elliott, Fischer, & Rennie, 1999). The two methodologies (mixed-methods review and qualitative) utilised within the thesis have individually been subject to scrutiny surrounding the validity and rigor, in a positivism dominated health care culture (Elliott et al., 1999; Sandelowski et al., 2006). In order to maintain the scientific rigor and validity of the Thesis Portfolio, two guidelines have been consulted, in line with the methodological and philosophical positions of each piece.

Systematic review. Assessing quality and rigor in mixed methods research is vehemently debated within the mixed-methods field (K. M. Brown, Elliott, Leatherdale, & Robertson-Wilson, 2015) and at present there is no ‘gold standard’ framework. The guidance is further mired when completing mixed-method reviews. The Joanna Briggs

Institute (JBI), a leading organisation in supporting evidence-based health care, has a set of guidelines for maintaining rigor in the conduct of mixed-methods reviews (Pearson et al., 2014), when translating quantitative findings into qualitative statements to allow for the mixed-methods synthesis. The validity and rigor of the systematic review presented within this thesis is assessed in accordance with these guidelines.

Bracketing. The JBI highlight the importance of maintaining neutrality during the process of the mixed-methods review. In doing so, the review is not consciously or subconsciously biased by the researcher imposing their own views or position on the evidence. Maintaining neutrality is termed 'bracketing' in this context. 'Bracketing' was achieved and maintained through the use of a reflexive diary throughout the process of conducting the systematic review. Keeping a reflexive diary and writing an early 'researcher position' statement, allowed the researcher to become aware of their own pre-assumptions related to the systematic review and ensure that they did not infiltrate the review process. Furthermore, in engaging in this process, the adherence to the critical realist philosophical position of the systematic review was ensured.

Text-in-context. Text-in-context relates to how data is extracted from the original articles. With mixed-method synthesis, preserving the context of the original study is crucial in the interpretation of results, particularly as the included studies are likely to be highly heterogeneous (Sandelowski, Leeman, Knafl, & Crandell, 2013). In order to ensure the context of the original articles is represented in the final review, Sandelowski et al. recommend extracting data relating to the following: sample, time, source of information (where relevant), magnitude and significance and target phenomena.

Given the significant heterogeneity of papers within the present review, data extraction was highly considered during the review design. Data extraction plans were clearly identified and specific attention was given to the sample characteristics. In doing so, the context of the articles endeavoured to be maintained. This was particularly relevant

for the qualitative papers, for which context and philosophical underpinnings greatly contributed to the interpretation of the original articles findings. Target phenomena also presented a challenge in the systematic review, as IWS was not the target phenomena of the qualitative papers. Therefore, the decision to extract only the relevant themes allowed for a focussed review, addressing the review question. For the quantitative papers, the numerical data related to the outcome of interest were not extracted, instead, a qualitative summary of results was provided. This approach was taken as the quantitative studies used a variety of different study designs and analyses. Therefore, direct comparisons between outcomes was not possible. Given the exploratory nature of the review paper and the paucity of literature addressing IWS and weight management behaviours, it was considered that at this preliminary stage, numerical data extraction was not imperative. However it is recognised that the criteria of magnitude and significance has not been fully met.

Quality appraisal. Quality appraisal is a key component in maintaining rigor in mixed-method reviews. As such, study quality was appraised and reported on within the systematic review chapter. For the quantitative studies, the Quality Assessment Tool for Quantitative Studies (QATQS) was used. This tool was utilised as it is considered to be a leading assessment tool (Deeks et al., 2003). However, as the tool uses the quantitative 'gold standard' design of randomised control trials to assess all other studies against, the majority of studies within the review were rated as moderate or weak, primarily due to their design. As the review included a number of cross-sectional studies, it may have been more appropriate to utilise a tool specific for rating the quality of cross-sectional studies. However, as the 'gold standard' of health evidence-based research is the randomised control trial, using the QATQS provides a quality rating which is more reflective of how the papers will be considered within the development of health policy. Therefore, the

review highlights that higher quality studies are required to understand whether IWS effects weight management behaviours.

Indicative recommendations. Pearson et al. recommend against the use of summative or proscriptive recommendations in mixed-method reviews. Throughout the integrative synthesis and discussion, indicative recommendations were made in relation to further research.

Empirical paper. A number of guidelines exist to assess the quality of qualitative research. Whilst these guidelines have provided useful reference points in the design and write up of the empirical paper, as the constructivist grounded theory methodology was utilised during the empirical paper (Charmaz, 2006), the quality and rigor of the Grounded Theory Lite research is appraised against the four principles of constructive grounded theory (Charmaz, 2008).

Principle One: Treat the research process itself as a social construction. This principle refers to the evolving nature of grounded theory and the researchers ability to follow lines of theoretical inquiry. Constructivist grounded theory is not prescriptive. Therefore, Charmaz (2006) considers constructivist approaches to be 'guidelines' as opposed to a manualised approach to constructing grounded theory. The current paper adhered to this principle, within the scope of the Grounded Theory Lite approach. Theoretical questions were explored as they arrived, both live during the interview process and also following iterative processes. Data iteration occurred after interview five and interview seven, which provided natural opportunities for theoretical questions to be identified and explored in the subsequent interviews.

Principle Two: Scrutinise research decisions and directions. The second principle refers to the integrity and epistemological coherence of decisions made within the research process. In order to maintain epistemological coherence throughout the development and conduct of the grounded theory, the reflexive diary was used to note down thoughts and

explore design decisions and research directions. Dilemmas were discussed in research supervision and within the peer supervision qualitative research forum, which was an invaluable resource for highlighting and grappling with the epistemological implications of decisions, whilst meeting the academic requirements of the thesis. It is recognised that completing a constructivist grounded theory within the context of a doctoral thesis is recognised can create epistemological conflicts (Nagel et al., 2015). The reflexive journal and peer supervision were most valuable in order to adhere to this principle when these conflicts arose.

Principle Three: Improvise methodological and analytic strategies throughout the research process. Following on from principle two, principle three requires the researcher to be analytic of their methodology and research strategy. The practice of reflexive journaling enabled the researcher to explore and explicitly acknowledge personal views and experiences which may influence decision making during the research process. In doing so, one methodological strategy received particular attention: member checking.

Although the concept of member checking has been identified as a marker of qualitative rigor (Elliott et al., 1999), within grounded theory, the collective position on member checking remains unclear. Constructivist grounded theory posits that meaning is co-constructed between the researcher and interviewees (Charmaz, 2006). Therefore, incorporating member checking into the design, from this position, creates a dilemma (Mishler, 1986). Glaser (2002) suggests that member checking within grounded theory may be unhelpful as due to the analytic process and extraction process, the categories may not directly reflect the raw data. As such, Glaser suggests that participants may reject or dislike the resultant grounded theory. Furthermore, by representing data to participants at a later date, participants are no longer within the context during which the original meaning was created. As such, revisiting and amending the phenomenon from a new context may render the study of the phenomenon as invalid (Sandelowski, 1993). However, Charmaz

utilises a form of member checking within her work. Charmaz suggests that under the guise of member checking, researchers can clarify points within the original interview, adding more depth or clarity to the data (Charmaz, 2006).

The current grounded theory did not use member checking as a process of ensuring validity and rigor. This decision was made primarily through concerns around diluting the phenomenological validity, as the researcher endeavoured to remain true to the epistemological positioning of the research. For pragmatic reasons, Charmaz's approach to member checking was not conducted within the study. However the value of Charmaz's approach to member checking is acknowledged.

Principle Four: Collect sufficient data to discern and document how research participants construct their lives and worlds. Adherence to principle four was limited by the use of a Grounded Theory Lite methodology. Within the context of the Grounded Theory Lite, the empirical paper had an optimum number of participants, which allowed for possibility of theoretical saturation (Braun & Clarke, 2014; Guest et al., 2006). However, in order to collect sufficient data, Charmaz does not necessarily recommend increasing participant numbers, rather re-interviewing participants to clarify points and obtain more data further along the phenomenological process (Charmaz, 2006). Whilst this level of data gathering surpassed the scope of the current thesis, which dictated a Grounded Theory Lite approach, it is recognised that returning to re-interview participants may have added further depth to the resulting grounded theory.

Strengths and Limitations

Systematic review. This thesis presents the first systematic review of IWS and weight management behaviours. The inclusion of both qualitative and quantitative papers in this initial review is considered to be a strength, as this paper can be used as an initial springboard for both quantitative and qualitative future research. The influence of IWS on weight management behaviours is being increasingly recognised. As such, new research is

regularly published on the topic. Given the time constraints of this doctoral thesis, the process of completing the scoping and final searches for the systematic review took place over six months in 2017. Therefore, it is acknowledged that the systematic review may not include all relevant papers at the point of submission.

A limitation of the systematic review is that the review was conducted by one person, the primary researcher. Whilst this was a requirement of the thesis, given the novelty of the mixed-methods synthesis approach used, the validity and rigor of the systematic review may have been enhanced with a second-rater or triangulation process.

Empirical paper. This thesis presents the first empirical paper to explore qualitatively the experience of weight management and self-compassion within the Tier 3 population of obese adults. As this population presents with complex needs and are likely to require ongoing weight management support, providing an initial understanding of the experience of weight management in this population is a strength of this paper.

In line with the fourth principle of constructivist grounded theory, whilst appropriate within the context and constraints of a doctoral thesis, the number of participants in the empirical paper is small. Whilst qualitative research does not aim to generalise findings to the experiences of an entire population, the qualitative method of grounded theory does allow for and encourage larger participant numbers to explore social processes. Had this research been completed outside of a doctoral thesis, a Grounded Theory-Full approach could have been utilised (Braun & Clarke, 2014).

Clinical Implications and Future Directions

The systematic review and empirical paper further support the literature around IWS in obese adults. IWS appears to play a significant role in the experience of obese adults. Given that IWS may potentially elicit shame, many obese adults may not be forthcoming with this experience. However, as the thesis has highlighted, IWS can covertly sabotage weight management. This thesis highlights the necessity to consider the

impact of IWS when providing psychological assessment and treatment of obesity in adults. Overlooking this factor in the assessment and treatment of adults in tertiary services, may lead to poorer weight management outcomes.

This thesis highlights how one's understanding of what constitutes a self-compassionate act may lead to the maintenance of weight management incongruent behaviours (e.g. eating to self-soothe). It may, therefore, be beneficial to provide clear definitions of self-compassion within clinical settings. Further research into how obese adults within tertiary care settings understand self-compassion, and specifically the dimension of self-kindness (Neff, 2003) may be of clinical utility.

The findings of the empirical paper could suggest that supporting obese adults to increase self-compassion may help to overcome self-criticism, IWS and shame. In doing so, the experience of weight management is improved. Providing interventions that enhance self-compassion for adults with weight management difficulties may be beneficial. Not only will this allow for self-compassionate resources to be built, experiencing success at weight loss during secondary or tertiary care could allow individuals to better manage their weight independently, without needing the support of Tier 4 bariatric services. Further research into the relationship between self-compassion and weight management in obese adults within tertiary services is required to enhance and refine appropriate therapeutic interventions. In doing so, it is hoped that an evidence base can be built to inform services who may offer self-compassion based interventions to support obese adults with weight management.

Third-wave psychological therapies. Given the potential benefits self-compassion has in supporting weight management in TSOA, introducing third-wave psychological therapies that support the development of self-compassion in this population may be beneficial (Leaviss & Uttley, 2015). Furthermore, the application of third-wave psychological models may provide further psychological understanding as to how self-

compassion influences weight management. Two third-wave psychological therapies for developing self-compassion will be discussed in relation to the current findings.

Compassion Focussed Therapy (CFT) is underpinned by the evolutionary model, the Affect Regulation Systems model (Gilbert, 2005). Compassionate Mind Training (CMT) within CFT has been found to reduce shame, stigma and self-criticism within a number of stigmatized populations including: individuals with mental health difficulties, schizophrenia with auditory hallucinations and adults who meet the criteria for personality disorders (Leaviss & Uttley, 2015). A key message within CFT is that whilst it is not ones fault they are in their current position (i.e. self-critical and attuned to threats), it is ones responsibility to manage it.

In the context of weight management, CFT has primarily been adapted within the eating disorder population i.e. anorexia nervosa and bulimia nervosa (Goss & Allan, 2014). Therefore, CFT for eating disorders' main focus is reducing eating disorder symptoms, with a focus on restoring a healthy eating pattern. Although the obese population have been found to hold similar beliefs in relation to weight and shape and may engage in similar maladaptive eating behaviours to those with an eating disorder, distinct differences in their eating patterns and subsequent cognitive and emotional responses separate the two populations (Wardle, 2009). Although theoretically CFT and CMT may be useful psychological interventions to increase self-compassion and overcome self-criticism and shame within overeaters, there is no published evidence to support CFT in the TSOA population (K. Goss, personal communication, February 15, 2017; P. Gilbert, personal communication, February 16, 2018; Leaviss & Uttley, 2015).

Considering CFT and CMT in relation to the findings of the current study raises a number of considerations for the application of CFT and CMT to TSOA. The category 'relating to food' in the current grounded theory played a significant role in the weight management process, there were a number of other factors that contributed to the

challenges of the weight management process and the limited access to self-compassion in obese adults. CFT and CMT in the obese adult population may therefore be more beneficial if applied more broadly, as opposed to focusing primarily on the relationship with food, which has been the main focus in works to date (Goss, 2011).

Although the Affect Regulation Systems model may be able to conceptualise and incorporate 'threats' from other areas within the weight management process i.e. the categories 'interacting with others' and 'difficulty maintaining weight', CFT and CMT remains empirically unevaluated in the TSOA population. As such, it may not be appropriate to apply CFT to the TSOA population without further research at this early stage.

An alternative therapeutic model to enhance self-compassion is Acceptance and Commitment Therapy (ACT; Hayes, Luoma, Bond, Masuda, & Lillis, 2006). Grounded in Relational Frame Theory, ACT suggests that when experiencing a painful private experience (for example, a memory of a stigmatizing experience at the gym), individuals engage in experiential avoidance to reduce or avoid the associated negative emotions (for example, not going for their planned run). Whilst this move may protect them from the painful experience, in doing so, they move away from their desired values.

In order to reduce experiential avoidance, ACT encourages the development of psychological flexibility. Psychological flexibility is considered to be the agent of change within ACT, which consists of six components: mindfulness, acceptance, cognitive diffusion, self as context, values and committed action. Whilst ACT does not claim to directly target self-compassion as component of psychological flexibility, self-compassion is considered to be inherent within all aspects of psychological flexibility (Neff & Tirch, 2013; Yadavaia, Hayes, & Vilardaga, 2014). Moreover, measures of psychological flexibility are highly correlated with measures of self-compassion.

There is limited but promising evidence to support the use of ACT to increase self-compassion (Yadavaia et al., 2014), reduce stigma and shame (Griffiths, Williamson, Zucchelli, Paraskeva, & Moss, 2018; Lillis et al., 2009; Luoma & Platt, 2015), and support weight management (Forman, Butryn, Hoffman, & Herbert, 2009; Niemeier, Leahey, Reed, Brown, & Wing, 2012; Weineland, Arvidsson, Kakoulidis, & Dahl, 2012).

Based on the findings of the current thesis, ACT may have more theoretical grounding in the treatment of obese adults. The systematic review found preliminary findings to suggest subjective quality of life may be a protective factor against the internalization of weight stigma. The current grounded theory poses that a poor relationship with self is key in the maintenance of weight management difficulties and that furthermore, that progress in weight management can also be measured through the relationship with self. In its 'pure' form (i.e. not integrated with standard behavioural interventions for weight management), the focus of ACT for weight management is in establishing values-based goals, moving the focus from weight change to a better quality of life. In turn, the relationship with self improves (Lillis & Kendra, 2014). Developing psychological flexibility may support obese adults to overcome the perception that self-compassion is conditional. In doing so, living a values-based life becomes the treatment focus, which improves the relationship with self, reducing distress and increasing the propensity for self-compassion during lapses. For patients who engage in the 'intensive milk pathway', the immediate focus can shift from weight loss as weight loss is inevitable if the diet is adhered too. Therefore, this may create the psychological 'space' for patients to focus on their values and begin to develop psychological flexibility, before being faced with the challenges of reintegrating solids into their diet. Therefore, introducing patients to ACT at this early stage of treatment may have a positive impact on long-term weight outcomes.

The empirical paper and resulting grounded theory highlight how self-compassion is perceived to improve the process of weight management. Both CFT and ACT show promising potential in supporting TSOA to become self-compassionate during weight management. Further literature exploring whether these third-wave psychological interventions can be applied to the TSOA population is necessitated.

Conclusion

This Thesis Portfolio explored the constructs IWS and self-compassion within obese adults. IWS was found to have a negative impact on weight management behaviours and was evidenced within the tertiary care population. Self-compassion was found to develop during weight management and positively influenced the weight management process.

Reflections on the Research Process

This section of the Thesis Portfolio provides reflections on the research process. These reflections are drawn from the reflexive diary and discussions within the qualitative research forum and supervision. Due to the reflective nature of this section, this section is written in first person.

Development of Research Project

Whilst developing this research project, I (MC) spent time reflecting on my position on societal representations of the thin-ideal' (Tylka, Russell, & Neal, 2015). In doing so, I found myself questioning my values by reflecting on times when I had been exposed to societal stigma of obese individuals. My personal values of integrity and equality were challenged in these situations, and I reflected deeply on why I had not challenged, or felt able to challenge the stigma in that moment. These reflections led me to become curious about the experiences of those who are faced with this stigma every day. Daily, I became aware of all the different ways in which obese individuals are either

directly or indirectly stigmatised in our society and acknowledged how this sat uncomfortably with me.

I began to wonder about the experience of weight management for obese adults who may need support within tertiary care. During initial literature searches, I became aware of how little research has been conducted to understand the experiences of this population. Combined, these experiences led me to become passionate about developing a research project that would capture the experiences of this highly stigmatized and under researched population. I was eager to contribute to better the understanding of self-compassion in weight management for this population, as contributing to this literature base may support the development of future psychological interventions.

Systematic Review

After completing a number of scoping searches in the development of the systematic review question, it became apparent to me that I would need to consider both qualitative and quantitative literature. Taking a critical realist approach to the systematic review was the most appropriate way to answer my review question and I was determined to find a review methodology that suited my question. Giving equal weighting to both the qualitative and quantitative literature during the synthesis was a difficult balance, as I naturally gravitated towards the qualitative literature. At times the weighting became unequal in subtle ways. For example, the thematic synthesis process was more time consuming than the quantitative narrative synthesis, which led to a deeper affinity with the findings. In order to maintain the equal weighting, the decision was taken to utilise the reflexive diary during the systematic review.

Empirical Paper

Grounded Theory Lite. The methodology of ‘full’ Grounded Theory, is recognised to be challenging in the context of a time-limited doctoral research project (Braun & Clarke, 2014). Therefore, given the time-limited nature of this doctoral research,

I chose the methodology Grounded Theory Lite (Braun & Clarke, 2006, 2014) for the research project. A Grounded Theory Lite project undertakes the same data analysis methodologies as a 'full' grounded theory and indicates the relationship between categories. However, specific theoretical sampling and interviewing to explore the relationship between categories is not necessarily engaged in (Braun & Clarke, 2014) This methodology was chosen as it was the most appropriate method to qualitatively answer the research question 'How does self-compassion influence the weight management process?' as Grounded Theory (full or lite) is recommended when: the research seeks to develop a theory to explain a social process, little is known about the study area and an explanatory theoretical model is beneficial (Birks & Mills, 2015).

In arriving at this research question for the project, I was inevitably exposed to some of the pre-existing literature relating to the concept of self-compassion and already had an awareness that self-compassion was being researched in relation to overweight and obese adults. This discovery, combining two areas of interest, prompted me to pursue further research in this area and I felt immediately drawn to adding to the literature in this field through qualitative research.

However, the route to my arrival at this research question already created a tension with the naturally compatible methodology of Grounded Theory Lite. I already had some awareness of the literature, which conflicts with the concept of prohibiting prior immersion in the literature to avoid contamination of the developing theory by pre-existing theories. Moreover, literature surrounding self-compassion was contemporary and growing rapidly. Therefore, at the time of developing the research project I was aware of dominant conceptual models of self-compassion (Gilbert, 2005; Neff, 2003), which were well accepted within the literature, mainstream media, the health service and clinical practice. The challenge of immersion was further amplified by the necessity to write a research proposal and ethics applications, which require the researcher to engage to some extent in

the literature. As such, I had to question whether or not to disengage from these conceptualisations during the research process. Also, if participants referred to these pre-existing conceptualisations of self-compassion during the interviews, I had to consider whether I engaged with these mainstream conceptualisations from a social constructionist epistemological position, through the cultural and social context the participants experienced.

In order to negotiate these challenges, I consulted with Grounded Theory research forums, seminal Grounded Theory methodology texts and published research about this challenge (Birks & Mills, 2015; Braun & Clarke, 2006, 2014; Charmaz, 2006; Nagel, Burns, Tilley, & Aubin, 2015) and felt relieved, validated and reassured that I was not alone in experiencing this challenge. By reading that fellow doctoral students also experienced the same challenges and that if immersion in the literature was actively and consciously kept to a minimum, this apparent conflict could be easily handled within a Grounded Theory Lite Methodology, was affirming. Moreover, as I planned to conduct a constructivist Grounded Theory Lite the guidance on 'immersion' was more flexible as Charmaz recognised the doctoral research expectations and was explicit that constructivist Grounded Theory projects could and should still be undertaken by student researchers (Charmaz, 2006; Nagel et al., 2015).

Due to the growing popularity of 'self-compassion', I chose to allow the participants to describe what self-compassion meant to them and to delve into their experiences and conceptualisations as to whether self-compassion was involved in the weight management process. All of the participants had some notion of self-compassion as they themselves had been exposed to the dominant conceptual frameworks of self-compassion, which may, upon reflection, in part have been why they were interested in the research project. This may have implications for the findings as the participants that the project recruited may not have been representative of the CWMS population as they were

already exposed to the concept of 'self-compassion'. However, some of the participants had heard of the concept of self-compassion yet were able to describe what their personal experiences and conceptualisations of self-compassion were, reflect that they were not self-compassionate during weight management and, most importantly, why this was so. Therefore, the resulting preliminary Grounded Theory Lite model may still resonate with those who are not aware of the dominant conceptual frameworks of self-compassion.

Taking this approach to the Grounded Theory Lite allowed me, as a researcher, to manage the conceptual frameworks for self-compassion the participants held, whilst focussing not on how self-compassion was conceptualised, but on the conceptualisation of how self-compassion developed during weight management (however the experience was conceptualised) by participants. Through the reflexive diary I was able to recognise when these pre-existing conceptual frameworks may have been creeping into my analysis and I was able to use the reflexive diary to contain this.

Data collection. As a novice researcher, I found the data collection process quite daunting, particularly as the process was conducted simultaneously with data analysis. A number of issues were reflected on throughout the data collection and analyses process.

Researcher influence on interview process. Prior to commencing data collection, I began to consider how my own body weight, shape and size may influence the data collection process. Being a 'normal weight' 'petite' female, I was anxious about how my questions around self-compassion in weight management may be perceived due to my own shape and size. Although I was not aware of this dynamic within the interviews, I opened myself up to the experience of scrutiny, just as the participants may scrutinise themselves and be scrutinised by others.

***Pre-understanding*.** Using the reflexive diary was crucial in helping me to identify and bring to my awareness pre-understanding that may have influenced data collection. Through the writing of the systematic review, I was aware of IWS and how this may

impact on weight management behaviours. During the interviews, participant statements relating to stigmatizing experiences may pique my interest and I was aware of how tempting it would be to follow this line of inquiry. Being aware of how my pre-understanding influenced my interview approach, allowed me to set firm boundaries around this topic prior to data collection, deciding that questions relating to stigmatizing experiences would not be asked unless the participants brought this topic naturally into the interview. When stigmatizing experiences were reflected on during the interview, I was mindful of balancing gathering rich data on the topic, without allowing the interview to wander too far away from the topic guide due to my own curiosity.

Researcher vs clinician. At times, particularly when participants disclosed a difficult experience during interviews, I grappled with how to respond to these experiences. Holding the 'intensive interviewing' (Charmaz, 2006) framework in mind was challenging during these moments of heightened emotions. I was torn between the clinician and researcher role. Utilising my 'clinician' clinical training skills would encourage me to provide emotional validation and offer a formulation of these experiences, whereas this conflicted with my researcher role, which required a more neutral response. At times I would find myself pulled into the 'clinician' role. I was aware from the literature related to my systematic review, that obese individuals often experience obesity stigma from healthcare professionals. I was mindful that participants may be bringing past negative experiences of obesity stigma within this context into the interview, and I was acutely aware that I did not want to add to these experiences. Indeed, a few participants described stigmatising experiences within the context of the current service.

I resolved that giving a human response and offering compassion to these experiences, was more aligned with the intensive interviewing framework, which allowed for rapport to be maintained as participants took risks in sharing their experiences (Charmaz, 2006). On reflection, this style created a comfortable dynamic, within which

participants felt comfortable to share their experiences of weight management and self-compassion.

The phenomenon 'self-compassion'. As I was introduced to the concept of self-compassion from an academic perspective, I rather naively entered the data collection phase anticipating that participants would be able to speak abstractly about their conceptualisations and experiences of self-compassion. However, after my first few interviews I recognised that this was not the case, particularly for those who had very limited experience of self-compassion in the context of weight management. At times I felt so lost in the participants' narrative of the weight management process that it was difficult to remain focussed on and elicit experiences of self-compassion. My experiences during interviews were likely reflective of just how overwhelming the experience of weight management was for the participants, and how self-compassion can easily become lost in this context. Allowing myself to become absorbed in the experiences of weight management, enabled me to understand the participants' world and experiences, which added a richer quality to the understanding of the phenomenon.

Data analysis. Whilst writing the empirical project it felt crucial to ensure that the participants would be able to connect the grounded theory with their experiences. At times, this led me to question the shape of my analysis as it developed, with categories relating to the weight management process taking shape more quickly than those related to self-compassion. Trusting in the process of the developing grounded theory was at times anxiety provoking and I found the procedures of constant comparative analysis and memo writing simultaneously fostered and relieved this uncertainty.

Memo writing. Documenting the research process through written memos was one of the more challenging aspects of data analysis. Charmaz (2006) encourages free-writing memos. Although I utilised this method, I found this particularly challenging as it did not fit with my preferred thinking style, which is more diagrammatic in nature. When free-

writing, I would find myself interrupting the process by returning to earlier sentences and changing the phrasing. Naturally this interrupted the 'flow' of my thinking. Drawing out and physically making links between categories and codes with marks on paper helped to clarify my thinking. Finding a balance between free-writing, diagramming and speaking aloud thoughts and reflections on categories allowed me to engage in the memo process in a way that fit my personal style.

Ontological and Epistemological Positioning

At different points in the development, design and conduct of the empirical project and systematic review, I engaged with IWS and self-compassion from different philosophical paradigms: critical realism (epistemological contextualism and ontological critical realism) and social constructionism (epistemological subjectivism and ontological critical realism). As the ontological position of the philosophical paradigms was shared, my position on reality and what is knowable was stable throughout the development and writing of the Thesis Portfolio. However, engaging with these two philosophical paradigms required me to move between different epistemological positions and challenge the 'nature of knowledge' and what can be known (Braun & Clarke, 2014, p. 29). In doing so this presented difficulties at different stages.

Systematic review. The two seemingly opposing epistemological positions within the systematic review literature (positivism and subjectivism) were managed through the adoption of a critical realist position. The critical realist paradigm explicitly allowed for IWS to be treated as both a theoretical concept (subjectivism) and a directly measurable psychological phenomenon (positivism). However, as part of the development of the empirical project I was required to reflect on my personal epistemological position and pre-understandings in order to position myself (Birks & Mills, 2015). Through the development of the empirical project, I had identified that my natural epistemological leaning is social constructionist. Therefore, remaining true to the critical realist position

during the conduct and write up of the systematic review was challenging as on occasion, I found myself beginning to critique the literature from this social constructionist position. At times this lead me to question the value of the quantitative literature within the review as it was unable to provide any personal meaning or experiences to the data. However through the process of 'bracketing' (Pearson et al., 2014) within the reflexive diary and the qualitative forum peers supervision groups, I was able to identify when my natural epistemological leaning was encroaching upon that of the systematic review, enabling me to conduct a fair and balanced review.

Empirical paper. I was first formally introduced to self-compassion during clinical training, through which solely a positivist/realist understanding of self-compassion was presented, that self-compassion was an aspect of individual psychology that could be directly investigated. Through my limited engagement with the literature (in the context of writing the thesis portfolio and writing ethics applications), I became increasingly aware that the dominant body of literature was aligned with this positivist/realist epistemology and self-compassion was being treated as a directly measurable phenomenon. Moreover, my (limited) searches did not reveal any literature within which self-compassion was considered from a subjectivist epistemological position.

As I reflected on my experiences and understandings of self-compassion I became increasingly aware of how greatly the NHS's understanding of self-compassion (which I was conducting research within) was influenced by this positivist/realist literature. As a result I anticipated that this may influence the experiences of the participants and how they understood and interpreted their experiences of self-compassion. In order to receive the relevant approvals for the project, it was necessary to engage in a limited way with self-compassion from this positivist approach, to be aligned literature. This stance was also necessary, in line with social constructionism, to be able to truly engage with the

participants experiences should their understanding and experience of self-compassion be shaped by these positivist/realist conceptualisations (Birks & Mills, 2015; Charmaz, 2006).

Thesis portfolio. The review question for the systematic review was developed some seven months after the empirical project was developed, at which point I had already explored and concluded that I leant more towards a social constructionist position. However, as I began to scope the literature for the systematic review, I soon recognised that I would be unable to answer fully the review question without reviewing positivist aligned literature (i.e. quantitative literature). This presented an epistemological challenge which for me. Simultaneously writing the systematic review and the empirical project required me to switch between critical realism and constructivist positions, which was surprisingly challenging. At times engaging and wrestling with these positions was overwhelming and halted the writing process. During the design and data collection phases, in order to remain true to the philosophical positions, I found myself treating the systematic review and empirical project as two separate pieces.

However, bringing the two papers together during the thesis write up added an extra layer of complexity that I had not anticipated. Initially I had planned to position the Thesis Portfolio within the social constructionist paradigm. However, as the two papers treated self-compassion and IWS from different epistemological positions, this inevitably shaped the framework around the Thesis Portfolio, as it became more aligned with the critical realism paradigm. In doing so, this allowed the Thesis Portfolio to be contextualised within the health system, which is epistemologically aligned with positivism, whilst valuing and respecting both the contributions of the papers reviewed within the systematic review and the experiences and realities of the participants within the empirical paper. Recognising the benefits of framing the Thesis Portfolio within this philosophical paradigm, I had to pull back somewhat from my social constructionist leanings in order to bring together the Thesis Portfolio. This experience was captured

within the reflexive diary and discussed within the qualitative research forum peer supervision. By viewing IWS and self-compassion through both of these philosophical paradigms, it is hoped that a more well-rounded consideration of IWS and self-compassion has been presented within the Thesis Portfolio.

Writing the Thesis Portfolio

Writing the Thesis Portfolio oscillated between feeling completely manageable to completely overwhelming. Although the process of completing and writing up this research project has been challenging, I have enjoyed the research process as a whole.

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Appendices

Appendix A

Body Image Journal Guidelines

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Appendix B

Systematic Review: Systematic Review Search Terms

adult* AND (obesity OR obese OR overweight) AND (Internali*ed OR self) AND (bias OR stigma* OR attitude* OR experience) AND (diet* OR weight loss OR weight maintenance OR eating OR exercise OR physical activity)

Scoping Search Dates: 15th February 2017, 10th March 2017, 17th March 2017, 24th April 2017, 6th May 2017

Final Database Search Date: 23rd June 2017

Appendix C

Systematic Review: Quantitative Quality Scoring

Table 7

Quality appraisal for quantitative Papers using the Quality Assessment Tool For Quantitative Studies (QATQS)

Quality Assessment Tool For Quantitative Studies	Puhl et al., 2007	Carels et al., 2010	Durso et al., 2012	Carels et al., 2013	Pearl et al, 2014	Pearl et al., 2015	Hubner et al., 2015	Baldofski et al. 2016	Mensinger et al., 2016	Mensinger & Meadows, 2017
Selection Bias	Strong	Moderate	Weak	Moderate	Strong	Moderate	Strong	Strong	Weak	Weak
Study Design	Weak	Strong	Weak	Weak	Weak	Moderate	Weak	Weak	Strong	Strong
Confounders	Strong	Strong	Weak	Moderate	Moderate	Weak	Strong	Weak	Strong	Strong
Blinding	Strong	Moderate	Strong	Moderate	Moderate	Strong	Weak	Weak	Strong	Strong
Data Collection Method	Moderate	Strong	Strong	Strong	Strong	Strong	Strong	Strong	Strong	Moderate
Withdrawals and Drop Outs	Not Applicable	Strong	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Weak	Strong
Global QATQS score	Moderate	Moderate	Weak	Moderate	Moderate	Moderate	Weak	Weak	Weak	Moderate

Appendix D

Ethical Approval Documentation

- Provisional Opinion Letter from REC
- Response to REC
- Approval Letter from REC
- HRA Approval Documentation
- Research and Development Approval Letter
- Non-substantial Amendment Request
- Non-substantial Amendment Approval
- Participant Information Sheet
- Participant Consent Form
- Non-disclosure agreement with the Transcription Service

Provisional Opinion Letter from REC

NHS
Health Research Authority
East of England - Cambridge South Research Ethics Committee
The Old Chapel
Royal Standard Place
Nottingham
NG1 6FS

05 April 2017

Miss Mercedez Coleman
Trainee Clinical Psychologist
Cambridge and Peterborough NHS Foundation Trust
Department of Clinical Psychology, Norwich Medical School
University of East Anglia, Norwich Research Park
Norwich
NR4 7TJ

Dear Miss Coleman

Study Title:	**Self- compassion and weight loss in clinically obese adults: A grounded theory study**
REC reference:	**17/EE/0123**
IRAS project ID:	**212211**

The Research Ethics Committee reviewed the above application at the meeting held on 23 March 2017 in your absence.

Provisional opinion

The Committee is unable to give an ethical opinion on the basis of the information and documentation received so far. Before confirming its opinion, the Committee requests that you provide the further information set out below.

Authority to consider your response and to confirm the Committee's final opinion has been delegated to the Chair.

Further information or clarification required

1. The Committee require you to confirm how you will ensure that all the inclusion criteria are met before the interview with the participant takes place as the response to question A13 of the IRAS form appears to indicate that participant details will be collected after the interview has occurred.

2. The Committee require you to expand on the information provided in the application as to what support the participant will receive in the event that the participant becomes distressed or upset during the interview and also, what mechanisms have been put in place to manage this. This information should also be included in the participant information sheet.

3. The Committee require you to clarify the number of participants who will be recruited to take part in the study and how this sample size was calculated.

4. The Committee require confirmation as to the expected duration of the interview as this differs throughout the application. Study documentation should be amended to ensure that this is consistent.

5. Please submit the feedback from Inspire as referred to in the response to question A14-1 of the IRAS form.

6. The Committee note that the inclusion / exclusion criteria stated within the application is not consistent. The response to question A13 of the IRAS form states participants with a BMI below 30 will be excluded from taking part in the study but A17-2 states that participants with a BMI currently below 35 will not be able to take part. Please clarify and amend the participant information sheet and protocol accordingly to ensure consistency within the study documentation.

7. The Committee note that the protocol appears to indicate there is a second academic supervisor however this is not declared on the IRAS form. Please clarify.

8. Please clarify the rationale for participants being unable to withdraw after one week following their interview and include this information in the participant information sheet.

9. Please confirm how participants will be able to opt in or opt out of receiving the results of the study and include this information in the participant information sheet.

10. Please confirm how long audio recordings and transcriptions will be kept for and include this information in the participant information sheet.

11. The Committee note the response to question A36 of the IRAS form which states that the consent forms will be kept in the researcher's home whereas the protocol indicates they will be kept in the supervisor's office. The Committee require confirmation that completed consent forms will be stored securely in the supervisors office and not in the researcher's home.

12. In addition the above, the following changes should be made to the participant information sheet:

- **a)** 'Am I able' and 'You are able' – the word 'able' should be changed to 'eligible'.
- **b)** Include corresponding paragraphs/information in the participant information sheet in respect of points 2, 3 and 4 of the consent form.
- **c)** Insert 'Cambridge South Research Ethics Committee' at who has reviewed the study.
- **d)** The Committee consider that the pictures/photographs used in the participant information sheet do not necessarily look appropriate (for example the photograph of the participant who has a BMI which would exclude them from participating in the research) and request you reconsider whether in fact it is necessary to include them in the participant information sheet.
- **e)** Please clarify what the first picture (hands on the sphere) represents and reconsider whether it is necessary to include this picture in the participant information sheet.

f) Delete the picture on page 2 of the participant information sheet.
g) Include a paragraph to provide information as what the participant can do and who they should contact in the event they should have a complaint during the study.

13. In addition to the above, the following changes should be made to the consent form:
a) An appropriate point should be added for consent to audio recording the interviews.

14. The following changes should be made to the poster
a) Proofread and correct any typographical errors. For example 'services users' should be amended to 'service users'.

15. The following changes should be made to the consent to contact document:
a) The consent to contact form should be amended so it is clear that if a patient does not wish to take part in the study there is no need for them to reply.
b) Proofread and correct any typographical errors. For example 'services users' should be amended to 'service users'.

Committee Comment/Advisory Point

The Committee recommends referral to information and guidance regarding participant information sheets and consent forms which can be found at http://www.hra.nhs.uk/resources/before-you-apply/consent-and-participation/consent-and-participant-information/ and http://www.hra-decisiontools.org.uk/consent/

If you would find it helpful to discuss any of the matters raised above or seek further clarification from a member of the Committee, you are welcome to contact Ms Penelope Gregory, REC Manager, nrescommittee.eastofengland-cambridgesouth@nhs.net .

When submitting a response to the Committee, the requested information should be electronically submitted from IRAS. A step-by-step guide on submitting your response to the REC provisional opinion is available on the HRA website using the following link: http://www.hra.nhs.uk/nhs-research-ethics-committee-rec-submitting-response-provisional-opinion/

Please submit revised documentation where appropriate underlining or otherwise highlighting the changes which have been made and giving revised version numbers and dates. You do not have to make any changes to the REC application form unless you have been specifically requested to do so by the REC.

The Committee will confirm the final ethical opinion within a maximum of 60 days from the date of initial receipt of the application, excluding the time taken by you to respond fully to the above points. A response should be submitted by no later than 05 May 2017.

Summary of the discussion at the meeting

- **Social or scientific value; scientific design and conduct of the study**

The Committee noted that the application had originally been booked for proportionate review but had been deemed more suitable for full ethical review due to possible ethical issues relating to the vulnerability of participants.

The Committee noted that the response to question A59 of the IRAS form states that there will be 12 participants taking part in the study but A13 and the protocol state that the number of participants will be 6 to 12. The Committee agreed that more clarification was required regarding the sample size.

Members agreed that the length of the interview should be clarified as this differs throughout the application.

The Committee noted inconsistencies in the inclusion / exclusion criteria throughout the application. The response to question A13 of the IRAS form states participants with a BMI below 30 will be excluded from taking part in the study but A17-2 states that participants with a BMI currently below 35 will not be able to take part.

The Committee noted that the protocol appears to indicate there is a second academic supervisor but this is not declared on the IRAS form.

The Committee was unclear about the rationale for participants being unable to withdraw after one week following their interview as this seemed rather arbitrary. Whilst there may be a good reason for this, this should be explained and made clear in the participant information sheet.

The Committee noted that interviews will be audio recorded and queried how long audio recordings and transcriptions would be kept. Members further noted that this information should be included in the participant information sheet. An appropriate point in the consent form should also be added for consent to the recording of interviews.

- **Recruitment arrangements and access to health information, and fair participant selection**

The Committee was unclear how the Chief Investigator will ensure that all the inclusion criteria are met before the interview with the participant takes place as the response to question A13 of the IRAS form appears to indicate that participant details will be collected after the interview.

- **Care and protection of research participants; respect for potential and enrolled participants' welfare and dignity**

The Committee noted that the application recognised the possibility that some participants could potentially become anxious or upset during the interview process but members agreed further detail was required as to how this will be managed and the mechanisms which have been put in place to support participants should this event occur.

- **Informed consent process and the adequacy and completeness of participant information**

  The Committee noted that changes will be required to the participant information sheet and consent form which will be detailed to the applicant in the post review letter.
  The word 'able' should be changed to 'eligible' (am I able to take part in the study).

  Members noted that no information has been provided regarding what a participant should do in the event that they have a complaint during the study.

  The Committee noted the participant information sheet did not follow the standard template/form.

  The Committee noted the response to question A36 of the IRAS form which states that the consent forms will be kept in the researcher's home whereas the protocol indicates they will be kept in the supervisor's office. The Committee agreed it was not acceptable for completed consent forms to be kept in the researcher's home.

  The Committee noted that points 2, 3 and 4 on the consent form did not have any corresponding paragraphs in the participant information sheet.

  The Committee was unclear how participants would be able to opt in/opt out of receiving the results of the study as per the information contained in participant information sheet.

  Some members of the Committee considered that the pictures/photographs used in the participant information did not always look appropriate, for example, one of the photographs used does not appear to feature an individual with a high BMI. In addition, it was not clear to members what the first picture (hands on the sphere) represented. Members considered that the picture on page 2 of the participant information sheet should be deleted.

- **Independent review**

  The Committee noted the response to question A14-1 of the IRAS form which states that feedback from Inspire had been attached with the application. The Committee noted that this information did not appear to have been provided.

- **Suitability of supporting information**

  The consent to contact form requests information from people who do not wish to take part in the study. If a person does not wish to be contacted there is no need for them to respond and as such the document should be amended to reflect this approach.

  The Committee noted typographical errors in the poster and the consent to contact form.

Documents reviewed

The documents reviewed at the meeting were:

Document	*Version*	*Date*
Copies of advertisement materials for research participants [Advertisement materials]	1.0	25 November 2016
Interview schedules or topic guides for participants [Interview Guide]	1.0	18 November 2016
IRAS Application Form [IRAS_Form_28022017]		28 February 2017
IRAS Checklist XML [Checklist_28022017]		28 February 2017
Letter from sponsor [Letter from Sponsor]	1.0	27 February 2017
Letters of invitation to participant [Consent to Contact Form]	1.0	25 November 2016
Other [Participant Debrief Sheet]	1.1	18 November 2016
Other [Demographic Information]	1.0	25 November 2016
Other [Timeline]	1.1	24 February 2017
Participant consent form [Consent form]	1.3	24 February 2017
Participant information sheet (PIS) [Patient Information Sheet]	1.3	24 February 2017
Research protocol or project proposal [Protocol]	1.1	18 November 2016
Summary CV for Chief Investigator (CI) [CV for CI]	1.0	05 December 2016
Summary CV for student [CV for Mercedez Coleman]	1.0	05 December 2016
Summary CV for student [Summary CV for Imogen Rushworth]	1.0	06 February 2017

Membership of the Committee

The members of the Committee who were present at the meeting are listed on the attached sheet

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

17/EE/0123	**Please quote this number on all correspondence**

Yours sincerely

Dr Leslie Gelling
Chair

Email: nrescommittee.eastofengland-cambridgesouth@nhs.net

Enclosures: *List of names and professions of members who were present at the meeting and those who submitted written comments.*

Copy to: *Ms Tracy Moulton*
Ms Julie Dawson, Norfolk and Norwich University Hospital Trust

East of England - Cambridge South Research Ethics Committee

Attendance at Committee meeting on 23 March 2017

Committee Members:

Name	*Profession*	*Present*	*Notes*
Dr Richard Aldridge	Retired Lecturer	No	
Mrs Martha Byrne	Director, Clinical & Pharmacovilligance QA	Yes	
Dr Ian Dumbelton	Retired General Medical Practitioner (Alternate Vice-Chair)	No	
Dr Leslie Gelling	(Chair) Reader in Research Ethics	Yes	
Mr Colin Green	Drugs & Therapeutics Pharmaceutical Advisor	Yes	
Mrs Alison Hall	Programme Lead - Humanities	Yes	
Dr Linda Harvey		No	
Mr John Kirkpatrick	Statistician	Yes	
Miss Angela Palmer	Retired Patent Litigator	Yes	
Mrs Nikki Phillimore	Antibiotic/infection management pharmacist	Yes	
Dr Michael Sheldon	Retired Clinical Psychologist	Yes	
Miss Carol Smee	Regulatory and Ethical Compliance Manager	Yes	
Mr Phil Tempest	Compliance Manager	No	
Dr Kate Williams	Senior Research Associate	Yes	

Also in attendance:

Name	*Position (or reason for attending)*
Ms Penelope Gregory	REC Manager
Ms Jenny Jones	Observer
Ms Joanne Doleman	Observer

Response to REC

1st May 2017

Dear Ms Penelope Gregory (REC) and Alison Thorpe (HRA),

Study Title: Self- compassion and weight loss in clinically obese adults: A grounded theory study

REC reference: 17/EE/0123

IRAS project ID: 212211

Thank you for taking the time to review the above application.

Please see an outline of the responses to the queries raised. I have reattached the amended documentation as requested. Changes to documentation have been italicised for your convenience.

If you have any further questions please get in touch.

Yours Sincerely

Mercedez Coleman

REC Queries

1. The Committee require you to confirm how you will ensure that all the inclusion criteria are met before the interview with the participant takes place as the response to question A13 of the IRAS form appears to indicate that participant details will be collected after the interview has occurred.

- An identified member of the clinical team will complete the Consent to Contact form with the potential participant during a routine clinic appointment, once they have indicated interest in the participation in the study. The Consent to Contact form includes the eligibility criteria and potential participants are asked to identify whether they meet criteria. Potential participants are required to self- report whether they meet the eligibility criteria at this stage. During initial telephone contact with the Chief Investigator (CI; Mercedez Coleman) to arrange a meeting to complete the study, the eligibility criteria will be discussed again with the potential participant to confirm their eligibility. The Consent to Contact form has been amended accordingly.

2. The Committee require you to expand on the information provided in the application as to what support the participant will receive in the event that the participant becomes distressed or upset during the interview and also, what mechanisms have been put in place to manage this. This information should also be included in the participant information sheet.

- Prior to commencing the interview, participants will be informed about the distress procedure and reminded that if they find any element upsetting, they are able to discuss any concerns openly with the CI. They will also be informed that they can withdraw at any time. Participants will also be asked if the CI can speak to their clinical team (if they consent to this) in case of continuing distress resulting from the study.

- Participants will be reminded that they are able to withdraw from the study at any point during the appointment.

During the interview

- The interview questions will be deliberately open, intended to act as cues for participants to talk, allowing them to comfortably share experiences with minimum constraint by the researcher. In the unlikely event that participants indicate distress during the interview, the CI will first stop the interview.

- In the unlikely event of distress, the CI will use clinical skills gained during their clinical psychology training to support the participant at that time. As a trainee

clinical psychologist the CI has experience and skills in the management of emotional distress under such circumstances. If participants become distressed during the appointment, the CI will stop the interview and clinically support the participant, speaking to them about the nature of the distress. The participant will be offered to take a break for refreshment, or will be offered to rearrange the appointment at a later date if necessary. If at any point the CI or participant thinks that the interview should not continue, the interview will be stopped.

- Participants will be offered a full debrief after the appointment to discuss any issues raised to ensure that any distress is identified, has been managed and the person won't be left alone in distress.

- If distress continues, the CI can offer to contact their clinical team and speak to them, or will encourage the participant to contact the service themselves.

- The episode and any follow up will be documented in the Research Log and will be discussed with the primary supervisor.

Post appointment:

- Regardless of continuation in the interview or not, the participant will be signposted to appropriate services (identified on the debrief sheet) and encouraged to utilise that support.

- If during the interview the CI has concerns around the participant's emotional wellbeing, the CI will inform the participant that their clinical team will be contacted and asked to provide a follow up appointment (providing they consent to this). Research interviews will be arranged during times when the clinical team is contactable (Monday- Friday, 9-4), to allow for this information to be swiftly passed on and for additional support from the clinical team to be provided if necessary. The clinical team will be informed of the time and location of interviews, in advance of all appointments.

- At the end of the interview or if the interview is discontinued, the participant will be signposted to appropriate services (identified on the debrief sheet) and encouraged to utilise that support.

- The IRAS form (A22) and Participant Information Sheet have been amended accordingly (please see- What are the possible disadvantages and risks of taking part?)

3. The Committee require you to clarify the number of participants who will be recruited to take part in the study and how this sample size was calculated.

- The study is qualitative and as such, sample size has been calculated in line with Grounded Theory Lite guidance and literature around achieving theoretical saturation of data (Guest, Bunce & Johnson, 2006; Braun & Clarke, 2013). This indicates that a sample size of 6- 12 participants is likely to achieve this. This study will aim to recruit participants who access Tier 3 NHS Weight Management Services using purposive theoretical sampling. It is expected that a sample size of this number will allow for theoretical saturation, within the limits of this thesis, to be achieved. Question A-59 on the IRAS form only allows for one figure to be entered, so the maximum number of participants has been used. Sample size has been included on the Participant Information Sheet.

4. The Committee require confirmation as to the expected duration of the interview as this differs throughout the application. Study documentation should be amended to ensure that this is consistent.

- It is estimated that participants will be involved in the study for approximately 2 hours once they have completed initial telephone contact with the CI. This estimate includes the time taken for interview, consent and debrief procedures. The Participant Information Sheet has been amended accordingly. The interview itself is expected to last 60 minutes, however this may vary slightly depending on how much information the participant wishes to provide. Documentation has been amended to reflect this.

5. Please submit the feedback from Inspire as referred to in the response to question A14-1 of the IRAS form.

- Documents from the Inspire Panel are attached to the application.

6. The Committee note that the inclusion / exclusion criteria stated within the application is not consistent. The response to question A13 of the IRAS form states participants with a BMI below 30 will be excluded from taking part in the study but A17-2 states that participants with a BMI currently below 35 will not be able to take part. Please clarify and amend the participant information sheet and protocol accordingly to ensure consistency within the study documentation.

- Service users with a BMI below 30 are not eligible to take part in the study as they are not considered to be obese. Moreover, existing literature would suggest there may be an increase in self- compassion at this point following successful significant weight loss (Goss, 2011; Hilbert, 2015). As such, any participant recruited with a BMI below 30 would not be representative of the desired client group. A17-2 has been amended to reflect the accurate BMI exclusion criteria, which is 30. The Participant Information Sheet has been amended accordingly.

7. The Committee note that the protocol appears to indicate there is a second academic supervisor however this is not declared on the IRAS form. Please clarify.

- Dr Sian Coker is the secondary academic supervisor for this project. The relevant contact details, CV and signatures have been added to the IRAS form (A2-1).

8. Please clarify the rationale for participants being unable to withdraw after one week following their interview and include this information in the participant information sheet.

- The methodology employed within the study (Grounded Theory Lite) determines that participants are only able to withdraw their data up to one week following their interview. This is because Grounded Theory is an iterative process, with new data shaping and informing questions within subsequent interviews. As such, data are collected and interviews are transcribed and analysed synonymously, that is more or less immediately after the interview. After one week the participant's interview will have been anonymously transcribed and unable to be extracted from the research data as the analysis process will be in progress. The Participant Information Sheet has been amended accordingly.

9. Please confirm how participants will be able to opt in or opt out of receiving the results of the study and include this information in the participant information sheet.

- Participants will be able to opt in or out of receiving the results of the study via the consent form. Participants will be asked to write their initials next to the relevant statement if they wish to be contacted. This is specified in A21 and the Participant Information Sheet has been amended accordingly.

10. Please confirm how long audio recordings and transcriptions will be kept for and include this information in the participant information sheet.

- Once the thesis has been examined (approximately May 2018) the audio files will be destroyed. The transcript will be stored securely at the University of East Anglia for 10 years after the study has ended (in line with NHS policy). Data will be accessible only by the CI and the primary academic supervisor. After 10 years all data will be destroyed. The Participant Information Sheet has been amended accordingly.

11. The Committee note the response to question A36 of the IRAS form which states that the consent forms will be kept in the researcher's home whereas the protocol indicates they will be kept in the supervisor's office. The Committee require confirmation that completed consent forms will be stored securely in the supervisors office and not in the researcher's home.

- Signed consent forms will be kept in a locked filing cabinet at the University of East Anglia in the primary academic supervisors' office. A copy of the consent forms will also be added to the participants' medical records held at clinic sites. A36 has been amended accordingly.

12. In addition to the above, the following changes should be made to the participant information sheet:

a) 'Am I able' and 'You are able' – the word 'able' should be changed to 'eligible'.

b) Include corresponding paragraphs/information in the participant information sheet in respect of points 2, 3 and 4 of the consent form.

c) Insert 'Cambridge South Research Ethics Committee' at who has reviewed the study.

d) The Committee consider that the pictures/photographs used in the participant information sheet do not necessarily look appropriate (for example the photograph of the participant who has a BMI which would exclude them from participating in the research) and request you reconsider whether in fact it is necessary to include them in the participant information sheet.

e) Please clarify what the first picture (hands on the sphere) represents and reconsider whether it is necessary to include this picture in the participant information sheet.

f) Delete the picture on page 2 of the participant information sheet.

g) Include a paragraph to provide information as what the participant can do and who they should contact in the event they should have a complaint during the study.

- The Participant Information Sheet has been amended accordingly (please see the following sections- Do I Have to take part in the study; What if I change my mind; Is my interview confidential?)
- All images have been removed.
- Contacts in the event of a complaint have been provided.

13. In addition to the above, the following changes should be made to the consent form:

a) An appropriate point should be added for consent to audio recording the interviews.

- The Consent Form has been amended accordingly.

14. The following changes should be made to the poster

a) Proofread and correct any typographical errors. For example ‘services users’ should be amended to ‘service users’.

- The poster has been amended accordingly.

15. The following changes should be made to the consent to contact document:

a) The consent to contact form should be amended so it is clear that if a patient does not wish to take part in the study there is no need for them to reply.

- The Consent to Contact and Consent Form has been amended accordingly.

b) Proofread and correct any typographical errors. For example ‘services users’ should be amended to ‘service users’.

- The Consent to Contact and Consent Form has been amended accordingly.

HRA Queries

1. Add the IRAS project ID (212211) to the information sheet and consent form;

- The IRAS project ID has been added to the Information Sheet and Consent Form (please see attached documents)

2. Amend the consent form to refer to the most recent version of the information sheet;

- This has been amended accordingly (please see attached documents)

3. Clarify the retention of recordings on the encrypted datastick (IRAS A36 implies these will be transferred to a password protected computer), how long will recordings be kept on the datastick, would it be possible to transfer the recordings to a secure server instead, how long will the recording be kept before deletion?

- The audio files will be immediately deleted from the data stick once they have been transferred onto the password-protected computer. The audio recording will be kept until the thesis has been assessed (by viva, approximately May 2018). Once the thesis has been passed, the audio recording will be destroyed. Unfortunately, the study will not have access to a secure server. A36 has been amended accordingly.

4. Include in the information sheet that interviews may be transcribed by a third party;

- The Participant Information Sheet has been amended accordingly.

5. Confirm that the transcription service used will have a confidentiality agreement in place with the sponsor;

- The transcription service used will have a confidentiality agreement in place with the sponsor.

6. Confirm how long identifiable information (eg contact details) will be kept before deletion;

- Some participants may have opted in to be contacted with the results of the study, which can only be disseminated once the thesis has been assessed (by viva). As such, identifiable information i.e. contact details will be kept until the thesis has been assessed (by viva). Once the thesis has been assessed and passed identifiable information from all participants will be destroyed. It is estimated that contact details will be destroyed in Summer 2018.

7. Clarify how data will be gathered from the standard clinical questionnaires – will copies of these be transferred from the holder or the information extracted *in situ* from the notes?

- The CI will anonymously extract clinical questionnaire data in situ from the participants' clinical notes. Each participant's clinical data will be assigned a confidential and inaccessible code, to allow the CI to match participant and clinical data at a later stage.

8. Include in the schedule of events all activities that may take place at the site (eg consent and interviews) even though they are not conducted by site staff;

- The Schedule of Events has been amended to include: informed consent, interviews, debrief and data extraction.

9. Amend Question 4 of the statement of activities - which has been answered as Yes to indicate that a model non-commercial agreement will be used for the study and it is indicated in question 1 that the schedule will act as the agreement;

- The Statement of activities has been amended accordingly

10. If participants are recruited from other WMS across England, these sites will need to be added via amendment as participant identification sites and an appropriate statement and schedule provided.

- If recruitment from other WMS is required, the appropriate REC/HRA amendments will be requested/completed.

Approval Letter from REC

NHS
Health Research Authority
East of England - Cambridge South Research Ethics Committee
The Old Chapel
Royal Standard Place
Nottingham
NG1 6FS

Please note: This is the favourable opinion of the REC only and does not allow you to start your study at NHS sites in England until you receive HRA Approval

16 May 2017

Miss Mercedez Coleman
Trainee Clinical Psychologist
Cambridge and Peterborough NHS Foundation Trust
Department of Clinical Psychology, Norwich Medical School
University of East Anglia, Norwich Research Park
Norwich
NR4 7TJ

Dear Miss Coleman

Study title:	**Self- compassion and weight loss in clinically obese adults: A grounded theory study**
REC reference:	**17/EE/0123**
IRAS project ID:	**212211**

Thank you for your letter of 10/05/2017, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

We plan to publish your research summary wording for the above study on the HRA website, together with your contact details. Publication will be no earlier than three months from the date of this opinion letter. Should you wish to provide a substitute contact point, require further information, or wish to make a request to postpone publication, please contact hra.studyregistration@nhs.net outlining the reasons for your request.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised, subject to the conditions specified below.

Conditions of the favourable opinion

The REC favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements. Each NHS organisation must confirm through the signing of agreements and/or other documents that it has given permission for the research to proceed (except where explicitly specified otherwise).

Guidance on applying for NHS permission for research is available in the Integrated Research Application System, www.hra.nhs.uk or at http://www.rdforum.nhs.uk.

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of management permissions from host organisations

Registration of Clinical Trials

All clinical trials (defined as the first four categories on the IRAS filter page) must be registered on a publically accessible database within 6 weeks of recruitment of the first participant (for medical device studies, within the timeline determined by the current registration and publication trees).

There is no requirement to separately notify the REC but you should do so at the earliest opportunity e.g. when submitting an amendment. We will audit the registration details as part of the annual progress reporting process.

To ensure transparency in research, we strongly recommend that all research is registered but for non-clinical trials this is not currently mandatory.

If a sponsor wishes to request a deferral for study registration within the required timeframe, they should contact hra.studyregistration@nhs.net. The expectation is that all clinical trials will be registered, however, in exceptional circumstances non registration may be permissible with prior agreement from the HRA. Guidance on where to register is provided on the HRA website.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Ethical review of research sites

NHS sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Non-NHS sites

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	*Version*	*Date*
Copies of advertisement materials for research participants [Advertisement materials]	1.0	25 November 2016
Copies of advertisement materials for research participants	1.4	07 April 2017
Interview schedules or topic guides for participants [Interview Guide]	1.0	18 November 2016
IRAS Application Form [IRAS_Form_28022017]		28 February 2017
IRAS Checklist XML [Checklist_28022017]		28 February 2017
IRAS Checklist XML [Checklist_05052017]		05 May 2017
IRAS Checklist XML [Checklist_10052017]		10 May 2017
Letter from sponsor [Letter from Sponsor]	1.0	27 February 2017
Letters of invitation to participant [Consent to Contact Form]	1.0	25 November 2016
Letters of invitation to participant [Consent to Contact Form]	1.1	07 April 2017
Other [Participant Debrief Sheet]	1.1	18 November 2016
Other [Demographic Information]	1.0	25 November 2016
Other [Timeline]	1.1	24 February 2017
Other [Secondary Supervisor CV]	1.0	21 April 2017
Other [Response to REC HRA]	1.0	01 May 2017
Other [Inspire Feedback 1]		26 August 2016
Other [Inspire Feedback 2]	1.0	26 August 2016
Other [Inspire Feedback 3]	1.0	26 August 2016
Participant consent form [Consent form]	1.3	24 February 2017
Participant consent form [Consent form]	1.4	07 April 2017
Participant information sheet (PIS) [Patient Information Sheet]	1.3	24 February 2017
Participant information sheet (PIS)	1.4	07 April 2017
Research protocol or project proposal [Protocol]	1.1	18 November 2016
Research protocol or project proposal		
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Summary CV for student [CV for Mercedez Coleman]	1.0	05 December 2016
Summary CV for student [Summary CV for Imogen Rushworth]	1.0	06 February 2017

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Reporting requirements

The attached document *"After ethical review – guidance for researchers"* gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The HRA website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website:
http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/

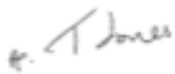
HRA Training

We are pleased to welcome researchers and R&D staff at our training days – see details at http://www.hra.nhs.uk/hra-training/

17/EE/0123	**Please quote this number on all correspondence**

With the Committee's best wishes for the success of this project.

Yours sincerely



Dr Les Gelling
Chair

Email:nrescommittee.eastofengland-cambridgesouth@nhs.net

Enclosures:	"After ethical review – guidance for researchers" *[SL-AR2]*
Copy to:	*Ms Tracy Moulton* *Ms Julie Dawson, Norfolk and Norwich University Hospital Trust*

HRA Approval Documentation

NHS
Health Research Authority

Miss Mercedez Coleman
Trainee Clinical Psychologist
Cambridge and Peterborough NHS Foundation Trust
Department of Clinical Psychology, Norwich Medical School
University of East Anglia, Norwich Research Park
Norwich
NR4 7TJ

Email: hra.approval@nhs.net

19 May 2017

Dear Miss Coleman

Letter of HRA Approval

Study title:	**Self- compassion and weight loss in clinically obese adults: A grounded theory study**
IRAS project ID:	**212211**
REC reference:	**17/EE/0123**
Sponsor	**University of East Anglia**

I am pleased to confirm that **HRA Approval** has been given for the above referenced study, on the basis described in the application form, protocol, supporting documentation and any clarifications noted in this letter.

Participation of NHS Organisations in England

The sponsor should now provide a copy of this letter to all participating NHS organisations in England.

Appendix B provides important information for sponsors and participating NHS organisations in England for arranging and confirming capacity and capability. **Please read *Appendix B* carefully**, in particular the following sections:

- *Participating NHS organisations in England* – this clarifies the types of participating organisations in the study and whether or not all organisations will be undertaking the same activities
- *Confirmation of capacity and capability* - this confirms whether or not each type of participating NHS organisation in England is expected to give formal confirmation of capacity and capability. Where formal confirmation is not expected, the section also provides details on the time limit given to participating organisations to opt out of the study, or request additional time, before their participation is assumed.
- *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* - this provides detail on the form of agreement to be used in the study to confirm capacity and capability, where applicable.

Further information on funding, HR processes, and compliance with HRA criteria and standards is also provided.

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It is critical that you involve both the research management function (e.g. R&D office) supporting each organisation and the local research team (where there is one) in setting up your study. Contact details and further information about working with the research management function for each organisation can be accessed from www.hra.nhs.uk/hra-approval.

Appendices

The HRA Approval letter contains the following appendices:

- A – List of documents reviewed during HRA assessment
- B – Summary of HRA assessment

After HRA Approval

The document *"After Ethical Review – guidance for sponsors and investigators"*, issued with your REC favourable opinion, gives detailed guidance on reporting expectations for studies, including:

- Registration of research
- Notifying amendments
- Notifying the end of the study

The HRA website also provides guidance on these topics, and is updated in the light of changes in reporting expectations or procedures.

In addition to the guidance in the above, please note the following:

- HRA Approval applies for the duration of your REC favourable opinion, unless otherwise notified in writing by the HRA.
- Substantial amendments should be submitted directly to the Research Ethics Committee, as detailed in the *After Ethical Review* document. Non-substantial amendments should be submitted for review by the HRA using the form provided on the HRA website, and emailed to hra.amendments@nhs.net.
- The HRA will categorise amendments (substantial and non-substantial) and issue confirmation of continued HRA Approval. Further details can be found on the HRA website.

The attached document *"After HRA Approval – guidance for sponsors and investigators"* gives detailed guidance on reporting expectations for studies with HRA Approval, including:

- Working with organisations hosting the research
- Registration of Research
- Notifying amendments
- Notifying the end of the study

The HRA website also provides guidance on these topics and is updated in the light of changes in reporting expectations or procedures.

Scope

HRA Approval provides an approval for research involving patients or staff in NHS organisations in England.

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If your study involves NHS organisations in other countries in the UK, please contact the relevant national coordinating functions for support and advice. Further information can be found at http://www.hra.nhs.uk/resources/applying-for-reviews/nhs-hsc-rd-review/.

If there are participating non-NHS organisations, local agreement should be obtained in accordance with the procedures of the local participating non-NHS organisation.

User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website: http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/.

HRA Training

We are pleased to welcome researchers and research management staff at our training days – see details at http://www.hra.nhs.uk/hra-training/

Your IRAS project ID is **212211**. Please quote this on all correspondence.

Yours sincerely

Rekha Keshvara
Assessor

Email: hra.approval@nhs.net

Copy to: *Ms Tracy Moulton*
Ms Julie Dawson, Norfolk and Norwich University Hospital Trust

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Appendix A - List of Documents

The final document set assessed and approved by HRA Approval is listed below.

Document	*Version*	*Date*
Copies of advertisement materials for research participants	1.4	07 April 2017
Interview schedules or topic guides for participants [Interview Guide]	1.0	18 November 2016
IRAS Application Form [IRAS_Form_28022017]		28 February 2017
IRAS Checklist XML [Checklist_28022017]		28 February 2017
Letter from sponsor [Letter from Sponsor]	1.0	27 February 2017
Letters of invitation to participant [Consent to Contact Form]	1.1	07 April 2017
Other [Participant Debrief Sheet]	1.1	18 November 2016
Other [Demographic Information]	1.0	25 November 2016
Other [Timeline]	1.1	24 February 2017
Other [HRA Statement of activities]	1.0	03 May 2017
Other [HRA Schedule of events]	1.0	03 May 2017
Other [Secondary Supervisor CV]	1.0	21 April 2017
Other [Response to REC HRA]	1.0	01 May 2017
Other [Inspire Feedback 1]		26 August 2016
Other [Inspire Feedback 2]	1.0	26 August 2016
Other [Inspire Feedback 3]	1.0	26 August 2016
Participant consent form [Consent form]	1.4	07 April 2017
Participant information sheet (PIS)	1.4	07 April 2017
Research protocol or project proposal [Protocol]	1.1	18 November 2016
Research protocol or project proposal	1.2	07 April 2017
Summary CV for Chief Investigator (CI) [CV for CI]	1.0	05 December 2016
Summary CV for student [CV for Mercedez Coleman]	1.0	05 December 2016
Summary CV for student [Summary CV for Imogen Rushworth]	1.0	06 February 2017

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Appendix B - Summary of HRA Assessment

This appendix provides assurance to you, the sponsor and the NHS in England that the study, as reviewed for HRA Approval, is compliant with relevant standards. It also provides information and clarification, where appropriate, to participating NHS organisations in England to assist in assessing and arranging capacity and capability.

For information on how the sponsor should be working with participating NHS organisations in England, please refer to the *participating NHS organisations, capacity and capability* and *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* sections in this appendix.

The following person is the sponsor contact for the purpose of addressing participating organisation questions relating to the study:

Name: Ms Tracey Moulton
Email: researchsponsor@uea.ac.uk

HRA assessment criteria

Section	HRA Assessment Criteria	Compliant with Standards?	Comments
1.1	IRAS application completed correctly	Yes	The applicant was reminded that if participants are recruited from other WMS across England, these sites will need to be added via amendment as participant identification sites and an appropriate statement and schedule provided.
2.1	Participant information/consent documents and consent process	Yes	No comments
3.1	Protocol assessment	Yes	No comments
4.1	Allocation of responsibilities and rights are agreed and documented	Yes	The sponsor intends that the statement of activities acts as the agreement between the sponsor and the site. This is the mechanism by which site should confirm their capacity a

IRAS project ID	212211

Section	HRA Assessment Criteria	Compliant with Standards?	Comments
			capability to participate in the study.
4.2	Insurance/indemnity arrangements assessed	Yes	Where applicable, independent contractors (e.g. General Practitioners) should ensure that the professional indemnity provided by their medical defence organisation covers the activities expected of them for this research study
4.3	Financial arrangements assessed	Yes	There is no funding to be provided by the sponsor to the site.
5.1	Compliance with the Data Protection Act and data security issues assessed	Yes	No comments
5.2	CTIMPS – Arrangements for compliance with the Clinical Trials Regulations assessed	Not Applicable	No comments
5.3	Compliance with any applicable laws or regulations	Yes	No comments
6.1	NHS Research Ethics Committee favourable opinion received for applicable studies	Yes	No comments
6.2	CTIMPS – Clinical Trials Authorisation (CTA) letter received	Not Applicable	No comments
6.3	Devices – MHRA notice of no objection received	Not Applicable	No comments
6.4	Other regulatory approvals and authorisations received	Not Applicable	No comments

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Participating NHS Organisations in England

This provides detail on the types of participating NHS organisations in the study and a statement as to whether the activities at all organisations are the same or different.

There is one type of participating NHS organisation at which the study will be conducted as per the protocol. Should participants be identified and approached at other NHS organisations the use of participant identification centres should be added as an amendment.

The Chief Investigator or sponsor should share relevant study documents with participating NHS organisations in England in order to put arrangements in place to deliver the study. The documents should be sent to both the local study team, where applicable, and the office providing the research management function at the participating organisation. For NIHR CRN Portfolio studies, the Local LCRN contact should also be copied into this correspondence. For further guidance on working with participating NHS organisations please see the HRA website.

If Chief Investigators, sponsors or Principal Investigators are asked to complete site level forms for participating NHS organisations in England which are not provided in IRAS or on the HRA website, the Chief Investigator, sponsor or Principal Investigator should notify the HRA immediately at hra.approval@nhs.net. The HRA will work with these organisations to achieve a consistent approach to information provision.

Confirmation of Capacity and Capability

This describes whether formal confirmation of capacity and capability is expected from participating NHS organisations in England.

Participating NHS organisations in England **will be expected to formally confirm their capacity and capability** to host this research.

- The sponsor should ensure that participating NHS organisations are provided with a copy of this letter and all relevant study documentation, and work jointly with NHS organisations to arrange capacity and capability whilst the HRA assessment is ongoing.
- Further detail on how capacity and capability will be confirmed by participating NHS organisations, following issue of the Letter of HRA Approval, is provided in the *Participating NHS Organisations* and *Allocation of responsibilities and rights are agreed and documented (4.1 of HRA assessment criteria)* sections of this appendix.
- The Assessing, Arranging, and Confirming document on the HRA website provides further information for the sponsor and NHS organisations on assessing, arranging and confirming capacity and capability.

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Principal Investigator Suitability

This confirms whether the sponsor's position on whether a PI, LC or neither should be in place is correct for each type of participating NHS organisation in England, and the minimum expectations for education, training and experience that PIs should meet (where applicable).

The Chief Investigator will be acting a Principal Investigator at sites which is appropriate for this study as the CI is carrying out the research activities at the site.

GCP training is not a generic training expectation, in line with the HRA statement on training expectations.

HR Good Practice Resource Pack Expectations

This confirms the HR Good Practice Resource Pack expectations for the study and the pre-engagement checks that should and should not be undertaken.

Where existing contractual or healthcare placement arrangements are not already in place it is expected that postgraduate students are supervised under close clinical supervision, when undertaking activities that may have a direct bearing on the quality of care by a clinical supervisor who is an NHS employee or an HEI employee with an honorary clinical or research contract. If clinical supervision is not available or not appropriate, the student should obtain an honorary research contract or a letter of access where the activity has no bearing on the quality of care.

Evidence of enhanced DBS and barred list checks with occupational health clearance would be expected to support a research passport application for an honorary research contract where obtained or standard DBS and barred list checks with occupational health clearance for letters of access.

Other Information to Aid Study Set-up

This details any other information that may be helpful to sponsors and participating NHS organisations in England in study set-up.

- The applicant has indicated that they do not intend to apply for inclusion on the NIHR CRN Portfolio.

Research and Development Approval Letter

Our Vision
To provide every patient with the care we want for those we love the most

Norfolk and Norwich University Hospitals NHS
NHS Foundation Trust

Miss Mercedez Coleman
Department of Clinical Psychology
Norwich Medical School
University of East Anglia
Norwich
NR4 7TJ

Research & Development Office
Level 3 East
Norfolk & Norwich University Hospitals NHS Foundation Trust
Colney Lane
Norwich
NR4 7UY

direct dial: 01603 289808
Ext: 5808
e-mail: rdoffice@nnuh.nhs.uk
website: www.nnuh.nhs.uk

16/06/2017

Dear Miss Mercedez Coleman

R&D Reference Number: 212211
Title: Self- compassion and weight loss in clinically obese adults: A grounded theory study

I am pleased to inform you that the Norfolk & Norwich University Hospitals NHS Foundation Trust has confirmed to the sponsor that we have the capacity and capability to take part in the above study.

Please note you cannot begin this study until you have received confirmation to do so from the study sponsor.

The agreed total local recruitment target for your study is 12 participants.

To support requirements of the National Institute of Health Research (NIHR) we will be monitoring and publishing outcomes of recruitment into your study. This includes benchmarking against a 70 day period from the time of receipt of a valid local document set to the time of recruitment of the first patient for your study.

The date of receipt of a valid local document set for this study is 3rd May 2017 and the benchmark of 70 days to recruit the first patient is 12th July 2017.

Please notify the R&D department when the first patient is enrolled/consented into the study. Wherever the duration exceeds 70 days of the Trust receiving a valid local document set, the Investigator will be expected to explain the reason for the delay in writing.

If you have any queries regarding this or any other project please contact me at the above address. Please note, the reference number for this study is 212211 and this should be quoted on all correspondence.

Yours sincerely

Andrew Holmes
Research Facilitator

Non-substantial Amendment Request

Partner Organisations:
Health Research Authority, England
NHS Research Scotland
HSC Research & Development, Public Health Agency, Northern Ireland
NIHR Clinical Research Network, England
NISCHR Permissions Co-ordinating Unit, Wales

Notification of Non-Substantial/Minor Amendments(s) for NHS Studies

This template **must only** be used to notify NHS/HSC R&D office(s) of amendments, which are **NOT** categorised as Substantial Amendments.
If you need to notify a Substantial Amendment to your study then you MUST use the appropriate Substantial Amendment form in IRAS.

Instructions for using this template

- For guidance on amendments refer to http://www.hra.nhs.uk/research-community/during-your-research-project/amendments/
- This template should be completed by the CI and optionally authorised by Sponsor, if required by sponsor guidelines.
- This form should be submitted according to the instructions provided for NHS/HSC R&D at http://www.hra.nhs.uk/research-community/during-your-research-project/amendments/which-review-bodies-need-to-approve-or-be-notified-of-which-types-of-amendments/ . If you do not submit your notification in accordance with these instructions then processing of your submission may be significantly delayed.

1. Study Information

Full title of study:	Self- compassion and weight loss in clinically obese adults: A Grounded Theory study
IRAS Project ID:	212211
Sponsor Amendment Notification number:	01
Sponsor Amendment Notification date:	October 2017
Details of Chief Investigator:	
Name [first name and surname]	Mercedez Coleman
Address:	Department of Clinical Psychology, Norwich Medical School University of East Anglia, Norwich Research Park, Norwich
Postcode:	NR4 7TJ
Contact telephone number:	07841389689
Email address:	Mercedez.coleman@uea.ac.uk
Details of Lead Sponsor:	

Partner Organisations:
Health Research Authority, England
NIHR Clinical Research Network, England
NHS Research Scotland
NISCHR Permissions Co-ordinating Unit, Wales
HSC Research & Development, Public Health Agency, Northern Ireland

Name:	Tracy Moulton
Contact email address:	
Details of Lead Nation:	
Name of lead nation *delete as appropriate*	England
If England led is the study going through CSP? *delete as appropriate*	No
Name of lead R&D office:	Norfolk and Norwich University Hospital

Partner Organisations:
Health Research Authority, England NIHR Clinical Research Network, England
NHS Research Scotland NISCHR Permissions Co-ordinating Unit, Wales
HSC Research & Development, Public Health Agency, Northern Ireland

2. Summary of amendment(s)

This template **must only** be used to notify NHS/HSC R&D office(s) of amendments, which are **NOT** categorised as Substantial Amendments.
If you need to notify a Substantial Amendment to your study then you MUST use the appropriate Substantial Amendment form in IRAS.

No.	Brief description of amendment *(please enter each separate amendment in a new row)*	Amendment applies to *(delete/ list as appropriate)*		List relevant supporting document(s), including version numbers *(please ensure all referenced supporting documents are submitted with this form)*		R&D category of amendment *(category A, B, C) For office use only*
		Nation	Sites	Document	Version	
1	Clarification of the exclusion criteria. The exclusion criteria is worded as "Previously engaged in individual or group psychotherapy, during which the role of 'compassion' was discussed, as this study aims to capture participants who have not received psychological support that uses self- compassion interventions." The exclusion criteria should read: "Previously engaged in individual or group psychotherapy during which the role of 'compassion' was discussed and was a primary treatment target. This study aims to capture participants who have not received psychological support that primarily uses self-compassion interventions." A discussion of 'compassion' does not constitute a psychological intervention.	England	All sites	Protocol: Thesis Proposal	1.3	
2						
3						
4						
5						

[Add further rows as required]

Partner Organisations:
Health Research Authority, England
NHS Research Scotland
HSC Research & Development, Public Health Agency, Northern Ireland
NIHR Clinical Research Network, England
NISCHR Permissions Co-ordinating Unit, Wales

3. Declaration(s)

Declaration by Chief Investigator

- I confirm that the information in this form is accurate to the best of my knowledge and I take full responsibility for it.
- I consider that it would be reasonable for the proposed amendment(s) to be implemented.

Signature of Chief Investigator: 

Print name: Mercedez Coleman

Date: 20th October 2017

Optional Declaration by the Sponsor's Representative (as per Sponsor Guidelines)

The sponsor of an approved study is responsible for all amendments made during its conduct.

The person authorising the declaration should be authorised to do so. There is no requirement for a particular level of seniority; the sponsor's rules on delegated authority should be adhered to.

- I confirm the sponsor's support for the amendment(s) in this notification.

Signature of sponsor's representative: T. Moulton

Print name: T. MOULTON

Post: CONTRACTS MANAGER

Organisation: UEA

Date: 31/10/17

Non-substantial Amendment Approval

Amendment Categorisation and Implementation Information

Dear Miss Coleman,

Thank you for submitting an amendment to your project.

If you have participating NHS/HSC organisations in any other UK nations that are affected by this amendment we will forward the information to the relevant national coordinating function(s).

Please note that you may only implement changes described in the amendment notice.

What Happens Next?

Information Specific to Participating NHS Organisations in England

1. **This email also constitutes HRA Approval for the amendment**, and you should not expect anything further from the HRA.
2. You may implement this amendment immediately.
3. You should ensure that participating NHS organisations in England are informed of this amendment. In doing so, you should include the NHS R&D Office, LCRN (where applicable) as well as the local research team.
4. Participating NHS organisations in England should prepare to implement this amendment, where expected.

IRAS Project ID:	212211
Short Study Title:	Self- compassion and weight loss in clinically obese adults
Date complete amendment submission received:	31/10/2017
Amendment No./ Sponsor Ref:	01
Amendment Date:	20 October 2017
Amendment Type:	Non-substantial
Outcome of HRA Assessment	**This email also constitutes HRA**

	Approval for the amendment, and you should not expect anything further from the HRA.
For NHS/HSC R&D Office information	
Amendment Category	**C**

If you have any questions relating to the wider HRA approval process, please direct these to hra.approval@nhs.net.

If you have any questions relating this amendment in one of the devolved administrations, please direct these to the relevant national coordinating function.

Additional information on the management of amendments can be found in the IRAS guidance.

Please do not hesitate to contact me if you require further information.

Kind regards

Mr Ali Hussain

Amendments Co-ordinator

Health Research Authority

Ground Floor | Skipton House | 80 London Road | London | SE1 6LH

E.hra.amendments@nhs.net

W. www.hra.nhs.uk

Sign up to receive our newsletter HRA Latest.

Self- compassion in adults with difficulties managing weight.

Invitation and brief summary

We would like to invite you to take part in a research study that is currently being carried out within NHS Weight Management Services. This study is being conducted as part of a Doctorate in Clinical Psychology at the University of East Anglia.

What is the study about?

This study aims to understand how self-compassion can influence weight loss in adults who experience weight management difficulties. Self- compassion is loosely defined as being kind, non- judgmental and understanding yourself. We are looking to speak to people who are currently working with a Tier 3 Weight Management Service to manage/lose weight. We are hoping to capture a range of different experiences and are looking to speak to people who feel they are self-compassionate and those who may have limited experiences of self-compassion.

Am I eligible to take part in the study?

You are eligible to take part in the study:

- If you are aged 18 or over
- If you have been assessed and are waiting to begin treatment in a Tier 3 Weight Management Service or if you currently receiving treatment
- If you are fluent in English
- If you have attempted to lose weight independently prior to treatment with the Weight Management Service
- If you have a BMI over 30

What would taking part involve?

If you are interested in taking part in the study:

- You would be offered an appointment to complete an interview.
  - The appointment will last around two hours
  - You will be interviewed for approximately one hour
  - You will be invited to talk about your experiences of weight loss and your understanding and experiences of self- compassion. The interview will be semi- structured. This means that although there will be some

set questions that you are asked in the interview, there will be time for you to talk about your own experiences.

- The interview would be audio recorded
  - The interview would be recorded on a password-protected audio recorder. This is to ensure that all of your experiences and views are captured correctly.

- The interview would take place at your local Weight Management Service clinic or at your home
  - This will be arranged for a time and date to suit you and a time could be offered around an existing appointment.

- We would like access to your medical records. When you were assessed for the service, you completed a number of questionnaires. We are interested in the Hospital Anxiety and Depression Scale and Eating Disorder Examination Questionnaire that you completed. The questionnaires measure symptoms of anxiety, depression and eating behaviours. With consent, we would use your answers to these questionnaires and your BMI for information purposes only.

  - If you would like to take part in the study, but would prefer if your questionnaires or BMI information was *not* used, please let the researcher know by *not* initialling the relevant box on the consent form.

Is my interview confidential?

Your clinical team will be informed of the date, time and location of your appointment. Your interview will be treated confidentially. This means that the information and experiences you share within the interview will not be shared with other people. Your personal details (name, age, contact details) will be kept separately from your interview answers.

All the information you share in the interview will be made anonymous and unidentifiable. Only the researcher (Mercedez Coleman, Trainee Clinical Psychologist) will know which answers were yours. Some direct quotes may be used when the study is written up and published. These quotes will be anonymised.

The exception to this is if any distress or risk is identified for you or others, the researcher will inform relevant others. This could involve contacting your Weight Management Service clinical team and signposting to other relevant services.

Once you have completed the study, your clinical team will be sent a letter to let them know that you have taken part. A copy of your consent form will be included in your medical file.

What will happen to my data?

Your interview will be typed up and used to help understand how self-compassion influences the experience of weight management, for people using the Tier 3 Weight Management Service. Once your interview has been typed up, the data will be anonymised for use in a research thesis, which will be published. An NHS approved third party transcription service may be used to help with the transcription of your interview. No identifiable personal information will be published.

The audio file and transcription of your interview will be securely stored until the research thesis has been examined. Once the thesis has been examined the audio file will be destroyed. The transcription of your interview will be stored securely at the University of East Anglia for 10 years after the study has ended (in line with NHS policy). Data will only be accessed by the researcher (Mercedez Coleman) and the primary academic supervisor (Dr. Imogen Rushworth). After 10 years all data will be destroyed.

What are the possible benefits of taking part?

Many people find the opportunity to share their experiences very helpful personally, and also enjoy contributing to new research.

Your experiences will help services understand the self- compassionate processes involved in managing difficult experiences when engaging in weight loss/ weight management.

The outcome of this project may lead to changes in treatment and/or advances in understanding patients who attend Complex Weight Loss Management Services.

If you wish, you will be entered into a prize draw to win a £20 voucher of your choice (Marks and Spencer, Amazon or Love2Shop). You will be asked if you wish to take part in the prize draw before the interview begins.

What are the possible disadvantages and risks of taking part?

The interview would involve speaking about your experiences for up to an hour and this may become quite tiring. You are able to take a break at any point during the interview.

Everyone's experience of weight management is different. For some this can be a really positive process, and for others weight loss can be very challenging. The interview may bring up difficult emotions for people as they think back to their own experiences of being compassionate towards themselves, whilst managing their weight. If you become upset or distressed in any way during the appointment, the researcher (Mercedez Coleman) will stop the interview and you will be offered

support. If you choose, the interview can continue. If you or the researcher thinks that the interview should not go continue, the interview will be stopped. You will be offered a full debrief after the appointment to discuss any issues raised to ensure that any distress is identified and has been managed. If distress continues, the researcher will discuss options with you. These may include the researcher offering to call your clinical team and speak to them, or you may wish to contact them yourselves.

Interviews will be arranged during times when your clinical team is contactable (Monday- Friday, 9-4), to allow for this information to be swiftly passed on and for additional support from the clinical team to be provided if necessary.

Do I have to take part in the study?

It is your choice if you wish to take part in the study. Participation is voluntary and you free to withdraw at any time before or during the interview without giving any reason. If you choose not to take part or withdraw from the study, this will have no impact on your treatment with the Weight Management Service.

What if I change my mind?

You are able to withdraw your data from the study up to one week after your interview. Due to the method of analysis used in this study, information from each interview will help inform the questions for the next participant. After one week your interview will have been anonymously typed up and analysed and will no longer be able to be taken out of the study.

Will I be contacted again?

If you would like to receive a summary of the study findings, these will be sent to you (by email or letter) once the study has been completed. It is anticipated that this will be in Summer 2018. If you wish to receive a summary of the results you are able to opt in to this by initialling and ticking question 8 on the consent form.

Any Further Guidance?

1. **Who is organising and funding this study?** The research study is being carried out as part of a doctorate in clinical psychology and has been approved by the Complex Weight Management Service in the NHS. *This study has been approved by the NHS Cambridge South Research Ethics Committee.*

2. **How have patients and the public been involved in this study?** The inspire Panel has reviewed this study. inspire stands for involving service users, carers and the public in research. Service users, carers and the public have provided feedback on the research project and their views have been used to help design the study and documentation.

3. **Will everyone who is interested be able to take part?** *We are looking for 6- 12 people to take part in this study.* Unfortunately, it may not be possible to interview everyone who is interested. This is due to time constraints of the research study.

4. **Who are the Researchers?**

Mercedez Coleman (Trainee Clinical Psychologist and Chief Investigator)
Dr Imogen Rushworth (Clinical Psychologist and Primary Research Supervisor)
If you would like to discuss anything in this information sheet, please contact Mercedez Coleman (Chief Investigator) at on 07804552684, or the Primary Research Supervisor, Imogen Rushworth, via I.Rushworth@uea.ac.uk.

5. ***Who can I contact in the event of a complaint?***

In the case of a complaint please contact the Doctoral Programme of Clinical Psychology, Programme Director Dr Kenneth Laidlaw, via k.laidlaw@uea.ac.uk

The Patient Advice and Liaison Service (PALS) is an independent point of contact. You can contact them in writing to The PALS Manager, Norfolk and Norwich University Hospital, West Outpatients Level 2, Colney Lane, Norwich NR4 7UY or by telephone on 01603 289036

Participant Consent Form

Consent Form: Version 1.4, 7th April, 2017 IRAS project ID (212211)

Consent Form

Participant Identifier for this study:

CONSENT FORM

Title of Project: Self- compassion in adults with difficulties managing weight.

Name of Researcher: Mercedez Coleman

Please initial the boxes to confirm that you have read and agree to the following statements:

1. I confirm that I have read the participant information sheet dated April 2017 (version.1.4) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time before or during the interview without giving any reason, without my medical care or legal rights being affected. ☐
3. I agree for my interview to be audio recorded. ☐
4. I understand that I have the right to withdraw my data up to one week after participation in the study. After this time withdrawal will not be possible. ☐
5. I agree to my clinical team being informed of my participation in the study. ☐
6. I agree for my Medical records to be accessed to obtain my BMI, medical history and the questionnaires I completed when accepted into my Weight Management Service. ☐
7. I agree to take part in the above study. ☐
8. I wish to be contacted by my preferred contact method with a summary of the study's findings. ☐
9. I wish to be included in the prize draw. ☐

Consent Form: Version 1.4, 7th April, 2017 IRAS project ID (212211)

Name of Participant	Date	Signature
Researcher	Date	Signature

Non-disclosure agreement with the Transcription Service

Confidentiality & Non-Disclosure Agreement - Client

This Agreement is made on the 25h Day of August 2017 between

- **UK Transcription Ltd of 15-17 Middle Street, Brighton, BN1 1AL ("UKT")**
  and

(2) Mercedez Coleman of The University of East Anglia ("The Client"). UKT has been appointed by the Client to transcribe video/audio files and documentation ("Work") which will involve the disclosure to UKT of sensitive and confidential data relating to both the Client and/or its client(s).

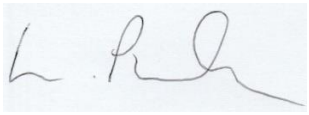
- In consideration of payment by the Client for work, UKT undertakes to:
  - maintain confidentiality and not to disclose to any person or organisation other than the Company (save as required by law) at any time any work including but not limited to any and all audiotapes, videotapes, and oral or written documentation provided by the Client to UKT.
  - not use any confidential information for any purpose except to evaluate and engage in the performance of transcription services for the Client;
  - not authorise or otherwise enable any other person or organisation to have access to the content of work (save as required by law) without obtaining the Client's prior written consent;
  - take all necessary steps to secure data in relation to work with encryption and to permanently destroy the same after use with a file shredder or other effective method;
  - not make any kind of contact with and/or solicit business from any person or organisation involved (directly or indirectly) with work provided by the Client.
- For the avoidance of doubt, the undertakings set out in clause 1 above shall apply both during the period in which work is carried out and at all times thereafter;
- Neither the Client nor UKT intend to create the relationship of employer and employee between them and nothing in this Agreement shall comprise such relationship.

Accordingly, UKT shall be solely responsible for any tax and other responsibilities arising out of performing and delivering work pursuant to this Agreement,

- This Agreement shall be governed by and construed in accordance with the laws of England and the parties hereby submit to the exclusive jurisdiction of the English courts.

Signed by: Mercedez Coleman, Trainee Clinical Psychologist 

For and on behalf of the Client Date 25th August 2017.

Signed by: Lindsey Prudhoe, Sales Manager 

Appendix E

Empirical Paper: Interview Guide

Interview Guide

Weight Management: Any changes to diet and exercise in order to reduce or maintain your weight.
Self- Compassion: Self- compassion is defined as being able to be kind, non- judgmental and understanding to yourself.

1. Tell me how you came to be at the WMS.

2. Can you tell me about your weight management experience to date?
    a. What prompted you to think about changing your weight?

3. In your experience, what, if any, do you consider to be the greatest challenge to managing weight?

4. What does self- compassion mean to you?

5. What is your experience of self- compassion?

6. How self- compassionate do you consider yourself to be on your weight loss journey?

7. What contributes to how compassionate you are towards yourself when facing these challenges?

8. How would you usually respond to yourself if you were struggling with your weight management routine?

    a. Emotional response to this challenge

9. Can you tell me about a time you consider yourself to have been self-compassionate whilst managing your weight?
    a. What was happening in your life
    b. What makes this experience stand out to you
    c. How do you make sense of this experience

10. How, if at all, has your self- compassion changed in relation to your weight management
    a. Over time
    b. Since being in the CWMS

Appendix F

Empirical Paper: Category Audit Trail per Participant

Table 8.

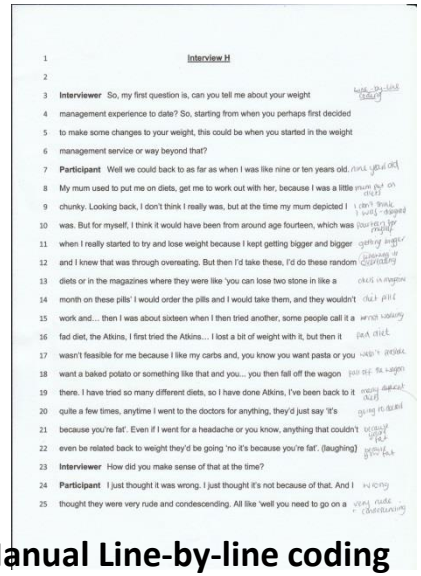
Tale to show participants who contributed to categories and sub-categories

	Katherine	Linda	Vicky	Charlotte	Evelyn	Carol	Mollie	Gemma	Barry
Interacting with others	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**
Others judging/stigmatizing	x	x	x	x	x		x	x	x
Others supporting	x	x	x	x	x	x	x	x	
Making social comparisons	x			x		x		x	
Seeking social acceptance	x			x			x	x	
Socializing influences food choices	x	x		x			x		
Developing self-compassion	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**
Perceiving self-compassion as conditional	x	x	x	x	x	x	x	x	
Redefining self-compassion	x	x	x	x	x		x	x	x
Receiving compassion facilitates self-compassion	x		x		x		x	x	

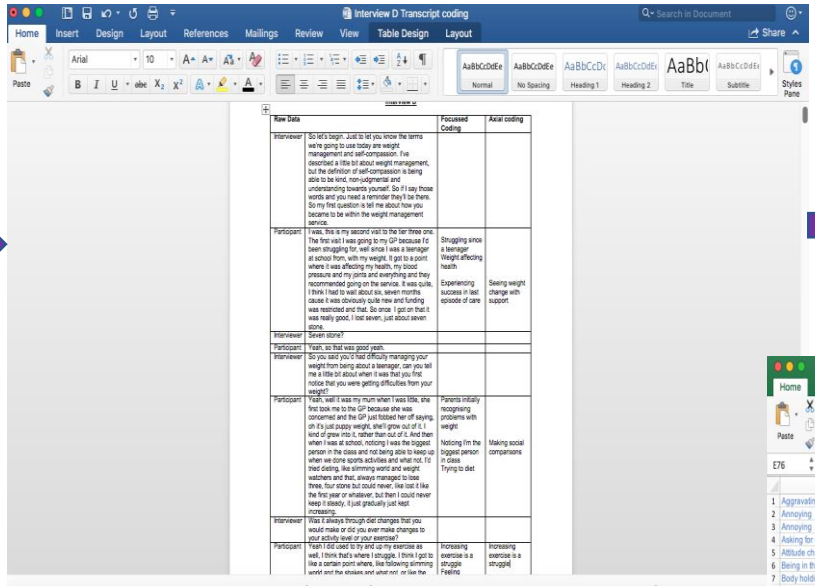
Self-compassion influences perspective taking	x	x			x		x	x	
Noticing change in self-compassion and weight management	x						x	x	
Relating to food	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**
Emotional eating pattern	x	x	x	x	x	x	x	x	x
Difficulty managing weight	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	
Learning to maintain weight		x	x	x	x		x	x	
Difficulty maintaining ‘diet lifestyle’	x	x	x	x	x			x	
Needing structure vs flexibility	x	x		x	x	x		x	
Relating to Self	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**
Disliking body image		x		x			x		
Being self-critical	x	x	x	x	x	x	x	x	x

Appendix G

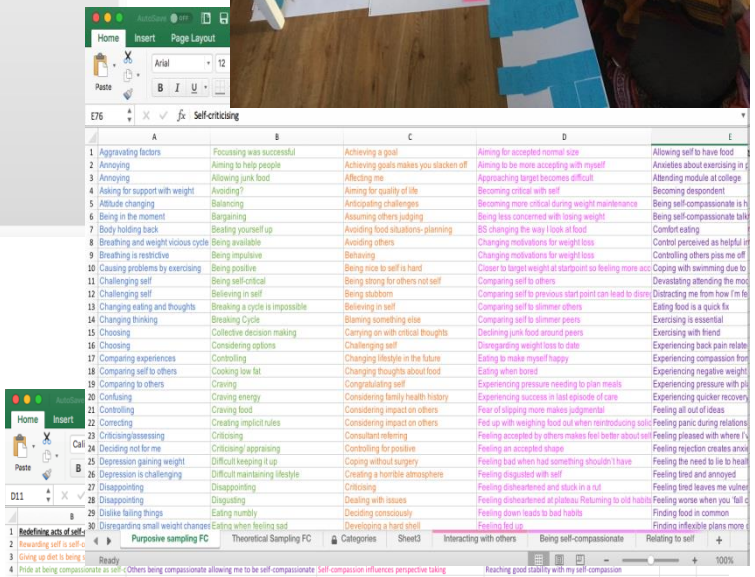
Empirical Paper: Process of Data Management



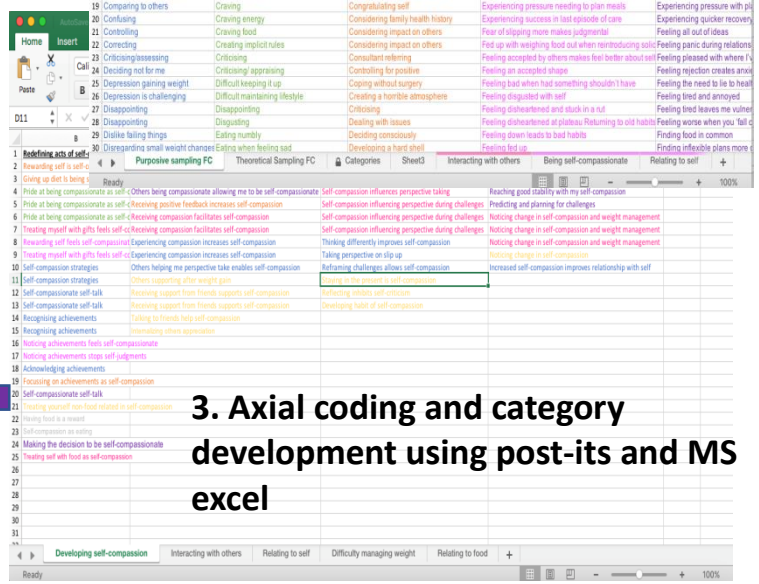
1. Manual Line-by-line coding

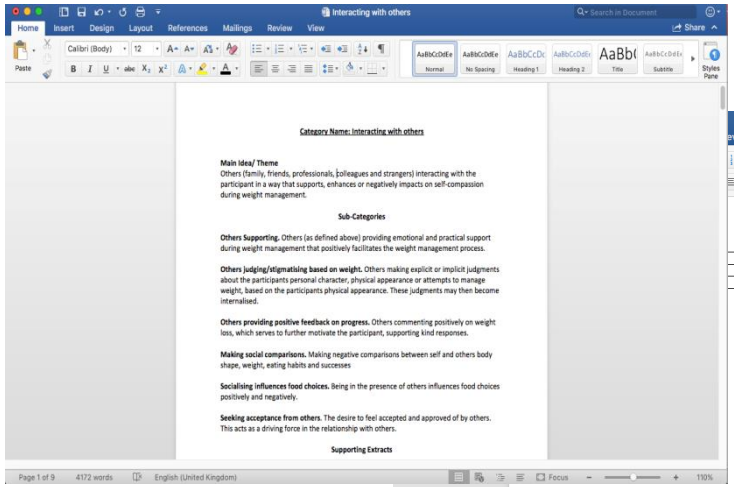


2. Focussed coding using MS word

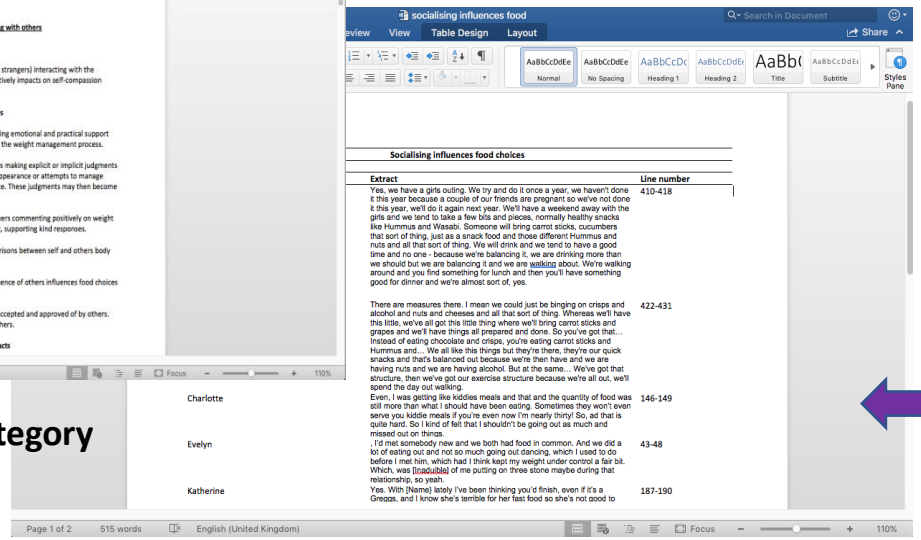


3. Axial coding and category development using post-its and MS excel





5. Category and sub-category



4. Data extraction table using MS word

Appendix H

Example of Memo writing

- Example of Case Based Memo
- Example of Conceptual Memo
- Example of Diagrammatic Memo

Example of a Case Based Memo

Memo written after interviewing Participant G

Date: 13th November 2017

I found this interview to be very enlightening. The participant shed light on the difficulties I had in accessing self-compassion experiences in the previous participants. The participant explained that when the end goal feels really far away, it's a lot more difficult to be self-compassionate, notice achievements, perspective take and recognise common humanity. However, when the participant was dieting and the weight to lose was shorter, it was easier to keep the goal in mind, which helped with the development of self-compassion. When at a high weight in can be hard to keep hold of common humanity aspect. This presented a whole new perspective on the weight management and self-compassion process, which may reflect the challenges I have had in accessing self-compassion experiences in previous interviews. Whilst holding this perspective in mind I was able to explore the links between categories identified within purposive sampling phase. Specifically interacting with others, being self-compassionate and the challenges of managing weight.

Example of a Conceptual Memo

Date: 11th December 2017

Sub-category: Learning how to maintain weight

Focussed Codes: 'difficult maintaining diet lifestyle', 'learning how to maintain weight'. 'putting weight on again', 'weight creeping on', 'maintaining weight', 'Judging self more when trying to maintain weight'

Participants describe maintaining weight to be the most challenging. They fear 'slipping back into 'old habits' and trying to 'create new habits'. After sending so long, or some since early childhood learning how to reduce their weight and lose weight, once participants are a stable low weight they describe the structure of the diet going and they may also lose the structure of the service or slimming world or weight watchers. For the participants, the old habits creep back in, they gain some weight then try really hard to lose it again with a fad diet perhaps. Participants haven't had experience of being at a weight they wish to maintain. Learning how to maintain weight is a big challenge.

"Keeping the weight off. It's my biggest challenge. I know I can lose it, I lost the seven stone, I've lost two stone in five weeks now. I know I can lose the weight, it's just getting to the point where I hit my target, then keeping it stead at that without putting it on again. That's my biggest problem. (Charlotte)"

How do participants incorporate lifestyle changes that are not diet lifestyle changes? Charlotte, Vicky, Evelyn, Mollie and Gemma all describe this phenomenon. That sustaining weight loss is hard and keeping the weight off once at a happy weight, is defeated by engaging in old habits.

“It’s trying to find a happy balance of knowing that when you can stop trying to lose weight, you can up your calories a bit, but it’s trying to work out where and when” (Gemma)

And obviously that didn’t work out so and then, stopped thinking about what I was doing and the weight just crept on, so I need to think this time and think constantly about what I’m doing. (charlotte)

Evelyn’s statement is particularly interesting. She states

“I suppose because I’ve already done it and I’ve put it back on again. And I’m thinking, what is even the point in dieting when I know I’m probably going to put it back on again. Sort of, I get a bit despondent, a bit you know, a bit more [inaudible], you know what’s life without pleasure? You know, I enjoy food (laughing)”

Her statement almost implies that to maintain weight, she must not eat and therefore not enjoy her food. There’s something to suggest that weight maintenance is synonymous with dieting and losing weight. “What’s even the point, I know I’m probably going to put it back on again, “is because once she stop dieting she returns to her old habits, becomes “despondent”.

“Obviously, that’s why I’ve been referred to the weight management service. Within that time, I’ve been able to lose a lot and then every time I stop that particular diet, then put a lot more on”
(Mollie)

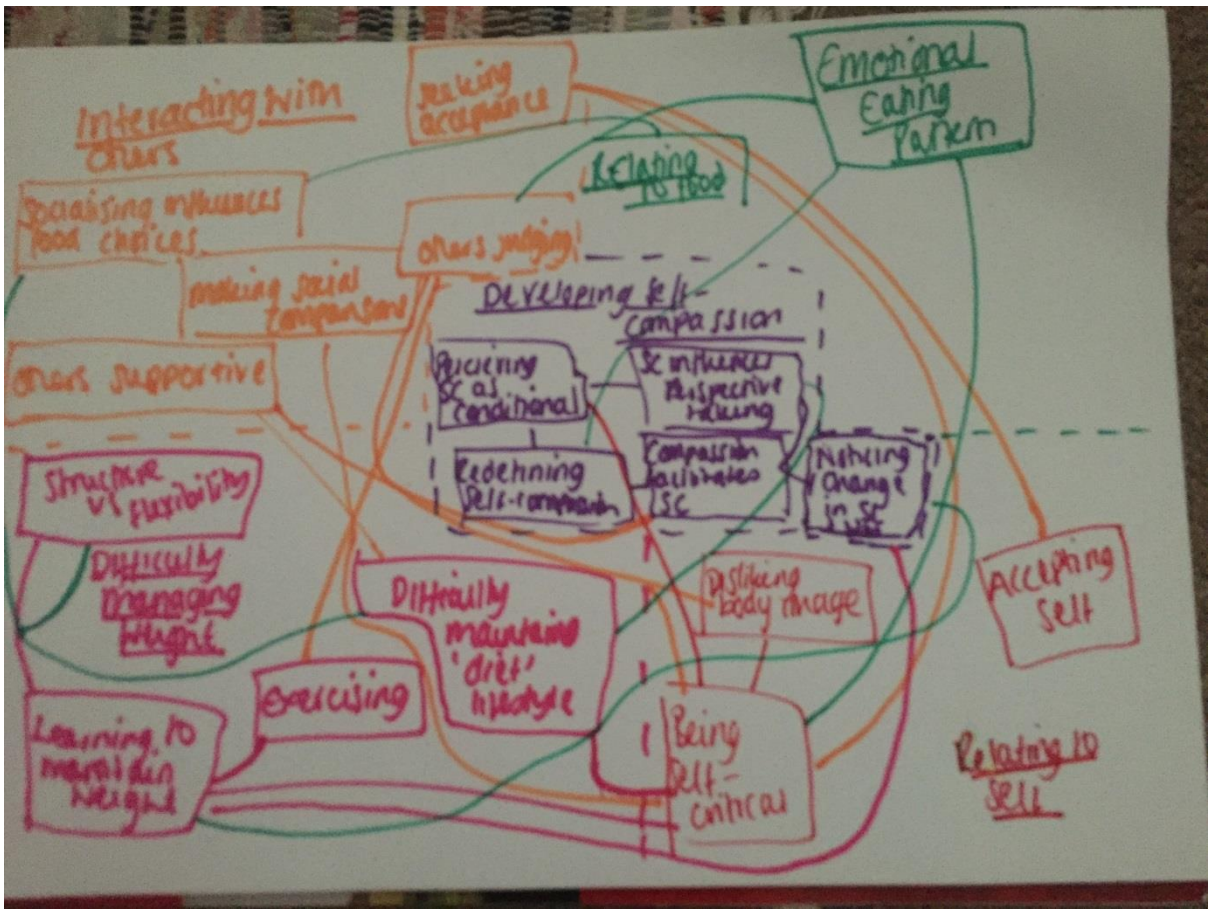
It is slip ups during this phase that are the most challenging to overcome the self-criticism and be self-compassionate.

Potential Links to other categories/subcategories:

Links to developing self-compassion

Relating to self

Example of a diagrammatic memo



Exploring subcategories within categories and conceptual links between them. Through this memo the circular design of the grounded theory was initiated, due to the recognition of interactions between categories and subcategories.

Appendix I

Transcript Extracts and Example of Coding

- Example of Line-by-line Coding
- Example of Focussed Coding
- Example of Axial Coding

Line-by-line coding extract

Interviewer So, what's been your biggest challenge do you think, looking back but still in your weight management history?	
Charlotte Keeping the weight off. It's my biggest challenge. I know I can lose it, I lost the seven stone, I've lost two stone in five weeks now. I know I can lose the weight, it's just getting to the point where I hit my target, then keeping it steady at that without putting it on again. That's my biggest problem.	Keeping the weight off Know I can lose Keeping it steady is biggest problem
Interviewer What is it do you think that makes that difficult?	
Charlotte I honestly don't know [long pause]. I don't know if I get fed up with weighing and cause when you have to reintroduce food you have to like weigh everything, obviously when you go out to restaurants it's hard. Even, I was getting like kiddies meals and that and the quantity of food was still more than what I should have been eating. Sometimes they won't even serve you kiddie meals if you're even now I'm nearly thirty! So, and that is quite hard. So I kind of felt that I shouldn't be going out as much and missed out on things. And then I was sat at home and	Fed up Reintroducing food Going to restaurants is hard Eating kiddies meals Won't even serve you kiddie meals [Eating at restaurants] hard Missed out on things

probably felt a bit down and then, just got into that circle again of, just started eating bits I shouldn't have done.	Felt a bit down, started eating
Interviewer So when you get to the weight that you're happy with, your goal weight, that's one of the things that are more difficult for you.	
Charlotte Yeah.	Agreement.
Interviewer And you mentioned that going out for dinner was quite challenging. Can you tell me some more, or give me an example of when that's been a problem for you?	
Charlotte Before when I went out, with like work friends they'd have like three course meal and they're all tiny. And they eat, they drink, they're there and I'm kind of like just having just having the one meal, what I think is the most healthiest off the menu. Then I'm just sitting there watching them and I find that hard. So I don't tend to, I don't go out to work Christmas meals or anything like that, I just sit there and I don't enjoy it.	Went out with work friends All really tiny Just having one meal Watching them Don't go out to work meals Don't enjoy it
Interviewer What sort of thoughts or feelings do you have when you're in that situation?	

Charlotte I feel annoyed that other people can eat what they want and I really struggle. I mean probably just even thinking about a packet of chocolate biscuits will probably put pounds on, it's that kind of feeling. I mean at work now I find it difficult as we've just moved offices and it used to just be our team and it's now got five teams in there. And there's one chap who's has biscuits and chocolate bars and everything. And one day I'm sat there and he has six lion chocolate bars, he went out and got a packet of donuts, then he had this lunch that he'd brought, then he'd go out and buy a sandwich and have that and cans of Redbull to keep him going throughout the day and I'm like thinking, why aren't you like the size of the bus. And this is just hard, I sit there and I hear people eating and munching and its, it's just annoying really. I just try and sit there and opening their crisps and what not. And they're all just normal size people.	Other people can eat what they want Even just thinking about [food] Probably put pounds on Moved offices Chap who has biscuits I'm sat there Got a packet of donuts Redbull to keep him going Why This is just hard Really annoying Normal size people

Focussed coding extract

Interviewer So, what's been your biggest challenge do you think, looking back but still in your weight management history?	
Charlotte Keeping the weight off. It's my biggest challenge. I know I can lose it, I lost the seven stone, I've lost two stone in five weeks now. I know I can lose the weight, it's just getting to the point where I hit my target, then keeping it steady at that without putting it on again. That's my biggest problem.	Keeping weight off is biggest challenge
Interviewer What is it do you think that makes that difficult?	
Charlotte I honestly don't know [long pause]. I don't know if I get fed up with weighing and cause when you have to reintroduce food you have to like weigh everything, obviously when you go out to restaurants it's hard. Even, I was getting like kiddies meals and that and the quantity of food was still more than what I should have been eating. Sometimes they won't even serve you kiddie meals if you're even now I'm nearly thirty! So, and that is quite hard. So I kind of felt that I shouldn't be going out as much and missed out on things. And then I was sat at home and probably felt a bit down and then, just got into that circle again of, just started eating	Fed up with weighing food out when reintroducing solids Feeling like shouldn't be going out (for meals) Missing out socially Feeling down leads to bad habits

bits I shouldn't have done. **Interviewer** So when you get to the weight that you're happy with, your goal weight, that's one of the things that are more difficult for you. **Charlotte** Yeah. **Interviewer** And you mentioned that going out for dinner was quite challenging. Can you tell me some more, or give me an example of when that's been a problem for you?	
Charlotte Before when I went out, with like work friends they'd have like three course meal and they're all tiny. And they eat, they drink, they're there and I'm kind of like just having just having the one meal, what I think is the most healthiest off the menu. Then I'm just sitting there watching them and I find that hard. So I don't tend to, I don't go out to work Christmas meals or anything like that, I just sit there and I don't enjoy it.	Comparing self to others Watching others eat food
Interviewer What sort of thoughts or feelings do you have when you're in that situation? **Charlotte** I feel annoyed that other people can eat what they want and I really	

struggle. I mean probably just even thinking about a packet of chocolate biscuits will probably put pounds on, it's that kind of feeling. I mean at work now I find it difficult as we've just moved offices and it used to just be our team and it's now got five teams in there. And there's one chap who's has biscuits and chocolate bars and	Even just thinking about food increases weight
Interviewer: So, what's been your biggest challenge do you think, looking back but	
everything. And one day I'm sat there and he has six lion chocolate bars, he went out and got a packet of donuts, then he had this lunch that he'd brought, then he'd go out and buy a sandwich and have that and cans of Redbull to keep him going throughout the day and I'm like thinking, why aren't you like the size of the bus. And this is just hard, I sit there and I hear people eating and munching and its, it's just annoying really. I just try and sit there and opening their crisps and what not. And they're all just normal size people.	Comparing self to slimmer others

Axial coding extract

still in your weight management history?	
Charlotte Keeping the weight off. It's my biggest challenge. I know I can lose it, I lost the seven stone, I've lost two stone in five weeks now. I know I can lose the weight, it's just getting to the point where I hit my target, then keeping it steady at that without putting it on again. That's my biggest problem.	Learning how to maintain weight
Interviewer What is it do you think that makes that difficult?	
Charlotte I honestly don't know [long pause]. I don't know if I get fed up with weighing and cause when you have to reintroduce food you have to like weigh everything, obviously when you go out to restaurants it's hard. Even, I was getting like kiddies meals and that and the quantity of food was still more than what I should have been eating. Sometimes they won't even serve you kiddie meals if you're even now I'm nearly thirty! So, and that is quite hard. So I kind of felt that I shouldn't be going out as much and missed out on things. And then I was sat at home and probably felt a bit down and then, just got into that circle again of, just started eating bits I shouldn't have done.	Needing structure vs flexibility Socialising influences food choices Emotional eating pattern
Interviewer So when you get to the weight that you're happy with, your goal	

weight, that's one of the things that are more difficult for you. **Charlotte** Yeah. **Interviewer** And you mentioned that going out for dinner was quite challenging. Can you tell me some more, or give me an example of when that's been a problem for you? **Charlotte** Before when I went out, with like work friends they'd have like three course meal and they're all tiny. And they eat, they drink, they're there and I'm kind of like just having just having the one meal, what I think is the most healthiest off the menu. Then I'm just sitting there watching them and I find that hard. So I don't tend to, I don't go out to work Christmas meals or anything like that, I just sit there and I don't enjoy it. **Interviewer** What sort of thoughts or feelings do you have when you're in that situation? **Charlotte** I feel annoyed that other people can eat what they want and I really struggle. I mean probably just even thinking about a packet of chocolate biscuits will probably put pounds on, it's that kind of feeling. I mean at work now I find it difficult	Making social comparisons Making social comparisons

as we've just moved offices and it used to just be our team and it's now got five teams in there. And there's one chap who's has biscuits and chocolate bars and everything. And one day I'm sat there and he has six lion chocolate bars, he went out and got a packet of donuts, then he had this lunch that he'd brought, then he'd go out and buy a sandwich and have that and cans of Redbull to keep him going throughout the day and I'm like thinking, why aren't you like the size of the bus. And this is just hard, I sit there and I hear people eating and munching and its, it's just annoying really. I just try and sit there and opening their crisps and what not. And they're all just normal size people.	Making social comparisons

Appendix J

Example of Coding Process for One Participant: Focussed Codes Into Categories

Table 9.

Focused codes into categories: Charlotte

Categories												
Interacting with others					Relating to self		Relating to food	Difficulty managing weight			Developing self-compassion	
Axial Coding (subcategories)												
Others supporting	Others judging/stigmatizing	Making social comparisons	Socialising influences food choices	Seeking social acceptance	Being self-critical	Disliking body image	Emotional eating pattern	Learning to maintain weight	Needing structure vs flexibility	Difficult maintaining 'diet lifestyle'	Perceiving self-compassion as conditional	Redefining self-compassion
Focused Codes												
Feeling supported by professionals	Feeling others look through me	Comparing self to others	Declining junk food around peers	Aiming for accepted normal size	Becoming critical with self	Feeling disgusted with self	Eating to make myself happy	Judging self more when trying to maintain weight	Fed up with weighing food out when reintroducing solids	Becoming more critical during weight maintenance	Fear of slipping more makes judgmental	Treating myself with gifts feels self-compassionate

Not feeling alone anymore	Getting bullied at school	Comparing self to previous start point can lead to disregarding weight loss.	Feeling like shouldn't be going out (for meals)-	Closer to target weight at start point so feeling more accepted by friends	Feeling bad when had something shouldn't have	Eating when bored	Keeping weight off is biggest challenge	Thinking about food a lot	Experiencing pressure needing to plan meals	Losing weight in college felt most compassionate about self	Thinking about rewards has changed
Others normalising my experience helps	Feeling others look through me	Comparing self to slimmer others	Missing out socially	Feeling accepted by others makes feel better about self		Feeling down leads to bad habits	Stopped thinking about weight maintenance and weight increased	Needing support from authority	Feeling disheartened and stuck in a rut	Hitting plateau makes you feel stuck and disheartened	Rewarding self with food feels different
Others showing interest is encouraging for me		Comparing self to slimmer peers		Feeling an accepted shape		Struggling not to eat if upset or angry	Keeping at WM for rest of life	Needing support from authority	Feeling disheartened at plateau Returning to old habits		Noticing achievements feels kind and non-judgmental
Others are		Watching		Wanting				Not getting	Increasing		Noticing

supporting me

others eat food

to feel accepted

weighed frequently during maintenance is hard

exercise is a struggle

achievements stops self-judgments

Others are understanding

Viewing others as 'normal size'

Looking for social acceptance

Not needing to prepare anything

Others thinking about me first feels nice

Noting what others are eating

Tension between feeling like I can’t relax but wanting to be able to relax

Others commenting on weight loss

Even thinking about food increases weight

Needing authority person to keep check

Others making me laugh and joke, showing compassion for me

Noticing I'm the biggest person in class