A qualitative exploration of the views of men working in routine manual occupations, general practitioners and public health strategists about body weight, health and weight management programmes.

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Thesis submitted to The University of Nottingham

for the degree of Doctor of Philosophy

March 2020

Abstract

Background

Men are underrepresented in weight management programmes despite being more likely to have increased health risk due to elevated body mass index than women. Gender sensitised weight management programmes have been trialled in an attempt to encourage more men to access support. Despite successes little is known about the views of men that have never attended any form of structured weight management programme. The aim of this research was to increase understanding of the views that men least likely to attend weight management programmes have towards body weight, health and weight management programmes.

Methods

Participants were recruited purposefully at their place of work. Semi-structured interviews were conducted with sixteen adult men with a BMI>25 who had never participated in a structured weight management programme and were employed in routine manual occupations. Interviews were analysed using an inductive thematic analysis approach to identify themes. Following early data analysis, GPs were identified as having influence on men's behaviour regarding weight management. Subsequently, ten GPs were recruited and interviewed, along with two public health strategists and findings from the different groups compared.

Results

Data analysis from interviews with men resulted in three themes (intrapersonal factors, important relationships and hegemonic masculinity) and a number of sub-themes. Analysis from interview with GPs and public health strategists also resulted in three themes (raising the issue, intervening to address weight management and “women are from Venus, men are from Mars”) plus additional sub-themes. Men have high levels of body consciousness, value guidance from GPs, express high levels of agency towards lifestyle choices and seek to preserve their masculinity, which is a barrier to attending weight management programmes. GPs did not feel equipped to deal with obesity sufficiently in primary care and held stigmatised views of men and their needs regarding body weight and weight management. A qualitative comparison of findings between these different participant viewpoints highlighted a number of conflicting beliefs.

Conclusion

Failure to consider the needs of men in weight management programmes will continue to lead to low participation. Improving health literacy at population level, gender sensitisation of resources, preservation of masculinity and providing men with opportunity to follow self-directed weight management programmes is the most likely way to increase participation. GPs need empowering to feel confident at addressing weight management in men and to have greater appreciation of their influence on the behaviour of this group. Public health commissioners and strategy planners should ensure clearly defined pathways are in place for men and consider the specific needs of

men when developing weight management policies or risk failing to meet the needs of this population and contributing to gender health inequalities.

Acknowledgments

This has been a long journey and would not have been possible without the dedicated and valued support of many people. Firstly, I express my sincerest gratitude and thanks to my supervisors Professor Jo Lymn and Professor Sarah Redsell whose expertise, guidance, motivation and support throughout this study has been incredible. You kept me focussed many times and your encouragement and inspiration made me believe that this was possible. Thank you so very much for your unbelievable mentorship and patience.

To my family. My parents and grandparents, not all of whom are around to see this moment, you have always supported me in whatever choices I made in life and gave me the confidence to stretch my imagination about what I can achieve, thank you. To my wife who has raised our children almost single handed over recent years, and my two sons who have started to question why their Daddy was always busy working, thank you for your patience and I look forward to spending more time with you and having fun.

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List of Abbreviations

BMI	Body Mass Index
BCT	Behaviour Change Technique
CCG	Clinical Commissioning Group
CHD	Coronary Heart Disease
COM-B	Capability, Opportunity, Motivation – Behaviour
COPD	Chronic Obstructive Pulmonary Disease
CVD	Cardio vascular disease
ESRC	British Economic and Social Research Council
FFIT	Football Fans in Training
GP	General Practitioner
HSE	Health Survey for England
JSNA	Joint Strategic Needs Assessment
ICER	Incremental Cost-Effectiveness Ratio
IHD	Ischemic Heart Disease
MECC	Making Every Contact Count
MI	Motivational Interviewing
MRC	Medical Research Council
NHS	National Health Service
NICE	National Institute for Clinical and Care Excellence
NIHR	National Institute of Health Research
ONS	Office for National Statistics
PEP	Preserve Masculinity, Empower, Prompt
PHE	Public Health England

QALY	Quality Adjusted Life Year
RCT	Randomised Control Trial
ROMEO	Review of Men and Obesity
SHED-IT	Self-Help, Exercise and Diet using Internet Technology
STP	Sustainability and Transformation Partnership
WHO	World Health Organisation

CHAPTER 1. INTRODUCTION

1.1 Structure of the Thesis

This thesis will investigate the views of men about accessing weight management programmes.

The thesis is presented in eight chapters. The current chapter (chapter 1) commences by providing a definition of overweight and obesity and an overview of obesity prevalence and the prevalence of obesity related disease. The chapter then describes the causes of obesity followed by a summary of strategy and treatment care pathways applied in the United Kingdom. Finally the chapter provides an overview of theories of behaviour change that are often applied to public health and weight management programmes and which theory will be used as a theoretical lens during the discussion chapter.

Chapter 2 provides a review of relevant existing literature. The chapter starts with a historical review of research that investigated the effect of diet and physical activity on body weight, the influence of behavioural change strategies and the benefits of multi-component weight management programmes. Clinical effectiveness of weight management programmes is reviewed before the chapter explores current literature around men and health, including research investigating men's access to healthcare services and more specifically men's access to weight management services. I also

review the recent development of gender sensitised weight management programmes.

Chapter 3 gives a description and rationale for the research study design and the methodology before describing the data transcription and analysis process and how early findings led to the research design being amended to follow a new line of enquiry involving General Practitioners (GPs).

Chapter 4 provides in-depth analysis of data collected from interviews with men who were overweight or obese working in routine and manual occupations. The chapter describes three overarching themes that were constructed from the interview data analysis and a number of sub-themes.

Chapter 5 goes on to provide the analysis and findings from interviews conducted with GPs and Public Health Strategists. Again, this chapter will describe the findings which have been organised into a number of overarching themes and sub-themes.

Chapter 6 provides a qualitative comparison of the findings from chapters 4 and 5. This synthesis explores the similarities and differences between the findings presented in chapter 4 and those presented in chapter 5, identifying a number of important areas where data findings either corroborate or contradict each other.

Chapter 7 provides a detailed discussion of the findings of this research presented in chapters 4, 5 and 6. This chapter examines the findings from my research, how these are situated within existing literature and how this research answers the posed research question. The chapter proposes a number of areas for future consideration within the practice of weight management as well as providing a reflective account of the research and its limitations.

Finally, chapter 8 draws the thesis to a conclusion and culminates in the proposal of three guiding principles for strategists, commissioners and planners in relations to weight management services and men.

1.2 Definition of Overweight and Obesity

The most widely used method for classification of overweight and obesity is Body Mass Index (BMI). BMI is a height to bodyweight ratio providing a measurement (kg/m^2) which correlates to a certain level of comorbidity risk (table 1).

Table 1. International classification of adult body weight using BMI

Classification	BMI (kg/m^2)	Risk of Comorbidities
Underweight	<18.50	Low but risk of clinical problems increased
Normal range	18.50 - 24.99	Average
Overweight	25.00 - 29.99	Increased
Obese	≥30.00	
Obese class 1	30.00 - 34.99	Moderate
Obese class 2		Severe

Obese class 3 (morbid obesity)	35.00 39.99 ≥40.00	- Very Severe

Source: WHO, 2000

The World Health Organisation defines overweight and obesity as *"abnormal or excessive fat accumulation that may impair health"* (WHO, 2018). Whilst BMI is the most commonly used classification of body weight and health risk, there is debate about whether BMI should be applied less frequently due to questionable ability to detect body adiposity (Okorodudu *et al,* 2010). Some argue that waist circumference is a more sensitive measure of body adiposity and is therefore a better indicator of health risk (Okorodudu *et al,* 2010; Staiano *et al*, 2012). The National Institute for Health and Care Excellent (NICE) recommends that clinical judgement is made when using BMI and that this should be taken into consideration with other clinical measures and indicators such as waist circumference (NICE, 2014).

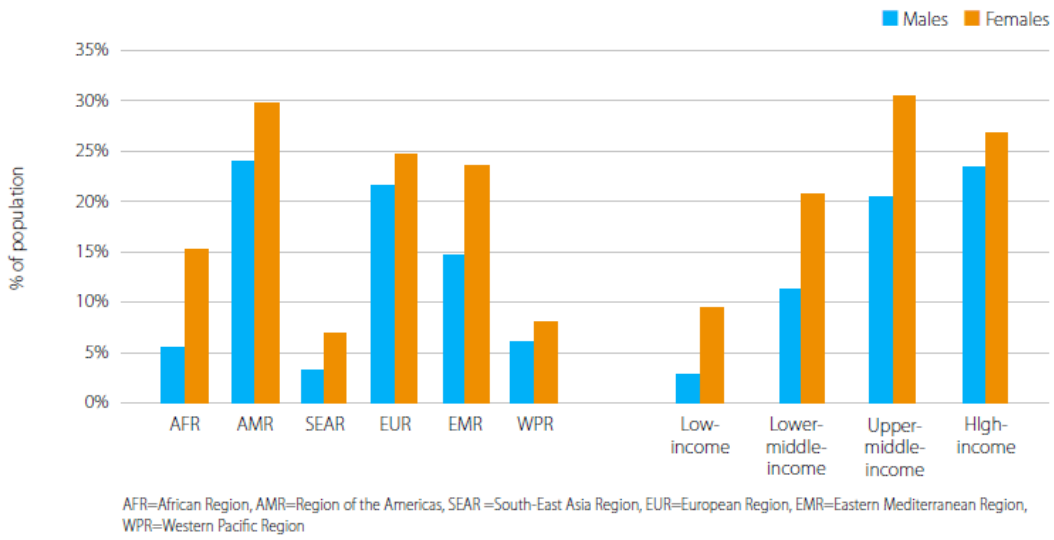
Whilst I acknowledge the argument over which measurement is clinically most relevant as an indicator of body weight health risk, currently most research is conducted using BMI as the primary measurement. Therefore, this thesis and research will apply BMI as the measurement to describe and categorise body weight.

1.3 Prevalence of Overweight, Obesity and Associated Disease

Between 1980 and 2013 the worldwide prevalence of adults classified as overweight or obese rose by 27.5% (Ng *et al*, 2014) with the World Health

Organisation (WHO) estimating that 11% of all men and 15% of women are obese (WHO, 2014). Obesity prevalence was predominantly confined to developed countries where it is more than double that of low-income nations (figure 1), however it is now increasing at its fastest rate within developing countries (Ng *et al*, 2014) making obesity a global public health concern.

Figure 1. Global prevalence of obesity

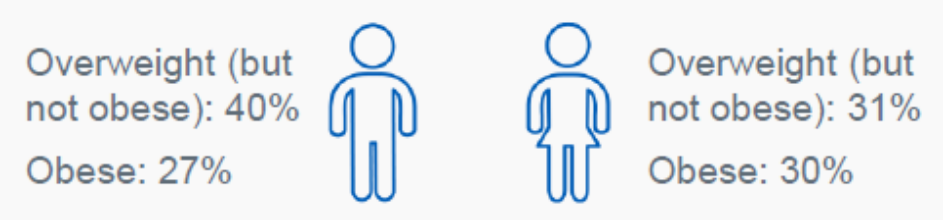


Source: WHO, 2014

In England the percentage of adults who are either overweight or obese has steadily increased since 1993 (Baker, 2019). Whilst fewer adults are likely to be categorised as overweight, more are now likely to be classified as obese. The Health Survey for England (2017) reported that 64% of adults were either overweight or obese. Around 40% of men are classified as overweight and a further 27% are obese resulting in 67% of all adult men in England having increased health risk attributed to body weight (Health Survey for England, 2017) compared to 31% of women classed as overweight and 30% as obese (figure 2). The forecast disease burden associated with the

increasing prevalence of obesity is anticipated to result in up to an additional 668,000 cases of diabetes, 461,000 cases of heart disease and stroke and up to 130,000 cases of cancer and a loss of 2.2-6.3 million quality adjust life years (QALY) in the UK at an additional economic cost of £1.9 billion (Wang *et al*, 2011). It is anticipated that by 2030 11 million more adults in the UK will be obese, resulting in the total economic cost of obesity reaching £49.9 billion (Foresight - Tackling Obesities: Future Choices, 2007).

Figure 2. Prevalence of overweight and obesity amongst in England



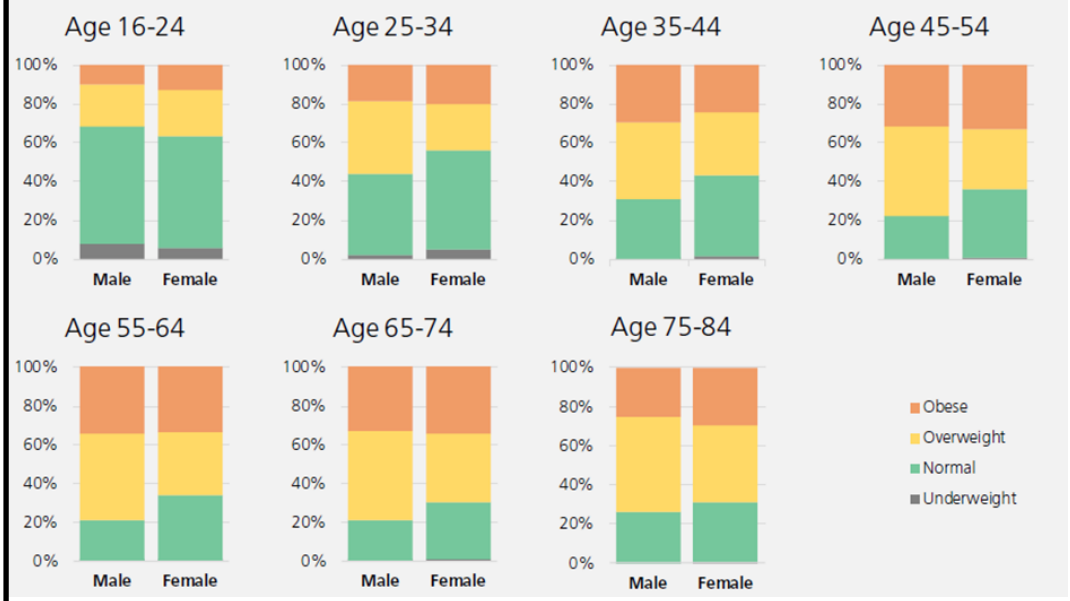
Source: Health Survey for England, 2017

Prevalence of overweight and obesity combined in the areas of highest deprivation is 67% compared to 57% in the least deprived areas (Health Survey for England, 2017), although this is most noticeable in the female population where the prevalence of overweight and obesity amongst adult women in areas of the highest deprivation is 67% compared to 48% of women from least deprived areas.

Lifestyle factors which directly contribute to weight gain such as diet and physical activity levels also vary across gender and socioeconomic groupings. Men are more likely to be classified as physically active than

women with 63% of adult men completing in at least 150 minutes of physical activity per week compared to 58% of women (Sport England, 2017). Both men and women from higher socioeconomic groups are more likely to be physically active than those from lower groups and less likely develop lifestyle related disease such as type 2 diabetes (Volaco *et al*, 2018). Women are more likely to eat the recommended five portions of fruit and vegetables per day compared to men (Blanck *et al*, 2008; Health Survey for England, 2017) and men have been shown to consume greater quantities of alcohol than women (Erol and Karpyak, 2015; Health Survey for England, 2017). Adults are also more likely to be overweight or obese as they become older (Jura and Kozak, 2016) with fewer men having a normal BMI in each age range compared to women, with the exception of 16-24 year olds (Baker, 2019) (figure 3).

Figure 3. Levels of overweight and obesity across age



Source: Baker, 2019

The association with non-communicable disease and body weight is well established with the earliest links being made to diabetes in the 1920's (Joslin, 1921, cited in Visscher and Seidell, 2001) and studies such as the Framingham Heart Study showing clear correlation between levels of obesity and risk of cardiovascular disease (Hubert *et al*, 1983). Systematic reviews and meta-analysis have demonstrated statistically significant correlations between obesity and type 2 diabetes; all cancers except oesophageal and prostate cancer; all cardiovascular diseases; asthma; gallbladder disease; osteoarthritis and chronic back pain (Guh *et al*, 2009). A further systematic review concluded that all classifications of obesity were associated with significantly higher mortality (Flegal *et al*, 2013) and there is a body of literature associating obesity with a number of psychological conditions and disorders (Luppino *et al*, 2010; Rajan and Menon, 2017). Research has also shown that men are more likely than women to be diagnosed with a number of weight related diseases such as chronic heart disease (CHD), stroke, hypertension and type 2 diabetes (Bots *et al*, 2017).

With rising prevalence of overweight and obesity across the globe and research showing undeniable correlation between body weight and numerous diseases the World Health Organisation branded obesity as a global epidemic (WHO, 2000).

1.4 Causes of Obesity and Obesity Reduction Strategy

From a simplistic biological perspective, the cause of weight gain is attributed to energy balance. When an individual consumes more energy than they

metabolise consistently over a period of time, the human body will convert excess energy into adipose tissue and the body will gain weight. However, the causes of obesity are far more complex and multidimensional (Meldrum *et al,* 2017; Wright and Aronne, 2012).

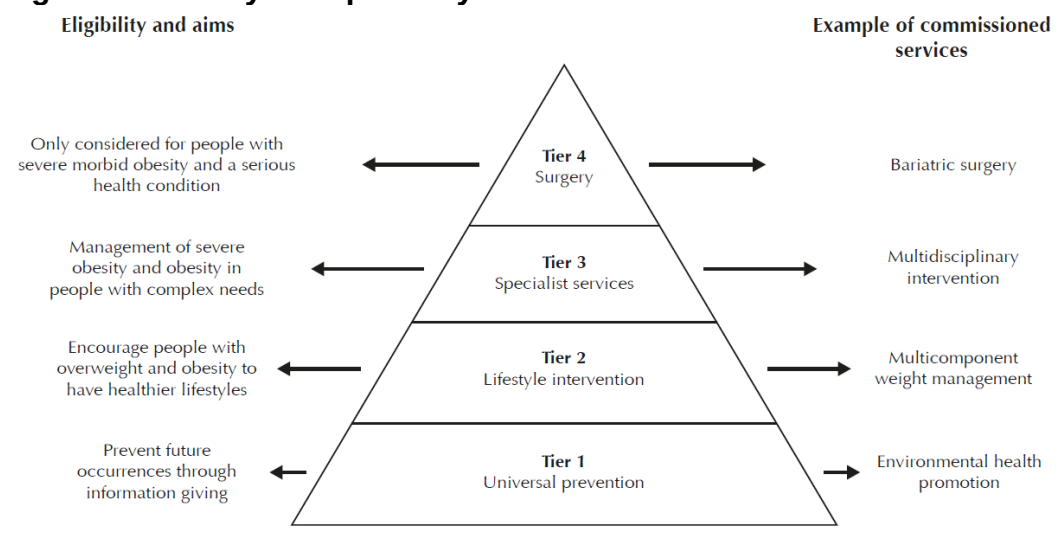
The obesity system map developed by Foresight (2007) illustrates the interdependency and relationship between seven key factors: food production, food consumption, societal influence, biology, individual psychology, individual activity and the environment. An intricate relationship exists between many of these factors that have converged over a period of decades resulting in an obesogenic environment (Foresight, 2007). The Foresight report in 2007 was instrumental in articulating this whole system approach to the causes and potential solutions to the observable rise in obesity prevalence and associated diseases.

With the prevalence of obesity reaching epidemic proportions (WHO, 2000) and a significant risk to public health, various UK government policy documents (Choosing Health, 2004; Healthy Lives, Healthy People, 2011) and international strategies such as the WHO Global Strategy on Diet and Physical Activity (2004) have been published. Choosing Health (2004) placed a great deal of emphasis on individual behavioural choices and sought to implement behaviour change strategies. Such individually focussed strategies have been criticised as potentially “victim blaming” as they fail to fully consider the wider determinants of obesity (Alder and Stewart, 2009). The Foresight report (2007) highlighted the complexity of

obesity causation and called for a whole system approach rather than focusing purely on individual choice. Through Healthy Lives, Healthy People (2011) the UK government began attempts to reduce obesity levels through a more holistic strategy, addressing determinants such as the physical environment, the food manufacturing industry, advertising and food retailers. Examples of this include steps taken in 2016 to limit advertising of certain food and drinks targeting children by the establishment of an industry code of conduct (The BCAP Code, 2016). In addition, recent fiscal measures have been introduced such as the introduction of a UK Soft Drinks Industry Levy, commonly referred to as the sugar tax (Jones, 2016; Smith *et al*, 2018).

Clinical treatment options for obese adults centre on support programmes seeking to change individual behaviour, change energy balance, pharmacotherapy and bariatric surgery (NICE, 2006; 2014). In 2013 the Department of Health published the UK obesity care pathway which describes a 'tiered' system of interventions (figure 4).

Figure 4. Obesity care pathway



Source: Department of Health, 2013.

Tier one is referred to as universal prevention and consists of providing information, education and brief advice to people who are at early risk of developing weight related disease in attempts to try and prevent further weight gain (Blackshaw *et al*, 2014). This includes brief advice and information provided by primary care or national health promotion campaigns. For example, social marketing strategies designed to raise awareness of the health consequences of weight gain, diet and physical inactivity have been used to initiate behaviour change within the population. Social marketing uses approaches similar to commercial marketing such as advertising, but has the intention of changing health related behaviour, rather than commercial gain (Gordon *et al*, 2006). Andreasen (1995) identified six essential criteria that should be included within the make-up of a social marketing campaign including behaviour change, customer research, segmentation and marketing, marketing mix, exchange and competition. The Change4Life programme is one such campaign that has been used across the UK aiming to reduce childhood obesity (figure 5). Effectiveness of such programmes is mixed however. A systematic review of public health social marketing campaigns by Gordon *et al* (2006) identified 18 studies that sought to reduce dietary fat intake, with eight having a positive overall effect, seven having a mixed or moderate effects and three producing no change. There were similar findings reported in this review for campaigns promoting consumption of fruit and vegetables, increasing physical activity levels and smoking cessation.

A cluster-randomised trial to evaluate the Change4Life campaign concluded that the campaign was successful in raising awareness of the importance of diet and physical activity with children and their families, however little impact was found on behaviour. Impact was also greater in families from higher socioeconomic groups than those from lower groups (Croker *et al*, 2012).

Figure 5. Images from the Chage4Life social media campaign



Weight management support programmes are commonly referred to as 'tier two' services and are delivered with referral pathways developed between local GPs and primary care practitioners (The Counterweight Project Team, 2005; 2008). Tier two programmes may include either local NHS clinicians such as dieticians and nursing staff or the commissioning of commercial sector weight loss organisations to accept patient referrals (Jebb *et al*, 2011; Jolly *et al*, 2011) and are recommended to provide weekly or bi-weekly support through either group support sessions or on an individual basis for up

to three months, before less frequent follow-up appointments (NICE, 2014). Access criteria for tier two services is commonly set at a BMI>30 or BMI >28 for those from black and minority ethnic groups or with additional comorbidities (NICE, 2014, PHE, 2015). Such programmes are commonly delivered within community centres or leisure centres (PHE, 2015) and support people to make long term lifestyle change which will lead to calorie reduction and increased energy expenditure, ultimately resulting in weight loss and are founded on three principle areas of diet, physical activity and application of behaviour change theory or behaviour change techniques (BCTs) such as setting behavioural goals, problem solving and self-monitoring of behaviour (PHE, 2018) in line with national guidance (NICE, 2014). Tier two programmes aim to achieve a clinically significant weight loss of 5% of body weight, by advocating sustained and achievable changes in lifestyle behaviours with the aim of maintaining these behaviours long term (NICE, 2014). 5% body weight loss has been shown to result in a number of health improvements and reduction of health risk factors such as a reduction in the incidence of type 2 diabetes, improvements in diastolic blood pressure, systolic blood pressure, HDL cholesterol and triglyceride (Douketis *et al*, 2005, Hamman *et al*, 2006; Wing *et al*, 2011). Research shows that such programmes achieve a mean weight loss of 2.0±5.8kg to 6.6±8.4kg up to 18 months after joining a programme (Loveman *et al*, 2011).

Tier two weight management services are the most common form of obesity intervention programme with 61% of upper tier local authorities and unitary authorities in England reporting having such programmes in place (PHE,

2015). A more detailed review of the effectiveness of tier two weight management programmes is conducted in chapter 2.

Tier three services are clinically specialised and for adults who present with more complex obesity or medical needs and a BMI placing them into the morbidly obese category (BMI>40), those with a high BMI (BMI>35) and additional comorbidities, or those preparing for or recovering from bariatric surgery and are typically provided through a professional mutli-disciplinary team including dieticians, bariatric physicians, specialist nurses, clinical psychologist and physical therapists (Alkharaiji *et al*, 2018; Brown *et al*, 2017). Within a tier three service focus remains on addressing dietary and physical activity behaviour, however intervention is highly tailored to each individual. Screening for hormonal causes of obesity are conducted and patients are screened for signs of psychiatric comorbidities such as anxiety, depression and eating disorders (Alkharaiji *et al*, 2018). The systematic review conducted by Alkharaiji *et al*, (2018) reports that 43.5% of patients participating in a specialist tier 3 weight management service achieved a clinically significant body weight reduction of 5% by 12 months, with mean weight reduction ranging from 2.8kg to 11.6kg. A study by Jenkins *et al* (2014) reviewed patients at 18 months and reported a mean weight loss of 12.4kg ($P<0.001$) with 47.9% of patients achieving a clinical significant 5% body weight loss.

Tier three weight management programmes are commissioned by either local authorities or CCGs, however such services are less accessible across

the country than tier two services with only 13% of upper tier local authorities and 12% of CCG reporting the commissioning of a tier three weight management service (PHE, 2015).

Tier four comprises of severe and complex obesity services which include surgical options for weight loss, obesity medicine, multi-disciplinary team involvement, specialist weight management programmes including education and counselling (NHS England, 2016). Surgical intervention is considered when a person's BMI is 40 or more, or greater than 35 in the presence of other significant disease such as diabetes. Surgical intervention should only be considered when there is evidence that the individual has fully engaged and participated in non-surgical interventions at tier two, three and four without achieving weight loss resulting in improved health and reduced health risk such as a 10% body weight reduction (NICE, 2014). Current obesity surgery consists of gastric banding, gastric bypass, sleeve gastrectomy and duodenal switch and are commonly undertaken laparoscopically (NHS England, 2016). Obesity surgery is reported to be highly clinically effective with some patients experiencing remission of type 2 diabetes (Buchwald *et al*, 2004; Colquitt *et al*, 2014, Gloy *et al*, 2013). Whilst research shows that surgical intervention can be highly clinically and cost effective (Alsumali *et al*, 2018; Picot *et al*, 2009) it is not without both physiological (Chang *et al*, 2014; Chang et al, 2018) and psychological risk (Alegria and Larsen, 2015; Morgan and Ho, 2017) including elevated incidence of suicide (Peterhansel *et al*, 2013).

The focus of this research is on tier two weight management services. By the term weight management programmes I refer to what is defined as a 'tier two' service within figure 4, with the following definition applied throughout this thesis:

> *"Lifestyle weight management programmes for overweight or obese adults are multi-component programmes that aim to reduce a person's energy intake and help them to be more physically active by changing their behaviour. They may include weight management programmes, courses or clubs that:*
>
> - *accept adults through self-referral or referral from a health or social care practitioner*
> - *are provided by the public, private or voluntary sector*
> - *are based in the community, workplaces, primary care or online"*
>
> (NICE PH53, 2014: 42)

Tier two weight management programmes are the most widely commissioned service aimed at reducing body weight and obesity across the country (PHE, 2015). In addition, existing research shows a current disparity between the numbers of men participating in such programmes when compared to women. For example, a national commercial sector weight management service has previously reported that only 5% of participants are men (Bye *et al*, 2005). Other studies which have offered patients free access to a variety of tier two weight management programmes for a limited period of time through primary care health professional referral have also reported low uptake from men, for example men equating to 13% of participants

accepting a referral reported by Jebb *et al* (2011) and 30% accepting referral by Jolly *et al* (2011). All of these studies recommend further research is conducted to understand why fewer men consistently present to such programmes than women. This point will be elaborated further during chapter 2 where I conduct a detailed literature review of tier two weight management programmes.

Furthermore, health inequalities exist within socioeconomic classifications. Socioeconomic status is determined by a combination of income, educational attainment and occupation (Miner *et al*, 2014) and whilst socioeconomic status is multifaceted and complex it has become increasingly recognised as a major determinant of health (Marmot, 2005). Health inequalities have been identified within different occupational classifications, for example people employed in routine manual occupations are less likely to be physically active (HSE, 2017), twice as likely to smoke (Sherriff and Coleman, 2013), and are twice as likely to self-report poor health compared to those in higher managerial and professional occupational groups (Drever *et al*, 2004). Life expectancy for men employed in routine manual occupations is 3.8 years lower (77.7 vrs 81.5 years) than for men in higher managerial and professional occupations and 7 years lower when compared to women employed in higher managerial and professional occupations (77.7 vrs 84.7 years)(ONS, 2015).

The existence of inequalities between occupational groups and across the socioeconomic gradients has been well researched and documented within other areas of health promotion such as smoking cessation. National policy for tobacco control has identified the high prevalence of smoking within routine and manual occupational groups and made this a priority for targeting through locally commissioned smoking cessation services (Department of Health, 2017; PHE, 2014). Research has been conducted to identify how access to smoking cessation services can be maximised for people from this occupational group. A systematic review conducted by Murry *et al* (2009) found that offering smoking cessation clinics within workplaces helped to improve access for manual workers, whilst a qualitative study by Sherriff and Coleman (2013) aiming to understand the beliefs, behaviours and needs of construction site workers to inform the development of a work-based smoking cessation service also found the workplace to be an acceptable place for such services to be accessed, but that knowledge of the availability of smoking cessation services was low amongst this group.

Despite these health inequalities amongst occupational groups being evident, existing research into weight management provision does not specifically investigate service uptake and outcomes amongst different occupational classifications, instead reporting far more frequently other socioeconomic indicators such as household income or educational attainment. What is noticeable within existing research is that men and people from lower socioeconomic groups are often underrepresented.

This combination of low numbers of men currently accessing weight management programmes and weight management research not currently focussing on recruitment of those from lower occupational classification makes this research important, especially considering the apparent health inequalities listed above for men and those employed in routine manual occupational classifications.

1.5 Theory of Behaviour Change

The application of health behaviour and behaviour change theory is integral to this developing area of research and it is important to consider the theoretic lens that will be used throughout this thesis.

Theories are defined as *"systematic way of understanding events or situations, a set of concepts, definitions, and propositions that explain or predict these events or situations by illustrating the relationships between variables"* (Glanz and Rimer, 2005). Theories help understand, explain, and predict behaviour and behaviour change and are widely applied to a multitude of public health and health improvement disciplines at an environmental, policy and individual level.

A scoping review which aimed to identify theories of behaviour change relevant to public health across four scientific disciplines (psychology, sociology, anthropology, economics) identified 82 different theories from 276 articles meeting the review inclusion criteria (Davis *et al*, 2014). These

theories had been applied to 18 different categories of behaviour with physical activity (n = 72), safe sex practices (n = 36) and smoking cessation (n = 30) being the most common. Only 13 articles addressed eating behaviour and 17 articles addressed eating and physical activity together. Other contexts in which behaviour change theories have been applied include health screening, addictive behaviours, medication adherence, sun protective behaviour, financial related activities and driving behaviour (Davis *et al*, 2014).

The Transtheoretical model of behaviour change (DiClemente and Prochaska, 1998) was the most commonly applied theory identified by Davis *et al* (2014) and was used in 33% of studies identified (n = 91). Other commonly applied theories were the Theory of Planned Behaviour (n = 36), Social Cognitive Theory (n = 29), the Information-Motivation-Behavioural-Skills Model (n = 18), Self-Determination Theory (n = 9) and the Health Belief Model (n = 9).

The effectiveness of interventions based on these various theories to result in behaviour change is an area of continued debate. Whilst there are a number of theories which are applied to intervention design far more frequently than others, there seems little justification for why this may be. A logical reason for choosing to apply one particular theory over another would be due to the evidence of effectiveness, however clearly determining the most effective theory to base an intervention upon is unclear (Davis *et al*, 2014).

For example, the Transtheoretical model of behaviour change has been highlighted above as one of the most widely applied theories within the discipline of health improvement, however research has been inconclusive on its applied intervention effectiveness. A systematic review conducted by Bridle *et al* (2005) sought to examine the effectiveness of the Transtheoretical Model in health behaviour change and reported that there was only limited evidence of effectiveness for interventions based on this theory. Similarly, Aveyard *et al* (2009) reported that there was no evidence of effectiveness within smoking cessation programmes based on the Transtheoretical Model compared to control interventions, whilst Adams and White (2003) reported finding modest short-term effectiveness of physical activity programmes based on the Transtheoretical model.

Other systematic reviews focussing specifically on weight management interventions using diet, physical activity or both based on the Transtheoretical model have also reported inconclusive outcomes. For example, Mastellos *et al* (2014) reported that randomised control trials for weight management interventions based on the Transtheoretical model showed that weight loss between intervention and control groups varied from 2.1kg to 0.2kg at 24 months but there were improvements in physical activity and dietary habits such as increased exercise duration and frequency, reduced dietary fat intake and increased fruit and vegetable consumption. This study was limited however with only three studies meeting the reviews inclusion criteria and the researchers reporting low quality methodological rigour and risk of bias through inadequate reporting of outcomes, methods for

randomisation and blinding, and use of self-reported measures for a number of outcomes including weight loss, dietary consumption and physical activity levels.

Similarly there are conflicting reports about the effectiveness of other behaviour change interventions based on different behaviour change theories. Hardeman *et al* (2002) conducted a systematic review of the application of the Theory of Planned Behaviour in behaviour change interventions. The review included 30 research articles, involving 24 interventions including limiting infants' sugar intake, smoking cessation, exercise, testicular self-examination and drink driving. Findings were again however inconclusive with the authors reporting that many of the studies they reviewed did not clearly describe how they used all the constructs within the Theory of Planned Behaviour, so were unable to qualify how thoroughly the theory had actually been applied to intervention design.

Other research has sought to understand the role that theory plays in maintaining behaviour change over a period of time. A systematic review by Kwasnicka *et al* (2016) identified five theoretical explanations of how individuals maintain behaviour changes and included "maintenance motives" which describes how people are more likely to maintain changes in behaviour when enjoyment is experienced, linking closely to the self-determination theory and autonomic motivation (Deci and Ryan, 1985), and the importance of supportive environmental and social cues which is congruent with normalisation process theory (May *et al*, 2009). At present there is some

support for the effectiveness of programmes or interventions seeking to achieve weight loss maintenance based on self-determination theory and self-regulation theories (Teixeira *et al*, 2012 and 2015).

In 2011, Michie *et al* conducted an extensive review of existing models and theories for behaviour changed and developed the COM-B model and behaviour change wheel. COM-B forms the central core of the behaviour change wheel and stands for "capability, opportunity, motivation and behaviour". The COM-B model recognises that behaviour is influenced by these three components and states that individual behaviours can be changed through modification of one or all of these areas. Modification of these three core components can be achieved through nine identified intervention functions which include education, environmental restructuring and training. Finally the behaviour change wheel is completed with seven policy categories identified which support the delivery of implementation functions such as legislation, service provision and regulation. Further work by Michie *et al* (2011) also developed a taxonomy of behaviour change techniques (BCTs) which have been described as the "active ingredients" within interventions designed to change behaviour (Teixeira and Marques, 2017). The BCT taxonomy includes 93 techniques such as goal setting, providing feedback on progress and self-monitoring organised into 16 higher level domains (Michie *et al*, 2013). Research suggests that combined use of BCTs can be more effective at initiating behaviour change with BCTs derived from self-regulation theories such as goal setting and provision of feedback more effective in changing physical activity and healthy eating than other

interventions not using these techniques in both general populations and for people who are overweight or obese (Dombrowski *et al*, 2012; Michie *et al*, 2009).

The COM-B model and behaviour change wheel are the most current and widely referenced theories within the discipline of behaviour change and one which I will utilise as a framework for application of the findings from my research later within this thesis (chapter 7).

CHAPTER 2. BACKGROUND AND LITERATURE REVIEW

2.1 Introduction

This chapter reviews relevant literature that is pertinent to the subject matter and helps to situate this research and its findings within the context of current research. The chapter is written in a number of sections. The first section provides a summary of the history of research into lifestyle intervention for weight management. The second section reviews the clinical and cost effectiveness of behaviour change weight management programmes. The third section reviews literature about engagement with lifestyle interventions before focussing specifically on men, access to health care services and the concept of masculinity. The fourth section reviews the recently emerging body of research around gender sensitisation of weight management programmes. Finally, the fifth section reviews qualitative research studies that are designed to investigate the views and attitudes that men have towards body weight and weight management programmes and how men have been involved in programme design.

In order to ensure a rigorous search and review of current literature was performed I used a number of databases to identify relevant papers and articles. Databases interrogated were PsycINFO, AMED, MEDLINE, CINAHL, PubMed and the Cochrane Library. Search limits included the age of participants (aged 18 years and above) and articles published in the English Language. Search words had to be part of either the title or found within the abstract and included key words associated with obesity such as

bodyweight; overweight; obese; weight management; weight loss; lifestyle and behaviour change. Gender specific terms to identify studies that included only men, such as men; man and male were used and a variety of words designed to locate studies that sought to understand the perspectives and views of research participants, such as perception; view; understanding; belief, attitudes and qualitative were applied when searching for research articles reporting findings on the views of men towards body weight and weight management.

Abstracts were scanned and then full articles of relevant papers obtained and read in full. The reference section of articles obtained was also examined for additional papers that were relevant to the literature review that may not have been captured by the initial searches.

2.2 Evolution of Weight Management Programme Research

Early research into weight management focused largely on the role of diet and calorie intake as the primary treatment option. Studies throughout the 1980's were pre-occupied with discovering weight loss outcomes in response to prescribed diet plans resulting in controlled daily calorie intake (Dietz and Schoeller, 1982; Kromhout, 1983; Nobels *et al*, 1989; Rolls et al, 1980). Whilst this research clearly demonstrated those who reduce calorie intake for a period of time experience weight loss, the research failed to address the long term sustainability of such prescriptive diets or the long term effectiveness in terms of weight regain after the research study had ended. In addition, such research merely confirmed that weight gain and weight loss

is driven by calorie intake but did not investigate what may cause people to consume excess calories leading to weight gain or what barriers people face when attempting to reduce calorie consumption. Research was not focussed on understanding the wider influences that impact on eating behaviour such as the environment, food manufacturing, food accessibility, social processes and social trends.

The impact of regular physical activity on body weight emerges strongly as an area of research within the literature throughout the 1990's. Randomised controlled trials exploring the impact of regular exercise and physical activity on body weight and body composition demonstrated beneficial health outcomes such as increased weight loss when compared to a control group (Dengel *et al*, 1994; Jakicic *et al*, 1995; Kraemer *et al*, 1999; Svendenson *et al*, 1994; Wadden *et al*, 1997; Weinstock *et al*, 1998). However the research design intervention within the physical activity literature relies upon a highly prescriptive approach. Interventions routinely saw participants provided with daily or weekly exercise programmes, often supervised with adherence expected for the duration of the study. Whilst the findings allow the link between energy expenditure and body weight to be concluded, the ability of such an approach to result in sustainable, long term weight loss and behavioural change was missing.

With studies demonstrating the relationship between diet and physical activity on body weight, the combination of these two factors then became the focus of research. Research demonstrated that a combination approach

addressing both diet and physical activity in unison can lead to enhanced weight reduction (Avenell *et al*, 2004). Avenell *et al* (2004) conducted a systematic review of RCTs which investigated the impact on weight loss when combining exercise with diet. Diet and exercise compared with diet alone was associated with a weight change at 12 months of −1.95kg (95% CI, −3.22 to −0.68kg). The effects were greater after 18 months where a weight loss of −7.63kg (95% CI, −10.33 to −4.92kg) was reported, and greater still after 36 months where a weight difference between the two groups of −8.22kg (95% CI, −15.27 to −1.16kg) was reported demonstrating that longer term weight loss achievement and maintenance was more likely in people who combined diet and exercise when compared to those who attempted weight loss through diet alone.

Whilst the research highlighted here clearly demonstrates the correlation between energy intake, energy expenditure and changes in body weight it does not address the real-life practical issues of long term adherence to such regimens.

As the prevalence of obesity and associated diseases increased, the need for programmes and interventions capable of inducing weight loss became more important. With literature demonstrating that a decrease in daily calorie intake and increase in physical activity levels result in weight loss, new challenges emerged in how interventions could result in sustainable weight loss lasting a number of years. With the effectiveness of combining dietary change with increased physical activity established, the introduction of

human behaviour change strategies as a tool to support adherence to lifestyle changes became an important area of research. A Cochrane systematic review (Shaw *et al*, 2006) sought to assess the effectiveness of psychological interventions for overweight and obese adults (aged over 18 years). The review included RCT's and quasi-randomised trials with the following types of interventions:

- Psychological intervention versus no treatment
- Psychological intervention versus different type of treatment
- Psychological intervention plus diet and / or exercise versus control plus diet and / or exercise

A number of different psychological interventions were identified including behaviour therapy, cognitive therapy, cognitive-behaviour therapy, hypnotherapy and relaxation therapy. A total of 36 trials, with 3495 participants, that had a follow-up duration of both greater than and less than 12 months were included. Studies were conducted in the USA (n=29), Netherlands (n=1), Canada (n=1), Spain (n=1), Colombia (n=1), the United Kingdom (n=1), Sweden (n=1) and Switzerland (n=1). Six studies (Israel, 1979; Jeffery, 1995; Oldroyd, 2001; Rozensky, 1976; Saccone, 1978 and Stevens, 2001) were identified that compared behaviour therapy with a control group and were suitable for meta-analysis. The follow-up period for these studies however was short (<12 months) with only a further two studies (Jeffery, 1995 and Stevens, 2001) providing results at 30 and 36 months respectively. Participants in behavioural weight loss programmes lost 2kg

(95% Confidence Interval 2.7 to 1.3) more than participants in control groups ($p<0.01$) with the review authors concluding that certain types of psychological therapy can enhance weight loss in combination with dietary change and exercise (Shaw *et al*, 2006). Whilst the additional weight loss achievement of 2kg experienced by participants within the behavioural weight loss programmes may seem modest, research has demonstrated that any weight loss is beneficial and that risk of developing diabetes can be reduced by 16% for every 1kg of weight lost by an individual who is obese (Hamman *et al*, 2006).

Current clinical guidelines reflect research findings that diet, physical activity and some psychological therapies delivered in combination result in the most effective weight reduction outcomes (NICE 2006; 2014) and many health authorities have developed or commissioned programmes to support obese adults lose weight based on this knowledge.

2.3 Effectiveness of Lifestyle Weight Management Programmes

There are a number of systematic reviews that identify randomised controlled trials investigating the effectiveness of weight management programmes. Loveman *et al* (2011) produced a systematic review that sought to assess the clinical and cost effectiveness of multi-component weight management programmes in overweight and obese adults. To reflect the NICE (2006) guidance this review only included studies which utilised;

> *"Structured, sustained multicomponent weight management programmes (i.e. the intervention had to be a combination of diet and physical activity with a behaviour change strategy to influence lifestyle)."* (Loveman *et al*, 2011: 14)

Inclusion criteria also stated that components of programmes had to be explicitly specified within the studies and have a follow-up period of at least 18 months in order to establish how effective programmes are at not only initiating weight loss, but enabling weight loss to be maintained over an extended period of time. Twelve RCT's met the inclusion criteria of the review (Burke *et al,* 2008; Dubbert and Wilson, 1984; Jeffrey *et al,* 1998; Jeffrey and Wing, 1995; Logue *et al,* 2005; Simkin-Silverman, 1998; Skender, 1996; Stevens *et al,* 1993; Stevens *et al,* 2001; Tate *et al,* 2007; Wadden *et al,* 1988; Weinstock and Wadden, 1998). All of these studies were conducted in the USA. Five of the studies compared multicomponent weight management interventions with non-active comparator groups (Jeffery and Wing, 1995; Logue *et al*, 2005; Simkin-Silverman *et al*, 1998; Stevens *et al*, 1993; Stevens *et al,* 2001) and study follow-up ranged from a minimum of 18 to 54 months. Weight loss within the intervention groups was greater in all studies when compared to a control group and was significant ($p<0.05$) in all but one of these studies. Mean weight loss difference at 18 months between intervention and control groups ranged from a weight loss of -2.0±5.8kg to 6.6±8.4kg compared with a change of 0.7±4.2kg to -0.5±4.5kg in control groups. Only one study within the review (Stevens *et al*, 1993) reported weight loss differences between male and female participants. Whilst the

precise sample size of the gender analysis was not reported, the mean weight change at 18 months in male participants was -4.7kg compared to -1.6kg in female participants. This is consistent with some other studies. The Look AHEAD Trial also reports that men lost significantly more weight than women for up to three years, following which time however weight loss was not statically significantly different between men and women when men lost 5.2 ± 0.2% and women 4.4 ± 0.2% (The Look AHEAD Research Group, 2010). A systematic review by Williams *et al* (2014) however concluded that whilst a number of studies reported a greater weight loss amongst men up to one year, women were equally successful as men at maintaining weight loss over the longer term. Williams *et al* (2014) also point out an important feature in the ways that studies report weight loss. Where studies report absolute weight loss in terms of body mass (kg) it is most noticeable that men are often reported to lose more weight. This could be explained by higher baseline starting weights which are common in samples of men when compared to women. When the proportion of baseline body weight loss is measured and reported however (such as percentage of body weight change or BMI) the difference between men and women is less convincing although still not altogether absent. Williams *et al* (2014) are critical that few studies report weight loss as a proportion of baseline body weight and therefore comparison of absolute weight loss between men and women can be misleading.

In seven of the twelve studies there were more female participants than males, with two studies included exclusively female participants and a further five predominantly female samples (67%-91% female participation).

Three studies (Jeffery and Wing, 1995; Simkin-Silverman *et al*, 1998; Stevens *et al*, 2001) reported weight loss outcomes at a minimum of 30 months follow-up. Whilst it is evident in all three studies that some of the weight lost during the initial 18 months is regained, it is also evident that weight was consistently gained over the same time period within the control groups, therefore differences in mean weight difference between the intervention and control groups were still significant. The study by Simkin-Silverman *et al* (1998) collected follow up data at 42 and 54 months. The trend of gradual weight regain was maintained within the intervention group, however total weight loss was still significant compared to the control group at 42 months. By the 54 month follow-up, almost all the weight lost during the initial 18 months was regained (weight loss of -0.2±6.9kg). The control group had also continued to gain weight at 54 months (3.1±7.7kg) although the difference at this stage was reported as not significant. Whilst this study provided the longest follow-up of participants, this study focussed specifically on middle aged women.

A more recent systematic review reporting the effectiveness of lifestyle interventions for weight loss in adults with severe obesity (BMI >40 or BMI >35 where comorbidities exits) was published during 2016 (Hassan *et al*, 2016). This was the first review to investigate the effectiveness of lifestyle

interventions exclusively within this BMI range and identified 17 published randomised controlled trials each with minimum intervention duration of 12 weeks and follow-up protocols ranging from 3 to 48 months. The total number of participants randomised in these studies was 7981 (70% female), with a mean BMI of 37.1. The majority of these studies were again conducted in the USA (n=13), with others conducted in Australia (n=2); Germany (n=1) and the Netherlands (n=1). Intervention design included individual and group participant support, self-monitoring, support through the use of technology, educational classes, behavioural change techniques, prescribed dietary and physical activity programmes, access to facilities for physical activity and individual counselling. This review reports the change in weight loss difference between intervention and control group ranged from -1.0kg to -11.5kg.

The largest study included within this review was the 'Look AHEAD' trial (The Look AHEAD Research Group, 2010). This multi-centred randomised clinical trial investigated the effects of intensive lifestyle intervention, diabetes education and support with 5145 overweight and obese type 2 diabetic adults. Weight loss and a number of other physiological measurements were taken annually for a four year period. Participants randomised to the intensive lifestyle intervention group achieved greater weight loss than those randomised to the diabetic education and support group (−6.15% vs −0.88%, p<.0001) and greater improvements in fitness (12.74% vs 1.96%, p < .0001), HbA1c (A1c, −0.36% vs 0.09%, p<.0001), systolic blood pressure (SBP,

−5.33 vs −2.97 mmHg, p<.0001), HDL-cholesterol (HDL-C, 3.67 vs 1.97 mg/dl, p<.0001), and triglycerides (−25.56 vs −19.75 mg/dl, p<.0006).

Studies have also been conducted investigating the effectiveness of individual and group programmes. Paul-Ebhohimhen and Avenell (2009) performed a systematic review to investigate the effectiveness of group or individual treatments for obesity in adults and after initial screening of over 45,000 articles, six published research papers from five RCT's were included in the review (Jeffrey *et al*, 1983; Jeffrey *et al*, 1984; Jones *et al*, 1986; Kingsley and Wilson, 1977; Straw and Terre, 1983; Waleekhachon-loet *et al*, 2007). Only one study was based in the UK (Jones *et al*, 1986), with three being conducted in the USA and one in Thailand. Interventions were provided by either dieticians or psychologists with a minimum follow-up period of 52 weeks. Meta-analysis concluded that group intervention was significantly more effective at inducing weight loss than individual approaches however a noticeable issue with these findings is that four out of the five studies (Jones *et al*, 1986; Kingsley and Wilson, 1977; Straw and Terre, 1983; Waleekhachon-loet *et al*, 2007) included 100% female samples making findings difficult to generalise to the male population.

The literature provides evidence that intervention comprised of a combination of diet, physical activity and psychological techniques are effective at initiating weight loss in overweight and obese adults. The literature however does lack studies that have longer duration follow-up periods with only a few being able to follow participants' weight loss outcomes over a period of 3-5

years. Those studies that involve longer term follow-up demonstrate a gradual regain of the weight lost over the initial 6-12 months. However, those who have participated in an intervention designed to initiate weight loss do still show a net reduction in body weight compared to those in control groups who generally gained significantly more weight than those within an intervention group. The Look AHEAD trail was significant as it was the first, large-scale study to follow-up participants over a four year period. Clinically the findings were important as the participants were diagnosed with type 2 diabetes and concluded that:

> *"lifestyle intervention can produce long term weight losses and improvement in fitness and sustained benefited effects on CVD risk factors*." (The Look AHEAD Research Group, 2010: 4)

On this basis, intervention that is capable of initiating weight loss, even with a gradual regain over a number of years is beneficial both in terms of the individual's health and cost effectiveness (Loveman *et al*, 2011).

The economic cost attributed to obesity related disease has previously been estimated to continue rising year on year (Wang *et al*, 2011). Therefore, cost effectiveness is an important consideration for public health programmes and interventions which aim to manage or prevent long term health conditions and disease. In addition to reviewing the clinical effectiveness, the report by Loveman *et al* (2011) provided a systematic review of studies investigating the cost effectiveness of lifestyle based multi-component weight

management programmes. The search identified 15 research studies, however upon obtaining and analysing each of these studies, none of the studies met all of the reviews priori inclusion criteria. Two studies (Roux *et al*, 2006; Trueman *et al*, 2010) met the reviews core criteria of:

> *"evaluating diet, exercise and behaviour interventions in overweight or obese populations using a lifetime economic model"* (Loveman *et al*, 2011: 51).

Despite neither of these studies fully meeting the priori study inclusion criteria fully, the researchers made a pragmatic decision to describe the findings of these two cost effectiveness studies as they were considered relevant and useful to the research question. Caution was urged with interpretation of findings however:

> *"the cost-effectiveness studies lack detail on some aspects of methodology so it was not possible to assess individual components and interpretation of the results was difficult. However, the studies appear credible and the results are consistent between them."* (Loveman e*t al*, 2011: 53)

The only UK study was that of the Counterweight Programme (2010) which involved delivery of a mutli-component weight management programme addressing diet, physical activity and behaviour change within Primary Care General Practices. A sample of 1419 obese adults (mean age 49.6 years,

mean BMI 37.1) were recruited through UK General Practice. The sample size was again female biased however with 77% being women. The study design did not use a concurrent control group, but instead assumed an annual weight gain of 1kg per year for untreated adults, which was derived from observational study of obese adults in Denmark (Heitmann and Garby, 1999) and North America (Gordon-Larson *et al*, 2009; Chaput *et al*, 2009). Attrition rate was also high, with 45.2% (n=642) of participants being followed-up at 12 months. A number of critiques about the way in which the Counterweight Programme had established the programme cost were also made as they had not accounted for a number of cost incurring resource requirements to deliver the programme such as management costs and administration time. Despite this, the programme was deemed to have provided cost effective outcomes:

> *"incremental cost-effectiveness ratio (ICER) is –£473 per QALY gained, i.e. it is cost saving"* (Loveman *et al*, 2011: 57).

Robertson *et al* (2014) conducted a further systematic review of the cost effectiveness of weight management approaches, but with specific emphasis on men. Five studies were identified for inclusion conducted in the USA, Switzerland, Italy, Denmark and Australia. None had been conducted within the UK. Two studies (Lannazzo *et al*, 2008; Maetzel *et al*, 2003) focussed on the impact of Orlistat as a pharmaceutical agent to aiding weight loss and three studies investigated the cost effectiveness of lifestyle change including diet, physical activity and behaviour change programmes (Galani e*t al*, 2007;

Olsen *et al*, 2005; Segal *et al*, 1998). For these three studies Robertson *et al* (2014: 191) concluded:

> *"there is some evidence to suggest that lifestyle interventions could be a highly cost-effective use of resources in terms of encouraging weight loss and improving health outcomes in overweight and obese men."*

Robertson *et al* (2014) draw attention to the heterogeneity between the three studies applying lifestyle modification approaches and describe this as one of the main limiting factors within their review and ability to draw conclusions. Following the review by Robertson *et al*, an additional systematic review was published which was again specific to the cost effectiveness of non-surgical obesity interventions in men (Boyers *et al*, 2015). The same five studies included in the review conducted by Robertson were included within this review (Galani e*t al*, 2007; Lannazzo *et* al, 2008; Maetzel *et al*, 2003; Olsen et al, 2005; Segal *et al*, 1998), plus an additional two studies (Miners *et al*, 2012; Spyra *et al*, 2014) which were conducted within the UK and Germany. The authors were cautious in their conclusion stating that their review provided:

> *"limited evidence on the long term cost-effectiveness of weight loss interventions designed explicitly for men."* (Boyers *et al*, 2015: 325)

Consistent with the findings of Robertson *et al* (2014), Boyers *et al* (2015) also described the need for caution when interpreting the findings due to the

methodological limitations of the studies analysed, study heterogeneity and the numerous assumptions applied within the studies with particular reference made to the assumptions around long term treatment effect, scenario modelling and maintenance of weight loss. In 2018 an economic evaluation was published for the gender sensitised weight management programme called the Football Fans in Training (FFIT) programme. The FFIT programme has been tailored to make weight management programmes appealing to men. This economic evaluation was published (Gray *et al*, 2018) having obtained the weight loss outcomes of 665 men 3.5 years after commencement of the study and concludes that the FFIT programme provided an:

> *"incremental cost-effectiveness of £10,700-£15,300 per QALY (quality adjusted life year) gained…. well within the threshold range of £20,000–£30,000 per QALY that NICE considers cost-effective*." (Gray *et al*, 2018: 8)

A vitally important observation and a point highly worthy of further investigation is the consistent low recruitment of men within obesity research and the number of published research articles highlighting this as a potential limitation of current research (Ahern *et al*, 2016; Gray *et al*, 2013; Paul-Ebhohimhen and Avenell, 2009; Pagoto *et* al, 2012; Young *et al*, 2012;). Whilst weight management programmes combining the elements of diet, physical activity and behaviour change psychology have been proven to be clinically and economically advantageous, there is a recurring pattern within

studies of female inclusion bias. Pagoto *et al* (2012) systematically investigated RCT's of lifestyle based weight management studies for their gender inclusion. A total of 244 studies were included with 95,207 participants, of which 27% of participants were men and 73% women ($p<0.001$). Furthermore, there is a paucity of research aiming to understand why men are less likely to participate in such programmes than women.

2.4 Engagement in Lifestyle Intervention, Men, Health and Weight Management

As outlined within chapter 1 there are a number of behaviour change theories in existence applied to a variety of public health subject disciplines with the intention of initiating changes in lifestyle behaviour to improve health (Davis *et al*, 2014). Health promotion and public health programmes have been developed for many years with the aim of reducing health harming behaviours, however programmes can often find it challenging to ensure that those at greatest health risk are the people who are engaging with such services and programmes. For the purpose of this study by using the term 'engagement' I refer to the accessibility of programmes and services and how people from different demographic groups participate within them.

Within existing research a number of barriers have been identified which prevent people from accessing a variety of health promotion programme and preventative health interventions. For example, a systematic review conducted by Morgan *et al* (2016) investigating barriers to GP physical activity referral schemes found cost and access to facilities to be factors

which prevented access to such programmes. Similarly, Withall *et al* (2011) found those form low income households engaged less frequently in physical activity programmes than those from more affluent groups with reasons such as cost, proximity to suitable facilities and access to childcare provided. Accessibility to services has also been identified as a barrier to people from lower socioeconomic groups for smoking cessation services (van Wijk *et al*, 2019), whilst Harte *et al* (2018) report difficulties in accessing primary care services as a reason for people not accepting invitations to the national NHS health checks programme.

Having the opportunity for access to health promotion programmes goes beyond logistical factors such as affordability and proximity to local facilities however and is also heavily influenced by social and cultural norms or individual beliefs. For example, men are known to seek help less frequently for a variety of health issues due to perceived cultural pressures and social beliefs about the male role in society. These cultural and social norms are often reported as reasons that men are underrepresented in health services and health research and will be discussed at greater length and detail during section 2.4.1 of this chapter. Horne *et al* (2013) identified beliefs amongst older adults in the UK that physical activity would exacerbate pre-existing health conditions and that language barriers, religious beliefs and cultural practices could act as additional barriers to some ethnic minority groups such as South Asian communities. Daly *et al* (2007) conducted a critical literature review of barriers to participation in cardiac rehabilitation programmes and reported that peoples beliefs about the low level of perceived benefits as a

reason for non-participation, as well as a number of other barriers consistent to those described above including lack of referral from physicians, self-efficacy, social support, self-esteem and motivation. Consistent with the findings reported by Daly *et al* (2007) that lack of physician referral was a barrier to the uptake of cardiac rehabilitation programmes, similar findings are apparent within other health promotion and public health disciplines, for example Small *et al* (2010) reported that reluctance of primary care physicians to refer women for alcohol treatment was a barrier to accessing professional support and treatment for women themselves.

Attitudinal beliefs have been shown to be a barrier to alcohol treatment programmes, where alcohol abusers have previously been reported as feeling they "should be strong enough" to reduce alcohol consumption without the need for professional help of support (Schuler *et al*, 2015). Low levels of self-efficacy have also been identified in a number of studies across a variety of health promotion programmes as barriers (Morgan *et al*; 2016; van Wijk *et al*, 2019; Withall *et al*, 2011).

Stigma associated with attending certain health promotion programmes is a regularly reported barrier to participation. Kelleher *et al* (2017) reported that both parents and children felt that stigma attached to attending weight management programmes for children was a significant barrier to attendance and Stringer and Baker (2018) reported that stigma was a consistent barrier to substance misuse treatment particularly for women.

Low numbers of men participating in weight management programmes has been highlighted as an area worthy of further investigation (Brown and Gould, 2011; Young *et al*, 2012; Gray *et al,* 2013). In order to examine this phenomenon further I conducted an additional review of literature to examine current research around the perceptions, views and beliefs that men have towards health, body weight and weight management. For ease of readership I will report the findings from this review in two distinct parts. The first part (section 2.4.1) will report my findings from reviewing literature regarding men and access to healthcare in general. The second part (section 2.4.2) will specifically review literature focussing on men and their attitudes towards body weight and weight management approaches.

2.4.1 Men and Healthcare

There is an extensive body of research concluding that men are notoriously difficult to engage with health promotion campaigns and healthcare in general. Gender differences in Primary Care consultation rates have been identified in previous studies (O,Brien *et al*, 2005; Wang e*t al*, 2013). Men are less likely to visit their local health provider (Verbrugge, 1985; White and Witty, 2005) and less likely to seek medical help for a variety of health issues (Moller-Leimkuhler, 2002). The average number of clinical consultations attended by women in the UK during 2008 was higher than men. This was the case for all age ranges, with the exception of those who were either very young (<15 years) or elderly (>75 years) where there was little difference (The NHS Information Centre, 2012). Whilst a case may be made for the fact that women are more likely to come in to contact with healthcare

professionals due to the need for contraceptive reviews, and during the years of pregnancy and child birth, Verbrugge (1985) claimed that even when reproductive conditions are excluded, a noticeable difference still exists between the average number of medical consultations received between men and women. More recent research such as the study conducted by Wang *et al* (2013) examined routinely collected data from 446 general practices covering 1,869,149 men and 1,916,898 women. The researchers concluded that whilst gender differences in Primary Care consultations were greatest between the ages of 16 and 60 years, these differences were only partially accounted for by consultations for reproductive reasons.

One of the most noticeable aspects within the literature attempting to understand men's attitude towards health and help seeking is the concept of masculinity which became a central theme within this literature review. Courtenay (2000) described the social construction of masculinity and claims that men themselves play a large part in the reconstruction of this phenomenon. Courtenay draws attention to the gender power struggle and the social construction of the *"stronger sex"* (Courtenay, 2000: 1385), describing how some men see the need to exert their dominance by denying weakness, emotions and vulnerability in order to be seen as infallible, domineering and strong. Seeking help is deemed to be a feminine act and a compromise to masculinity. Courtenay (2000) describes this type of masculinity as hegemonic masculinity, a way in which men adopt a number of behaviours (which can impact their health) in the pursuit of power

acquisition (Connell, 1992; 1993; 1995). This work is significant and widely referenced across research investigating men and healthcare.

Moller-Leimkuhler (2002) reviewed the sociocultural and clinical literature with a focus on mental health, specifically depression. The discussion about men engaging with this issue was consistent with that of Courtenay (2000) and describes similar themes around the concept of masculinity and the male gender-role;

> *"The traditional male gender-role, as defined and reinforced within the public realm, is characterized by attributes such as striving for power and dominance, aggressiveness, courage, independency, efficiency, rationality, competitiveness, success, activity, control and invulnerability."* (Moller-Leimkuhler, 2002: 5)

Moller-Leimkuhler (2002) describes at length the stereotypical concept of men's attitudes towards health, describing how men wish to avoid feminised behaviours such as describing their emotions, admitting illness and seeking medical help in order to preserve their perception of an *"invulnerable"* status. *"Masculine capital"* is a term that has been used to describe the way in which young men engage in certain health behaviours as a way of developing masculinity (de Visser and McDonnell, 2013). Findings highlighted the health behaviours associated with masculinity evident within current society, but also warns that failure to challenge these socially constructed stereotypes results in their continual reinforcement and reproduction.

O'Brien *et al* (2005) sought to understand more about male accounts of masculinity and seeking medical advice. Using a number of exclusively male focus groups they drew conclusions about the ways in which men perceive health and help seeking. A total of 59 men were recruited from a cross section of ages, socioeconomic backgrounds, current health status and occupations for this research. One common theme constructed from the analysis was that men will avoid making an appointment with their medical practitioner in fear of *"time wasting"*. Many of the men are quoted as saying that they would not consult their doctor over *"trivial"* or *"minor"* health problems, preferring instead to *"wait 'till you take a heart attack"* or to avoid seeking medical help *"until you're dying"* (O'Brien e*t al*, 2005: 508).

In 2016 a systematic review was conducted into the role of masculinity and help seeking for depression amongst men (Seidler *et al*, 2016). The review located 37 studies which met the study inclusion criteria, the majority of which (n=28, 76%) were conducted in the USA and Canada. The studies included within this review encompassed a total of 8146 participants and included qualitative studies (n=17, 46%), quantitative studies (n=18, 49%) and mixed-methods research (n=2, 5%). The majority of the studies included in this review used men only samples (n=29, 78%). The authors reported findings from the synthesis of qualitative studies which include the theme *"Impact of masculinity on help seeking"* and *"Type of therapy and therapist preferred"* (Seidler *et al*, 2016: 111) describing how their findings demonstrate that men perceived therapy for depression as an effeminate

treatment option due to the associated connotations of emotional disclosure, therefore reducing the likelihood of men to seek help for depression (Heifner, 1997; Rochlen *et al*, 2010; Tang *et al*, 2014). Findings also report that when men sought help they often provided limited disclosure and minimised the severity of their symptoms during treatment in order to maintain their masculine status (Cleary, 2012; Johnson *et al*, 2012). The researchers conducting this systematic review conclude that;

> *"Overall, our results demonstrate the negative impact of adherence to traditional masculine norms on the way men experience and seek help for depression."* (Seidler *et al*, 2016: 116)

Interestingly however, Seidler *et al* (2016) did suggest that tailoring clinical interventions for men may help with the uptake, adherence and efficacy of treatment for depression. They also conclude that certain clinical treatments such as Cognitive Behavioural Therapy may be particularly suited to men's strengths, such as problem solving and the masculine desire for practical solution-focussed outcomes in order to sustain long term behaviour change rather than other forms of *"just talking"* therapy. Seidler *et al*, (2016) are critical however of the limitations of the research which they included within their review, particularly around the sampling strategies employed and the demographic profile of participant recruited in many of the studies highlighting;

> *"The majority of studies relied on convenience samples of healthy, Caucasian, undergraduate, male students or general community members from high-income countries with self-reported diagnoses. Whilst non-clinical samples can offer unique insight, they do little to guide the design of effective clinical interventions and often fail to highlight healthcare system issues, which reliably emerge as barriers to men's help-seeking for depression. Therefore, the men who are at greatest risk and whose experiences can best inform the development of help-seeking interventions remain largely unexplored. These same men should be the essential focus of future research."* (Seidler *et al*, 2016: 115)

This limitation concurs with previous work conducted by Galdas *et al* (2005) who is critical of existing research highlighting that studies largely recruited homogenous samples (usually white, middle class men) and that such sampling fails to allow generalizable conclusions to be drawn to the male population.

In 2018, Keohane and Richardson conducted 13 focus groups in Ireland with participants (n=34) purposely sampled from groups identified as being at high risk of suicide such as farmers, men with history of substance misuse, the unemployed and men from the gay and transgender community plus community gatekeepers (n=35) which included teachers, men's health professionals, public health nurses, physiotherapists, farm officials and representatives from religious groups. The findings from this research also

highlighted how masculine norms impact men's help-seeking as well as care givers willingness to support men during times of psychological distress and made the recommendation that;

> *"a key basis for reaching men with effective suicide prevention interventions is to look beyond men's help-seeking as a passive, one-dimensional construct, to a more dynamic triad of help-seeking/giving/taking behaviors that intersect in multiple and complex ways and that are embedded in the sociocultural context of men's lives."* (Keohane and Richardson, 2018: 169)

Whilst existing research concludes that masculinity plays a significant role in explaining why men are less likely to access healthcare services than women, the way in which masculinity is depicted may differ leading it to become a complex social construct. Seidler *et al* (2016) described how their findings depicted two ways in which masculinity was evident within the studies they reviewed. They state that quantitative studies often portrayed masculinity as a *"unitary and stable construct",* whereas the qualitative studies described masculinity as a *"fluid and multi-faceted"* phenomenon. Kimmel (in Murphey, 2004: 182) also highlighted the potential variation in masculinity across society;

> *"Manhood is neither static nor timeless; it is historical. Manhood is not the manifestation of an inner essence; it is socially constructed. Manhood does not bubble up to consciousness from our biological*

makeup; it is created in culture. Manhood means different things at different times to different people".

Evans *et al* (2011) confirm all of the points already discussed and reinforce the concepts of masculinity as a socially constructed concept that will vary dependent on age, race, education, employment, socioeconomic status, sexuality, geography and community. They argue however, that if the concept of masculinity itself is socially constructed, then it will vary dependent upon the social context.

Application of masculinity to health promotion campaigns has also been the focus of previous research. A study by Robertson and Williamson (2005) reviewed 10 years of health promotion campaigns and describe how many seeking to engage with men have looked to exploit the concept of masculinity. They describe how it has not been uncommon for campaigns and initiatives targeting men to use competition and sport as a means of improving engagement. Whilst this may have had some successes, they provide a note of caution when using such approaches asking whether this may seek to *"replicate destructive aspects of male behaviour"* (Robertson and Williamson, 2005: 297).

The concept of masculinity remains an important construct that is strongly evident today, with the traditional male gender role dominating findings within existing research. A study conducted with 28 British men living in Hong Kong aged 21 – 51 years concurs with previous findings around men and their

health (Rochelle, 2019). Three, qualitative focus group discussions were used to collect data which was thematically analysed with results supporting previous research around men's reluctance to seek medical help, discuss health matters with others and preserve their sense of masculinity and invincibility. This research however was again unrepresentative of the wider population with all participants having a White British ethnic origin and a relatively high level of education, with 86% having received at least a college education.

2.4.2 Men and Weight Management

Building upon the concept of masculinity being an important factor within the study of men and health, Wilkins (2001) describes the *"feminisation"* of body weight. Wilkins (2001) discovered that weight loss was deemed by men to be more of a female issue, describing it as a *"woman thing"*. Wilkins also describes how industrialised nations almost always have a well-developed compliment of weight loss support available for women in response to this. Large scale multi-national companies have seized the opportunity to provide support groups, dietary supplements, meal replacements, magazines, internet sites, self-help books and so forth that routinely have a female target audience in mind. The lack of demand for such products and services from male consumers has prevented private sector investment in such concepts that may be more appealing to men.

Haslam (2007, in White and Pettifer) draws attention to the different ways in which men and women perceive body weight, describing men's attitudes

towards body weight as flippant and how men trivialise their weight by using humour;

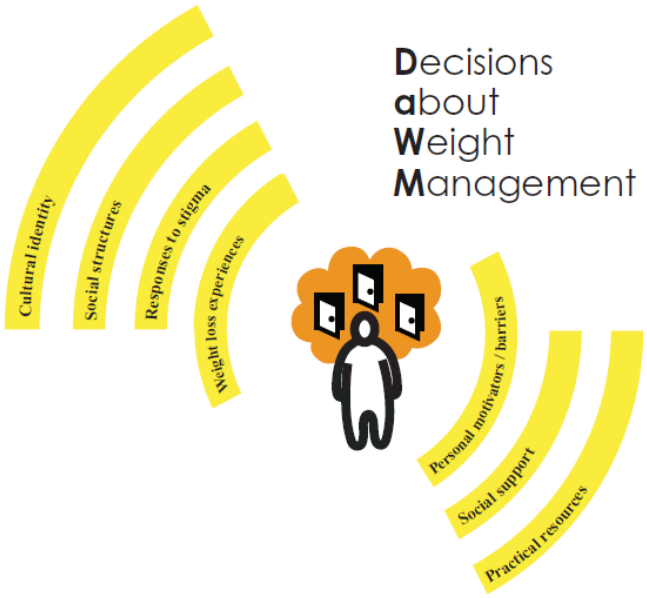
> *"Many obese men are characterised by good humour, and many have the wrong attitude towards their bellies; they treat them like a constant faithful companion, and, like a dog, give them the occasional pat. Rotund, plethoric men are the very embodiment of conviviality, standing at the bar, holding court to the assembly of drinkers. They joke about their waistline as a sign of affluence – 'It's all paid for' – and to lose it would be nothing less than a bereavement. It is as though their humour and joie de vivre are seated in their belly, and to lose it they would be like Samson without his hair."* (Haslam, 2007: 17-18, in White and Pettifer)

In contrast, Haslam (2007, in White and Pettifer) also describes how this type of humour is not shared amongst overweight or obese women and that women are much more likely to be depressed by their body weight, rather than find it amusing.

Brown and Gould (2011) conducted a review of literature seeking to provide insight into the perceptions, experiences, contexts and influences for adults facing decisions about weight management because of overweight or obesity. A total of 29 qualitative studies were included in the review with a high proportion (86.2%) being from the UK, USA and Australia. The studies included within this review involved a total of 1387 participants, but this was

heavily female bias with women outnumbering men by 4:1 (79.7% women, 20.3% men). Whilst the majority of studies located and used within this review included both men and women, there were 6 studies that recruited a female only sample (Ali *et al*, 2010; Befort *et al*, 2008; Blixen *et al*, 2006; Byrne *et al*, 2003; Lynch *et al*, 2007; Thomas *et al*, 2008;) compared to 2 studies that included men only participants (Sabinsky *et al*, 2007; Weaver *et al*, 2008). This systematic review reported that seven main themes were inductively derived from the studies reviewed, with these themes being displayed in a model (Figure 6) which illustrates the influences on decision making for weight management

Figure 6. Decisions about weight management model



Source: Brown and Gould, 2011.

The research conducted by Sabinsky *et al* (2007) was conducted in Denmark and recruited 13 men aged 25-44 years to participate in focus groups. Those recruited were reported as being primarily from lower-socioeconomic classes

defined as those with less than four years of vocational training and *"unskilled workers".* All participants were classified as being clinically overweight, although this was defined through use of self-reported height and body weight rather than objective measurement and BMI calculation of each individual. Whilst useful in providing some understanding of the barriers that men face regarding weight loss, their motivations for wanting to lose weight and their views of what a perfect weight management programme would consist of, the sample size was small (n=13). The report identified that men felt weight management programmes should be conducted within the place of work, provide opportunity to exercise with colleagues, be flexible and have the ability to provide individual counselling to supplement group based activity sessions involving other men they could identify with. There was also some preference for elements of the programme to provide competition, humour and a focus on improved physical performance rather than body weight *per se.*

The research conducted by Weaver *et al* (2008) was performed recruiting adult men from a general practice in the North East region of England. A sample of 17 men were recruited to the study aged 28-44 years, with BMI ranging from 22-36 and were qualitatively interviewed using a semi-structured approach. Findings constructed from data through thematic analysis showed that the men interviewed viewed the term obese differently to the clinical definition, with some men perceiving the term not to necessarily define someone as *"unfit"*, providing examples of professional sports athletes who may have a high BMI due to their body composition, but who would not

be deemed unhealthy. This research did not however report findings helpful to understanding why men are unlikely to participate in weight management programmes or what support mechanisms they would find useful, appealing or acceptable.

A US study published in 2016 (James *et al*, 2016) sought to explore the weight loss strategies employed by men born between 1946 and 1964. Participants were aged 54 years (SD 5.57) with 63% having the minimum of a college education. The research applied a mixed-method study design using a cross-sectional survey of 211 men and 20 one-to-one semi-structured interviews. Eighteen percent of participants had a healthy BMI, with the remainder being classified as either overweight (43%) or obese (39%) but BMI was calculated using self-reported height and weight rather than being objectively measured. The majority of men were reported to be actively attempting to manage their body weight at the time of the study with 40% expressing a level of dissatisfaction with their current body weight. Only 8% of participants reported joining a weight loss group as a method to manage body weight, whereas increasing physical activity levels was an approach used by 47% of participants. Despite this research demonstrating that relatively few men (n=17) from the sample reported to have used a weight loss group as an approach to weight management the research did not offer any reasoning as to why this was the case. The study does report however that the female partners and wives of this group of men would often be engaged in some form of weight loss programme and that whilst the men

were unlikely to attend them in person, they would look to their partners for support and reported attempting to manage their weight together.

What is apparent within the literature is that findings are mixed. Many studies describe men as having a preference for self-directed weight management approaches, whereby they are independent, self-directed and receive no external support or guidance. This is evident within the research performed in Australia by Thomas *et al* (2010) and Lewis *et al* (2011). Thomas *et al* (2010) qualitatively interviewed 142 individuals who were obese (BMI >30) aged 19-75 years with the aim of exploring the attitudes and opinions towards population and individual based interventions for obesity. The sample follows the pattern of female dominance with only 25.4% (n=36) of participants being men. Participants were also generally well educated with 62.7% (n=89) having university undergraduate or postgraduate degrees. Whilst only 25.4% of the sample were men, the analysis did provide some commentary on the identified differences between men and women. Women are reported to have been more likely than men to believe that population based interventions such as the restriction of junk food advertising to children is an effective way to reduce obesity, whereas men were particularly likely to reject the idea of state imposed legislation such as the taxation of unhealthy foods in preference of individual based interventions that encouraged personal choice and responsibility particularly around physical activity and fitness. Both men and women are reported to have spoken about the environment of fitness facilities such as gym's being intimidating and the need to feel emotionally secure and supported when exercising.

The study by Lewis *et al* (2011) recruited men only (n=36) who were obese (BMI range 30.0 – 60.7). Findings from this qualitative research which also applied interviewing as the data collection method reported that men were reluctant to seek help and support for weight management as they saw this as weakness and preferred to adopt a self-management approach that maintained their independence. The sample recruited to the study was similar to that of previous studies however, in that it was bias towards high academic achievers with 72.2% (n=26) of participants having university degrees or postgraduate qualifications. The findings from this research demonstrate how men differ from women who are more likely to join weight management programmes and seek forms of social support, whereas men would see this as a sign of weakness and prefer an approach of independent self-management. Despite this, there are studies showing that men do have a desire to interact socially with others also experiencing similar issues regarding weight management, in particular the desire to participate in physical activity sessions within a group environment (Gray *et al*, 2013; Morgan *et al*, 2011; Sabinsky *et al*, 2007).

2.5 Gender Sensitisation of Weight Management Programmes

With greater understanding and appreciation of the concept of masculinity on the impact of men's behaviours and attitudes to their health, interaction with health care services, help-seeking and attitudes towards body weight, research is now exploring how the concept of masculinity can be applied to weight management programmes. There is a growing body of research

which aims to understand how weight management programmes can be made more appealing to men and increase participation. A number of research studies have been performed sampling exclusively men to investigate the effectiveness of gender sensitised weight management programmes at initiating and maintaining weight loss.

Young *et al* (2012) conducted a systematic review which claimed to be the first to review the effectiveness of men-only weight loss programmes. This review located 23 published research studies that met the review inclusion criteria. The review concluded that men-only weight loss programmes were effective at initiating weight loss with meta-analysis showing a significant difference in weight change within intervention groups when compared to control groups (mean difference -5.66 kg, $P < 0.00001$).

The 'Review of MEn and Obesity' (ROMEO) project was a mixed-methods synthesis of evidence for weight management in men, funded by the National Institute for Health Research (NIHR) and led to published reviews of both quantitative and qualitative findings (Robertson *et al*, 2014; 2016; 2017). A systematic review of the clinical effectiveness of men only RCT's was published by the ROMEO project (Robertson *et al*, 2017). This extensive review searched eight bibliographic databases and four clinical trial registers to locate RCT's and quasi-randomised trials of weight loss interventions in men only participants. The review accepted RCT's which included participants who were classified as clinically obese (BMI of 30 and above), or where BMI was >28 and patients had additional cardiac risk factors.

Interventions included diet, physical activity, behaviour change techniques and pharmacotherapy (Orlistat) or a combination of these compared against a placebo, control group or against each other. Only studies with a mean or median duration of 52 weeks were accepted.

In total 21 reports from 14 RCTs were included within the review with studies being conducted in the United States (n=6), Australia (n=4), Finland (n=1), Italy (n=1), United Kingdom (n=1) and the Netherlands (n=1). Mean age of men participating in the studies was 46 years (range 36-62 years), mean starting body weight was 112.7kg and mean starting BMI was 32.4. Mean retention rate for all trials was 78.2% (range 44%-100%). The review concluded that men only weight management interventions were effective at achieving weight loss, with the most effective approach being the combination of diet, physical activity and behaviour change techniques achieving a mean difference in weight at one year compared with no intervention of -4.9kg ($p < .0001$). This supports findings from previous reviews with mixed sex populations (Loveman *et al*, 2011; Hassan *et al*, 2016).

Within the systematic reviews published by both Young *et al* (2012) and Robertson *et al* (2017) the approach to gender sensitisation of weight management begins to become apparent. Robertson *et al* (2017) located the published study by Hunt *et al* (2014) which focussed on gender sensitisation of the weight management programme by applying concepts of masculinity to make acceptance of attending a weight management programme more likely

to men. This was achieved through the medium of sport and by holding weight management programmes within professional football clubs and tailoring the programme around a football theme, naming the programme the Football Fans in Training (FFIT) programme. In Australia, the Self-Help, Exercise and Diet using Internet Technology (SHED-IT) programme was developed and researched leading to a number of published research articles (Blomfield *et al*, 2014; Collins *et al*, 2011; Collins 2013; Lubans *et al*, 2009; Morgan *et al*, 2009; Morgan *et al*, 2011; Morgan *et al*, 2012; Morgan *et al*, 2014; Young *et al*, 2014). The SHED-IT programme focussed on the application of internet and self-help resources as an approach to support weight management in men. These two programmes are both founded on gender sensitisation and masculinity but have different approaches to delivery. I will now briefly summarise and critique each as they are important examples in relation to my research.

2.5.1 The Self-Help, Exercise and Diet using Internet Technology (SHED-IT) Programme

Developed and researched in Australia, the (SHED-IT programme sought to design and research the effectiveness of an online weight management programme, tailored for men. Applying the findings from Sabinsky (2007), the programme aimed to appeal to men by providing individualized feedback, being work based for convenience and included participants with whom men identified. The researchers and programme designers also hypothesised that men would be more likely to participate if the programme was for men only (Morgan *et al*, 2009; 2011). A total of 65 men were recruited to an initial

pilot study and were randomly and blindly assigned to either the SHED-IT internet intervention group (n=34), or to an information only control group (n=31). All participants had a BMI classification of overweight (47.7%) or obese (52.3%). Those assigned to the SHED-IT intervention group were provided with one face-to-face group information session lasting 75 minutes and an information booklet that was designed and written specifically with men in mind. The information provided participants with guidance relating to modification of diet and physical activity levels as well as behaviour change techniques such as goal setting, self-monitoring and social support. The session also provided a tutorial on how to use the free and publically available website Calorie King (www.calorieking.com.au), an online tool designed to support behaviour change in diet and physical activity levels with participants instructed to use this resource for three months. The information only control group received the same information session and information booklet, but without the tutorial about the online tool and did not have access to this website during the study. Baseline measurements including body weight, BMI, waist circumference, blood pressure, physical activity levels (measured using a pedometer) and dietary intake were taken at one or two weeks prior to participants attending the information session. Follow up outcomes of this trial at 3, 6 and 12 months have been published.

A follow-up of participants at the 12 months interval demonstrated that 71% of those assigned to the internet intervention group achieved a weight loss of −5.3 kg (95% confidence interval), ranging from -3.0kg to -7.5kg weight loss, compared to weight loss of −3.1 kg (95% confidence interval) ranging from -

0.7kg to -5.4kg in the information only control group (Morgan *et al,* 2011). Further research was completed using a qualitative study design to investigate the experiences of men who participated in the SHED-IT programme and this research will be discussed within a later section of this chapter.

The SHED-IT pilot programme provided a number of useful findings. Firstly, it concurred with previous research in so much that men are able to achieve weight loss and sustain this for a period of up to 12 months. Secondly, and perhaps more interestingly is the fact that all men who presented for follow up at 12 months had achieved weight reduction. This finding is interesting and provides us with evidence that men need relatively low levels of support to achieve weight loss. Despite men in the information only control group achieving weight loss at the 12 month follow-up point, the weight loss achieved at this stage was greater in those randomised to the internet intervention group who had access to the internet resource for the first 3 months of the trial. Despite these findings being positive, this study recruited a low sample size and the researchers urged caution when attempting to generalise findings to a wider population. Recruitment of participants was conducted through a University only and therefore had a large proportion (43.1%) of student participants, resulting in an average participant age of 35.9 years (SD 11.1). Researchers were also cognisant of the fact that whilst men in both groups achieved weight loss, there had been no control group receiving no intervention.

Following this study, Morgan *et al* (2012) conducted an additional three-arm RCT. A total of 159 overweight and obese men were recruited to this study, stratified by BMI and randomly assigned to one of three groups with a balanced ratio (1:1:1). The three groups were:

1. Group 1 (n=54); the SHED-IT resources programme
2. Group 2 (n=53); the SHED-IT online programme
3. Group 3 (n=52); no intervention (waiting list control)

The SHED-IT resources (group 1) and SHED-IT online (group 2) groups were provided with numerous self-help materials including a DVD and handbook that had been developed in light of previous research and from the findings of the initial SHED-IT study process evaluation (Morgan *et al*, 2011). In addition, those in group 2 were also provided with a modified handbook that provided information on how to use the online weight management website Calorie King, as was used in the previous study (Morgan *et al*, 2009; 2011). No face to face sessions were provided to any group in this study. Group 3 did not receive any information during this period of time and remained on a waiting list. Baseline measurements of body weight; BMI; waist circumference; body composition; blood pressure; resting heart rate; objectively measured physical activity levels using a pedometer; dietary intake; alcohol consumption and quality of life were taken and repeated at 3 and 6 months. Results showed that both group 1 (SHED-IT resources) and group 2 (SHED-IT online) lost weight. Men in group 1 experienced weight loss of -3.2kg (-1.5 to -4.9kg) greater than men in the control group ($p<0.001$)

and men in group 2 achieved weight loss of -4.2kg (-2.5 to -5.9kg) more than men in the control group ($p<0.001$). The difference in weight loss between group 1 and group 2 however was not statistically significant ($p>0.05$). These findings supported the conclusions from the initial pilot study that men can be successful in achieving weight loss when provided with self-help materials.

Whilst the SHED-IT programme has been a useful example of developing a gender sensitised weight management programme for men applying technology, other programmes have also followed a similar approach.

2.5.2 The Football Fans in Training (FFIT) Programme

In 2011, research published by Gray *et al*, identified the need for greater investigation into the phenomenon of low participation of men in existing weight management programmes and how programmes could be designed to be more appealing to men. The research was founded upon Medical Research Council (MRC) Guidelines for developing and evaluating complex interventions (Craig *et al*; 2008) which state that the process should be;

> *"an iterative process of: identification of the evidence base; developing a theoretical understanding; and using pilot work (which considers the views of the target population, those delivering the programme and the practicalities of implementation) to inform final modifications to the programme prior to full scale evaluation.*" (Gray *et al*, 2013: 2)

This research focussed on the concept of delivering weight management programmes to men within a professional football club setting. The first in a sequence of published research articles over a number of years from the team leading this research (Gray *et al*, 2013) described how the FFIT programme was developed. The development was an incremental process involving two distinct phases. Phase 1 was the development of the programme content which was completed by a multi-disciplinary team of professionals comprising of two psychologists; two health social scientists; a nutritionist; a men's health nurse and a representative from the Scottish Premier League (SPL) Trust. Phase 2 was to pilot the programme within 11 Scottish Premier League Football Clubs and also conduct a feasibility study in order to investigate recruitment, retention and potential weight loss. The feasibility study itself took place within two Scottish Premier League Football Clubs and recruited 103 men aged 35-65 years. All men were classified as clinically overweight or obese having a BMI greater than 27.

The reported mean weight loss from the feasibility study amongst the intervention group was -4.6% of body weight (SD 2.8), with a mean weight gain within the control group of 0.6% (SD 2.0). BMI and waist circumference were also reported as following a similar pattern (all $p<0.001$). Additional benefits were also reported within the intervention group such as significant increases in self-esteem and 12-Item Short Form Health Survey (SF-12) scores, physical activity levels, consumption of breakfast, fruit and vegetables and significant decreases in the reported consumption of foods

containing high levels of fat and sugar in comparison to the control group (Gray *et al*, 2013).

In order to optimise programme delivery, participants of the 11 pilot programmes and the two feasibility groups were asked to complete feedback questionnaires on completion of the 12 week programme. Semi-structured focus group discussions also took place with a number of participants who completed the programme to gain deeper understanding of their experiences. Semi-structured face to face or telephone interviews were also conducted with participants who did not complete the programme in order to understand their reason for withdrawal from the programme. Data collected was thematically analysed to identify recurring themes which then informed programme design refinement and amendment. The optimised programme was then tested through a larger randomised controlled trial which recruited 747 men aged 35-65, all classified as clinically overweight or obese (minimum BMI 28). Twelve months following the start of the programme, the mean difference between the control and intervention groups was -4.94kg (95% CI -3·95kg to -5·94kg) body weight loss in favour of the intervention group ($p<0·0001$) (Hunt *et al*, 2014).

Follow up rate within this study was high, with 333 (89%) men allocated to the intervention group from an initial 374 followed up at 12 months and 355 (95%) of men from an initial 374 in the control group followed up at the 12 month interval. There was representation within the sample recruited across socioeconomic status. Whilst 188 (25.1%) of participants were from the least

deprived quintile (Scottish index of multiple deprivation), there was representation across all quintiles including 131 (17.5%) participants from the most deprived quintile.

One of the limitations of research into the effectiveness of weight management programmes is the relatively short term follow-up periods. There is a paucity of research findings available that have studies effectiveness of weight management programmes over a number of years. To help address this current deficit in research, Gray *et al* (2018) published weight loss outcomes for men recruited to the FFIT programme 3.5 years after commencing the programme. 488 (65%) men from the original 747 who commenced the trial presented for follow-up measurements to be taken. The mean weight loss at 3.5 years for the men presenting for follow-up was -2.9kg (95% CI -1.78 to -4.02 kg; $p < 0.0001$). Whilst this is a positive weight loss achievement after 3.5 years, it is a reduced weight loss compared to baseline measurement taken at 12 months which demonstrated a weight loss achievement of -5.49 kg (95% CI -4.47 to -6.51 kg). This signifies that there had been a weight regain of 2.59 kg (95% CI 1.61 to 3.58 kg; $p < 0.001$) between the 12 month and 3.5 year follow-ups. Whilst an overall weight reduction is still evident up to the 3.5 year time period, the major limitation with this study is that there is not a 'no intervention' control group to compare against, as those men who were initially randomised to the control group for the first 12 months of the study were held on a waiting list and subsequently participated in the FFIT programme. The loss to follow up rate is also high with 35% of participants not returning for follow-up at 3.5 years. The

researchers also note that the men who did not return for follow-up had a higher baseline body weight which could indicate that these men were those finding it more challenging to maintain lifestyle changes and were more likely to have regained all the weight lost during the trial period.

The FFIT programme claims that it was successful in attracting men at high risk of future disease with only 40 (5.4%) participants reporting to have participated in a form of commercial or primary care led weight management programme within the previous three months (Hunt *et al*, 2014). The reports do not specify how many men had previous experience of attending a weight management programme at any other point in their history, which could be a greater proportion. There is therefore the critique within this research that the men who opted to participate within this programme were already motivated to lose weight, and also had a level of confidence which enabled them to attend and participate in a programme of this nature. Whilst this research does provide positive findings into the potential of gender sensitised weight management programmes and their potential to reach a greater number of men, it is still unable to provide insight into those who did not engage with the programme and the views that they hold.

Section 2.5.3 Additional Gender Sensitised Weight Management and Public Health Programme Research.

Whilst the SHED-IT and FFIT gender sensitised weight management programmes have been instrumental in this area of public health research

and practice it is important to note that this is a rapidly expanding area of research because of the potential positive health impact that could be experienced if more men are motivated to make lifestyle change.

There are numerous additional research studies contributing to this topic both within the discipline of weight management and also within other areas of public health. For example, Azar *et al* (2014) adapted a group based diabetes prevention programme delivered through online video conferencing in response to low participation at group sessions by men. 64 men were randomly assigned to an intervention (n=32) or control group (n=32). The control group received 12 weeks of intervention which consisted of the Diabetes Prevention Program-based Group Lifestyle Balance (GLB) core curriculum (Kramer *et al*, 2010). Participants assigned to the intervention group lost on average 3.2 kg more than the control group (95% CI, 1.6–4.8), and experienced a BMI decrease of 1.0 more than their control counterparts (95% CI, 0.4–1.5). Realmuto *et al* (2018) also sought to respond to observed lower enrolment in the National Diabetes Prevention Programme amongst men from low-income communities by tailoring programme delivery and content. Following qualitative interviews and focus groups with participants they report that men felt the adaptions enabled more open and in-depth conversations around lifestyle behaviours, body image and masculinity which led to increased knowledge and changes to diet and physical activity habits.

An additional programme also published in 2014 (Morgan *et al*) evaluated the effectiveness of the ‘Healthy Dads, Healthy Kids’ scheme. This RCT recruited

93 overweight or obese fathers and their primary school aged children to a 12 week face-to-face lifestyle change programme. Fathers assigned to the intervention group lost more weight (-3.3 kg; 95% CI, -4.3, -2.4) than the control group fathers (0.1 kg; 95% CI, -0.9,1.0). Significant treatment effects ($p < 0.05$) were also found for waist, BMI, resting heart rate, energy intake, and physical activity and for children's physical activity and adiposity. The Healthy Dads, Healthy Kids scheme was later adapted with the intention of making it culturally acceptable to a multi-ethnic population within the UK (Griffin *et al*, 2019). A feasibility RCT was conducted and was successful in recruiting a high proportion of participants from minority ethnic groups (61%) and from areas of high socioeconomic deprivation, with 54% of those recruited to the study from areas the most disadvantaged quintile. Weight loss at six months was -2.9kg (95% CI -5.1 to -0.6), but the researchers reported significant challenges in recruitment and retention of participants.

Outside the topic of weight management a systematic review of RCTs conducted by Teo *et al* (2018) aimed to determine the effectiveness of interventions designed to improve the uptake of health screening in men. The review included 58 studies, the majority of which (31) related to prostate cancer. The authors report that interventions providing educational information improved men's intention to access health screening. The authors also concluded however that many of the studies identified had low methodological quality and had to be excluded from their analysis and that more robust studies are required to provide evidence of the effectiveness of interventions aiming to improve men's health screening behaviour.

Sagar-Ouriaghli *et al* (2019) conducted a systematic review and synthesis of behaviour change techniques within interventions targeting help-seeking amongst men with regards to access of mental health and substance misuse services. Nine studies were included within the review, although authors reported meta-analysis was problematic due to disparate interventions, outcomes, and populations. An innovative approach applying the taxonomy of behaviour change techniques (Michie *et al*, 2013) was used to synthesize each interventions key feature and identify those able to improve help-seeking in men. The key reported techniques that improved men's help-seeking behaviours regarding mental health and substance misuse were the use of role models, psycho-educational material to improve mental health knowledge, assistance with recognising and managing symptoms, active problem-solving tasks, motivating behaviour change, signposting to services, and content that built on positive male traits such as responsibility and strength.

Work by Petrella *et al* (2017) has taken the work published by the FFIT programme and sought to apply the concept to the sport of ice hockey in the Canadian Hockey League. A pilot RCT consisting of 80 men aged 36-65 with a minimum BMI of 28 were randomly assigned to an intervention or control group. Those in the intervention group received 12 weeks of support and education from coaches covering aspects of diet, physical activity and behaviour change. At 12 weeks the intervention group achieved a weight reduction of -3.6kg (95% confidence interval, -5.26 to -1.90 kg) more than the

control group ($p<0.001$) and maintained this weight loss at the 12 month follow-up period. The same approach has also been trialed in Europe, with the development of the EuroFIT programme which recruited 1113 men to a two-arm RCT through 15 professional football clubs across Norway, the Netherlands, Portugal and the UK (Wyke e*t al*, 2019). Men were aged 30 – 65 years and had a BMI of at least 27. The concept is also being trialed in Australia with the protocol for the first Aussie-FIT trial aiming to recruit men through the Australian Football League (Quested *et al*, 2018) and in New Zealand through professional rugby clubs (Maddison *et al*, 2019).

Whilst the focus on gender sensitisation of weight management programmes through the medium of sport has undoubtedly been successful at reaching a population that would otherwise be unlikely to engage with weight management programmes, there is the risk that this approach is generalised as the 'magic bullet' to addressing obesity in men. These programmes have reported successfully engaging men in the issue of weight management and report favourable weight loss outcomes. However, it is not clear within this body of research whether those who have self-selected to participate in these trials have also previously attended other forms of structured weight management programmes and what the outcomes were. Men who have self-selected and participated in the trials of gender sensitised weight management programmes within sports clubs will have a level of motivation and confidence to attend, but it would be overly presumptuous to suggest that this is the case for all men. These programmes also assume that men

are interested in sport, which is also an over-generalisation to the male population.

2.6 Involving Men in Weight Management Programme Design

The MRC guidelines for developing and evaluating complex interventions describe the importance of applying learning and understanding of service users to shape the development of the intervention (Craig *et al*; 2008). This approach has been adopted by a number of gender sensitised weight management studies throughout an iterative process, whereby programmes have been constructed using theoretical concepts (in this case that of masculinity), piloted with a number of participants, with a form of process evaluation taking place that applies qualitative methods in order to understand the views of participants about the programme which in turn informs future programme design and delivery. Examples of this are available within the SHED-IT, FFIT and Hockey FIT programmes which all evaluated the experiences of those who participated in the programmes, as well as a number of other evaluations of participants experiences in other weight management programme trials (Ahern *et* al, 2013; Allen *et al*, 2015)

Design of the SHED-IT programme is reported to have drawn upon previous research conducted by Sabinsky *et* al (2007) into the preferences that men have for weight management and the perceived barriers and motivations to weight loss. The SHED-IT programme published its 12 months clinical outcomes and findings from a process evaluation (Morgan *et al*, 2010; 2011) which describe how the evaluation used surveys and semi-structured

interviews with men who completed the programme in order to inform future programme improvement and developments. Findings from this research demonstrated that men found the programme advertisements appealing due to their use of humour and that the advertisements communicated the flexibility in the programme design, rather than it being a strict diet regime which men reported to have previously experienced and found unappealing (Morgan *et al,* 2011). Participants interviewed described an overall positive experience with the programme and experienced increased levels of knowledge and empowerment with regards to body weight management and weight loss. Researchers did report a preference amongst those interviewed for a greater level of face-to-face contact throughout the programme through more regular meetings, groups or lectures (Morgan *et al*, 2011).

A similar process evaluation was also applied to the FFIT research protocol. Gray *et al* (2013) cites the MRC framework and guidelines for developing and evaluating complex interventions and claims to follow this framework in order to evaluate and improve the FFIT gender sensitised weight management programme for men. The process evaluation involved participant completion of a survey and focus groups designed to understand what participants found useful and what improvements they would recommend. The group environment was identified as a positive aspect amongst participants who valued the opportunity to attend a programme with similar people. The opportunity to take part in physical activity and the programme addressing overall lifestyle behaviour was perceived positively, rather than it being a an overly prescriptive regime focussing purely on dietary restrictions.

Whilst this process evaluation approach applied to the SHED-IT and FFIT programmes has been used to modify elements of the programme and gives useful perspectives of participants experience, the main limitation is that it only provides the perspectives of those who were willing to participate within a weight management programme in the first instance and fails to capture the perspectives and views of men who did not attend the programme at all. For example, the development of the initial FFIT pilot programme was led purely by a team of professionals and clinical experts. This process failed to engage with the viewpoint of the target group during the developmental phase of the pilot programme. This was acknowledged by the researchers who state that the programme may have benefited from earlier engagement with its target group. Some research attempts to contact those who have failed to complete programmes or disengaged part way through were made (Gray *et al*, 2013), however response rates were usually low and this still fails to obtain the perspectives of those who did not engage with such a programme in the first instance.

The Canadian Hockey FIT programme (Petrella *et al*, 2017) includes an inductive qualitative thematic analysis of data collected through semi-structured telephone interviews with a cohort of 23 men who had participated in the programme. Following the process evaluation approach studied by the SHED-IT and FITT programmes, this research aimed to gain in-depth understanding of the motivations for participation in the programme, barriers to physical activity and healthy eating in men and the experiences that men

had with the gender sensitised material provided as part of the programme. Whilst findings from this qualitative research demonstrated positive experiences of those who were interviewed, the sample was largely derived of professional, educated men with 19 (82.6%) of participants having college/technical diplomas or university degrees and 17 (73.9%) earing $75,000 or more. The authors of this research were cognisant of the requirement for health promotion programmes to be designed in light of the target audience, but the recurring theme of interviewing men about their experiences of a gender sensitised weight management programme to establish what the men found useful and what may need to change in future iterations of the programmes structure yet again takes the views of only those men who have self-selected and participated in a programme of some description. The findings of this research are useful and concur with the findings of that reported by the FFIT programme in so much that men found participation at a programme hosted within a professional sporting environment acceptable to their masculinity, however it does not enlighten us to the perspectives of those who have chosen not to attend these programmes at all.

In the recently published research by Wyke *et al* (2019) there is an important explanation about how the intervention for the EuroFIT programme was designed. The researchers report;

> *"Members of the public who had experience of similar programmes were members of our Strategic Partners Advisory Board and Trial*

> *Steering Committee and shaped the development of the protocol. Others, who had no previous involvement in similar programmes and were recruited through participating football clubs, advised on the development of the EuroFIT programme"* (Wyke *et al*, 2019: 10)

Whilst the detail is vague, this may signify that those developing weight management programmes are beginning to recognise the value that involving future programme users in the early design and formulation of the programme structure and content can have. The second part of this sentence identifies people with *"no previous involvement in similar programmes"* and is the most significant point as it is an attempt to develop greater involvement with those who have not previously engaged with weight management programmes. Although it does not clearly define what the researchers mean when referring to *"similar programmes"* it is the only example I have reviewed which alludes to engagement with people who have no previous experience of weight management programmes in programme design.

2.7. Summary

Weight management programmes founded on behaviour change and lifestyle modification around diet and physical activity can be clinically and cost effective for both men and women. However, uptake of such programmes amongst men is significantly lower than the uptake amongst women. Having reviewed this literature, it is apparent that research has identified this as a public health issue and efforts are being made to address this. The socially

constructed concept of masculinity plays a significant role in this phenomenon and is being considered within the study and intervention design of programmes attempting to gender sensitise and become more appealing to men. The following common programme design components are evident in current research and aim to preserve the masculinity of the men they intend to attract by improving social acceptance. Key components are:

1. The environment in which these programmes are situated has been masculinised by hosting them in community venues regularly frequented by men, such as football clubs or through self-help mechanisms.
2. The programmes are gender homogenous. Men only programmes are seen as conducive to participation and link to camaraderie and friendly competition which are acceptable traits within masculinity.
3. Men enjoy physical activity elements of weight management programmes, therefore programmes focus on promotion of exercise and activity as a central theme.
4. Men want programmes to be flexible and avoid strict or overly restrictive dietary regimes.

Whilst research is beginning to address the issue of engagement with men about health and weight management, there is still little in the way of involving this target group with intervention and programme design. Assumptions are apparent within current research that men enjoy sport,

competition and ‘banter’ (Gray *et al*, 2013; Morgan *et al*, 2011). Whilst the engagement of men with weight management through this mechanism is showing signs of success it fails to take a wider viewpoint from men who may not be interested in sport, those men who cannot afford to attend as spectators of football matches, those men who do not find competition appealing or those men who do not reconstruct this particular version of masculinity.

Having reviewed this body of literature, I arrive at my concluding statement. High quality research investigating the effectiveness of weight management programmes and intervention for adult men in the UK is scarce. Efforts have been made, but the issue of engaging men with this health issue seems to be a recurring practical problem. Far fewer men participate in weight management programmes than women, yet a greater proportion of men are classified as overweight and obese. Providing services that are not attractive or accessible to certain sections of the population may seek to contribute to health inequalities (ten Have *et al*, 2011). There is however a noticeable body of research and theory around the concept of masculinity which researchers and those designing weight management programmes are aware of and have made effort to utilise this construct and make weight management programmes more appealing to a men. Research is investigating the view of men who attend gender sensitised weight management programmes in order to use this understanding during incremental improvement to programme design. Despite this, no research is available to my knowledge that seeks to directly investigate the view of body weight, health and weight management

programmes from men who have explicitly never attended a weight management programme before, meaning that the views of a large proportion of the male population are currently not understood. The prevalence of men classified as overweight or obese, the lack of engagement with weight management programmes and the levels of associated preventable disease amongst this group (e.g. hypertension, coronary heart disease, type II diabetes) warrants further research to investigate the attitudes, views and perspectives of men who have never participated in a weight management programme. This would be valuable in influencing future obesity strategy and weight management service design and potentially increasing engagement with overweight and obese men who are currently not accessing such services.

CHAPTER 3. METHODOLOGY AND METHODS

3.1 Introduction

This chapter commences with a personal reflection describing how the concept of this research was derived from my professional experience and practice.

The chapter then defines the research strategy, philosophical underpinnings and the rationale for the methods that were chosen as the 'tools' capable of answering the research questions posed.

3.2 Conceiving the Idea

Silverman (2017) talks about personal experiences often being the catalyst for research ideas and this is certainly true in the case of this research. I joined the NHS in 2005 working for a health promotion department as a health improvement practitioner and tasked with establishing a lifestyle change service to work with people who were unemployed and in receipt of incapacity benefit. During this time I undertook training in behaviour change theory which could be applied to support individuals make changes to their lifestyle. I worked with patients referred to the service to help them set goals around improving diet and increasing physical activity levels. Subsequently I moved to Lincolnshire to take up a managerial position within the Healthy Communities Team commissioned by the local Public Health Directorate and constructed the concept of this research whilst establishing a new, county-wide weight management service targeting adults (aged 18+) who were

classified as clinically overweight or obese and providing them with a 12 week lifestyle change programme with the aim of supporting participants to make lifestyle changes regarding diet and physical activity.

On monitoring the impact of this service it became evident that only 30% of participants were men, with the majority of those men who did participate being over the age of 65. Uptake of the service amongst men of working age was almost non-existent. I wanted to compare this to uptake in other weight management programmes and after a short literature search I located a research paper published by a nationwide commercial weight management provider stating that uptake within their programme of men was less than five percent (*Bye et al, 2005).*

Around the same period of time I attended a training course about social marketing which described the process that commercial sector businesses deploy to develop new products. Central to their approach was the concept of market segmentation. This process involved deep customer insight and research in order to develop an understanding of the product final end user. The segmentation process would culminate in a detailed description and definition of the target group of customers who the product would then be marketed towards.

This learning led me to reflect on how new services are developed within the NHS. Whilst developing the weight management service I led, we held a number of meetings with groups of professionals, clinicians and subject

matter experts to ensure that the clinical quality and effectiveness was maximised. What we had not done was consider who the service would be for, who it would target (our thinking was that it would be for everyone – a significant failing in the service design) and what their needs might be. It was not surprising therefore that the service we provided was accessed and enjoyed by some and not others with the demographic of service user being typically white, middle class women.

Time pressures to mobilise new services within the NHS often do not allow for detailed research and insight to be conducted into the needs of service users. Therefore I needed to find a way which this research could be done and help enhance the understanding of those not currently being reached through available services, and my research journey had begun.

3.3 The Research Question

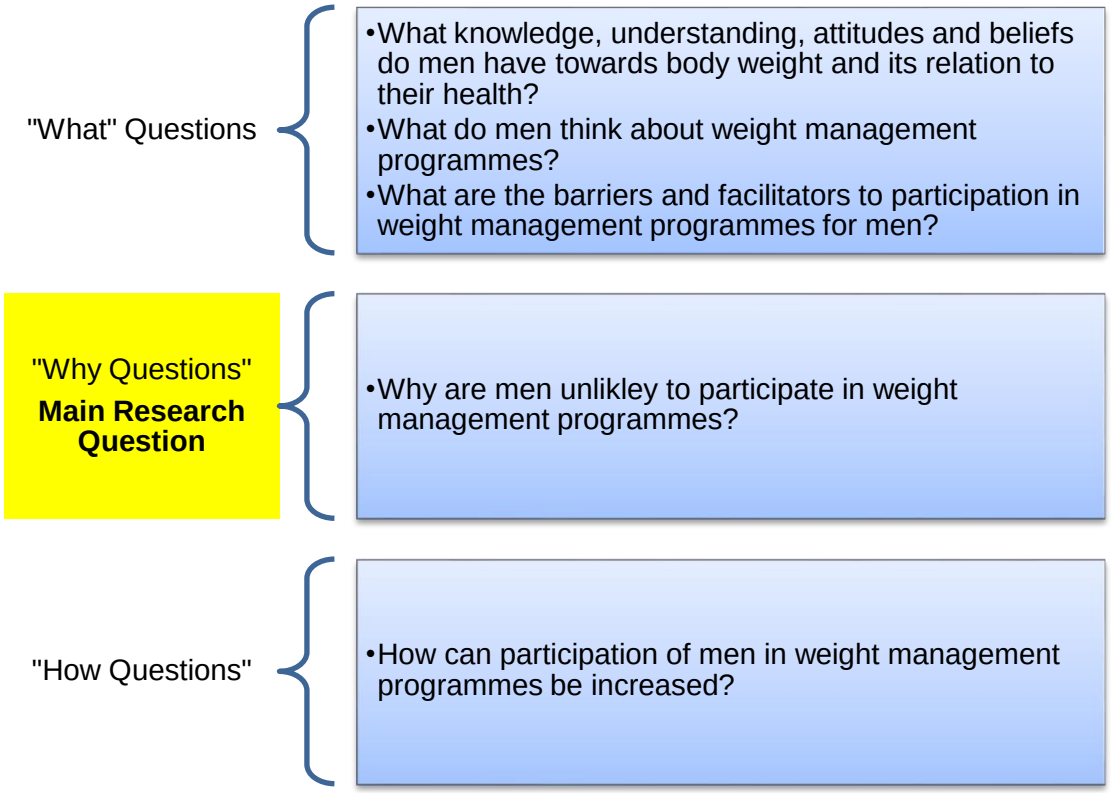
Defining the research question is a vital component of research design (Blaikie, 2007; Bryman, 2012; Mason 2018). Blaikie (2007) describes three different types of research questions, with each being a pre-cursor to the other. Firstly Blaikie describes using “what” questions, secondly there are “why” questions and finally there are “how” questions. Blaikie describes the importance of the sequencing of these questions, describing how “what” questions will come before “why” questions, and “why” questions coming before “how” questions. This sequencing of question types is important because;

> *"we need to know what is going on before we can explain it, and we need to know why something happens the way it does before we can be confident about introducing interventions to change it."*
>
> (Blaikie, 2007: 7)

The purpose of his research is to develop better understanding of why there is low participation of men within weight management programmes.

In order to achieve an understanding of why this is happening, a number of research questions are required in order to develop understanding of the phenomena and in turn enable the collection of data capable of answering the main research question. Successfully answering the main research question will allow application of the findings of my research in order to deepen existing understanding of how participation of men within weight management programmes can be increased. Figure 7 illustrates the research questions developed for this research by applying the different question types described by Blaikie (2007).

Figure 7. Research questions



3.4 Research Paradigm

Research strategies are always situated within broader theoretical and philosophical frameworks or perspectives known as paradigms. Two important aspects for research strategies to consider are the ontology and epistemological assumptions.

3.4.1 Ontology

Ontology is concerned with the nature of social reality and what exists (Blaikie, 2007) or, the ability to answer the question *"what kind of things are there in the world?"* (Benton and Craib, 2001: 4). Benton and Craib (2001) describe a number of broad philosophical traditions which can be used to answer this question, with this research having an idealist ontology.

The idealist ontological perspective acknowledges that there is no meaning in the world until we construct it and that nothing is real until it has been constructed in the minds of individuals themselves (Lincoln and Guba, 1985). Our understanding of the world is not objective and cannot be separate to social actors (Denzin and Lincoln, 2018). The purpose of this research is to investigate the social constructions of the research participants as social actors and therefore accepts this ontology and appreciates the value of the individuals constructed versions of reality as meaningful.

3.4.2 Epistemology

Epistemology is commonly defined as the theory of knowledge (Bryman, 2012, Mason, 2018). In order to successfully answer the research questions (Figure 7), this research sought to investigate the experiences, perspectives, views and understandings that men hold regarding body weight, health and weight management programmes. The research therefore adopted a constructivist epistemology.

The constructivist paradigm was proposed by Lincoln and Guba (1985) who described it as a wide ranging eclectic framework, sharing similarities from other philosophical standpoints such as interpretivism, naturalism and hermeneutics. The constructivist epistemology argues that an approach is required when studying the social world that is capable of reflecting the complexity of people as living beings and social actors and capable of developing understandings of human behaviour (Blaikie, 2007).

Constructivism is often seen as a contrasting epistemology to that of positivism which is strongly associated with the natural sciences (Bryman, 2004; Denzin and Lincoln, 2018). Constructivism seeks to understand phenomena (Silverman, 2010) and will seek to access *"common sense thinking"* taking the viewpoint that an individual's actions are motivated by their interaction with their daily world, their experiences and interpretations of their surroundings (Schutz, 1994; cited in Blaikie, 2007: 22).

3.5 Research Design

3.5.1 Qualitative Research

The research questions, research objectives, epistemological and ontological foundations are well suited to the use of qualitative research methods. Qualitative research methods can help investigate the views, opinions and perspectives of social actors in an attempt to understand their rational choices and motivations for their behaviours (Avis, 2003; Mason, 2002). They can help understand the causes of social phenomena and how these phenomena arise (Silverman, 2017) and are able to provide a depth of understanding to phenomena rather than seeking to establish causal inferences (Mason, 2002), being particularly suitable when research wishes to access participants lived experience (Mason, 1996).

The most commonly used qualitative methodological approaches evident within current qualitative literature are grounded theory, phenomenology and ethnography (Avis, 2003; Hunt, 2009; Thorne *et al*, 1997). Grounded Theory has many principles that were conducive to supporting the aims of this

research such as findings being *"grounded"* within the data and the concept of data being simultaneously collected and analysed in order to explore findings further in subsequent interviews (Glaser and Strauss, 1967; Strauss and Corbin, 1994). However, the aim of this research was not to formulate new theory which is a key aspect of the Grounded Theory methodology. Phenomenology is most noticeably concerned with exploring the *"lived experience"* of individual social actors. However the main and most significant drawback with this approach is that the nature of this inquiry was to understand more about those who had never experienced a particular phenomenon (men who have never attended a weight management programme) rather than seeking to understand more about the lived experience of those who had. Finally, an ethnographic research methodology was deemed inappropriate for this research as the findings are not observable but will instead be articulated through language in order to understand individual's thoughts, feelings and views.

Whilst no single methodology described above provided a perfect solution, there were elements from both grounded theory and phenomenology that did suit the aims of the research.

3.5.2 Generic Qualitative Approach

There is a growing movement within the qualitative research field that recognises the need for a pragmatic approach that is less concerned with strictly adhering to previously defined research methodologies (Avis, 2003; Caelli *et al*, 2003; Sandelowski, 1993). The generic qualitative approach,

also referred to as non-categorical qualitative research (Thorne *et al*, 1997) or simply interpretive (Kahlke, 2014), allows research design to adopt principles of existing research methodologies without the need to be fully compliant with the purest notion of these and *"seek to discover and understand a phenomenon, a process, or the perspectives and worldviews of the people involved"* (Merriam, 1998: 11). Caelli *et al* (2003: 2) defined the generic qualitative approach as;

> *"those that exhibit some or all of the characteristics of qualitative endeavour but rather than focussing the study through the lens of a known methodology they seek to do one of two things: either they combine several methodologies or approaches, or claim no particular methodological viewpoint at all."*

Proponents of the generic qualitative approach recognise that adhering to a strict methodology can often be overly restrictive to qualitative researchers who require greater flexibility in order to answer certain research questions, in particular where the research is concerned with developing understanding into the thoughts, feelings, views and perspectives of a particular group or population (Cooper and Endacott, 2007; Percy *et al,* 2015).

Generic qualitative approaches are however not without their challenges and criticisms. Critics have accused such approaches of method slurring by blending aspects of different methodologies. Morse (1989: 4) is particularly critical of this approach writing;

> *"such mixing, while certainly 'do-able,' violates the assumptions of data collection techniques and methods of analysis of all the methods used. The product is not good science; the product is a sloppy mishmash"*

Others have accused generic qualitative approaches as being successfully able to *"obscure rather than illuminate epistemological foundations of qualitative work"* (Atkinson and Delamont, 2006: 756).

Wider reading identified a sub-category of generic qualitative methodology called interpretive description (Kahlke, 2014). Interpretive description (Thorne *et al*, 1997; 2004) is a qualitative methodology initially developed within nursing research in response to the recognition that established methodologies are often not fully suited to lines of inquiry developed by those researching health topics, particularly those seeking to understand the health and illness experiences from a patient's perspective (Thorne *et al*, 1997). The development of interpretive description methodology has been cognisant of criticisms aimed at research which has deviated away from established methodologies and has sought to address such issues with attempts to maintain methodological integrity (Thorne *et al*, 1997). Having carefully considered the original research questions, established research methodologies and generic qualitative approaches, interpretive description was the chosen methodology for this research for the following reasons;

1. The origins of the development of interpretive description are grounded in health research.
2. Interpretive description was developed after identifying that established research methodologies were often unable to fully answer questions worthy of qualitative inquiry without some deviation from an established methodological framework (Thorne *et al*, 1997).
3. Interpretive description allows the researcher to utilise aspects of established methodologies such as grounded theory and phenomenology whilst not adhering to one or the other in the purest sense.
4. Interpretive description has a defined philosophical standpoint and is careful not to *"slur methods without regard for the coherence of their epistemological foundations"* (Thorne *et al* 1997: 172). Interpretive description is founded on an interpretive constructivist epistemology.
5. Interpretive description seeks to generate understanding and knowledge that has practical relevance in a clinical context.

3.5.3 Ensuring Methodological Rigour

In order to maintain the integrity and rigour of this research the guiding principles for interpretive description comprising of: analytic frameworks; sample selection; data sources, data analysis and rigour (Thorne *et al* 1997) have been applied.

Thorne *et al* (1997; 2004) argue that effective application of interpretive description requires an analytic framework to be established at the outset of

the research which is founded within existing knowledge. They argue that *"going in blind"* can be counterproductive and that it is important for researchers to critically appraise and analyse existing knowledge of the phenomenon under investigation using available data sources.

In order to develop my own analytic framework for this research I have conducted a detailed review of current literature (chapter 2) which has highlighted a number of findings central to the design of this research such as the prevalence of overweight and obesity amongst men, their tendency for risk taking behaviour and low participation within weight management programmes. I have also provided a reflection of my own professional experiences and how this has influenced my desire to conduct research in this subject area and the conception of the research (see section 3.2). In addition, I take the position that increasing levels of obesity within the population is detrimental to health and that health services, strategists and planners have an obligation to address areas that are known to have a negative impact on health. Therefore I take the standpoint that having a body mass index above 25 is a risk to an individual's health and that methods of supporting individuals to maintain a body mass index within a healthy range is ethically the right thing to do.

The remaining guiding principles for inductive description (sample selection; data sources, data analysis and rigour), will be addressed throughout the rest of this chapter.

3.5.4 Research Methods

3.5.4.1 Sampling Strategy and Size

This research applied a purposive sampling strategy known as intensity sampling, with some theoretical consideration (Abrams, 2010). Patton (1990: 171): defines intensity sampling as follows;

> *"An intensity sample consists of information-rich cases that manifest the phenomenon of interest intensely".*

The phenomenon of interest is the observable low participation of adult men who are overweight or obese in existing weight management programmes. Through reviewing current literature it is possible to predict that those men least likely to engage in such programmes are those who reconstruct hegemonic masculine behaviours, therefore the study inclusion criteria and recruitment strategy was designed with this purpose in mind.

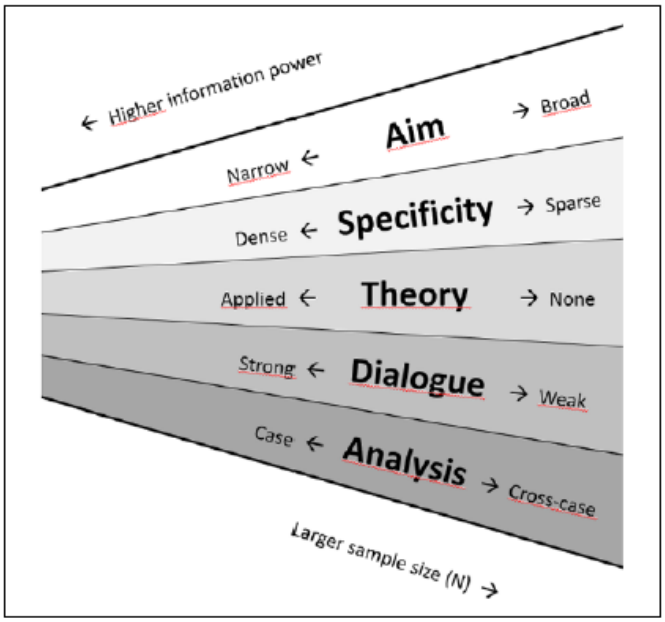
With regards to the number of cases to sample, providing a definitive number is a matter of on-going debate within qualitative research. Many qualitative studies apply the concept of data saturation (Glaser and Strauss, 1967) or the point of redundancy (Lincoln and Guba, 1985). This is often interpreted as being the point at which no new data are derived from additional sampling. However, there is no universally accepted approach to define sample size in qualitative research. Patton (1990) described the difficulty faced by researchers when attempting to decide the sample size for qualitative research and suggests that this is left flexible.

More recently there are those who have proposed new guidance and principles in relation to qualitative sample size. Malterud *et al* (2016) have developed the concept of information power as an approach to assessing suitability of sampling size for qualitative research. Malterud *et al* (2016) are critical of how the use of data saturation has become the prevailing concept for sample size in qualitative research and recognising the need for qualitative research design to be robust and defensible they claim;

> *"Tools to guide sample size should not rely on procedures from a specific analysis method, but rest on shared methodological principles for estimating an adequate number of units, events, or participants. For this purpose, we propose the concept information power. The larger information power the sample holds, the lower N is needed, and vice versa."* (Malterud *et al*, 2016: 1754)

I applied the model of information power which is based on five domains (Figure 8) to my research design in order to continually assess the requirement for additional participant recruitment for further data collection throughout the research process.

Figure 8. Information power items and dimensions



Source: Malterud et al, 2016: 1756.

Table 2 shows how I assessed my sample against these five domains in order to determine the information power of the sample.

Table 2. Information power assessment process

Domain	**Analysis of Samples Information Power**	**Assessment of Information Power**
Aim	The aim of the research is narrow and focussed on a specific research area	High
Specificity	Dense and highly specific inclusion criteria which ensures research is focussed on a narrow sub-section of the population	High
Theory	Some theoretical underpinning to inform research design, but research was exploratory in nature	Moderate
Dialogue	Researcher trained in talk/listening skills such	High

	as motivational interviewing and counselling. Gender commonality with participants	
Analysis	Exploratory, cross case analysis.	Low

Considering the information power items and dimensions shown in table 2 including the focussed research question, inclusion criteria and experience of the researcher the sample was considered to have a high information power. On the other hand the lack of established theory and exploratory analysis strategy would argue for lower information power. Consequently rather than set out a target number of research participants to be recruited I began the data analysis process early in order to continually assess the information power against the assumptions made. I accepted that the number of participants recruited would be flexible based on the quality of the interviews and the level of data derived and this was continually reviewed throughout the research process until sufficient analysis of the collected data were able to answer the research questions (Malterud *et al*, 2016).

3.5.4.2 Study Inclusion Criteria

To ensure that the sample provided data suitable of answering the research questions, a number of inclusion criteria were set (Table 3).

Table 3. Study inclusion criteria

Gender	Men
Age	Adult (aged 18+)
Employment Status	Employed in routine and manual occupations

Body Weight Classification	Minimum BMI 25 therefore all participants categorised as clinically overweight or obese
Experience of Weight Management Programmes	Never attended any form of structured weight management programme

Focusing this research on a sample of participants who were exclusively men, all of whom had never attended any formal or structured weight management programme would ensure that those least likely to access weight management programmes were the exclusive focus of this research. This is an important distinguishing feature between this research design and previously conducted research and enables a previously unheard voice to be investigated for the first time. Previous research has investigated the experiences, attitudes and beliefs that men have towards weight management programmes by sampling men who have participated within a weight management programme and either completed the programme, or commenced the programme and subsequently withdrawn or not completed the full programme and follow-up period. No research has however sampled men who have no history of attending weight management programmes and is a noticeable gap within the existing literature also identified by others as described in chapter 2.

The reason this is an important area for further research is because the views, beliefs and opinions of men who have never attended any form of weight management programme are likely to be different to those who have attended, even if they commenced a programme without successful completion. Men who have volunteered to participate in weight management

programmes will have reasons for doing so and it is important to investigate how the beliefs of men who have not participated in such programmes may be different, what additional barriers they face and what, if anything, can be done to change this and enable them to participate in such programmes.

A minimum body mass index of 25 allows the research to focus on participants who are at elevated risk of preventable disease due to their body weight and ensures that the research findings ultimately have the greatest public health benefit.

A noticeable gap within existing literature highlighted within my literature review (chapter 2) is how many previous studies conducted on men and weight management often recruited from groups with higher educational attainment and higher levels of income. Therefore rather than sample from a broad range of demographics and potentially risk repeating recruitment of a sample similar in demographic profile to previous research I chose to target this research towards a specific demographic where health risk associated with body weight is more prevalent and the representation of men within weight management programmes is likely to be low, specifically routine manual workers.

3.5.5 Access and Recruitment – Adult Men

The specific nature of the sample, whist providing high information power, made recruitment one of the greatest challenges of the research process.

The research therefore applied pragmatic ways to recruit participants willing to participate.

In order to access a suitable participant group I decided to approach workplaces which I anticipated were likely to employ men meeting the socioeconomic group specified within the study inclusion criteria. Workplaces, it was hoped, would provide a captive audience to promote the research towards and may allow suitable employee's to be interviewed during their working hours, providing a convenient and 'benefit in kind' to those who volunteered for interview.

I used my knowledge of the local area, plus a number of internet based searches to identify workplaces purposefully which were likely to employ men meeting the study inclusion criteria. Through the company websites I located an email address through the 'contact us' section and used this contact email address as the starting point for my initial contact. Initial emails were sent to a total of 16 workplaces to introduce myself and the research being conducted. If no response was received, a follow up email was sent two weeks later as I wanted to provide the workplace with the opportunity to response and maximise the recruitment opportunity for the research, but without overly burdening companies and organisations with correspondence. I left a two week interval between my first and second email contact if no reply was received as this gave each workplace long enough to respond, without putting them under undue pressure.

I approached these 16 workplaces first as they were some of the largest employers within the local area and I felt that approaching this number of workplaces was sufficient as a first wave of recruitment. Workplaces contacted were all from the same geographical county within the East Midlands and are described as follows:

- Local authorities
- Retail outlet (national chain supermarkets)
- DIY stores (part of a national chain)
- Factories (part of national group)
- District General Hospitals
- Power station
- Transport companies (part of a national chain)

Seven workplaces responded to the initial email and I then opened up further email dialogue and phone calls to provide further details of the research and build rapport with the workplaces. Initial contact was with a variety of people and different in each organisation. Within the seven workplaces who responded to my initial contact, the main organisational contacts I liaised with were Human Resources (national chain supermarket and food processing factory), Senior Departmental Management (local authority, hospital and transport company) and Occupational Health (power station). I managed to organise site visits with four of them to meet with the contact I was liaising with and discuss participation in the research in greater depth and detail. Despite promising initial contact with the other three workplaces I did not

manage to fully enlist them into the recruitment stage of the research. One workplace (a national chain supermarket) ceased responding to my further emails and dialogue was lost without any further response from them. One workplace (power station) informed me that they did not have sufficient time to be involved with recruitment and one workplace (food processing factory) stated that they felt it would be pragmatically difficult to support releasing staff during working hours because of the nature of their production line. In these instances I politely thanked them for making contact with me.

Following the initial site visits with the remaining four workplaces all agreed to support recruitment of participants to the study. These included a local authority refuse collection depot, a local district general hospital, a national chain supermarket and a local transport company. Unfortunately I was unable to pursue recruitment at the transport company as there was no suitably confidential area for interviews to take place. This left me with three workplaces to commence recruitment of participants to my study. I obtained signed consent from each of these organisations before commencing any recruitment (appendix H).

Each workplace displayed posters advertising the research in staff areas (appendix I). They also agreed to promote the research and recruitment to staff during forthcoming teams meetings and all three workplaces agreed to allow staff to take part in interviews during normal working hours. In addition, the local authority refuse collection service manager invited me to attend a staff meeting in order to introduce myself and the research to employees. I

offered to attend any available staff team meetings at the other workplaces who engaged (supermarket and general hospital) but this did not become possible due to the times and days of suitable staff meetings being incompatible with my availability. I could have attended meetings with sufficient advance planning but I was concerned that time delays (possibly two to three months in advance) would slow recruitment and jeopardise completion of the research project within available timescales. I therefore agreed with these workplaces that they would display posters and discuss the recruitment at their team meetings on my behalf, and I would attend future meetings if recruitment was still insufficient.

A number of suitable dates were organised with management at each workplace. Each workplace agreed to compile a timetable of interviews for each day that I would visit and release staff from duties so they could attend for an interview. I always worked flexibly so that the workplace business was not affected by my presence and on several occasions was unable to perform interviews as planned due to needs of the business taking precedence and staff being unable to be released from duties. On such occasions interviews were rearranged for the next available convenient time for the workplace.

A total of 26 men volunteered to be interviewed. Each was accurately weighed and measured using calibrated Marsden M-550 Digital Floor Scales and the Leicester portable height measurer to establish their BMI. 16 of

these men met the study inclusion criteria and were interviewed. Ten volunteers did not meet the study inclusion criteria for the following reasons:

- Five did not meet the BMI criteria
- Two had previously participated in a weight management programme
- Three were from higher managerial occupations and did not meet the classification of routine manual workers

3.5.6 Access and Recruitment - General Medical Practitioners & Public Health Strategists

Early analysis of data generated from the interviews with men identified the relationship with their General Medical Practitioners (GPs) as pivotal, with the GP being identified as a medical professional with influence over the men's lifestyle behaviours. It became clear therefore that there was a need to recruit and interview a number of GPs in order to gain their views and experiences of working with overweight and obese men.

In turn, early analysis of data generated from interviews with GPs identified the impact of recent changes in local commissioning decisions and budgetary *"cuts"* that had been observed by the GPs interviewed. I felt it important therefore to capture the views of strategists and commissioning decision makers and consequently recruited a senior public health leader and a representative from Public Health England to the study for interview.

3.5.6.1 Access and Recruitment – GPs

Recruiting GPs to participate in research has previously been reported as challenging. Patel *et al* (2017) reported recruiting 20 GPs from 109 GP practices employing 842 GPs in the Cambridge area of the United Kingdom giving a recruitment rate of 2.4%. They found that a multi-dimensional recruitment strategy was required which included promoting the research within local GP newsletter, gaining the support of the local health authority, contacting practice managers and snowball sampling through working with contacts to support recruit GPs.

I emailed four local Clinical Commissioning Groups (CCGs) to introduce myself, the research being conducted and the requirement to interview a number of GPs across the county. These four CCGs were chosen for recruitment as they were responsible for providing healthcare services to the same geographical population as the men were recruited from, which I felt was important to maintain a consistent geographical context, but an approach which also utilised a convenience sampling strategy because of the close proximity of potential participants to myself, resulting in a non-random sample being recruited. All CCGs responded to my initial email and subsequent dialogue resulted in each CCG locality manager informing GP practices of the research at their next primary care locality meetings which are attended by 103 GP practices operating across the four CCGs geography (employing between 300 and 400 general practitioners). In addition, the research was promoted on a weekly GP communication bulletin through the

CCG communications department which is emailed electronically to all GPs working within these CCG areas.

Following the locality meetings and weekly communication 17 GPs responded expressing an interest in taking part in the research. Assuming that all 340 GPs were made aware of the research this was a response rate of 5%. This response rate was higher than that experienced by Patel *et al* (2017) who also recruited GPs for a qualitative research study and achieved a response rate of 2.4%, but lower than the study by Treweek *et al* (2012) who reported a response rate of 15.7% to an email invitation for GPs to participate in an online trial. The study by Treweek *et al* (2012) did however involve the incentive of a £20 gift voucher so it is not surprising this resulted in a higher rate of response.

I provided each with a participant information sheet giving the background to the research. Five of the GPs who initially volunteered did not respond to my further communications, one GP withdrew due to work commitments and one cancelled the interview due to unforeseen circumstances and was unable to provide a date to re-schedule. One interview took place but audio-recording equipment failed so data were lost and not able to be included. No further contact or communication was received from the other two.

I also used snowball sampling (Patton, 1990) by asking each GP who participated in an interview whether they knew of any colleagues who may be

willing to participate. A further 3 contacts were generated through this method resulting in 1 volunteer being recruited for interview.

Scheduling interviews with GPs was often difficult due to their working commitments. Suitable dates and times were arranged with each GP and interviews were conducted either face to face or by telephone to reduce the need for travel and make interview participation as convenient and practicable as possible. Three interviews were conducted face to face and seven were conducted by telephone. When telephone interviews took place, specialist recording equipment was used that was capable of audio-recording the interview to allow transcription to occur.

Telephone interviews can be used within qualitative research when either cost, travel or access is precluded from conducting interviews face-to-face (Sturges and Hanrnhan, 2004; Sweet, 2002). Other advantages of telephone interviews are that participants have high level of privacy and remain in their own environment which can reduce social pressure and support the participant to feel comfortable and relaxed (McCoyd and Kerson, 2006).

There are reported disadvantages of telephone interviewing however such as the lack of visual cues reported by Garbett and McCormack (2001). A further disadvantage is that some have claimed that telephone interviews should be kept shorter in comparison to face-to-face interviews which can compromise the depth of discussion taking place (Sturges and Hanrnhan, 2004; Sweet, 2002) however there is little to support this with McCoyd and Kerson (2006)

reporting telephone interview duration of 1.5 – 2 hours with little participant fatigue.

I was aware that telephone interviews may compromise my ability to build rapport with the participants and that I was not able to use visual or body language cues to help development of the interview itself. To mitigate this, I ensured that I gave each participant a thorough introduction about the study at the start of the interview and gave them the opportunity to ask any questions before commencing. I found that levels of concentration for myself as the researcher needed to be higher as I focused more intensely on the participants dialogue, using additional probing questions to ensure that the interview was still in-depth and explored all relevant areas just as during face-to-face interviews.

With organisation of convenient dates and times for GPs difficult to establish, the use of telephone interviews provided a pragmatic alternative to face-to-face interviewing. Telephone interviews were generally shorter in duration ranging from 27-52 minutes compared to a range of 35-56 minutes during GP interviews conducted face-to-face. This may be a result of interviews not being as comprehensive due to the reasons discussed prior, however interviews still produced strong finding important to the research and research questions.

3.5.6.2 Access and Recruitment – Public Health Strategists

I selected relevant strategists that were most appropriate to add greater depth of understanding to the research following what I discovered through interviews with GPs. This needed to be obtained from both a local and national perspective and I successfully recruited two senior public health leaders who led on the obesity and weight management agenda locally and nationally.

I contacted a Public Health Directorate by email with the background to the study and participant information sheet. They replied and a senior public health leader responsible for local obesity reduction volunteered for interview. I liaised over email and telephone with their secretary to organise a convenient date and time to conduct the interview. This interview took place within the senior public health leader's office face to face.

Finally, I also emailed a contact that had been provided to me by my supervisor for a senior manager within Public Health England. This individual provided contact details for a relevant senior colleague working within the Obesity and Nutrition department. I contacted this individual by email to which they responded. I provided the participant information sheet and they agreed to be interviewed. Because of their location in the country this interview was performed by telephone. Neither of these public health leaders were known to me prior to recruitment to the study.

3.5.7 Semi-Structured Interviews

For this research I chose to use semi-structured individual interviews as the data collection method of choice. Interviewing is a common method utilised within qualitative research and interpretive description (Thorne *et al*, 1997; 2004) but there needs to be a justified rationale for employing this technique over and above other types of method (Potter, 2002). By choosing semi-structured interviews as a research method, we assume that talk and text are forms of data and can be interpreted into new knowledge (Mason, 2002). We also assume that research participants volunteering to be interviewed are able to articulate their reality using language and to verbalise reasons, views and perceptions.

The literature review has highlighted the difficulty in engaging adult men in conversation around health matters. It also highlights that men are difficult to engage in research that focuses on body weight. For this reason individual interviews were selected as opposed to focus groups in order to provide participants with a greater sense of security at discussing and disclosing information about subject matters that they are otherwise reluctant to discuss in front of other people.

Whilst retaining a basic interview structure which is designed to guide the interview and give it a specific focus, semi-structured interviews also allow the researcher and participant the opportunity to explore and discuss the topics in a way that does not stifle natural conversation and reserves the right to stray from the pre-set interview questions to investigate and explore

perspectives and viewpoints raised that may be unexpected or unique, enriching findings and adding greater depth to data collection (Mason, 2002; Denzin and Lincoln, 2018). This method aligns well with the skillset and experience of myself as the researcher as a trained motivational interviewer.

3.6 Ethics

A submission describing the research and the ethical considerations was made to the University of Nottingham Faculty of Medicine and Health Sciences Research Ethics Committee on 28 February, 2014. Approval was received on the 18 March, 2014 with the ethics reference A13032014 SoHS (Appendix E). As the sampling strategy evolved in response to findings from interviews with men a revised ethics submission was made to the ethics committee on 22 January, 2017. The amendments were approved on the 29 March, 2017 (Appendix F).

Ethical consideration was applied to this research using the key principles listed by the Economic and Social Research Council Framework (ESRC, 2012). The subheadings below have been taken from the ESRC principles and each considered carefully when designing and conducting this research.

Research participants must normally be informed fully about the purpose, methods and intended possible uses of the research, what their participation in the research entails and what risks, if any, are involved.

Each participant was fully informed about the research purpose, methods and possible uses. A written overview and explanation was provided to each participant in advance of them being recruited as a participant in order to provide openness and transparency. Participants were asked to provide written consent to participate by means of signing the written explanation (Appendix G) once they had read and understood the document. In all cases the understanding of participants in terms of consent to study participation and what this entailed was checked prior to interview. For all groups it was made clear that this was exploratory research and that there were no right or wrong answers to any questions.

The confidentiality of information supplied by research participants and the anonymity of respondents must be respected.

Data collected remained confidential at all times and steps will be taken during the process to maintain anonymity. Data or any item(s) capable of disclosing an individual or identifiable information were stored securely, for example within a lockable filing cabinet or password protected computer system. A number of men questioned during interview whether information they disclosed would be shared with their employer. I reassured them that whilst their employer had been supportive in providing me with the opportunity to enter the workplace to interview staff during normal working hours, my research was totally independent of their workplace and no information would be shared with their employer. I explained to participants that quotes would be used within the completed thesis and any subsequent

publications but that pseudonyms would be used so that participants would not be identifiable by their quotes. This was most challenging in relation to the Public Health Strategists of whom only two were interviewed therefore geographical location for this research taken place was reported on a regional basis to protect anonymity.

Research participants must take part voluntarily, free from any coercion.

Participants were recruited voluntarily, without coercion and were free to refuse or withdraw from the research process at any time. No incentives were used to recruit participants.

Harm to research participants and researchers must be avoided in all instances.

The research required participants to be interviewed and be asked questions about their body weight, health, views of weight management programmes, experiences of working with overweight and obese patients, commissioning of obesity services and implementation of local and national strategy regarding healthy lifestyles.

Body weight can be a particularly sensitive and personal topic of discussion for some. The use of interviews as opposed to another form of data collection method such as focus groups was taken with ethical consideration

in mind. The use of individual interviews provided a confidential environment for those interviewed. Interviews also allowed a personalised environment and steps were taken to ensure the participants were comfortable and relaxed, such as arranging an interview time and location convenient for each individual. All participants were reminded that they were able to withdraw from the research process at any time should they feel uncomfortable or experience distress.

The independence of research must be clear, and any conflicts of interest or partiality must be explicit.

All participants were informed that the researcher was a PhD student of the University of Nottingham. The researcher is self-funding and no sponsorship has been granted or received from any additional sources. I also informed participants that research ethical approval has been obtained from the Faculty of Medicine and Health Sciences Ethics Committee.

3.7 Process of Data Collection

Semi-structured interviews were arranged and conducted on an individual basis at a time, date and location convenient to each participant. All interviews were audio recorded with the prior consent of the participant. Audio recording allows an accurate transcription of the interview to be produced to maximise data collection and also enables the researcher to concentrate on interaction with the interviewee and probe into areas of interest raised during the interview (Gruyter, 2003). During interviews

conducted face to face with research participants, the interview was audio recorded using a digital Olympus voice recorder VN-731PC. The same audio recorder was also used during telephone interviews with the addition of a specialist microphone designed to audio record telephoned interviews. Interview duration ranged from 26 – 58 minutes with adult men and 35 - 62 minutes with GPs and public health strategists. Field notes were also made immediately after each interview in order to capture my thoughts and feelings about the interview interactions with the participants and any particularly unusual or interesting points that arose.

3.7.1 Interviewing Adult Men

Prior to interviews commencing an interview guide was developed drawing on a review of existing literature. The initial interview guide (Appendix A) had questions designed to explore participant's attitudes towards their own health and what they believed contributed to their health, followed by more specific questions seeking to understand how men understand body weight to impact on health. Questions were designed to explore men's attitudes and views of weight management programmes and their preferred methods of weight loss should they have ever desired to lose weight and to explore their experiences of previous weight loss attempts. Finally the interview guide provided men with the opportunity to provide ideas and suggestions on how more men could be encouraged to manage a healthy body weight.

Following reflection on the first two interviews the interview guide was amended to help participants relax and improve the quality of the interview

data generated. This is reflected in my field notes following the second interview, where I noted;

> *"Participant a little closed, nervous to start with– need to build rapport before moving into questions about health. Answers short".*

As a result I included more generic questions at the start of the interview such as *"Tell me about your job and a typical day?"* to help build rapport. This was designed to 'break the ice' with participants and allow them to become more comfortable with talking about themselves by focussing on a less emotive subject before approaching questions about personal matters and health. As further interviews were conducted I added additional questions to the interview guide in order to explore early emergent findings (Appendix B).

3.7.2 Interviewing GPs and Public Health Strategists

Using the experience I had gained from interviewing men I ensured that I structured the interviews with GPs and Public Health Strategists differently to make sure the interviews were of the best possible quality. I provided participants with time to relax and feel comfortable answering questions by opening the interview with questions such as *"how long have you been a GP?"* and *"tell me about the practice you currently work at?".* These types of questions were even more important when conducting telephone interviews as it was more difficult to build rapport with the research participant due to

the inability to use body language or facial expression as a way to encourage the participant to relax and talk in detail.

Interview questions with GPs were developed using the findings from the interviews with adult men. Areas of interest generated from analysis of GP interview data then informed the line of questioning for interviews with the Public Health professionals (Appendix C and D for interview guide). At the start of the interview I provided each GP or public health strategist with a verbal overview of the focus of the research and that the specific area of investigation was weight management with men employed within routine manual occupations as determined by the ONS classifications. At the start of the interview I provided each GP or public health strategist with a verbal overview of the research and that the specific area of investigation was weight management with men employed in routine manual occupations as determined by the ONS classifications. Despite the scheduled interview questions in appendix C and D not specifically referencing routine and manual workers, I ensured that the participants remained focussed on this particular group by repeatedly asking for their answers to be specific about men within this occupational class. Often answers would become more generalised about weight management and patients as a singular group, rather than specific about the population group that was the focus of this research, but being alert to this I was able to ask supplementary questions and probe to ensure that participants were answering the question within the context needed for this research, and not more generally.

3.7.3 Process of Data Transcription

All interviews were transcribed verbatim (Braun and Clarke, 2006). The initial 16 interviews with men were transcribed by myself, which is recommended to allow the researcher to become familiar with data collected and aids analysis (Braun and Clarke, 2006; Miles and Huberman, 1994). Whilst conducting interview transcription myself had the advantage of helping me become familiar with data collected, the disadvantage is that this is a very time consuming endeavour. Due to time constraints I made the decision to enlist the services of a professional transcription service with experience of transcribing qualitative interviews for academic research for the transcription of the GP and Public Health Strategist interviews. This was a pragmatic decision in order to accelerate data transcription and the analysis process to ensure the research project was completed within the timescales permitted.

Following the receipt of a transcript from the professional transcription service I checked each for accuracy against the audio recording. Whilst the transcriptions were relatively accurate, I made a number of amendments to each transcript in order to make data as accurate as possible. I made these changes and reviewed each transcript against the audio recordings a number of times until I was happy with the accuracy of the final transcript. After the full transcription of each interview had been performed and I was happy with the level of accuracy I uploaded the completed transcript into the NVivo 11 software package to aid the analysis of data.

3.8 Process of Data Analysis

Data were analysed using the thematic analysis step-by-step guide proposed by Braun and Clarke (2006). Thematic analysis is described by Braun and Clarke (2012: 57) as:

> "*a method for systematically identifying, organising and offering insights into patterns of meaning (themes) across a data set".*

The process of thematic analysis followed the six phases set out by Braun and Clarke (2006) displayed in table 4. The data analysis process started with data familiarisation. The aim of this phase of data analysis is to become *"intimately familiar"* with collected data and begin to notice things that may be relevant to the research question (Braun and Clarke, 2012: 61). Familiarisation with data commenced when I transcribed interviews, or as I read and re-read transcribed interviews and compared them with the audio recording. *"Repeated immersion"* in the data is a concept advocated by Thorne *et al* (1997: 175) when applying an interpretive description methodology therefore conducting the interview, transcribing and re-reading each transcript provided opportunity for this level of immersion. Where I used a transcription service to transcribe the interviews, I carefully re-read each transcript a number of times to ensure I was fully immersed in the data.

Table 4. Phases of thematic analysis

Phase	Description of the process
1. Familiarising yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking in the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells; generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Source: Braun and Clarke, 2006: 35.

Following the process of data familiarisation I began the systematic analysis of data itself by applying *"codes"* to the interview transcripts. This process was supported by the use of NVivo 11 software. Codes are described as:

> *"the building blocks of analysis: If your analysis is a brick-built house with a tile roof, your themes are the walls and roof and your codes are the individual bricks and tiles. Codes identify and provide a label for a feature of the data that is potentially relevant to the research question"* (Braun and Clarke, 2012: 61).

Reading through each transcript I coded segments of data that were potentially of interest. Once a code was applied, I continued reading the transcript until another section of interest was identified and either applied the

same code, or created a new code. This process then continued throughout the whole data set. As this process continued through the data set, codes were often modified or even recoded which is common during this phase of thematic analysis (Braun and Clarke, 2012).

Following the coding of each transcript I began to actively construct patterns and themes amongst the individual codes that had been applied to the data. A theme is defined as being able to capture;

> *"something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set"* (Braun and Clarke, 2006: *82)*

During this process I began to construct findings as I searched for overlap and similarity within the codes leading to codes being clustered and themed. I then reviewed these themes against the coded data and the entire data set in a process of *"quality checking"* (Braun and Clarke, 2012: 65). During this process themes were often revised, as patterns amongst codes were explored further and the process of analysis continued to evolve. This often resulted in early themes merging or collapsing and being categorised into new themes and sub-themes. Finally, each theme and sub-theme was titled in a way that was able to capture the essence of collected data and findings within it, with titles chosen that were deemed *"informative, concise and catchy"* (Braun and Clarke, 2012: 67). My two academic supervisors also

read a number of transcripts and reviewed my data coding and construction of themes to ensure trustworthiness and reliability.

3.9 Qualitative Comparison

Having completed analysis of interviews from the two groups separately within this study, I then conducted a qualitative comparison of the findings.

Comparison is an important and common feature within social and behavioural qualitative research (Mills, 2008) and is applied as an approach to identify similarities or differences either between groups of individuals, within groups over different time points or across different data types (Guest *et al*, 2012).

Comparison is able to deepen understanding of a particular phenomenon (Miles and Huberman, 1994) with Krueger (1998: 17) stating that:

> *"Perhaps the most useful strategy in qualitative analysis is finding patterns, making comparisons, and contrasting one set of data with another".*

Guest *et al* (2012) described ways that qualitative comparison can be achieved between two or more data sets that have already been inductively coded. For this research I have chosen a pragmatic approach to comparing the data sets which Guest *et al* (2012) describe as examining the:

"differential expression of themes across groups and note(s) which themes/concepts are similar across groups and which are different".

Due to the level of emersion I achieved within data throughout the research process I was able to conduct a qualitative comparison using this approach, seeking to identify where there were commonalities and differences or contradictions between different groups. I examined the themes, sub-themes and codes to identify where these similarities or differences occurred between the interviews with men and the interviews with GPs and Public Health Strategists. The outcomes of this qualitative comparison are reported in chapter 6.

3.10 Reflexivity

Reflexivity is sensitivity to the ways in which the researcher interacts with the research process, research participants, data collection and data analysis (Berger, 2015). By being reflexive the quality and validity of research can be enhanced and potential limitations of the research acknowledged.

By applying the method of choice for this research, I was engaging with the research participants recruited face to face. Through the process of answering questions posed by the researcher the research participants are required to use language to develop their responses. It is acknowledged that this can pose problems to research validity as we must assume that the responses provided to the researchers questions are the true feelings and thoughts of those interviewed.

It is important to reflect on my own demographic as this may have influenced research participants and their responses to my questions. I am a man, with a healthy body weight (BMI between 20 and 25). I was aged 34-37 during the period of data collection. My professional background includes working as a Health Improvement Practitioner working within Public Health and managing a countywide NHS community weight management service. I have professional training in leading physical activity programmes including an undergraduate degree in Sport and Exercise Science and numerous industry recognised Fitness Instructor qualifications. In addition I have studied the subjects of diet, nutrition and behaviour change.

Miller and Dingwall (1997) stated how the presence of the interviewer may influence the responses of interviewees, whereby those interviewed will seek to give responses that portray them as a competent member of their community or to protect their self-worth in some way. It is important to recognise therefore that men who were interviewed about their health and body weight by another man, who was of a healthy BMI, may have portrayed themselves as being concerned about their weight and provided examples of what they are doing to address body weight as a method to protect their self-worth. Body weight is perceived in society as a very emotive and personal subject, therefore it is feasible that men would feel uncomfortable discussing this and wish to answer questions in a light that they feel is socially acceptable, rather than their true thoughts and views on this subject.

Despite this limitation, there was advantage to the researcher being a man in so much that this is a commonality between the intended research group and the researcher which may enhance the relationship and lead to interviewee's disclosing a greater amount of information than if the researcher were a woman. This commonality had the potential to enhance the depth of disclosure from men interviewed allowing for greater understanding in this field of research.

I have received professional training in skills and techniques designed to support people make lifestyle changes. Having completed training in Motivational Interviewing and counselling I am highly aware of the importance of developing relationships and rapport with individuals. This training has also taught me the value of reflective listening practices and appreciation of self-awareness. Because of this training and background I found that I was able to develop rapport with interview participants quickly and develop a comfortable environment for open discussion to take place.

The fact that I have also lived within the East Midlands all my life may also have had influence on the outcomes of this research. My accent was the same as the men I interviewed and I knew many of the same places around the local area which they travelled, lived and worked. This helped establish me as 'one of them'. Despite me holding academic and professional qualifications and working in a career that places me in a different socioeconomic classification to the men interviewed, I dressed casually, adopted non-technical language, had the same local accent and talked with

them about the local area to help develop a trusting relationship in a short space of time. I feel that my ability to do this helped gain greater depths of disclosure during interviews than my otherwise have been possible. My experience of working within the NHS in a variety of roles also helped when interviewing GPs as I was able to associate with them on a professional basis.

The process of data analysis must also be considered at this stage as data will go through a process of interpretation by the researcher. The researcher has their own experiences and prior knowledge that, no matter how much they attempt to remain impartial will still influence the ways in which they interpret and construct themes and findings within the data (Braun and Clarke, 2006). All of these factors within my professional history mean that I, as a researcher, will carry certain levels of thoughts, values, knowledge and beliefs that will influence the collection, analysis and interpretation of data.

3.11 Summary

In order to systematically develop a research strategy that ensures the research process has a level of rigour I adopted the guiding principles to research design set out by Blaikie (2007). I have described the underpinning epistemology of the research as constructivist, acknowledging that the research share similarities to other philosophies such as the interpretivist paradigm and hermeneutics and accept that knowledge is subjective rather than objective and that the findings from this research are co-constructed

between research participants and myself as the researcher rather than being an objective ‘truth’.

The research design used a generic qualitative approach known as interpretive description, rather than adherence to one of the commonly utilised methodologies such as grounder theory or phenomenology. Sampling was purposive and also theoretical in order to investigate the populations most likely to provide data capable of answering the research question and ceasing on findings from conducted interviews which were then used to guide subsequent samples in an iterative manner, with sample size guided by the concept of information power rather than the concept of data saturation. Findings of interest from initial interviews led to changes in the sample recruited which moved from a one dimensional view of the phenomena of interest (interviews with adult men) to a multi-dimensional exploration including medical professionals and strategic decision makers. Data were analysed by the application of inductive thematic analysis using the six steps as set out by Braun and Clark (2006) with a qualitative comparison of findings completed which demonstrates where findings converged across the different samples recruited and where it contradicted.

CHAPTER 4. MEN, BODY WEIGHT AND WEIGHT MANAGEMENT

4.1 Introduction

A key aim of this research was to develop greater understanding of the views that men have towards their body weight, health and weight management programmes. As men are under-represented in obesity research and within weight management programmes, developing greater understanding of the barriers and facilitators for this would be a valuable contribution to the current body of research and will aid future strategic decision making and clinical programme design. Through data collected during qualitative interviews and subsequent analysis a number of factors have been identified that influenced the views that men have towards these areas, their lifestyle behaviours and choices.

This chapter commences with a description of the demographic characteristics and body weight profile of those who were recruited for interview. It then presents the findings from the data collected through semi-structured interviews which is organised into three overarching themes: intrapersonal factors; importance of relationships and hegemonic masculinity.

4.2 Participant Demography and Characteristics

4.2.1 Body Mass Index Classification

A total of 16 men met the study inclusion criteria and consented to be interviewed. In line with the study inclusion criteria all participants were men and classified as either clinically overweight therefore having a BMI 25.0 –

29.9, or clinically obese having a BMI 30.0 and greater. 69% of participants interviewed (n=11) had a BMI greater than 30, placing them into the clinically obese category and 31% of participants (n=5) were classified as clinically overweight (Table 5). BMI ranged from 27.6 to 40.5, with a mean of 30.5.

Table 5. Participants (men) recruited

Pseudonym	Standard Occupational Classification 2010 Unit Group	Employment: NS-SEC Analytical Classes	Ethnicity	Age	BMI
Mark	Waste Disposal and Environmental Services Supervisior	Routine and Manual	White British/English	39	35.1
John	Waste Disposal and Environmental Services Supervisior	Routine and Manual	White British/English	46	32.1
Patrick	Refuse and Salvage Occupations	Routine and Manual	White British/English	51	37.8
James	Refuse and Salvage Occupations	Routine and Manual	White British/English	31	30.28
Neil	Refuse and Salvage Occupations	Routine and Manual	White British/English	44	27.8
Frank	Refuse and Salvage Occupations	Routine and Manual	White British/English	59	32
Ben	Refuse and Salvage Occupations	Routine and Manual	White British/English	28	27.6
Rick	Refuse and Salvage Occupations	Routine and Manual	White British/English	58	30.9
Dean	Refuse and Salvage Occupations	Routine and Manual	White British/English	55	30.2
Sam	Refuse and Salvage Occupations	Routine and Manual	White British/English	31	31
Dale	Cleaning and Housekeeping Managers and Supervisors	Routine and Manual	White British/English	33	28.5
Paul	Telephonist	Routine and Manual	White British/English	45	33.2
Eric	Housekeeper	Routine and Manual	White British/English	54	31.1
Will	Telephonist	Routine and Manual	White British/English	32	28.7
Trevor	Housekeeper	Routine and Manual	White British/English	55	40.5
Tony	Housekeeper	Routine and Manual	White British/English	24	27.3

4.2.2 Age

The age of participants ranged from 24 to 59 years. The most represented age group was the 50-59 years age range with 38% of participants (n=6) in this category. The 20-29 age group was the least represented with 13% of participants (n=2) falling into this category.

4.2.3 Socioeconomic Status (Occupational Classification)

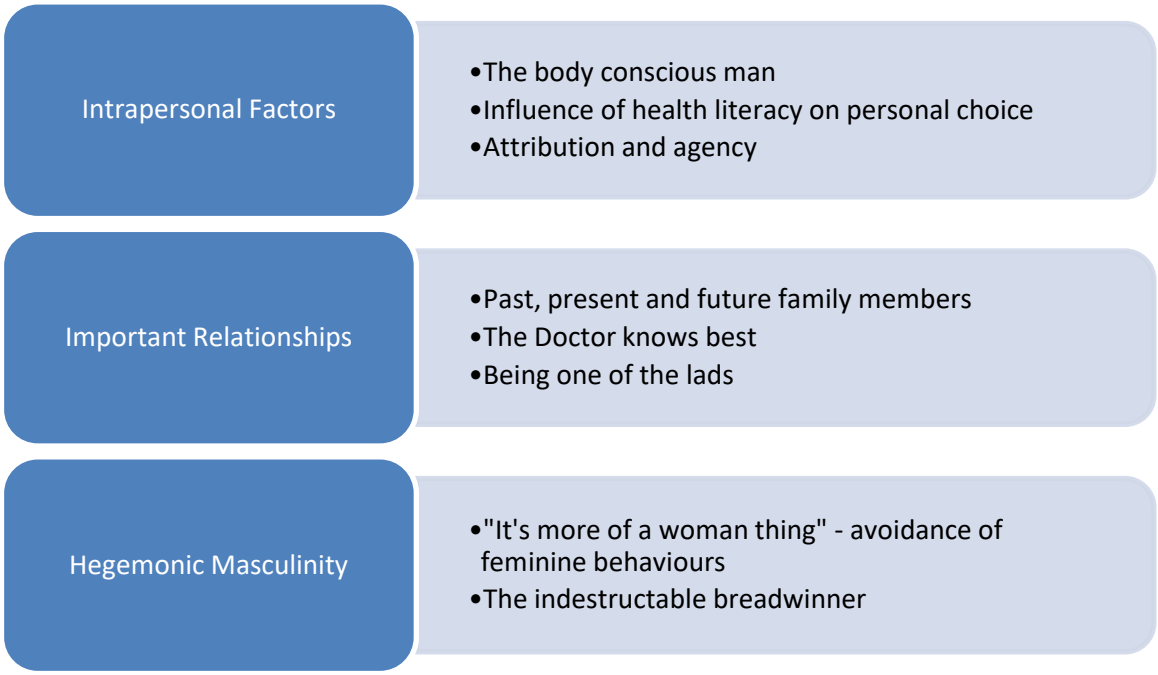
All men interviewed were in substantively contracted full time employment and met the Office for National Statistics (ONS) occupational classification of routine and manual workers (ONS, 2010). The majority of participants worked within a local authority refuse collection service (n=10). There were a mixture of roles within this group with some being heavy goods vehicle

drivers and some performing highly physical roles such as lifting and carrying waste bins and loading them onto the back of the waste collection lorries for empty (commonly referred to by this group of workers as “carriers”). Four participants worked within the housekeeping department within a local District General Hospital. Their job roles involved cleaning of the hospital wards and clinical areas, deep cleaning and maintaining the general appearance and cleanliness of the hospital environment. Two participants worked on the hospital switchboard as call handlers, which was a sedentary role (Table 10).

4.3 Findings

Through the data analysis methods described in chapter 3, three main themes were identified in the data. The three themes and subsequent sub-themes are displayed in Figure 9, which illustrates how the first two themes (Intrapersonal Factors and Important Relationships) are comprised of three sub-themes, whist the third theme (Hegemonic Masculinity) is comprised of two sub-themes. Each theme and sub-themes will be described in detail throughout the rest of this chapter. I have used quotations from interviews to illustrate the findings being described. Names provided are pseudonyms created in order to protect participant identity.

Figure 9. Themes and sub-themes



4.3.1 Intrapersonal Factors

A common theme identified was the level of intrapersonal factors that either facilitate or inhibit men's ability and willingness to manage a healthy body weight and improve health. Data were organised into three distinct sub-themes described below.

4.3.1.1 The Body Conscious Man

Participants were often somewhat nervous at the start of interviews and typically provided short responses to questions. As the interviews progressed I managed to develop a rapport with participants who relaxed and divulged intimate personal feelings of insecurity. There were repeated instances during the interviews of participants showing low levels of self-esteem and low confidence manifesting in a number of ways. Narratives

were littered with instances of men using negative self-description about their body shape and appearance. Social comparison was evident throughout the interviews, with participants comparing their appearance to other men and using derogatory language about themselves. Participants referred to being overweight or obese in a negative context and evidenced this by describing their undesirable body condition. This negative view reinforced their low levels of self-confidence, which then became a barrier to engage in activities which they identified as beneficial to improving health and managing body weight.

Appearance was important to those interviewed and the desire to improve personal appearance was commonly provided as a reason for wanting to lose weight. The following interview extracts taken from interviews with Eric and James illustrated how they are dissatisfied with their current body shape, with particular reference to excess weight around the abdomen. James in particular provides a detailed description of how he has considered his body shape and it's proportions, with his mid-section being perceived as holding a disproportionate amount of fat compared to his limbs, resulting in feelings of self-consciousness;

> *"I just got, got this belly now and I'm thinking it's noticeable… it, it, it's noticeable. I, I've never really noticed it before. It just made me feel, I shouldn't have a belly, I just want I don't want, I just want to be a little bit more flatter."* [Eric, 54, BMI 31.1]

"..I'm one of those people who I don't put weight no weight on my arms, I don't put no weight on my legs, I, I aint got no fat on them at all, but my gut is where it comes on like. You know, it's when I get a t-shirt on I look, I do look chubby like, you know what I mean, it's bloody, I get it round here as well, I get it here (signals around waist area), but you know my arms look a bit daft like, when you've got newt on your arms and newt on your legs fat wise.." [James, 31, BMI 30.3]

Being overweight was linked by participants to other negative physical effects such as profuse sweating and stretchmark's. Again, these were described in a negative way and deemed undesirable;

"…sometimes I look at myself and I think oh god sort of thing, especially around my belly is, it's where most of it is, so, and must admit I feel like I sweat a lot and I think that's probably to do with my bodyweight as well. So I'm always quite conscious about the way I look." [Dale, 33, BMI 28.5]

"..I've got a few stretch marks and it's like naa don't want 'em… I didn't like what I saw to be honest." [Sam, 31, BMI 31.0]

Participants often described fear of ridicule because of their current body shape, displaying low levels of self-esteem and high levels of body consciousness. In the following example Dean, a 55 year old refuse collection worker, was able to articulate the desired behaviour he aspires to

in terms of walking with no shirt on, portraying signs of physical confidence and stature but explains how he feels unable to do this because of his current body shape;

> *"...well then ya think, ya look at some slim bloke walking down the street, he's got his shirt off and ya think well I daren't do that*. Wobbley, wobbley, wobbley, look at that fat bastard there and people take the piss right…" [Dean, 55, BMI 30.2]

Whilst many participants described how they found their body shape undesirable and desired to change, there was also concern about being too thin. One participant described how he thought being too thin would prevent him from being able to perform his job which involved lifting heavy loads and physically demanding work. This demonstrates that whilst men found being overweight or obese undesirable and wished to change, larger body size was importantly regarded as a sign of physical strength;

> *"I don't wanna be too thin do I? Couldn't do this job I don't think. If was too thin don't think be able to do it."* [Frank, 59, BMI 32.0]

Participants focussed on physical activity and exercise as a preferred method to manage body weight and improve physical appearance. Their concept of exercise was often narrow, with use of local gym's routinely referred to but other forms of physical activity such as walking or participating in sports rarely discussed. The focus for physical activity was centred on the gym

environment which was portrayed in a negative context by some due to their body consciousness.

Attendance at a gym was seen as daunting and uncomfortable with interview participants describing the gym as an environment dominated by physically superior men and even a place where bullying may take place. Their perception of the gym environment was that it was the domain of athletic, muscular men who would be critical of men who were overweight or not as physically conditioned. Within the following interview extract Sam's worry is akin to a child feeling vulnerable in a school environment with concerns of being bullied;

> *"…you've got men who probably just don't want it and are a bit dubious about going to a gym… I think a lot of men think of a gym and they go there with a bit of a belly and it's sort of full of men with muscles and… they think they might get stared at and maybe picked on or something."* [Sam, 31, BMI 31.0]

Low levels of confidence and high levels of body-consciousness were evident within the interview with Mark who stated how he stopped attending a local gym during his lunch break due to concerns that there may be other people he knew attending at the same time. His sense of embarrassment and low confidence is highlighted when he describes *"not being confident on all the equipmen*t" and finally the phrase *"I'm sure they don't want to see me*

sweating buckets" is one of wishing to protect other people from the unpleasant sight of him exercising and sweating profusely;

> *"Well I mean there's always a few other people in (the gym) at dinner time when I went but it's sort of like, I'm not so bothered about a few people but then there might be people that I actually know and I'm not confident on all the equipment, I'm not, I'm sure they don't want to see me sweating buckets…."* [Mark, 39, BMI 35.1]

One participant who had previously suffered two heart attacks explained how his occupational therapist had informed him about a local exercise on referral scheme that he could access via his GP. This particular individual's low confidence was an obvious barrier to successfully pursuing this opportunity for increased physical activity and health improvement;

> *'…I mean if you are go into a gym you walk in everybody's like an A-frame…and you walk in, you've got a beer belly and whatever else, and your arms are flappy and you think… so, yeah it would definitely put me off.'* [Trevor, 55, BMI 40.5]

Whilst the main focus on physical activity participation was to achieve improved physical appearance, some also employed this strategy as a direct method to improve emotional wellbeing and confidence. Tony gave an emotional recollection of childhood experiences of bulling at school. He had taken up weight lifting as a method to increase his body size in adulthood,

but also acknowledged that his body composition and diet were not as healthy as they may be. For this individual however, body size was seen as a way to improve self-confidence and a way to exhibit strength and assertiveness as a deterrent to people who may be aggressive towards him, combating the fears he developed from his childhood bullying experiences. Whilst he desired his body size to be derived from the development of muscle mass, he acknowledged that the main aim was to be *"big"* rather than necessarily to be healthy;

> *Tony: "…I've been bullied a lot at certain hours, younger if it has to go back from like that and like that in people, you say, you know, you're a- a s- strong kid but you didn't like confrontation and you never used to like sticking up for yourself. And now that I'm older, and I've grown confidence where I could probably speak my mind depending on circumstances. I just like to feel like I have that certain strength that say, for an example, I'd like to be able to defend myself if like someone who came across and try to move me in a string or sort of thing. I've got that bit of strength to defend myself.*
>
> *Interviewer: "Okay. So, it's very much then that you pump the weights and gives you some strength, gives you a physical appearance as well?"*
>
> *Tony: "Probably, to be not scared of-- what I know from like, 'Oh, we won't try mock him. He looks quite broad and looks after himself'.*

We'll probably--. arms give the appearance, physique, or he looks after himself but like he's not, I don't want to be looked at as to be feared, but at the same time, enough to not be mocked or something like that, in a sense, if you can get me." [Tony, 24, BMI 27.3]

Lack of confidence and embarrassment about body weight and shape was raised by a number of participants as a reason for low participation in weight management programmes amongst men. Some felt that men would be self-conscious and embarrassed to attend such groups because they would have to be weighed in front of others;

"..I think it's a bit of confidence with some men. They don't like to get their kit off and err, with a big belly hanging out." [Sam, 31, BMI 31.0]

The data collected from the interviews conducted demonstrates that men are highly self-conscious about their body weight and physical appearance. Being overweight or obese was portrayed negatively with men comparing themselves to other men and often describing their body shape in a negative and inferior way. This negative self-image leads to low body confidence and low self-esteem which is a barrier to participating in physical activity opportunities that traditionally appeal to men.

4.3.1.2 Health Literacy and Influence on Individual Choice

As part of the research I wanted to explore the understandings of what contributed to a healthy lifestyle amongst men. During the early part of

interviews I used an open question to begin dialogue on health, but avoided specifically referring to any specific contributory factor in order to give participants the opportunity to inform me of how they viewed their current health status and what may contribute to it without biasing their response. The question *"Tell me about your health at the moment"* was regularly met with men talking about their body weight, diet and physical activity levels showing that participants felt these to be important to an individual's general health and wellbeing. It became apparent throughout interviews that many of the men interviewed aspired to lead a healthy lifestyle in terms of their diet, physical activity levels, alcohol consumption and smoking status, however they commonly described being unable to adhere to these behaviours consistently due to a variety of factors that are described later within this chapter. Despite often being unable to fully adhere to what they described as a healthy lifestyle, they provided accounts which demonstrated their understanding of lifestyle behaviours that impact on health which focussed on diet and physical activity levels.

I explored current dietary habits by asking participants to describe a typical day's dietary intake and then probed to understand the reasons for their particular dietary choices. A number of men interviewed demonstrated awareness and application of nutritional guidelines and recommendations. Frank provided the example of saturated fats and how he attempted to avoid them due to their damaging impact on health;

"..keep off them saturated fats an' all, that destroys ya." [Frank, 59, BMI 32].

Awareness of public health messages and campaigns was evident within the interviews, with some participants demonstrating understanding and application of the '5-a-day' campaign and other nutritional guidelines such as the need to reduce salt and sugar consumption. Evidence of such health literacy led to practical implementation by participants who provided examples of making small but realistic and sustainable changes to their diet which has been promoted as a method of health behaviour change in recent years within the Department of Health's 'Change for Life' social marketing campaign;

"you wanna take 5-a-day basically it's been proven that it does your body very good and that's what we, you know, we aim to do." [Neil, 44, BMI 27.8].

"Well obviously I know that, yes, I'm probably better off eating apples and oranges and your 5-a-day sort of stuff, yeah I'm aware that you should probably eat that. I'm not saying I don't eat it, I mean I do, I probably just don't eat enough of it as such" [John, 46, BMI 32.1].

"…ya think bloody hell all the sugar and the salt in this and that, an, an I 'ant got a sweet tooth but I think why am I, if I ate that, that's got about ten spoon fulls of sugar in it even though it's only a bloody

biscuit, ya think well I'm eating biscuits quite often. I might as well have a spoonful of sugar in. So I don't do it, so I've stopped doing it a, and then ya look, then you take note of salt and the risk to heart conditions and everything." [Dean, 55, BMI 30.2].

James provided a description of changes made to his diet in order to manage body weight. His description shows awareness and application of a number of nutritional areas and how he has applied this understanding in a practical context to his dietary choices. Evident within his interview is the understanding of nutritional guidelines such as the benefits of reduced dietary fat content and increased vegetable consumption. The constituent make-up of the meal he describes in the interview extract below is one which aligns to current nutritional recommendations in terms of macro and micronutrient components by containing a source of complex carbohydrate, lean sources of protein and vegetables containing fibre, vitamins and minerals. It is evident that James has applied this understanding to substitute calorific meals containing high levels of dietary fat, and low levels of vegetables with lower calorie alternatives and closer alignment with nutritional recommendations, for example substituting sausage and chips with rice and fish. Inconvenience and time limitations was often provided as reasons for being unable to adhere to a healthy diet, but in this example James has successfully found ways of increasing vegetable consumption in a time efficient manner by using frozen microwavable bags of pre-prepared vegetables. There is a need for satiety within his description which was often an issue for men who had previously or were currently attempting to lose

weight. He describes how he uses vegetables as a method to *"fill you up"* which is mentioned twice within this paragraph and is important to this individual whilst still achieving the benefits of reduced calorie consumption;

> *"I never used to eat bugger all fruit and veg really because obviously if you're having sausage, egg and chips for tea or summat stupid like that like you aint getting any of that whereas if you're going home now you think right I'm having that much rice, a piece of fish, I'm gonna stock all the rest of it up with veg like broccoli, carrots and cauliflower because there's newt in them and they fill you up… I buy them steam bags and all for the microwave, them frozen ones, stick them in the microwave for three and a half minutes. They're quite good because they're just the right amount in them so when you done your fish and your rice or your chicken or whatever you're having, stick that on the side of it just fills you up that bit more."* [James, 31, BMI 30.3]

Whilst many participants articulated the health benefits of eating a balanced diet and demonstrated basic nutritional understanding, it was common for them to emphasise the requirement for small, simple changes to food intake, rather than following a *"strict"* diet. Men often constructed the concept of a *"diet"* in a negative way, relating it to the requirement to deprive themselves of food which they enjoyed or something that would *"rule their life".* There was a preference amongst those interviewed to make moderate dietary change, often described as *"cutting down"* rather than *"cutting out".* Will, a 32 year old hospital switchboard operator spoke at length about his desire to

improve his diet, but not at the sacrifice of enjoyment of food. In the following interview extract it is noticeable how he articulates his desires to reduce consumption of food containing high levels of sugar (in this example chocolate), but how he also manages to justify continued consumption of this, albeit in a reduced way. He describes how complete abstinence of foods he enjoys would lead to him being *"miserable"* and his aim is to continue enjoying such foods but with an approach that allows him to do so without feeling guilty;

> *"I'm not gonna make myself miserable by denying me self stuff that I enjoy eating ya know, like chocolate. Most people like chocolate but if I cut down on the amount of chocolate and maybe instead of bringin' a chocolate bar for me lunch bringin' something else that's not chocolate, yeah. And then when I do have chocolate I don't feel as bad because I've not been havin' as much, if that makes sense at all? Cuttin' down so it means because I've cut down a little bit I can still have a little bit as well."* [Will, 32, BMI 28.7]

Neil, a 44 year old refuse collection worker also provides an account of how he aimed to improve his diet to achieve long term sustainable weight loss whilst still enjoying *"treats"* which would not be permitted if following what he termed a *"strict diet regime".* This example reinforces the understanding participants held towards the health benefits that can be achieved through adopting a balanced diet, rather than strict abstinence from certain foods or food groups which they understood should only be consumed in moderation;

"I still wanna have a few little treats you know, if we go out to the cinema and that, I still wanna be able to have a Coca Cola and, and go out to the pub I still want to be able to have a pint of beer, maybe a steak you know, things like that and I feel as though if you wanna lose it (weight) quick you can't have them sort of things because you're cheating yourself so, but I feel long term and then you know, ya not, it's not ruling your life. [Neil, 44, BMI 27.8]

In addition to diet, physical activity and exercise were commonly identified by participants' as an important contributory factor to health. The following interview extract illustrates one participant description of why he felt physical activity was important, seeing it as a way of avoiding illness as well as maintaining vitality into later life;

"I don't want to suffer illness problems basically, that's what I don't want to do and I, you know, and obviously we all do suffer problems now and again and, you know, with our bodies but I don't wanna, to self-inflict with err issues if I can avoid it like, you know, obviously carrying too much weight, things like that you know. I want to keep myself pretty, you know, fit and nimble for my own personal reasons as well." [Neil, 44, BMI 27.8]

Other participants also recognised how changes in activity levels, often related to changes in occupation had resulted in weight gain, or improved wellbeing when employed in more physically active roles;

> *"I know I've put some weight on over the years due to probably not being so active in my work role more than anything"* [John, 46, BMI 32.1]

> *"I've had loads of different jobs some of 'em more active than others and I've noticed that I do tend to feel fitter and healthier when I'm doing an active job as opposed to one where I'm not moving around so much."* [Will, 32, BMI 28.7]

4.3.1.3 Attribution and Agency

With obesity being regarded as a complex issue spanning environmental, biological, economic and individual determinants, it was important for this research to help understand how men attributed their health and body weight, to what level they felt they were able to influence this and to what extent they felt empowered to do so. Throughout interviews men commonly attributed health to their individual lifestyle choices, making direct correlation to how they live their lives and health outcomes. Some gave accounts of how their body weight and health were able to be managed through their own behaviours and choices. Whilst managing a healthy body weight through eating a healthy diet and regular physical activity was widely accepted as a

desirable thing to do, many described being unable to achieve this through a lack of intrinsic motivation.

In the following example, Sam explains how he felt that whilst remaining healthy was his personal responsibility and largely within his control, he found it difficult to adhere to this because of low levels of motivation, regarding himself as the main barrier due to his own *"laziness";*

> *"…it was back to that bit of ya not, not havin' that kick up the arse to do it. I think it was just me, yeah, me just bein' lazy I think."* [Sam, 31, BMI 31.0]

There is an interesting conflict within this interview extract. The second part of the extract clearly shows how Sam identifies himself as the barrier to achieving the desired behaviours and weight loss by describing the problem as *"himself being lazy".* However, the previous sentence portrays the need for an external motivational force to be present, in this example described as *"that kick up the arse".* This alludes to the view that this individual is seeking motivation to be provided to him by someone or something external to himself which is currently lacking. When finally positioning himself as the main barrier and referring to his personal motivation, the language is hesitant and the term *"I think"* is used twice within the same sentence showing a reluctance to fully accept that the main barrier to weight loss is himself. This also demonstrates that whilst men perceived themselves as having control

over their lifestyle choices and body weight, they may still require external sources of motivation and support in order to achieve behaviour change.

It was common for those interviewed to have made previous weight loss attempts. Accounts of this demonstrated a preference for men to look for weight management approaches in isolation rather than seeking support, guidance or help and again placed the responsibility for body weight with themselves. However, such accounts followed a common pattern of initial weight loss success followed by weight regain. The following account from Patrick shows him reflecting on a previous weight loss attempt. Whilst his account shows how he initially attributes his early weight loss success to his own ability to control his dietary intake, make lifestyle changes and careful planning, he later subconsciously identifies food availability as a major barrier to his continued adherence to a healthy diet. He alludes to the fact that he is now finding his dietary regime *"a bit boring"* indicating that his motivation for long term adherence is reducing, however he doesn't recognise that readily available and accessible high calorific food as a structural factor and a potential reason for him regressing to previous habits;

> *"Because I know I could do it if I'm, because I've done it on the wagons before where I've cut down. I've said to [colleagues name removed] when he used to work with me and I said I'm going to lose some weight. I ate healthy you know, did all my own pack up, the whole lot and once a week I'd treat myself to a cream cake and we used to get them from one of the butchers full of apples and stuff, full*

of synthetic cream and all and I'd have that but that's all I has all week, just that one cake and I kept, and I did start losing weight and that and [colleagues name removed] says you have kept to it and all and I said well yeah and all, I say, I say but it's getting bit boring now, I get bored of it. I think that's what the problem is and you think I could just see some fish and chips or just walk past the chippy where it's all bad for you and that but it's like, oh well get a bag of chips even though I don't eat a lot of chips…" [Patrick, 51, BMI 37.8]

One of the interesting elements of this extract is how Patrick described eating a *"bag of chips even though I don't eat a lot of chips".* This infers that the consumption of such food was largely driven by the ease of availability rather than the desire for that particular food itself, or hunger. Patrick however does not acknowledge the availability of such high calorific foods as the trigger for making these choices, instead attributing this decision to his personal levels of motivation and referring to boredom as the main trigger.

Whilst the majority of men interviewed attributed their health and body weight to their own behaviour and lifestyle choices, there were examples of economic influences on lifestyle choices and one participant who expressed strong views around the pre-determined biological disposition of health.

There were mixed views on the cost of healthy eating with some participants stating that it was more expensive to eat a healthy diet and others claiming

the opposite. James described why it was financially more cost effective to eat a diet which may be deemed as less healthy;

> *"So if you have sausage, chips and beans it cost you hardly anything, whereas if you're going and havin chicken breast, rice and whatever sauce and vegetables it'll probably cost you about four pounds just for your own meal, whereas that other one has probably cost you less than a pound, for beans, couple of sausages and a sack of taters you know you can buy a pound for a sack of taters so it's cost you thirty, forty pence in taters it's a massive difference and that's why I think it's wrong I think that all, fast quick fattening food I recon it should be expensive. I recon the healthy stuff should be lower because it be more incentive for people to eat a lot healthier."* [James, 31, BMI 31.3]

In this statement James not only provides examples of how an unhealthy meal (in this example sausage, baked beans and chips) can be cheaper than more healthy options, he also describes how it would be an incentive for people to choose healthier options if unhealthy foods were more costly. With this statement he is identifying structural barriers, in this case economic cost, to making healthier food choices rather than attributing food consumption to individual choice alone.

In other interviews however participants gave examples of how they had improved their dietary choices and physical activity levels due to the expense of certain convenience foods and the cost of travel. Examples of this were

provided by Dale who described reducing the number of takeaways he and his partner were ordering each week and had also started cycling to work. Whist his primary reasons for making these changes were as a method of weight management he equally recognises the financial benefits;

> *"Err, well no I got used to the car so I could come in the car, I used to come in the car before. I'm piling a bit of weight on now and erm, yeah could do with biking to work. It, financial reasons as well… it obviously, it's a lot cheaper biking to work"* [Dale, 33, BMI 28.5]

> *"Me personally it was because we was eating far too many and I was getting' sick of all the take-aways erm, and the Misses noticed that financially as well. Bloody hell where's this money gone, where's that gone? I'm not being funny but five take-aways last week look that's why, so. But the, the some of it, I mean if we had gone for a kebab that's, kebab was a prime example. I'd sit there afterwards and look at kebab box and it was just, just grease and fat especially when it's dried out and it's just that, that's quite disgusting actually. I mean I just ate that, so.* [Dale, 33, BMI 28.5]

The expense of eating 'take-a-way' food was also identified as a reason for them to be consumed less frequently by Paul indicating that price of food was a driver for dietary choice;

Interviewer: "So erm, do you ever have take-a-ways and things like that?"

Paul: "Occasionally, not really. Once a m', once a month or something… KFC or Pizza Hut or summat but not, not that bothered. Too expensive aren't they." [Paul, 45, BMI 33.2]

In stark contrast Rick, a 58 year old refuse collection worker, expressed strong views about the pre-determination of health and ultimate mortality and attributed this to biological factors;

"No, no, no its like I said mate, I, I really don't think that errm whether you smoke or whether you drink heavy or whether you eat heavy I, I don't see anything attributing to death only that the day you're born you are allotted n' you will die on that day that's given to you, full stop." [Rick, 58, BMI 30.9]

This interview raised a number of other factors which the participant attributed to health and body weight, all of which were rooted in a biological and genetic context rather than behavioural and attributes illness and disease largely to factors beyond an individual's control;

"I think if your family suffered from heart trouble, you'll suffer from it. I think if there's cancer in the family there's a good chance you'll suffer from cancer. [Rick, 58, BMI 30.9]

However, despite Rick's strong and opposing viewpoint compared to the majority of participants there was contradiction within his interview. Claims that nothing impacts on an individuals mortality were later contradicted as he identified smoking as a possible form of health harming behaviour, showing that he did attribute health and longevity with lifestyle habits to at least some degree.

4.4 Important Relationships

Data analysis identified a number of relationships as having significant influence on participants, their lifestyle behaviours and their attitudes towards health and their own body weight. This theme has been divided into three additional sub-themes which I will describe in detail.

4.4.1 Family: Past, Present and Future

Men interviewed often described having family and home lives that were busy, stressful and sometimes chaotic. The typical participant was married with children. Both adults in the family would often work and have to balance employment with the needs of children and home life. Many described how busy they felt their lives were, leaving little time for themselves;

> *"Ok so the, the, the time being you know you're working full time, you're up early you get back home, you've got three kids to sort out they all need feeding and tea… .Yeah there's always shopping to do,*

you have to go to the shop everyday near enough…, it's bedlam…" [James, 31, BMI 30.3]

"we lead a busy lifestyle and that, so the bit of free time we get is obviously, you know, sometimes your health is the last thing on your mind really." [Neil, 44, BMI 27.8]

Dale, a 33 year old hospital housekeeper, provided an account of how motivation to prepare and cook meals is compromised due to busy home schedules which results in foods of convenience being chosen. This was common within interviews conducted, with busy home schedules often provided as a reason for choosing convenience foods;

"I mean having two young kids, obviously they come first and right, we'll bath them and get them in bed and by that time it's half past seven, eight o'clock and ya think I can't be bothered to go into the kitchen now and bloody stick something on the George Foreman or something, let's just ring a take-away…" [Dale, 33, BMI 28.5]

Family members were seen as being both a motivator for lifestyle change but also a barrier. Some gave descriptions of how their wives or partners were keen to lose weight and so they were providing support to encourage and motivate each other as they made efforts to eat a healthier diet;

"…basically we sort of doing it together and just err, for our own, what would you say, our own wellbeing." [Neil, 44, BMI 27.8]

Having children was a catalyst and motivating factor to review health and lifestyle choices, with particular focus on long term health. Children and grandchildren were used as a motivational source in terms of parents being able to live long enough to see their children and grandchildren grow;

"…you see I've got a four year old daughter, I'm 51. I would like to see my daughters 21st Birthday. I would love to see.., I've got two other kids that are older, they've had their 21st birthdays but I would still love to see her have her 21st birthday… yes I'd love to be around by then, yes as long as I've got my health and can still walk". [Patrick, 51, BMI 37.8]

"…my main aim is to make sure I see grand kids like, you know what I mean, age wise you know what I mean. It might sound a bit of a stupid thing to say or whatever but no, I definitely want to be here for grandkids… I don't want to be one of them grandparents like one set of my grandparents they dies when by time I was like seven like, so I don't really remember them, but err, I think it's important to be there for that sort of thing and I need to start and look after myself now rather than when I get to fifty…" [James, 31, BMI 30.3]

Ben, a 28 year old refuse collection worker, provided an emotional account of a recent relationship breakdown and how this led to him becoming a heavy alcohol user. He recognised he was at risk of harming his long term health and had made recent conscious efforts to lose weight and improve fitness and diet. In the interview extract below he identifies both the short and long term benefits of leading a healthier lifestyle with motivation arising from the desire to be an active and involved father in the short term, whilst improving longevity in the long term;

> *"I just used to be asleep on the sofa hungover all the time, they did, they (his children) deserve better, they wanna do more with their Dad ya know and that's and that's another reason I wanna spend more time with them and you just, I do do thing, I do do things with em but it's just in the long run obviously I'm not getting any er younger in the long run and they'll want me around longer wont they. I don't wanna be drinking and eating myself into an early grave"* [Ben, 28, BMI 27.6]

But family involvement could also been perceived as unwanted and de-motivating. Patrick disliked interference from his immediate family, perceiving this as an annoyance and described how pressure from them was less likely to encourage him to change his lifestyle;

> *"Cause it's like my kids saying oh Dad you should lose this (body weight), Dad you should do and I think the nagging gets on me nerves so I just say, I blank it. I just blank it and wipe it out and I thought shut*

up go away, you know… People having a go just makes me say, no chance, you'll do it in your own good time." [Patrick, 51, BMI 37.8]

Parental influences from childhood were also apparent within interviews with a number of participants providing reflective accounts of eating habits and diet during childhood. Patrick told of how he was *"made"* to eat what his parents provided at meal times, whether he enjoyed the food served or not;

"…like when we was kids we was made to eat it… That's what you did. You, what was ever on your plate you ate it… I had to eat it. Even stuff you didn't like. See I had sprouts and things like that, you got them put on your plate and you, you had got, you got made to eat it." [Patrick, 51, BMI 37.8]

Dean also reflected on his childhood meal times and told of the large portion sizes his mother would serve and some of the unhealthy food cooking practices that he could recall with a degree of disbelief;

"…I remember her (his mother) doing what seemed to be at the time a great big pan of potatoes and there's th.., three children and me parents and ya know these what ar'.., what are say a scoop full, a table spoon full of mash potato, ya, ya used to have like an ice cream scooper didn't they put on ya plate. The, the children, and this was between the age of about eight to thirteen, me and me two sisters, we 'ad nine on the plate right. Me Dad, he'd have about ten, fourteen of

em and I'm not kiddin, pile, a pile of mash potatoes and then whatever they'd cooked then 'cause everything was cooked in fat as Scotch people do, or they did the bacon or sausages n' everything right… you'd av ya sausage, alright two, three but then the fat in the pan they'd pour it all over ya dinner and do ya know, 'there ya are do ya, that'll do ya good, it'll grease ya throat or put skin on ya back like velvet'… And we used to eat it, I'm thinking god make me sick now."
[Dean, 55, BMI 30.2]

Tony, a 24 year old hospital housekeeper, also reflected on his parents attitudes to feeding him as a child. He provided an account of his parents being concerned of how *"skinny"* he was and would therefore provide him with what he now considered to be excessive amounts of food to take to school and consume throughout the day;

Tony: "I'd have breakfast and then a lunch box of food. We ate in the taxi on our way there (to school). Snacks for break, like say, it's back then playtime and then at lunch out of either a salad on a Thursday, which I used to love, or I'd have me own lunch box again. And then I'd have another snack for play, as I say, playtime after lunch. And then I'd have another lunch box with food on the way back in the taxi. And then when I got home, I'd my tea or lunch, sorry, tea. And then I'd have supper…Yeah, I ate lots of food a day and I was, uh, a chubby lad."

Interviewer: "Why did they give you all that amount food?"

Tony: "Because I used to moan that, I was like once they started because they was worried about me being a skinny rake… And they wanted to plump me up, they, they, they always thought I was going to grow up a skinny rake, so they wanted to beef me up a bit… And then I just got used to it and then coming into my teens when I was 12, 13, erm, that's, that's when I obviously knowing I was a chubby lad and I didn't like it." [Tony, 24, BMI 27.3]

4.4.2 Doctor Knows Best

Healthcare professionals, in particular General Practitioners (GPs, often referred to as "the Doctor") were identified by those interviewed as individuals able to exert influence over their lifestyle behaviours. *"The Doctor"* was repeatedly identified as a significant person who men would take advice from and act upon the advice provided. Frank explained how he had recently been diagnosed with Type 2 Diabetes and the GP had referred him to an educational course to learn about how to self-manage this condition and was only attending because he had been instructed to do so by his GP;

Interviewer: "If the doctor hadn't of told you that and it was just up to you..?"

Frank: "I wouldn't have bothered." [Frank, 59, BMI 32]

Frank stated a number of times within his interview of how he *"had to"* visit the GP. His language infers a passive involvement in his engagement with health care and how he is attending for various appointments because he perceives it as mandated by the GP rather than him being actively involved in his health. There is a submissive tone in his language, whereby he describes *"having to go"* almost as though he is reluctantly abiding to an order, or following rules imposed upon him;

> *"Yeah I had to go in yeah, because every so often you have to go in don't ya… Cause you got to go every so often 'ant you now, you know every five years or so is it they have these check-ups…But I've got to go on a two hour course.."* [Frank, 59, BMI 32.0]

He later describes how he adheres to these appointments because of the status and knowledge of the GP, rather than a willingness to proactively manage his own health;

> *"..they (GP) supposed to know best aren't they, they supposed to know best"* [Frank, 59, BMI 32.0]

Men interviewed regarded the GP as someone who had significant levels of knowledge and expertise and if they were concerned enough to raise body weight as a health issue, they described how this would be significant enough to make them consider taking action. In the following interview

extract, Sam articulates the importance of a Doctors status and how they are likely to be listened to more than a lay person;

> *"..obviously because of a doctors position, they're there to look after people's health and obviously whatever ya doctor tells ya I think you take it in a bit don't ya. Anybody else like a friend or someone saying 'ah ya need to start eating healthy' – yeah whatever, what do you know."* [Sam, 31, BMI 31.0]

In other interviews participants provided accounts of how they have proactively sought information or advice from GPs about their weight. There was a pattern of missed opportunities for GPs to capitalise upon this. A number of examples were provided where participants had initiated conversation with their GP about body weight without there being any offer of guidance, support or follow-up;

> *Dale: "…they've got like a plasma screen that's got advertising on, it did say is your, if ya wanna quit smoking, if you wanna lose weight then there's err, please consult your doctor and then he can refer you somewhere and so that's sort of like, yeah even more so I'll mention something now but…"*
>
> *Interviewer: "Did, didn't follow it up with any information or referral elsewhere?"*

Dale: "No." [Dale, 33, BMI 28.5]

Participants were open to receiving advice and support from GPs, particularly after a recent health scare or diagnosis of a medical condition. One man expressed his dissatisfaction however with the medical profession who he felt had failed to offer him specialist dietary support after becoming diabetic. Eric worked within a hospital as a housekeeper and only found out that he could be referred to a dietician for specialist dietary advice after speaking with work colleagues. He was keen to receive help and guidance on how to manage his diabetes but felt that GPs weren't being proactive enough with patients to make onward referrals for such care;

"So not one of my doctors turn round to me and says I'm gonna refer you to a diabetic dietician. It's only because I was working here (hospital) right and I got to know departments and I got to know well there's a diabetic department within the hospital and then I got to find out that there was a dieticians, yeah all ya gotta do is see ya doctor and get ya doctor to be referred." [Eric, 54, BMI 31]

Whilst many men described how they would contemplate lifestyle changes if advised by a GP, there were also those who felt that too much emphasis was being placed onto body weight by health professionals. Eric was sceptical about a medical professional's conclusion that his weight was impacting both his diabetes and muscular-skeletal pain that he experienced;

"..according to the doctors not according to me, according to the doctors and the health people I've spoken to weight is controlling how my body's working at the moment. From my diabetes to my knees to my back to some of the aches and pains and I just in a roundabout way now I, I've got to the mind set where I wanna go in there, well I don't wanna go in there, I wanna go in there and say I'm perfectly ok, but I would love to go in there some point an' the doctor say 'well it's ya weight' and I'm thinking not, it's not the god damn weight ya know, it's something else.." [Eric, 54, BMI 31.1]

Trevor was equally sceptical about the willingness of medical professionals to attribute health problems to body weight. He had previously ruptured an Achilles tendon and used this as an example to illustrate his point, drawing on the fact that professional sports people also suffer such injuries therefore all physiological problems should not be attributed to body weight;

"I don't think anything to do with weight, umm, I don't think ruptured Achilles has a lot to do with weight either, umm, professional footballers who are 12 stone, pure athletes but it still happens to them." [Trevor, 55, BMI 40.5]

4.4.3 Being One of the Lads

Behaviour influenced by masculine social practices are evident within the data. Descriptions provided show how the purchasing of food and drink was often done as part of a team culture amongst work colleagues and forms a

togetherness sense of team dynamic and social bonding. The following interview extract demonstrates a *"buying in rounds"* culture which is a practice most commonly associated with buying alcoholic drinks in a pub environment, but is evident within the practices of buying drinks for colleagues during work hours. James identifies how this practice has led to him drinking a high number of high sugar energy drinks throughout a working day;

> *"…I have three lads out with me like, erm, whenever anybody went in to a shop they'd always bring three cans out and like 'here you are lads', one each like and then you'd go in so you'd buy one for everybody so you could end up with having four or five in a day"* [James, 31, BMI 30.3]

James went on to describe how every Friday he and his work colleagues would have *"breakfast day"* whereby the team would eat a fried breakfast together at a local roadside café. The significance of this weekly event had a sense of togetherness, being part of a team and camaraderie rather than the need to eat and had become a traditional weekly event that was looked forward to by this particular group. The choice of food however, which consisted of a traditional fried English breakfast is a high calorific option. When asked what the view of his colleagues would be if he decided to have a healthier food option, he alludes to the fact that it would likely be negatively commented on by colleagues and staff working in the café;

"I think you would probably get the rip, even the lasses at the café, they'd like rip the, they'd rip ya for it 'oh just havin a salad', ya come in the café and 'just havin a salad'. [James, 31, BMI 30.3]

The concept of *"buying in rounds"* and *"breakfast day"* was also described by another participant. Sam's description shows how the *"taking turns"* practice of buying food and drinks is commonplace, but that this is also a method of sharing and supporting others to buy food even if they cannot afford to do so due to lack of money at the time;

"It's like on err, Wednesday you get three for two pound (energy drinks) so I brought three and then the other lad, one of the others lad brought three as well so like was had two each 'cause there's three of us in a wagon. You do take it in turns like and then obviously if one of us aint got any money, 'cause tomorrow is breakfast day tomorrow, have full English fry-up so obviously if someone's short or haven't got any money you say 'oh I'll get it this week and you get it next week'." [Sam, 31, BMI 31.0]

There were also descriptions of men seeking emotional support from friends during difficult periods within their private lives, which ultimately led to adoption of unhealthy behaviours. This was most strongly apparent within the interview with Ben, a 28 year old refuse collection worker with a BMI at the time of the interview of 27.6. He gave a detailed account of how a relationship breakdown had resulted in him frequently visiting local pubs,

drinking increasing levels of alcohol and using this as a coping mechanism and method of escapism to survive the feelings of boredom and loneliness which he encountered;

> *"A lot of it was to take me mind of things and boredom… That was another on of it, boredom…obviously when everything that was go, gone on and stuff I want a fan of me own company so it's like I'm not sitting here thinking about things, it's kind of a way out, you know what I mean?"* [Ben, 28, BMI 27.6]

This statement shows how he required company to help him cope with the boredom he was experiencing and that the company he needed was found in the pub environment. He went on to describe how this in turn led to unhealthy food choices and comfort eating as a way to cope with low mood;

> *Interviewer: "..you're right it is junk, but why, why was you going for that food?"*
>
> *Ben: "Probably just (pause) self, I, I used to take, obviously it's nice but if I had it, it kinda just yeeeaaahhh! You know what I mean, gives you that (sigh), sound queer without saying that feel good factor because it is, it's just like, well this is nice one… After feeling shit and all that have a few of them and it's just, it's just yeah I'm gonna treat myself, fuck it."* [Ben, 28. BMI 27.6]

Within this interview Ben articulates how he went through a period of reflection on his lifestyle and made significant lifestyle change. He took up exercise at his local gym and was attending regularly with friends. He also significantly reduced his alcohol intake, whilst still attending his local pub to maintain social interaction. He describes how his friends have responded to these concerted efforts to reduce his alcohol intake and improve his diet and fitness. After initial pessimistic comments received from friends, he articulated how he now receives compliments about his determination and how others are quoted as being envious of his commitment and dedication to sustain such changes;

> *"It just has to be, for me it has to be self-motivated, that's how it has gotta be, or ya gir', or a mate or whatever it, it's how a ma', usually how a man works in'it, it's either self-motivated or ma, ya mate goes ahh fancy goin' down the gym… they've (other friends) actually come round and said we wish we could as well… so it kinda makes ya think yeah, cause his (a friend from the pub) misses says 'I wish you'd do the same, I wish you'd do it'.* [Ben, 28, BMI 27.6].

In the instance of Ben, he gave accounts of how he has improved his diet, reduced his alcohol consumption and increased his physical activity levels and ultimately found support from his friends, some of which now aspire to follow his example, a fact he was proud of. His lifestyle change has all been masculinised and framed with the context of fitness improvement and

strength gain however, rather than for weight management or health improvement.

4.5 Hegemonic Masculinity

Interviews discourse was heavily influenced throughout by the concept of hegemonic masculinity. Hegemonic masculine practices were commonplace within the participant's behaviour and had a profound and direct influence on a number of behavioural choices and approaches to weight management. Whilst the social construction of masculinity was a significant cross-cutting influence on all themes described within this chapter, the two main manifestations of this phenomenon are described by the following two distinct sub-themes.

4.5.1 "It's More of a Woman Thing" - Avoidance of Feminine Behaviour

Adherence to hegemonic masculinity by the rejection of adopting behaviours or taking part in activities that are perceived as feminine was highly evident within the data. The examples provided within section 4.4.3 of this chapter already highlight this, for example the decision by James to describe substituting a fried breakfast (a masculine food choice) for a salad (a feminine food choice) which may lead to ridicule, or the way that Ben found acceptance amongst his friends for leading a healthier lifestyle by framing this in terms of the pursuit of fitness and strength (masculine) rather than for weight loss (feminine). Other examples within the data are much starker, specifically on the views that men held towards attending weight management support groups or programmes.

Desire to manage a healthy body weight was evident throughout the data, however those interviewed, did not consider attendance at a weight management programme an approach that they would adopt. The overwhelming perception of weight management programmes was that they were a place where women and not men attend and that men who did attend were likely to be ridiculed for doing so;

> *"I don't sit there when I'm in a pub (laughing) with a mate 'oh ey up mate how you doing, ever thought about going to fat club or owt', it's not one of them things you discuss is it, it's more of a woman (laughing)… it's more of a woman thing, it's what they talk about.* [Mark, 39, BMI 35.1]

> *"you imagine you sign up, with all your mates and they go 'oh what are you up to tomorrow night?' Such and such, 'footballs on tele'. You go 'um, Slimming World and the Weight Watchers'… and you would get an almighty round of stick for it."* [Trevor, 55, BMI 40.5]

The notion of a weight management programme being *"a woman thing"* was reinforced further with participants making reference to popular television comedy shows whom, in recent years have stereotyped and ridiculed weight management programmes, further stigmatising such support services;

Trevor: "I don't know whether you would ever get away from the stigma or the image that is given about these weight watch clubs."

Interviewer: "Mmm, so where is that image stigma come from then?"

Trevor: "Probably sketch shows like Little Britain or something I would imagine." [Trevor, 55, BMI 40.5]

The stigma of attending a weight management programme went one step further in one participants' account who stated how he perceived more homosexual men to attend weight management programmes than heterosexual men, stating this was due to increased *"vanity"* amongst homosexual men, compared to heterosexual men. This distinguishing point was framed in a way whereby the participant had aligned homosexual men to femininity, in this instance attending a weight management programme and distanced heterosexual men from such behaviours such as vanity;

"..dare I say it and this has been brought home to me by me sister that, ya gonna think I'm weird when I say that, but there is getting to be more men who are homosexual who go to them clubs, because they have got the vanity side to them… more than the hetero's who really don't give a monkey's ten ti, nine times out of ten" [Dean, 55, BMI 30.2]

Men perceived there being little practical benefit in attending weight management programmes, describing them as a being ineffective and more of a social event rather than actively taking practical steps to address weight;

> *"Not my cup of tea sitting there with a load of women. Well I mean they don't actually do a lot do they, at these Slimming Worlds by the sounds of it. All they go to is they go and sit there, they weigh themselves and then they go home from what I've heard. Then it's like on the way home they'll usually get a Chinese or summat and treat themselves it not like, so you've spent three or four quid on going to this club where basically you sit in a room with loads of other people get weighed and then spoil yourself on the way home by having a Chinese or fish and chips or summat which is another five or six quid so you've spent a tenner and what, what have you achieved? You've just got yourself weighed. Just go to Boots and put 20p in the machine."* [Mark, 39, BMI 35.1]

From this statement we can see that Mark's view is firstly that weight management programmes are female dominated. Secondly his perception is one of a social gathering and finally there is the suggestion that it would be more cost effective and equally as effective to self-manage by monitoring your own body weight, demonstrating a preference for a self-management approach to weight management rather than the need for support.

Self-management as a preferred approach to weight management was observed in a number of interviews. Men maintained adherence to hegemonic masculinity by rejecting the need to what they deemed a feminised approach (i.e. attending weight management programmes) and instead described methods of self-management as the preferred approach in order to maintain hegemonic masculine traits such as independence and self-sufficiency;

> *"I don't have to ask them (weight management programmes) to tell me what to eat, I can go on, I can look at cook books, it's all over the internet…."* [Dean, 55, BMI 30.2]

> *"My misses used to go to Weight Watchers years ago and that like, but erm, na I'm not really, not really bothered about it, I've got some scales I can just weight myself there can't I"* [James, 31, BMI 30.3]

Whilst men did not describe weight loss or the desire to manage a healthy body weight as a feminine activity in its own right, their approaches to managing body weight and improving health were constructed in a way that maintained hegemonic masculinity. Those interviewed regularly identified physical activity as an approach to improve health and mange body weight. The focus however was regularly on attendance at gyms in the pursuit of physical fitness and strength rather than for weight loss or health improvement. Other examples of physical activity provided included martial arts (Karate and Judo), playing football and even firing a longbow. All these

examples are either traditionally male dominated pursuits or involve some form of combat. There was some, but far less emphasis on taking measures to include daily physical activity levels through lower intensity activities such as walking or active travel, showing that when choosing methods to increase physical activity levels men feel the need to masculinise their approach.

Men interviewed were highly unlikely to utilise weight management programmes to support weight loss efforts due to the perception of their female dominance and feminised stigma. Men preferred a self-management approach, in particular the adoption of masculine approaches to physical activity and exercise participation such as attendance at a local gym.

4.5.2 The Indestructible Breadwinner

Whilst the theme of hegemonic masculinity was evident throughout interviews and a key driver of perception and behaviours, one participant was able to articulate the social pressures that are placed on men to conform to hegemonic masculine practices. He makes connections between his upbringing and the need for men to be *"the boss".* Eric also draws attention to social norms that are imposed on children at a young age such as the toys that they are introduced to, and in adulthood work environments which are overtly masculine. The following interview extract encapsulates the theme of hegemonic masculinity and how it influences the behaviours of men;

> *Eric: "ya know we're, we're indestructible, we're the main wage earners, we go out we do this X amount of jobs that.."*

Interviewer: "Where does that come from, why are men like that?"

Eric: "It's, it's inbred, it's inbred because err, I don't know about ya-self or whatever but when I was growing up my dad was the boss, even though my, my mum worked virtually full time hours because my dad came in half an hour later than my mum did most days to his work ya know, he did longer hours. He was the main wage earner. He was the boss. He was the gaffer. He was ya know, it, it's ya don't cry over that, only women cry over that, ya don't do that only women do that. Stop bein' a sissy, stop being a girl, be a bloke, be a man, stand up. That sort of mentality and it sort of like say inbred. I mean even today right you, you still gettin' toys that are solely male, solely female and if you look at the solely male toys it's action man, cars etc, etc. Ya look at the female it's prams an' irons. I know because I buy 'em for me grandkids… Yeah its ya, ya, you're a man ya know. You've got a pain there – so go through it ya know. And of course, I say of course I mean I left home an', an' joined the army well that's even more of a man environment. Ya know, if ya can't go running off to somebody every time ya got an pain or whatever. Be a man, grow up." [Eric, 54, BMI 31.1]

This statement from Eric typifies the concept of hegemonic masculinity in terms of the necessity to reject behaviours that are socially accepted for women. His statement is littered with examples of *"what women do"* that he

describes as unacceptable for men to replicate such as expressing emotion through crying or showing signs of physical pain and discomfort. The overriding message within this statement is the need for men to be seen as *"indestructible"* and avoid showing any signs of physical or emotional vulnerability. The repeated inferences of what men should and should not do is a reconstruction of family practices he experienced during childhood where he describes a male dominated power dynamic within the family unit.

Family was identified as priority for many of those interviewed. Men were commonly pre-occupied with performing their perceived role as the *"family breadwinner"* in order to provide for family members;

> *"…obviously I think I'm the obviously the breadwinner. I go out and let em obviously, me going to work and wanting to let them do the things that they wanna do and have nice things…"* [Sam, 31, BMI 31.0]

This led to legitimisation of men neglecting their own health needs in preference of ensuring they provide for those around them allowing them to maintain their masculine identity of the *"indestructible breadwinner".* It was common for men to tell of how they had little time for consideration of their own wellbeing once they had taken care of other family members who were seen as priority. This was a barrier when it came to exercise participation or preparation of healthy foods, leading to choices of convenience;

"..because after you, you've looked after ya, you know your wife or girlfriend, then your family the you know all the other things, you come right down the scale don't you" [Neil, 44, BMI 27.8]

Despite reconstructing this attitude whereby men prioritised the needs of those around them above their own health in order to fulfil the masculine role of the family breadwinner, none had considered how they would successfully continue in this role should they witness a deterioration in their personal health. Whilst the men interviewed often explained their role as the main financial earner in the household, there was no evidence of men taking proactive measures to improve their health in order to ensure they are able to maintain their occupation and ability to work. There were examples however of the impact that poor health had on these men when their occupational status was jeopardised. This was encapsulated by Trevor who found his masculinity challenged whilst unable to work due to serious health problems. He explained how he returned to work earlier than advised following a heart attack due to the financial pressure he and his wife experienced whilst in receipt of statutory sick pay during his absence from work. His return to work led to a second heart attack and a further period of sickness absence. Trevor describes feelings of inadequacy and *"letting people down"* due to being unable to work and becoming financially dependent on his wife as the main source of household income;

"it does make you feel a bit inadequate to be fair… Cause you are not providing, you're not pulling your weight, but, I mean she (his wife)

was very understanding about it. Deep down when she was going to work six, seven days a week and she is doing 12 hours a day… But yeah, it does, it does make you feel as though you are letting people down. [Trevor, 55, BMI 40.5]

4.6 Chapter Summary

The in-depth interviews provided a rich insight into the influencing forces on attitudes and behaviours amongst overweight or obese adult men from routine and manual occupational demographics who have never attended any form of structure weight management programme. High levels of body consciousness and low levels of self-esteem are apparent within the data and provide a significant barrier to these men accessing support services or participating in regular exercise and physical activity. Participation in exercise and physical activity was a preferred method to manage body weight, change body shape and improve health; however men often viewed attendance at a gym facility as the main way to achieve this which was problematic due to a perception and stigma associated with such an environment. Those interviewed were in the main aware of public health messages regarding diet and physical activity which they link to body weight and health. This data demonstrates that these men framed the concept of dieting in a negative context, associating it with deprivation of the enjoyment of certain foods, inflexible and restrictive. These men preferred a “cut down not cut out” approach to diet modification, often aiming for a balanced approach which allowed them to enjoy foods they considered to be unhealthy in moderation, rather than never at all which they felt was unrealistic and

unappealing. Men attribute lifestyle behaviours as largely within their control, however few were able to demonstrate long term adherence to lifestyle changes or weight management. Many barriers to healthy lifestyle adherence were identified within the data which are rooted in intrapersonal relationships and social structures.

GPs were identified as having a significant influence on the behaviours of those interviewed. GPs were regarded as knowledgeable experts whose advice is carefully considered. Examples of men proactively seeking GPs advice about their weight are evident, but were not followed-up by the medical professional involved indicating potential missed opportunities for health promotion advice to be provided. The influence of family members was strong within this data. There are examples of men and their wives or partners striving to achieve lifestyle change and weight loss together, although there are also cases of rebellion whereby men accused family members of *"nagging".* The desire to improve longevity in order to experience children growing up and grandchildren was a motivation for men. Childhood eating habits imposed by their own parents are shown to have had significant influence on their experiences growing up and in adulthood.

Reproduction and adherence to social norms are apparent throughout the data and is a cross cutting theme which influences men's attitudes to body weight, health and weight management programmes. Adherence to hegemonic masculine practices are striking throughout this data, however there are examples which also go against what may be deemed traditional

masculine values such as the desire to live a healthy lifestyle and manage a healthy body weight for both physical and psychological benefits. They deemed attendance at weight management programmes as a predominantly feminine activity and instead showed preference for self-management approaches. Adherence to hegemonic masculinity was maintained through the role of the ‘indestructible breadwinner’, enabling men to justify why their personal health needs were often neglected, however none had considered the consequences and impact on their ability to fulfil this perceived role should their health deteriorate and the likely impact on their family members who they sought to protect and provide for.

CHAPTER 5. FRONT LINE EXPERIENCE AND STRATEGIC VIEWPOINT

5.1 Introduction

It was identified during the interviews with men reported in chapter 4 that the GP was one professional who had influence to initiate behaviour change within this group. Therefore, it was decided that interviewing a number of GPs and exploring their approaches to addressing weight management would be insightful. In turn, throughout interviews with GPs a number of strategic commissioning decisions were identified as significant, hence it was important to investigate the strategic viewpoint further. To do this I recruited a senior public health leader, plus a representative from Public Health England.

This chapter commences with a description of the various stakeholders recruited for interview. It then presents the findings from the data collected through semi-structured interviews which is organised into three overarching themes: Raising the issue; Intervening to address weight management and 'Women are from Venus, men are from Mars'.

5.2 Professionals Characteristics

A total of 12 interviews took place with the following professionals:

- 10 GPs
- A local authority senior public health leader
- A representative from Public Heath England's Diet and Obesity Division

Local GPs were identified as an important stakeholder due to the findings discussed in chapter 4 in relation to the influence they posess on men's lifestyle choices and decisions. It was felt important therefore to investigate the views that GPs have towards addressing weight management with men, approaches they take and confidence in dealing with this issue. GPs were purposively sampled to ensure that a mix of male and female GPs were included, with a varying number of years general practice experience, from both rural and urban practices (table 6). A local authority senior public health leader from the Midlands region was recruited to the study to provide a local strategic and commissioning perspective. It was identified as important for this research to explore current local strategies aiming to address obesity, how the needs of men were considered and how this influenced commissioning of health improvement services. Finally, a representative from Public Health England's Diet and Obesity Division was interviewed to investigate the national strategic view of addressing obesity in men.

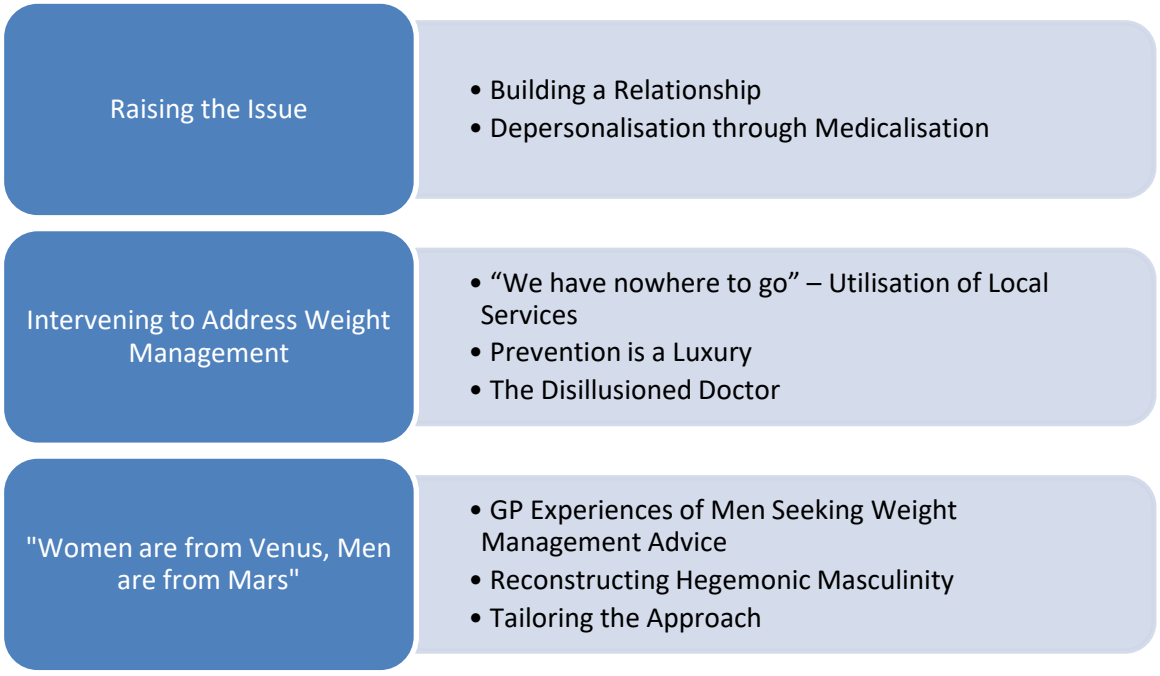
Table 6. GPs recruited to the study

Pseudonym Identity	Gender	Ethnicity	GP Experience (Years)	Employment Status (GP Partner/Salaried/Locum)	Rural or Urban Practice	Practice Population Size (Number Registered Patients)
Dr A	Male	White British	25-30	Locum	Rural	16000-17000
Dr B	Female	White British	5-10	Partner	Rural	5000-6000
Dr C	Male	White British	10-15	Partner	Rural	5000-6000
Dr D	Male	White British	25-30	Partner	Urban	11000-12000
Dr E	Male	White British	30+	Locum	Urban	7000-8000
Dr F	Female	Asian	10-15	Partner	Urban	15000-16000
Dr G	Male	African	0-5	Partner	Urban	11000-12000
Dr H	Female	White British	20-25	Locum	Urban	7000-8000
Dr I	Female	White British	0-5	Salaried	Rural	12000-13000
Dr J	Female	Asian	0-5	Partner	Rural	10000-11000

5.3 Findings

Through the data analysis methods described during chapter 3, three main themes were identified. Figure 10 illustrates how the first theme (Raising the Issue) is comprised of two sub-themes. The second and third themes (Intervening to Address Weight Management and 'Women are from Venus, Men are from Mars') are each divided into three additional sub-themes. The themes and sub-themes are described in detail throughout the rest of this chapter. Consistent with chapter 4, I have used quotations from interviews to illustrate the findings being described.

Figure 10. Themes and sub-themes



5.3.1 Raising the Issue

GPs were appreciative of the impact of bodyweight on health and the importance that managing a healthy body weight has on a patient's wellbeing.

A key line of enquiry in this research was to further understand how GPs raised the issue of body weight with men, what approaches they took towards patient weight management with this group and how these differed, if at all, between men and women.

This theme consists of two further sub-themes which will now be discussed individually in detail.

5.3.1.1 Sub theme: Building a Relationship

Throughout interviews with GPs the overwhelming method employed to raise and address issues of body weight and weight management with men was highly personalised to the individual. Many examples were provided where GPs felt it important to build a relationship with their patient initially so that they had developed enough trust with their patient before raising the issues of body weight. This was described in great detail by Dr C who was concerned about the potential for patients to be *"put off"* from visiting the GP if the issue of body weight was raised in an insensitive manner;

> *"They've got to have that trust in you that they know you know what you're talking about. Um, and you know that you're not just telling*

them stuff because it's written on a computer page that you've got to turn in, you've got to build that relationship first" [Dr C, male]

Dr C was particularly concerned about developing relationships with men who he identified as infrequent attenders to the GP surgery. He was concerned that raising certain lifestyle related issues such as body weight and smoking at the wrong moment could deter men from returning and engaging with medical services;

"So if they're coming in to talk about their blood pressure, for me, although weight is an important factor in that, um, far more important that I get a good bond with him, that I get him to come back for that blood pressure monitoring…. You want to get them coming back and engaging with their disease process, and then you can start drip feeding the message about obesity and about weight." [Dr C, male]

The concerns that Dr C had about the risk of disengaging patients were echoed by others. Dr D described men from routine and manual occupational backgrounds as a *"hard group to reach"* and explained how he offers them a friendly welcome and employs a comforting approach in attempts to encourage them to engage with the GP;

"..if they come and see me I do actually tell them quite often, it's quite nice to see them because we don't see them very often, they are a hard group to reach… And I, I do try and point out to them some of the

things they need to keep an eye on. Um, don't be frightened to come and ask, you can talk to me about it, it's fine." [Dr D, male]

GPs avoided generic comments about body weight and preferred to utilise clinical measures such as blood pressure, cholesterol, joint pain and blood sugar levels as a method to express the clinical risk that patients were facing due to an elevated BMI. It was common for GPs to initiate a discussion on risk factors contributing to an existing medical condition or symptom being faced by their patients;

"..it's more common for men to come with other problems or diabetes, that we discover they're diabetic or, or raised blood pressure. Um, and then it tends to be, uh, a GP who points out the link between the weight and the, the symptoms that they've got." [Dr E, male]

"…if a man comes in and he is overweight, he won't want to hear about his weight unless he's come with another problem that you relate back to it. And then that's how you can introduce it. So, if he comes in with pains in his knees that are, that you diagnose as due to arthritis, then you can talk about losing weight to lose the pressure on his knees because it's a logical step and so he can understand that." [Dr H, female]

Despite the concerns of many GPs that it was important to develop a relationship with the patient initially before they began to address body

weight, there were some who felt that modern day general practice did not allow such relationships to be developed over a period of time. Dr E described a perceived misconception over the assumption that GPs have close relationships with all their patients and explains that often he did not know the patient he was consulting. He also describes the way that patients wish to access general practice is one of convenience to the patient, alluding to the fact that patients value appointment times that fit around their daily schedule, rather than times that a particular GP is available to enable continuity of care;

> *"..there's a bit of a misconception that the GP knows the patients, even one, even one who's been there a long time. The way patients utilise surgeries tends to be, you know, 'I'll go when it's a time convenient for me'. So you might often don't know the patients particularly."* [Dr E, male]

Dr I elaborated on this point by reinforcing the notion that patients do not get the opportunity to access the same GP due to many GPs now choosing to work part time. They saw lack of GP availability and open access as a barrier to continuity of care from a single GP and viewed the traditional model of a family GP being out-dated. Because of this, their approach to addressing body weight was far more direct. They did not feel they had the time available to develop a relationship with patients and instead addressed the issue more directly;

"I think the way that the general practice is set up these days is it can be very challenging to maintain a relationship. Because patients doctor surf so they will see different people each time and that's not through their fault. It's through availability the fact that there are actually a few GP works part time. They may want to see a doctor on Thursday and the preferred one probably doesn't work. So, your traditional model of family GP looking after their patients is quite dated now… I know my patients who I see regularly but it's a very small proportion at the end of the day… And I, to be honest, I think that we're-I think that we can be a bit too mumbie pumbie with everybody. They know they're fat. They know that I know they're fat. So why are we just beating around the bush? It's my job to address the issues. And yes, it may- it may not be what they want to hear. But it has to be said. Because otherwise, I'm negligent in my role. It's my job to identify the problems, to promote health, to discuss weight loss. And if I'm not doing that 'cause I'm frightened of offending them, then I'm not doing my job properly. So quite frankly I don't have time for that nonsense."
[Dr I, female]

5.3.1.2 Sub theme: De-Personalisation Through Medicalisation

The GPs interviewed raised issues of body weight with patients when weight management would improve the patient's symptoms or clinical management of their condition. They were far less willing to raise body weight with patients in a primary prevention approach in the absence of symptoms that could be related to body weight and lifestyle factors.

The most frequent time for GPs to raise body weight with a patient was in response to clinical indicators which may be helped by weight management and lifestyle change. Dr I summarised the most common reasons for initiating a discussion about weight management which focussed on conditions such as hypertension, elevated cholesterol levels and pre-diabetes;

> *"I think probably the most common scenario is somebody that's coming with blood pressure or high cholesterol, um, or we found them to be pre-diabetes. Those are probably the three most common, um, routes that, you know, would involve a conversation around and lifestyle modifications, weight loss diets, exercise"* [Dr I, female]

Musculoskeletal pain was a common condition that GPs identified could be addressed through weight management and often initiated conversation about weight loss when patients complained of knee and back pain;

> *"…if it's a joint related problem, it's (weight management) more likely to be discussed or a musculoskeletal problem. So, you know, 'my back hurts' – well actually you need to lose weight."* [Dr D, male]

> *"And then for knee pain, back pain we say, uh, 'being overweight is not going to be helpful with this and, um, if you lose weight then quite a few of your problems can be dealt with'."* [Dr F, female]

A variety of clinical measures, recordings and tools were used by GPs as a method to lead into a conversation with patients about weight management and the benefits of weight loss. The Q-Risk tool was used by some GPs to quantify a patient's risk of suffering a heart attack, based on current lifestyle factors. GPs described how they used the Q-risk tool to provide their patients with a risk score and then initiated discussion to address lifestyle issues, including weight management with their patient. Dr F was a regular user of the Q-risk tool and provided a recent example of how they applied its use in a consultation with a patient who had a Q-risk score of 32 (32% probability of suffering a heart attack or stroke within the next ten years);

> *"So, I did, um, I had to speak and tell (the patient), 'so you can't change your um age, you can't change your gender, you can't change where you live, but other things which are affecting your risk are things which you can do something about yourself, like the controlling diabetes, hypertension. Uh I'm here to only to advise you and give you medications, but you need to work to control those and um, uh cholesterol-wise, again, and weight-wise, BMI wise, these are the things which you can alter in that equation to reduce your risk and weight-wise exercise diet and lots of things which you can do um to reduce your risk'.* [Dr F, female]

Blood pressure readings were commonly utilised by GPs to open conversation over body weight and weight management. Dr B described

how they attempted to quantify the reduction in hypertension measurement related to weight loss to make the concept understandable to patients;

> *"…for example, someone with high blood pressure, I might say to them 'it's really important to, to maintain a healthy weight because for every kilo you lose in weight your blood pressure will probably go down one or two points'…"* [Dr B, female]

Dr E found it helpful to refer to a BMI chart when addressing patients body weight and requirements for weight management;

> *"…you put up your BMI charts in there. You know, you got, uh, you know, green, overweight and then obese and I, and they're, I say 'you're, you're just in the red zone you know. Want to get you into the green'."* [Dr E, male]

The pattern of GPs using clinical measures and relevant tools to medicalise a patient's risk of further disease was an approach they found comfortable and believed patients found acceptable. Using a medical diagnosis or clinical indicator allowed them to legitimise introduction of a conversation about body weight and weight management. This approach of identifying a medical condition allowed the GP to de-personalise the issue of body weight, using the identified medical condition as the reason for initiating a conversation about weight management with a patient. This shows that whilst GPs often claimed to be comfortable and willing to address weight management with

patients they would only do so in a situation where a medical condition or measurement which could be managed through lifestyle change was evident.

GPs were far less likely to raise the issue of weight management during consultation with an otherwise healthy patient. They were reluctant to initiate a discussion about weight management with patients who were at risk of developing health conditions due to elevated BMI, with GPs believing that patients would not be motivated to make lifestyle changes until the issue of body weight became directly associated with an existing or newly diagnosed medical condition. The following interview extracts illustrate how the GPs feel it an ineffective approach to raise issues of body weight with patients unless there is a direct impact on their health. Within these extracts there is also a strong sense of victim blaming, with both GPs stating how the majority of people understand the health risks of being overweight or obese but make the choice to continue with current lifestyle behaviours. This alludes to the fact that the GPs are attributing their patient's lifestyle behaviours to individual choice, rather than considering wider social, economic and environmental factors that are known to contribute to obesity prevalence;

> *"…I have no doubt that the vast majority of people know that if they're fat it's bad for their health but there's very little motivation to do anything about it, until there's a problem. So, I think pure prevention is much more difficult."* [Dr B, female]

"…I think, they feel quite well and it's very, what 20-year-old is interested in how he may feel in 40 years? They're not… I think it would be extremely difficult 'cause everyone says, 'Oh I know I shouldn't smoke, but I do. I know I should eat sweets, but I do' and so I think it would be extremely challenging… So I don't know that bringing that any earlier would change anything really." [Dr I, female]

Examples of pro-active GP initiated weight management conversations before the onset of health conditions in a primary preventative approach was not evident within the data collected during this research. At the point where GPs raised weight management, patients had already witnessed a deterioration in health and weight management was being applied as an approach to manage an existing or long-term health condition, rather than to prevent the onset of disease.

5.3.2 Intervening to Address Weight Management

Whilst GPs often raised issues around weight management with patients as an approach to managing existing health conditions, I was interested to understand the approaches that GPs took towards supporting patients to manage a healthy body weight and what barriers they identified to this. In addition, I sought the views of both local and national stakeholders to gather data on the current strategic and commissioning approaches to addressing weight management specifically within men.

5.3.2.1 Sub Theme: "We have nowhere to go" – Provision and Utilisation of Local Services

GPs acknowledged that they had an important role within addressing obesity, but a number of challenges were articulated within interviews that resulted in their ability to directly support patients being restricted. GPs regularly described using onward referrals to other support services available in the local area that were able to provide additional advice to patients regarding weight management. However, the GPs interviewed had recently witnessed the decommissioning of several services which they had previously utilised for patient weight management support. Common examples provided by the GPs were access to three months free support at a local Weight Watchers group through a voucher scheme; access to GP exercise on prescription services whereby a GP could refer patients to a local leisure centres who had specially training fitness instructors to develop a safe and effective exercise programme for patients; and referrals to a local Health Trainer service which was a team of local support advisors trained in behaviour change techniques to help patients set realistic goals for lifestyle change and facilitate access to local services;

> *"…at the moment we have nowhere to go. In [location removed] we have nowhere to go… Um we used to be able to say go to Weight Watchers and here's you, you know, your first three months vouchers for it. Um, now we can't do that."* [Dr A, male]

"…we've referred to the, um, uh exercise on prescription scheme... and we have used, when they were around, heath trainers but they're not around anymore…" [Dr E, male]

"We have a GP referral scheme to the local gym. Um anyone above BMI above 30 and if they are willing to take it, they get free session, six sessions from our referral. Um, I'm not sure 'cause recently I heard that uh, there's no budget at it and they're stopping that scheme." [Dr F, female]

The decommissioning of interventions designed to support weight management and reduce obesity prevalence was discussed with the senior public health leader who described how the local authority had undertaken a spending review in light of recent financial restrictions;

"…obviously there's definitely some financial issues. Like, this authority has to cut its budget by going on 40% in the last four or five years and clearly, the council looks across all of what it does about everything when it's in that level of financial difficulty and, um, clearly easier to some extent to get behind stopping doing something that you don't believe in." [Senior public health leader, male]

Within the interview extract above the senior public health leader refers to the council *"stopping doing something that you don't believe in".* This point was explored further within the interview to ascertain the importance that the local

authority placed on addressing the prevalence of overweight and obesity within the local population and to understand the rationale for the apparent budget restrictions for weight management interventions that GPs had described. It was apparent within this interview that there was a conflict between what the senior public health leader felt the local authority should be providing to address the local prevalence of overweight and obesity and what the local authority elected politicians and ultimate decision makers believed. This conflict was epitomised by the local senior public health leader describing the local authority as being divided into *"two tribes";*

> *"I think it's useful to think about local government organisations as, as two tribes if you like. Political tribe and the officer tribe."* [Senior public health leader, male]

Choosing to provide this anecdote and describing local government as two distinctive tribes demonstrates the internal conflict that exists within the local authority and strongly suggests that this particular public health professional does not agree with the approach taken by the political leaders within the organisation towards addressing weight management. They went on to describe how the political leaders with the local authority favoured an educational model of health improvement which placed the onus of responsibility for health onto individuals and avoids a *"nanny state"* approach;

> *"For our politicians, um, they see it as an important issue because they understand the health impacts of it. Uh, what is significantly less*

of a priority for them is intervening in ways which would appear to be, um, devaluing people's personal decisions and lifestyle choices. Nanny state is a term that gets used a lot around here, particularly by the political tribe. So, it is a high priority. It's identified as a high priority in lots of our major strategic documents, JSNA (Joint Strategic Needs Assessment), so on and so forth. So, you'll find it written large as a health issue the council is interested in. What you'll find slightly less obvious is, is where, how the council is deploying resources to do anything about it. Okay. Uh, this council, for example, does not commission weight management services directly, uh, for the population. Nor does it particularly spend money on physical activity programs, so, clearly a strong association. So, the, the mode of operation for the public health team in this authority, 'cause this is a political decision not to do those things and spend resources on those things, as opposed to a professional decision, is to deploy, um, an influencing mode if you like around, um, issues to do with obesity, weight management, physical activity." [Senior public health leader, male]

From this interview extract it is apparent that there is an ideological standpoint within the local authority elected politicians which places the onus of responsibility for lifestyle choices onto the individual. The local authorities view was that individuals should be provided with information and education about the impact certain lifestyle choices may have on health and

subsequently allow individuals to apply this information in ways which they choose.

In addition, the senior public health leader acknowledged that the local authority decisions to withdraw funding for weight management interventions had followed a review of cost-effectiveness of the local services that were previously available and that the findings of that review had been taken into consideration by political decision makers;

> *"..in fairness to members, I think, is about comparative evidence of effectiveness. So, when they took the decision, uh, to stop doing weight management physical activity programs a couple of years ago, they, they, they did ask for advice. They asked for comparative kind of assessment to the evidence for the different public health programs and, um, the cost-effectiveness- not the effectiveness, but the cost-effectiveness for some of the weight management interventions is not as strong as it is for some of the other, uh, interventions that were in the program. So, I'd be unfair if I said they weren't at all influenced by the science, because they were."* [Senior public health leader, male]

Whilst the GPs felt restricted in what services they could now refer patient to for professional weight management support, they acknowledged the financial pressures being faced by the local authority;

"…local authorities have even less money. And in [location removed], we are the lowest, um, we get the lowest money per head in the country. So, so I don't blame [anonymised] Council because their hands are as tied as ours in the NHS." [Dr H, female]

"I think if I wanted to be hard headed and say where am I spending my money for what I'm getting a good outcome, I would probably actually adopt the same approaches to [anonymised] Council." [Dr D, male]

5.3.2.2 Sub Theme: Prevention is a Luxury

In a number of interviews GPs described a number of barriers which they faced preventing them from addressing weight management with patients as often as they may wish to do. The most common barrier was the lack of time available within a GP consultation. GPs often described working with patients with multiple co-morbidities and having numerous demands and pressures to manage in a consultation time that was routinely quoted as being 10 minutes duration;

"So if you've got someone coming in with X problem and you sort it out, and they don't come very often. You also got warnings flashing up (on the GP electronic computer system), they haven't had their blood pressure taken for five years. They haven't had their vaccinations, have you offered them flu vaccine? They haven't had their, their COPD checked and they should have been in and, you see, you should tell them, you know, book an appointment with the nurse

for your COPD check. So by the time you've done all that and you've tried to enter all the details that you have got, you know, into your computer, you've…, and then there's smoking cessation… And then when you're trying to do your smoking cessation you think well you know, weight's gotta wait. And, and so I think it's to do with all the preventative stuff, we don't have the luxury. Oh, and don't forget that I might have to diagnose you with dementia as well. So, you know, 'do you have any trouble with your memory?' See it's quite difficult to fit in, given the times and pressures on General Practice." [Dr A, male]

"I don't know about if GPs have time. I think it's something they love to focus on. I think they're more worried about bringing his blood pressure down to a reasonable level than they are about getting them to lose weight. I know that's a bit chicken-and-egg but you're so pressured in general practice, in the majority general practice that the time to spend on what GPs would probably see is the niceties and the preventative stuff is limited. You're too busy fire fighting the patients who've already had the heart attack or a stroke or anything else."

[Dr C, male]

Within the extracts above taken from interviews with Dr A and Dr C, both make noticeable comments about how preventative health intervention is regarded as a luxury, and that priority for GPs is the medical management of patients diagnosed conditions such as hypertension or COPD. They describe having limited consultation time available to address all patients'

needs and refer to being under high levels of pressure. Within these statements there is evidence of GPs prioritising patient's care, with weight management taking low priority.

Whilst the complexity of patient need and the limited consultation time available was acknowledged by the majority of GPs as the main factor resulting in preventative health approaches being neglected, the same issue was also noted by the senior public health leader who explained how they had recently attempted to address this issue with local primary and secondary care clinicians by encouraging them to maximise the clinical impact of their consultation time, turning *"chat"* into impactful dialogue;

> *"…the clinicians I talked to immediately identified that as another thing, a-another intervention to do, something to add into their interaction with a patient. Um, but interestingly, when you turn into a conversation about a, okay, so, when you're chatting to someone, because there's always, there's always chat in a-in a-in an intervention with the clinician. Um, whether it's, you know, the nurse doing, dressing your leg also. But, you know, the receptionist is weighing you before you go into the outpatient clinic or whatever. And-and the-the and-and to them, the notion that they have a responsibility to use the time they have with a patient therapeutically as to, as opposed to doing. Um, they seem to, clinicians seem to get that more as a as a kind of, 'We're not asking you to do anything else.' But what we're trying to say to you, is do you, would you not want the time that you have with a*

patient to have the biggest impact that it might have is to say a the-the comfortable interaction about the weather or, their dog, or their shoes or the, whatever sentence. You know, very often what you have to say is, 'This would work better if, you have you thought about?' And then, if the patient engages with you on it, great, they've given you permission to have a conversation with them, haven't they? If they just kind of dodge then you've done your minimum intervention, haven't you? [Senior public health leader, male]

From this interview extract it is apparent how the local senior public health leader is trying to persuade front line clinicians about the added value which they can introduce to a consultation through a very short and simplistic approach. There is reference to the fact that GPs perceive addressing lifestyle issues as *'another intervention to add in'* which they feel is unrealistic. One GP interviewed as part of this study made reference to this approach by public health;

"I remember going to one of our sessions where it was someone from Public Health that was talking about- oh and you know, you know this brief intervention for smoking takes only three minutes. Well out of 10 minutes [laughs] that's quite, that's a lot of time." [Dr H, female]

From this extract it is noticeable that the GP can recall the point raised by the Public Health representative, however they do not accept the recommendation that a three minute intervention (albeit in the example

provided being about smoking cessation) is an amount of time that is feasible to dedicate to health promotion messages.

Despite their being consensus that GPs did not have a suitable amount of time within routine consultations to address weight management issues with patients, many of the GPs enjoyed providing health promotion advice to patients whenever they had the opportunity. One such example was given by Dr D who described his previous days working hours, but how his out of hours working did allow for additional time with patients which enabled him to *'do a bit of health promotion'* something he found enjoyable;

> *"…yesterday I started working from ten-to-eight in the morning and finished at quarter-past-eleven at night. Um, just because I've got lots of patients to see and I still believe that general practitioners should still do their out of hours working then, but it's actually quite fun doing out of hours because you can actually do a bit of health promotion."* [Dr D, male]

A final point of interest raised was that GPs were not commissioned to provide weight management support to patients. Dr H recalled that he had previously worked within surgeries that provided dedicated weight management programmes to patients delivered by the Practice Nurse, however these had ceased;

"I've worked in practices where I go around where they, where the nurse has done uh, weight management club at the end of surgery time. You know, in the surgery closes and then stayed on for another hour to, to you know, have a weigh-in and chat people about weight in her own time. But now because things are so pressurised, nobody has the time for that. And if you open your building outside of normal hours and you're paying cleaners and staff and u, utility costs and of that time and insurance. So you know, no one can afford to do it either….Um, and it, it all comes down to you know, who commissioned it? Nobody." [Dr H, female]

Whilst Dr H identifies lack of funding and expenses to providing a structured weight management approach within general practice (i.e. a nurse hosting a group weigh-in and advice session), Dr B acknowledges the lack of dedicated resource to address weight management, but still felt it was part of their remit to try and address weight issues with patients to some degree and saw the preventative benefits of doing so;

"…I guess the harder, more cynical GPs than me would say, well you know, in what time am I supposed to do this, and whose gonna pay for the training and whose gonna help with implement it and it's yet another thing GPs are being asked to do, so who else can help with this? Do you see what I mean? I personally, my personal belief with that is that I am paid to do it, it's part of my job and it's really important and fundamental to preventing lots of illness that I will otherwise have

to treat and it's fundamental to looking after my patients as a whole person." [Dr B, female]

5.3.2.3 Sub Theme – The Disillusioned Doctor

Despite GPs appreciating the health benefits of weight management for patients with pre-existing medical conditions there was a sense of disillusionment amongst some of the GPs interviewed and a belief that whatever they attempted, their patients were often unlikely to achieve long term weight loss. Dr D explained how he perceived himself as having only limited influence over patient's lifestyle choices;

"…all I can do is try and point people in the, in the right, right direction. I mean, it's the old phrase isn't it? You can take the horse to water… Um, I might have a small influence. But the reality is I don't think I have a great deal of influence. [Dr D, male]

GPs often demonstrated a degree of frustration in their accounts of attempting to address weight management with patients.

"It's very frustrating definitely because you know if you did this, you lost weight, your anti-hypertensives instead of taking five you will be taking three, erm but even that will make a difference, it's very frustrating." [Dr J, female]

GPs described reasons that patients provide for being unable to lose weight. Dr I provided a particularly frank account of their perception of patient attitudes. They described how patients would *"put up blocks"* and provide *"excuses"* as to why they were unable to manage a healthy body weight. They also describe how today's society want the *"easy solution",* referring to patients' reliance on a medical model of health whereby they rely on the doctor to solve a health problem, with the patient being a passive recipient of healthcare rather than accepting ownership;

> *"You're having this conversation and people put up blocks why they can't. 'I can't do this because of that. I can't do this because of that'. So, you're having to try and find ways to get down those blocks, to encourage them actually but you could. I think lifestyle is very difficult because people want an easy solution. People want a tablet. People want you to sort out their problem and they are not prepared to take responsibility for themselves. And I think this is why they come up with lots of reasons and excuses. But you have to say 'look, I can give you the information, but that's all I can do. This has, this change has to come from you'. And there's a lot of resistance to that and people don't like being told that either, I find… And in this society, everybody wants the easy solution. I want to lose weight, but I don't actually want to make much effort to achieve that."* [Dr I, female]

Some GPs felt that their help and advice would only be successful if the patient had the intrinsic motivation to change lifestyle behaviours, and that there was little they could do to influence that motivation;

> *"…the ones that are motivated to change will do it full stop. The ones who haven't quite got through, the ones that are coming because err 'the wife told me I should, erm I'm not really that bothered', then you haven't got that motivation… they won't make the changes."* [Dr C, male]

> *"you try and deliver a bit, a bit of motivational counselling sort of type of thing… it works sometimes and it doesn't others. I mean patients bring their own ideas, beliefs and expectations to the consultation. And, uh, you have to, it's, it's ultimately down to them isn't it."* [Dr E, male]

Despite a strong sense of disillusionment amongst many of the GPs interviewed, there were some who felt that they did have an influence over a patient's behaviour and provided examples where they had initiated patients changing their lifestyle. Dr F believed that some patients were likely to listen to their GPs advice on weight management issues;

> *"Uh I think some lay people who are, um you know, worried about their health and who are keen then, they might take it seriously from a GP*

and listen. I think some people, lots of people with lay p…lay people will take it from doctors and advice." [Dr F, female]

Dr B was able to identify a specific example where they had supported a patient to manage a healthier body weight, resulting in significant medical benefit;

" *…well, in my twelve years of working within general practice, I've had five patients who have cured themselves of diabetes through changing their lifestyle, and four out of those five were men… And I mean that's been significant changes in lifestyle, so one gentleman that sticks in my mind was a young, in his late forties, young bank manager, locally. He was overweight, hypertensive, and I diagnosed him with diabetes, so we had the conversation about lifestyle and he wanted to know what he could do to get rid of the diabetes, he wanted to know, could he cure himself if he could make some changes. So, I went through it all with him and he basically went away and a year later he was off all medication, about three stone lighter, and took regular exercise, and he'd just incorporated small changes into his daily routine, basically, and it made a difference."* [Dr B, female]

Whilst Dr B was able to provide instances where patients have made significant lifestyle changes there are a number of important details within this statement. Firstly, Dr B has used medically significant examples, whereby patients have *"cured themselves of diabetes".* Whilst this is a

significant achievement, it shows how the memorable successes for this particular GP are where patients have made exceptional improvements to their lifestyle, rather than examples which may be less extreme but still important and more regular. Secondly, whilst the success in a medical context is significant, it is contextualised as being a small number of successes over a long period of time by the sentence *"in my twelve years of working within general practice, I've had five patients who have cured themselves of diabetes".* So, whilst the GP is pleased to have achieved this with patients, it is noticeable how the number of cases is small. Thirdly, the description does not give details of how the GP supported this particular patient to change their lifestyle. There is evidence of the GP providing a brief intervention and informing the patient about the benefit of lifestyle change, but the description of events then alludes to the fact that this patient did not receive any other form of guidance or support from health services and was able to self-manage. Finally, it is noticeable that the example provided was of a bank manager who would not fit the same demographic and occupational classification of the men interviewed as part of this study. I explored this further with the GP who believed that people with higher education attainment and income are more likely to succeed on long term lifestyle change than those from lower socioeconomic groupings. I pursued this angle of enquiry further by asking how Dr B felt that people on lower incomes or with lower educational attainment levels fared;

> ***"****They struggle with it more, I think. From a-an educational point of view in terms of understanding the impact of their weight and, really,*

taking on all the advice that I might give, but also being able to afford to make the changes… Um, just because eating healthier costs more 'cause unfortunately all the processed rubbish is very cheap, and all the fresh fruit and veg and healthy products are much more expensive and that can be prohibitive for a healthy diet." [Dr B, female]

It is now noticeable that Dr B begins to identify additional factors that make it challenging to address weight management within certain socioeconomic groups, such as education and economic influences.

5.3.3 "Women are from Venus, Men are from Mars"

My research data showed a clear difference in the ways in which GPs experienced addressing weight management with men compared to women.

5.3.3.1 Sub Theme: GP Experience of Men Seeking Weight Management Advice

During my interviews with GPs I was keen to explore their experiences of men's help seeking with regards weight management. Examples had been provided by some of the men interviewed and reported in chapter 4 of missed opportunities by medical professionals to provide advice and support to men, some of whom had no previously diagnosed medical condition.

The overwhelming response from GPs when questioned about their experiences of men approaching them for weight management advice or

support was that men did not seek help for weight management from their GP;

> *"In terms of men coming in to see me and saying 'Doctor I'm overweight. How do I lose weight?' I can't remember the last consultation I've had, and certainly not in the six months, or probably a year or two."* [Dr A, male]

> *"No… no… Well, I mean they (men) never do, it's incredibly rare, yeah, I can't think of anybody that has come to me specifically about weight."* [Dr B, female]

> *"…no, no, no I don't have. I haven't seen any men asking for uh, help with weight reduction."* [Dr F, female]

This was in stark contrast to the experiences of GPs being approached for help with weight management by women, which was described as being a frequent occurrence;

> *"…with women it's quite common for them to come along and say, uh 'I, I want to do something about my weight', whether that's a health-related concern or a body image related concern, it's more usually it's body image."* [Dr A, male]

Interviewer: "Do you get ladies that will approach for that (weight management advice) specifically?"

Dr B: "All the time… All the time, yes." [Dr B, female]

Despite it being reported by GPs interviewed to be rare for men to seek help regarding weight management, and much more common for women to do so, GPs did describe how it was more common for the issue of weight management to be raised as a secondary issue with men which may be a contributory factor to a medical condition;

"…there's a lot more indirect consultation about it. Oh yeah, it crops up as the contributory factor to their symptoms such as painful knees or bad backs or breathlessness etcetera." [Dr E, male]

"It (body weight) might come along as concern about their health once you say what their cholesterol is…" [Dr A, male]

Despite GPs rarely experiencing men pro-actively seeking advice for weight management, when advice was provided, usually in response to an identified clinical indicator, some GPs had experienced a greater adherence to their advice and higher levels of weight loss achievement with men compared to women. There were instances of GPs describing how they perceived men to be less emotionally invested in body weight as a personal issue and would therefore take advice from the GP more readily than women who they often

felt took the GPs intervention personally or sought medical rationale for being unable to manage a healthy body weight;

> *"…women tend to very much seek an excuse for being overweight, so they will want to have their thyroid checked because they think that they're gaining weight because they've got a problem, rather than it being the fact that they are eating too much and not exercising enough. Um, they, they want me to find out why they can't lose weight and they always say 'well, I hardly eat anything doctor and I've tried going to the gym ad nothing works…' actually, for the majority of people if they just reduced their calories and exercised more, they would lose weight. But men will accept that, generally, and women don't".* [Dr B, female]

> *"…women give you lots of reasons why they can't lose weight whereas men I find, uh, just, um, they're just quite matter of fact about or say, 'well, I don't really eat the right things, don't really exercise' and that's sort of where it ends. They kind of know they're overweight. They normally say 'oh I know I'm overweight'. Whereas you get the women with lots of reasons where 'oh, you know, I find it really difficult to lose weight and I've tried every diet and I've done this and I've done that'. There's always an excuse as to why they haven't, whereas men I find, uh, it's very much a more simplistic conversation."* [Dr I, female]

Within these two interview extracts both GPs differentiate between the ways in which men and women respond to issues of weight management during medical consultation. Both GPs explained how women are more likely to seek justification for weight gain, be it medical or social. In these examples the GPs place the onus of responsibility for weight management on the individual, and are guilty of victim blaming, failing to consider factors that make it challenging for individuals to manage a healthy weight in modern society. They describe women as using *"excuses"* to justify why they have gained weight or why weight loss attempts have been unsuccessful. In contrast men are described as more likely to show greater levels of agency and attribute body weight to their individual lifestyle choices, often stated how they felt men were more successful at achieving weight loss compared to women;

> *"And so I've known men who have gone from being at risk of diabetes to no longer at risk because they've gone away and lost weight. Whereas very few women seem to be able to manage that."* [Dr H, female]

> *"…if men put their mind to it they seem to be able to lose weight more easily. Suppose that's a, suppose subjective view. But that's, they seem to have the willpower… they seem to be rather better than, than the women"* [Dr E, male]

"...a woman will listen to what you have to say, feel really defensive, make lots of excuses, will go away, you'll probably see her again in another period of time and she might not necessarily have done something about it…" [Dr I, female]

5.3.3.2 Sub theme: Reconstructing Hegemonic Masculinity

Throughout interviews with GPs their perception of men's attitudes towards body weight was influenced by a traditional hegemonic masculine construct. GPs often described male patients as being disinterested in body weight and compared this to their experiences of working with women, describing how women were often concerned about body weight and would regularly seek help. They attributed the motivation for the desire of women to manage body weight to body image consciousness, rather than for health improvement. This is apparent in the comment by Dr I, who uses the analogy of men and women wishing to lose weight in preparation for a summer holiday to illustrate the point. From this comment we can see how the GP is attributing the motivation for managing body weight to body image;

"I don't think a man worries about a bikini diet, you know. You know, he probably wouldn't really think 'oh I'm going on holiday. I need to lose weight', whereas that might be a thought of-of-of a woman" [Dr I, female]

Similar perceptions were apparent in interviews with other GPs who often stated how they felt that men did not have high levels of body consciousness or wish to manage body weight due to appearance concerns;

> *"...men generally lack the body image concern as a group"*
>
> [Dr A, male]

Other GPs commented on social acceptance of being a man who is overweight or obese. In this interview extract Dr H identified how societal acceptance for being overweight or obese is greater for men than it is or women;

> *"I think men accept their weight more. So, they don't see it's an issue. It's okay to be large and be a man. Um, and, and I think there's a lot more acceptance within male culture. That if you're fat, then you're fat, that's fine. And the, the issues are more about other things that you compare yourself with"* [Dr H, female]

This social acceptance for men to be *"large"* was also discussed by Dr A, who described how he felt it was viewed as *"normal"* for men to be overweight. His comments develop this point further by describing how it is socially acceptable for men to have a *"large"* physical presence, including *"big, chunky arms".* The GP then links the idea of large body size portraying physical strength which he portrays as desirable amongst men and more of a priority than body size or shape;

"…having a bit of a belly is normal for a man and isn't an issue as long as they've got some of the other stuff like big, chunky arms and can bench press 200 kilos. So, it's more about a performance issue, I think for men, less about how they look." [Dr A, male]

A similar viewpoint was raised by another GP who commented that *"manliness"* is not compromised by being overweight and therefore body weight is not seen as a priority for men;

"…there's less of a concern if you're carrying a few extra stone, as far as a man is concerned. It doesn't make you any less manly. And therefore, it's not seen as a priority for them." [Dr C, male]

Whilst GPs generally reconstructed the concept of hegemonic masculinity in their depiction of men's lack of body consciousness, some had noted a change in body image concern amongst younger men and accepted that young men were more conscious of their body weight and body image signalling a change in society;

"I would accept that for younger men, uh, it's more the body image issue is increasingly an issue, but again it's about body image, not specifically about weight. They look at themselves in the mirror and want to look good…" [Dr A, male]

"…this perception of male appearance has started to change over the last few years. And I, and I think we might see change of this, in fact change of society, um become established." [Dr D, male]

5.3.3.3 Sub Theme: Tailoring the Approach

I interviewed a representative from Public Health England (PHE) to gain insight into the higher-level strategic direction regarding men and obesity. At both national and local level reducing the prevalence of obesity was seen as a high priority, however it was evident through dialogue with the PHE representative that national strategic priority was being placed on addressing childhood obesity;

"…nationally, I think that, um, there is a certain emphasis around, um, tackling and hopefully preventing, um, child obesity from getting any worse" [PHE representative, male]

They were also quick to make the point that whilst the official national headline policy is around addressing obesity in children, PHE are addressing obesity across the life course and that addressing weight management within the child population cannot be done in isolation of adults;

"I mean if you look at the Childhood Obesity Plan and you only take that as being a, an indication that priority that one could go away with that assumption. Um, I don't believe that that necessarily gives the full picture. Um, people always get hung up on strategies and plans. You

know, PHE have been working across the life course, um, for some time, since inception in 2013. And I think that anybody who knows anything around obesity and the causes knows that to tackle the problem in children we have to tackle the problem in adults." [PHE representative, male]

There was recognition that the needs of men regarding weight management are different to those of women. Examples were provided of how they have been working with partner agencies such as the Men's Health Forum to support initiatives targeting men and weight management;

"…we worked with Men's Health Forum. On a, a practitioners guide, um, around this very issue. And I think that um, you know, I mean Men's Health Forum do a great job. And you know they've been around for a number of years and we've worked with them in um, across the various government departments the nutrition team have been in so as I say we worked with them um, around their guides and around construction workers and things" [PHE representative, male]

There was also recognition that the commercial weight management sector has been slow to adapt and provide services for men. The following statement identifies this and the fact that such businesses had been originally established with a female target audience in mind;

> *"…in terms of weight management, then I oppose that-that whole market has been-has been quite slow to respond to that unmet need. I think it's fair to say, you know, Slimming World and Weight Watchers of this world which dominate the out-of-pocket um, market, but also to some degree, you know, they're still um, used as referrals from NHS and local councils. Um, and you know, their, their whole, um, mantra and core business was set up to cater for, for females*." [PHE representative, male]

Locally, it was evident from interviews with GPs that until relatively recently they had the ability to refer patients to local Weight Watchers groups which had been commissioned by the local authority Public Health department to support patients free of charge (funded by the local authority) for up to 12 weeks. This service had however recently been decommissioned. A senior public health leader described how their approach to commissioning any form of weight management service in the future would be different to that taken previously;

> *"I think we're very unlikely ever again to go down the path of buying an off the shelf tool and just hoping that all of the population will find their way to it and that it will be acceptable to them."* [Senior public health leader, male]

Within this statement is an acknowledgement that previous commissioning of weight management services was overly simplistic. Utilisation of terms such

as *“buying an off the shelf tool”* and *“just hoping that all of the population will find their way to it”* insinuates that previous commissioning of weight management services had not considered the needs of various sectors of the population and had been unsuccessful.

The PHE representative felt that local authorities were now better equipped to address the needs of men regarding weight management;

> *“I think that we are beginning to see a-a turn in the tide, and local councils are far more, I think, aware of and what they may need to provide in terms of engaging men, and into services and where they need to go to engage men.”* [PHE representative, male]

However, despite the recognition of both PHE and the senior public health leader that men may require a different approach regarding weight management compared to women, there was still a lack of significant detail of how this would be addressed locally. When questioned on how any future weight management services would be commissioned locally there was a claim that such differential needs would be identified through detailed engagement with the public;

> *“It's routine part of our service commission and recommissioning activity that we go and talk to people about what, what they would want, how they would want to see these services organized, what*

would put them off, what wouldn't put them off. [Local senior public health leader, male]

On further probing and questioning on this matter however it was apparent that there was a lack of consideration and understanding to the needs of men to a level that would make an impact on commissioning and service delivery;

"…we don't think about men very much, at all. So the idea that we thought below the top layer of what do men need to these other issues about why men do what they do, and think the way they think, but we don't spend a lot time thinking about it. Well, certainly in this, in this area we don't spend a lot of time thinking about the needs of men as being different than the needs of anyone else, so, I guess the idea that we'd be thinking below that top layer of what the men need, down to the kinds of things that you've been describing. The conversation never gets, has never got there, hasn't got there in any conversations I've been in." [Senior public health leader, male]

Furthermore, the strategic emphasis placed upon the health of women and children overshadows any efforts that may be done to raise the profile and need of men's health. This is described by the senior public health leader who uses the term *"policy vacuum"* to illustrate the lack of focus around men's health compared to the profile of women and children's health needs;

"I think it's some of the associations with it, because obviously if you say men's health in this setting or in men's healthcare setting, um, they don't, the- the- the conversation doesn't leap to men's obesity, men's smoking, men's alcohol consumption, particularly, it will leap to physiologically male conditions, (prostate cancer) absolutely. Um, so it's something, there's something about, and in fact the needs of men I think are drowned out by the level of volume of discussion about the needs of women. Uh, because everywhere I go women and children, 'What do women and children need?' 'How does this work for women and children?'…that's part of the policy vacuum. [Senior public health leader, male]

This issue of strategic emphasis on the health of women and children and lack of focus on men's health was also identified by one of the local GPs. Dr A spoke strongly about the lack of focus on men's health;

"It's all about women's health. You have a women and children's group in the STP (Sustainability and Transformation Partnership), we don't have a men's health group. Let men die… Where's the, where's the prioritisation for men's health? Actually, there isn't any. It's all about women's health. And women always live longer. So that's, that's, that's a prejudice against men's health that's very strong in the community including the health commissioning community."

[Dr A, male]

Both of these interview extracts are compelling in that there is very little focus on men's health in general. The use of the term *"policy vacuum"* encapsulates this and shows that there is very little sub population consideration to men and their particular health needs as a distinct group.

5.4 Chapter Summary

Interviewing a number of medical and strategic professionals has provided a rich insight into the views and experiences of stakeholders attempting to address weight related disease on a daily basis, as well as the strategic leaders who are responsible for local and national policy and commissioning of appropriate public health and health improvement services.

The data analysis within this chapter shows that GPs are acutely aware of the importance of weight management regarding their patients' health. Whilst they were able to provide numerous examples and experiences of attempting to address weight management with patients, this was done exclusively (within this sample) as a secondary prevention approach, with weight management being used as a method for long term condition management where it is known to have clinical benefits, for example with type II diabetes, hypertension and joint pain. What is noticeable is the reluctance that GPs have in raising weight management with patients who are at risk of developing weight related disease due to elevated BMI, but are otherwise currently healthy. This is prevented due to a number of reasons including consultation time availability but, also due to the perception of the GPs interviewed about patients being disinterested and offended if they

raised the issue of body weight in a primary preventative approach rather than it being linked to a pre-existing or newly diagnosed medical condition. Fear of disengaging men, who they perceive as a hard to reach group was apparent. Whilst many GPs felt it important to build relationships with patients to support the engagement process and to avoid dissuading men to visit the GP more regularly, others felt that modern day general practice did not allow for this and preferred to adopt a directive approach, attempting to utilise the opportunity they have to address lifestyle issues with male patients when they do make one of their otherwise infrequent visits to the GP surgery.

Many GPs demonstrated victim blaming and placed strong emphasis of responsibility onto the individual for making lifestyle change. They often reported levels of frustration when patients were unable to make sustainable lifestyle changes and found the recent decommissioning of specialist weight management services an additional challenge, leaving them with little or no options for supporting patients with weight management other than providing very simplistic and basic advice in the time available to them.

GPs often reconstructed hegemonic masculinity within their accounts, referring to men as being disinterested in physical appearance, something which they regarded as a primary motivating factor for the desire to manage body weight within the female population. However, GPs reported that men were often more successful in weight management attempts than women, accepted responsibility and did not seek to provide *"excuses"* in the same way that women often would.

Strategically, obesity was said to be a high priority for both national and local government. However, on closer analysis there was a lack of specific detail around addressing obesity prevalence within the adult population, with national strategy focussing on childhood obesity.

There was appreciation that the needs of men need to be considered and are uniquely different to those of women. Recognition amongst all stakeholders that the social acceptance for seeking help, advice and support for weight management amongst men is significantly different to that of women and that traditionally available weight loss groups have not met these differing needs.

Economic constraints have impacted on the availability of local services, with the local authority making the decision to cease investment in behaviour change services designed to support individuals make changes to diet and physical activity levels. There is also an ideological viewpoint amongst local authority elected politicians that citizens have the right to make their own lifestyle choices and that the role of any public health strategy or service is to educate individuals so they can make informed choices regarding their personal health, rather than provide interventions which are seen by some as nanny state interference.

Despite the overall acknowledgement from all stakeholders interviewed that obesity prevalence amongst men is a public health concern and will require an approach different to that required for women, there was no clearly

defined direction of how this was being addressed, or planning to be addressed. GPs made attempts to address weight concerns with patients when clinically appropriate but were not resourced or trained to address it to a comprehensive degree. National policy had a strategic focus on childhood obesity and local strategy was one of disinvestment in obesity services and deployment of population health education rather than direct intervention at an individual and behavioural level.

CHAPTER 6. QUALITATIVE COMPARISON OF FINDINGS

6.1 Introduction

Chapter 4 provided detailed analysis of the views, thoughts and feelings that men who are overweight or obese have towards body weight, health and weight management services. Subsequently chapter 5 presented the analysis from interviews with key stakeholders including front line medical professionals (GPs) about their experiences of working with men who have elevated BMI. Through detailed analysis of these two data sets it was noticeable that there are a number of findings which either complement each other, or illustrate contradictory experiences and viewpoints. This chapter reports findings from a qualitative comparison of these two qualitative data sources.

This chapter is divided into a number of sub-sections to explore the qualitative comparison in detail. Section 6.2 describes the issue of body consciousness amongst men interviewed as part of this study and how body consciousness in men is perceived by GPs. Section 6.3 describes GP experiences of men help seeking for weight management and compares this to the views and experiences of men themselves. Finally, section 6.4 provides a comparison of the influence of human agency and social structure regarding weight management and behaviour change and the appreciation of these phenomena in respect of contributory factors for weight gain and individuals ability to manage a healthy body weight.

Table 7 provides a summary of the qualitative comparison findings and highlights where contradictory or complimentary views between the different data sets have been identified.

Table 7. Summary of chapter findings

Body consciousness	Men exhibited high levels of body consciousness and perceived their body shape as undesirable due to fear of public ridicule	GPs perceived men as having low levels of body consciousness and being overweight as socially acceptable for men
Experience of help seeking	Men sought guidance from GPs regarding weight management	GPs did not experience men approaching them for weight management advice. Commonly approached for weight management advice from women

Perceived influence of the GP	Men perceived their GP as an 'expert' who's advice could initiate changes in behaviour	GPs perceived themselves as having little or no influence over initiating lifestyle change amongst overweight and obese men
Levels of support	Men are independent and require low levels of support for weight management	GPs feel the need to provide high levels of support in relation to successfully addressing weight management
Agency	Men have high levels of agency regarding weight management and act decisively	Men are decisive and are more successful than women with weight management







6.2 Body Consciousness

There are noticeable and important contradictions between the ways in which GPs described the behaviour of men and that which men themselves disclosed during interviews in relation to their attitudes towards body weight and health.

The first noticeable contradiction was that GPs often referred to men as being disinterested in body weight and weight management for the purpose of body image. This was evident in a number of interviews and the notion that men lacked body consciousness was referred to on a number of occasions. GPs held a stigmatised view of men's attitudes to body weight, which was grounded within the concept of hegemonic masculinity;

"..a woman will talk about her fat thighs but a man wouldn't say 'oh, I'm really conscious about my thighs' or something you know, it isn't a conversation they have…" [Dr I, female]

GPs interviewed viewed men as often being dis-interested in body weight for body image purposes and without the same levels of body consciousness as women. There were many examples within the interviews I conducted with men however demonstrating that men were body conscious and concerned about their physical appearance. An example was provided by James who describes a history of weight loss attempts leading up to summer holidays when he is likely to wear less clothing and be more physically exposed in summer clothing. He attributes weight loss to *"feeling better",* which he explains was previously a motivational factor for a weight loss attempt leading up to a holiday with friends. The underlying motivating factor for his weight loss attempts at this time was a planned holiday with a group of friends and embarrassment about exposing his body during activities such as swimming and sunbathing. The fact that his weight loss attempt seems to have been triggered by a female friend shows that he exhibits a similar level of body consciousness to this female associate;

"I just wanted to feel, better in yourself because it does make you feel better when you lose weight. I've done it before , I've, well like last time was about two and a half years ago I went on a diet with my wife's er , one of her girlie friends, she was going on a diet, I thought I

could do with losing some for the holiday like because we were all going on holiday together." [James, 31, BMI 30.3]

In direct contrast to this, Dr I uses the summer holiday as an example to illustrate a belief that men do not experience body consciousness in the same way as women. Dr I's choice of language feminises this thought process by referring to individual's being worried about a *"bikini diet"* and suggesting that men are not motivated to lose weight for such events, placing importance of body consciousness as high for women and none existent for men. Clearly there is a stark contrast between the opinion of Dr I and James' account.

A second example of a man exhibiting high levels of body consciousness was during the interview with Dean. Dean was one of the older participants interviewed aged 55 and demonstrated a high level of body consciousness within this interview. His body conscious behaviour prevented him from removing items of clothing such as his shirt during hot weather conditions. He compared himself to other men who he described as *"slim"* showing levels of social comparison and how he could not adopt the same behaviours as a *"slim bloke"* (in this case walking in public with no shirt on during hot summer weather) because of fear that he would be ridiculed due of his body shape. Dean is therefore holding the view that being overweight as a man and removing clothing would be deemed inappropriate by others in society and lead to unpleasant comments and remarks from others which he wished to avoid.

In contrast, Dr H described how they felt it was more socially acceptable for a man to be overweight and that it was seen as less of a concern within society. Dr H held a view that it was acceptable for men to be *"large"* and that culture has a greater level of acceptance towards men who are overweight. Within the interview with Dr H they often referred to activities such as playing Rugby which is synonymous with typically large men. However, Rugby players are also positioned within society as men who are physically strong, powerful, aggressive and brave. There is a generalised view from Dr H therefore that *"large men"* are perceived within society in a similar way and therefore being *"large"* is not an undesirable body shape for men to experience. Dr H attributes this to greater levels of social acceptance of being overweight for men. This view however is inconsistent with the examples of James and Dean who both provided accounts of having concerns over their body size related to public exposure leading to potential ridicule from others and public humiliation. This fear of being embarrassed in public due to their body shape shows that they did not share the view of Dr H in that their body shape would be socially accepted because they were men. Instead they expected their body shape to be the focus of negative attention and ridicule.

Some GPs acknowledged a change in culture amongst younger men in particular who exhibited greater levels of body consciousness than may have previously been witnessed. Dr D explained how he felt body image was not historically a motivating factor for weight management in men, but how they

believed this had started to alter in recent times. Dr A also described how they felt that body image was becoming more apparent amongst younger men;

> *"…this perception of male appearance has started to change over the last few years… and I, and I think we might see change of this, in fact change of society, um, become established.* [Dr D, male]

> *"I would accept that for younger men, uh, it's more, the body image issue is increasingly an issue…"* [Dr A, male]

However, age differentiation was not evident amongst the men interviewed for this study, with body consciousness evident across the age spectrum of the men interviewed. This is illustrated by the two interview extracts below, the first of which is taken from an interview with Frank who was the oldest participant recruited aged 59. He was concerned about advice provided to him by his doctor about what an ideal weight for him would be, and that he felt he would look too thin at that particular body weight demonstrating his concerns about his physical appearance;

> *"I suppose I could lose a bit more weight but like I say I don't wanna lose too much. I'd look like Skeletor.. No, you don't want to be too thin do ya."* [Frank, 59, BMI 32]

Frank's concern about not appearing too thin demonstrates a body image concern but is also influenced by a similar culturally driven perspective described earlier by Dr H, in so much that society sees larger body sizes for men as having greater levels of strength and power (the Rugby player analogy). Frank elaborates within his interview on how he feels that if he was too thin he would not be able to successfully perform the demands of his occupation which he describes as physically demanding and requires a high level of muscular strength and endurance in order to lift and carry heavy loads. This connection infers that he views a larger body size as one that has greater levels of physical strength, something which he is concerned he would lose if he lost too much weight.

The second extract is from an interview with Tony who was the youngest participant recruited aged 24. He demonstrated body consciousness in relation to his general physical appearance in response to derogatory comments from people about his body weight resulting in negative self-identity and him avoiding eating food altogether during some periods of his life for up to two days at a time and closely relating his body weight to his appearance and feeling *"ugly"*;

> *"It's like no - I'm fat and ugly. And then you go into your looks like, aw, I'm ugly. Because if I'm fat, I'm ugly and things like that."* [Tony, 24, BMI 27.3]

Tony attributes being overweight with being ugly and demonstrates a direct correlation of how being *"fat"* results to being physically unattractive. Again this illustrates high levels of body consciousness and impact on self-esteem that was evident within the interviews with many of the men and is not overtly appreciated within the accounts provided by the GPs.

6.3 Experiences of Help Seeking

During interviews with GPs I explored their experiences of patients seeking help and advice for weight management. I was interested to discover whether GPs experienced a difference in the frequency that men and women sought advice about their body weight and whether the approaches varied. GPs often described how they were regularly approached by women for weight management advice. In contrast, they also explained how it was very rare for them to be approached for weight management advice by men. They attributed this to a number of reasons, primarily because they felt that men experienced less social pressure to manage body weight than women and secondly because men were generally less concerned about their health.

In contrast to the experiences of the GPs interviewed, there were a number of examples provided by the men interviewed of when they had raised concerns about their body weight with a GP, or demonstrated signs of interest about their weight during medical consultation. In chapter 4 I illustrated this point by using the example of Dale, a 33 year old hospital cleaner and housekeeper, who provided an account of raising body weight

with his GP and felt disappointed when the GP did not provide any additional level of advice or support.

This was a missed opportunity to provide proactive health promotion support to an individual who was not presently in the highest health risk category due to body weight (BMI 28.5). Recent weight gain had been observed by this individual, so intervention at that point in time may have prevented further weight gain and reduced the risk of progression of weight related disease in the future. Dale was prompted to initiate conversation with his GP about his body weight after viewing a health promotion advert on a plasma screen whist seated in the waiting room. This indicates his contemplatory readiness for change (DiClemente and Prochaska, 1998) as this cue was sufficient enough for him to act by raising the issue during the consultation. The GP however did not recognise his readiness for change and the opportunity for preventative health improvement advice was missed.

What we cannot understand from this interview extract is the reason for the GP not developing this conversation and exploring possible advice or further support for this patient which they may have found helpful. However, within the interviews with GPs a number of practical barriers were identified that may have resulted in this opportunity being lost. Firstly, GPs often described a highly pressured working environment with short consultation times (10 minutes) to work with patients of increasing complexity and numerous co-morbidities. It is possible that this particular GP was running late and felt under pressure to end the consultation and move to the next patient

appointment. The GP may also have reinforced the cultural belief that was evident within this data set that GPs hold a perception that men are not overly concerned about body weight and therefore as the patient was not within an obese category (BMI above 30) it did not warrant pursuing the issue further. This is unlikely as the patient themselves had proactively raised the issue of body weight in the first instance and in doing so exhibited signs of concern. Thirdly, a number of GPs spoke about training needs around addressing weight management with patients and raising the issue;

> *"we don't get any specific training about how to do brief intervention with patients for weight loss."* [Dr B, female]

The patient in this example had clearly demonstrated behaviours that indicated concern about their own body weight. The GP may not have been trained to identify such cues and therefore the opportunity to initiate conversation with the aim of further assessing the patient's readiness for change and aiding a move towards taking action and lifestyle change was missed.

There was a mixed view about the way in which weight management is broached by a medical professional amongst the men interviewed. Some stated how they were not concerned about the relationship with the Doctor, and that they were only *"doing their job"* by raising issues of body weight with patients;

"You know, he had a job to do, he has to point out where you are with your weight…" [John, 46, BMI 32.1]

In these instances, the views of Dr E and Dr I about a direct approach to addressing body weight were justified as some men felt that the Doctor was simply conducting their job role. However there were men interviewed who felt that medical professionals were quick to attribute health conditions to body weight. In these instances a directive approach from a GP who did not have a strong relationship with the patient may be counterproductive and lead to disengagement of the patient with the medical profession.

In addition to the style in which GPs raised issues of weight management with men, there was also an important finding about the timing of when weight management is raised by GPs. A theme identified within the data derived from interviews with GPs was how they commonly described addressing weight management with patients as a method to manage long term conditions which body weight is known to be a contributory factor such as type II diabetes, hypertension and coronary heart disease. GPs described willingness to discuss lifestyle issues such as diet, physical activity levels and body weight with patents who were newly diagnosed with such conditions as part of the medical management plan. What is not apparent within the GP accounts was attempts to raise such lifestyle issues with patients at an earlier stage before diagnosis of a weight related medical condition was diagnosed in a primary preventative manner.

When questioned about applying weight management intervention as a primary preventative approach to health some GPs identified a number of barriers to this strategy within the Primary Care setting. GPs did not feel that initiating conversations with a patient who had a BMI placing them at increased risk of developing certain types of medical conditions, before the patient showed any signs or symptoms of such diseases would be beneficial. GPs felt that it was *"pointless"* raising the issue of body weight with patients who were otherwise healthy as it was unlikely to result in any forms of behaviour change. There was also a deeper underlying concern that raising the issue of body weight and weight management in an otherwise healthy individual could result in the patient feeling they were under personal attack rather than this being raised for medical and health benefit, subsequently damaging the relationship with the patient.

There were mixed view points from men interviewed as part of this study about when would be appropriate for GPs to raise the issue of body weight with them. As previously described, there are examples within the data whereby men themselves pro-actively initiated discussion about their body weight showing that they can be concerned enough about the impact that body weight is having on their health to raise it during consultation with a medical professional. Whilst there is evidence of this within the data collected for this research, this was not the routine experience of GPs who describe such occasions being rare. Despite this, there is a richness of data within the interviews with men during this research which indicates that men are aware of the impact that body weight has on their general health or for

body image purposes. There were however also sceptics who were opposed to medical professionals attributing health conditions to body weight and the deviant case within the data where one participant disregarded all lifestyle related impact on health in the belief that health and mortality were pre-determined genetically.

6.4 Perceived Influence of the GP

Interviews with men identified that the GP was a potential source of influence regarding behaviour change for men. This finding was described in detail during chapter 4, theme: Important Relationships – sub theme 'Doctor Knows Best'. The findings show how this group of men held the GPs advice in high regard and deemed them as a subject matter expert whose advice was more likely to be taken into account than the advice provided by other non-medical experts such as friends and family members. Many of those interviewed described how they would accept being informed by their GP that they were overweight or obese and would be prompted into taking action regarding their own lifestyle choices if the GP had advised them to do so, showing an adherence to a medical model of health whereby the medical professional is held in a position of power and authority amongst this group, who would then adhere to advice or instruction provided.

In contrast, the GPs interviewed often described a feeling of disillusionment with regards to weight management whereby they perceived their personal influence as minimal when it came to encouraging patients to change lifestyle and manage a healthy body weight;

"[sighs] I feel helpless because all you can do is tell them but it's up to them to do it." [Dr J, female]

GPs were often guilty of victim blaming, describing body weight as determined by individuals and their lifestyle choices in the first instance but, on further probing and closer analysis it was apparent that GPs had a greater appreciation of the wider determinants of obesity. Whereas the men interviewed attributed their body weight and lifestyle choices largely to their own personal choices, GPs did express consideration of the structural barriers facing people in modern society with regards to obesity and related lifestyle choices. GPs made reference to modern culture, the physical environment, food availability, the costs often incurred to follow certain leisure or physical activity pursuits, the pressures facing working parents who are time poor, education and the influence that the media and social media has on society. There was an understanding that all of these socioeconomic factors have a significant bearing on an individual's dietary habits and physical activity levels and whilst individual agency and choice remain critical, it is often difficult for individuals to make lifestyle changes against the flow of current culture and societal influence. This understanding of the determinants of obesity coupled with many experiences of patients failed attempts to manage a healthy weight left GPs feeling that any attempted intervention they made was likely to be ineffective.

The GPs perceived lack of influence over patients with regards to weight management issues may be a factor in missed opportunities identified within the data when men had been proactive in consultation and raised body weight in conversation, only for this not to be pursued or follow-up by the GP. However an additional factor to consider may be the fact that GPs feel there is little probability that patients will successfully take up advice provided and therefore simply do not make attempts to initiate behaviour change. This may also be a significant factor in the GPs reluctance to raise issues of weight management with patients in a primary preventative manner, at a time when patients have risk factors that elevate the probability of the patient developing certain types of disease, but do not raise the issues of weight management with patients until there is a diagnosed medical condition which would benefit from the patient managing a healthier body weight and making lifestyle change.

6.5 Appreciation of Human Agency and Social Structure

Chapter 4 articulates the high levels of agency that were exhibited from men interviewed and is discussed in detail under the sub-theme title 'Attribution and Agency'. This theme described how the men interviewed attributed their body weight to individual lifestyle factors in particular dietary choices and participation in physical activity. They described themselves as being the barrier to successful weight management often referring to their lack of intrinsic motivation to sustain healthy lifestyle choices. Some eluded to wider social, environmental or economic factors that may make adherence to a healthy lifestyle a challenge, for example James who offered a substantiated

description of the cost difference between eating a healthy meal compared to an unhealthy meal and many others who referred to competing pressures on their available spare time making it difficult to commit to regular exercise participation. However the strongest narrative provided was how men saw their body weight as something that they could influence through certain lifestyle behaviours and something that was within their control;

> *"My weight is in my control yeah, I believe… That's why I've started doing cycling and trying to do something about it."* [Dale, 33, BMI 28.5]

High levels of agency amongst men was also reported by GPs. A number of GPs provided accounts of how men and women faired differently during weight management attempts, with GPs often reporting feelings of frustration when working with women who would routinely seek help and guidance from their GP for weight management but which GPs felt were less likely to be successful in comparison to men. GPs often described how women sought to justify their current body weight through seeking a medical diagnosis for conditions related to weight gain such as hypothyroidism, or would have well-rehearsed arguments as to why they were unable to change lifestyles, which GPs often referred to as *"excuses";*

> *"Well, I hardly eat anything Doctor, and I've tried going to the gym and nothing works, and when they say that to me, because I hear that a lot, several times a week, this, this is a bit harsh but my GP trainer used to say to me that we discussed this, and he'd say to me 'if I*

locked them in a room and fed them 500 calories a day, they would lose weight.' Do, do you know what I mean? So you think, well actually for the majority of people, if they just reduced their calories and exercised more, they would lose weight. But men will accept that, generally, and women don't." [Dr B, female]

A number of GPs did however compare these experiences to men who they often reported as having much greater levels of success with weight management. GPs provided some accounts of how once weight management had been identified as a medical issue for the patient, commonly in relation to a new diagnosis or pre-existing medical condition such as hypertension or type II diabetes, men would act upon the GPs advice of the need to reduce their body weight and return several months later having taken action. GP accounts explained how men were more willing to accept the fact that they were overweight or obese compared to women who often found weight issues more sensitive and emotive resulting in women seeking to justify their body weight, rather than accept ownership and seeking a advice on how it could be changed;

"…if a man decides he wants to do, I mean I've had a number of patients (men) who've listened to the advice, come away in three months, come back in three months and said 'weight me now. I've done this, re-check my cholesterol. Has what I've done worked?' I don't find the same with women. [Dr I, female]

Where GPs provided accounts of men accepting the need to manage a healthier body weight there was little further involvement from the GP. Instead men developed their own weight management strategies and solutions. This again compliments findings within this research, whereby the men interviewed preferred a self-directed approach to managing their body weight by participation in physical activity, researching dietary information on the internet and reducing certain types of food;

> *"..I'm pretty confident I can do it (lose weight) myself, cause it's like I said there's just a few things you gotta do. Watch what you eat, watch what you drink and exercise."* [Ben, 28, BMI 27.6]

> *"…ya just have to look online and, and common sense dictates. I know what I should eat."* [Dean, 55, BMI 30.2]

They were less inclined to have considered attendance at weight management group based programmes and did not express the need for social support from others. In fact, the men found the idea of attending such a group antagonistic to their masculinity due to the perceived view of such programmes being a female dominated pursuit and something that they were uninterested in;

> *"..I think it's more for obviously ladies and that sort of thing, you know, because obviously they always go to them sort of, I don't think it would really appeal to me that."* [Neil, 44, BMI 27.8]

This finding is significant as the rhetoric from GPs was often that they felt they had little to offer patients around weight management support due to the recent decommissioning of local behaviour change support services which they could previously refer patient to for help with dietary change, physical activity and weight management. There was a relatively fixed view amongst GPs that without the availability of such services, there was little they could do to support patients;

> *"Um, we used to be able to say go to Weight Watchers and here's you-you know, your first three months vouchers for it. Um, now we can't do that. I think people then have to decide they have to be motivated to pay for it and put the time aside… I think if we could send, we used to be able to send them to, I don't know what they were called. But there were sort of like health advisors that would do a one-to-one with them. And then they would also be able to send them to a gym or support them in going to something like that. That's gone as well. That-that got cut… Well, it means that there is no way, you know, you-you just basically are saying - lose weight, do the best you can".*
> [Dr H, female]

However, with some GP experiences demonstrating that men required very little on-going support to be successful once they were at an appropriate stage of change, coupled with the fact that men themselves reported preference of a self-directed approach to weight management, there needs to

be a modified approach to the way in which GPs address weight management with men. GPs described referring patients to specific programmes, interventions and group based approaches for weight management, rather than GPs themselves identifying readiness for change and then harbouring men's high levels of agency and desire for approaches to weight management which protect their masculinity by placing them in control, allowing them to remain independent and not have to follow what they perceive to be a feminised method of weight loss. There were some examples from GPs who described providing patients with written information about weight management, but this was not a strong theme within the data of developed self-directed approaches which could be initiated within Primary Care and followed up without the need for high levels of patient contact between times.

During interview with a senior public health leader I explored current commissioning strategy in order to understand the driving factors behind the recent disinvestment and decommissioning of several services reported to me during interviews with GPs. I discovered that the local authority leaders and decision makers did not wish to invest public funds into support services which they felt led to a nanny state approach and that this had been a key consideration in the authorities decision to decommission a number of services that were originally funded as an approach to support people eat a healthy diet and increase physical activity participation levels. The local authority had since moved away from investing in the commissioning of services which provided individual behavioural and lifestyle support and had

moved to an educational model of health promotion, much to the disappointment of many of the GPs interviewed as part of this study.

The following extract from my interview with a senior public health leader demonstrates how the local authority assumes the position that its citizens are able to express their free will and personal choice regarding individual lifestyle behaviours and the authorities role is to ensure that individuals receive sufficient information about the impact certain behaviours may have on their health, allowing citizens to make their choices based on the understanding that they are making educated and informed choices;

> *"..we're very comfortable as an authority politically with the idea that we have a role in educating the public and making them see, uh, the harm they may be causing themselves by making difficult choices and to understand the information around those issues, but then we tend to take a view that if we are confident that the population knows what it's doing, knows the effect of the choices that it might make or the individuals might make within that, then, that is a sufficient role for this local authority-and, uh, we needn't go any further in terms of trying to influence people by structural interventions."* [Senior public health leader, male]

Despite a number of GPs being disappointed about the local authorities decision to dis-invest in a number of lifestyle support programmes that supported adults to eat a healthy diet and become more physically active,

when questioned on what they felt was missing from local obesity strategy many talked about the need for education particularly in relation to schools and the targeting of school age children. Dr C and Dr D both identified education within schools as important and felt it was important that such education started early in life to result in healthier lifestyle choices in later life;

> *"..having the right messages in schools… healthy eating messages and that healthier lifestyle messages going through right from the start the next generation I think have a chance."* [Dr C, male]

> *"I don't think there is enough um, teaching in schools about health, and about the way your body works and what you do, it's impacts on your body in the short, medium and long term."* [Dr D, male]

This compliments the national strategic approach to obesity which has identified the targeting of children as a priority;

> *"Um, nationally, I think that, um, there is a certain emphasis around, um, tackling and hopefully, preventing, um, child obesity from getting any worse."* [PHE representative, male]

Whilst GPs were disappointed about this change in strategic approach which they deemed as detrimental to local obesity prevalence, this may be more suited to men. According to the findings within this research, men preferred a self-directed approach to weight management allowing them to conduct

their own research and develop their own strategies rather than receive a structured intervention typically assuming that individuals required individual behavioural support in order to successfully manage changes of behaviour. Within chapter 4 one of the identified themes from the interviews with men was about the influence that their health literacy has on their individual lifestyle choices. Findings showed that men held a degree of knowledge about the impact that diet and physical activity had on body weight and subsequently their overall health. Specifics were provided about the health risks of consuming high levels of saturated fat, sugar and salt and the health benefits of eating at least five portions of fruit and vegetables per day, consuming lean protein sources such as white meat and fish and the need to be physically active. This demonstrated that the men interviewed had a level of health literacy which provided them with the knowledge of how to improve their own health.

This approach assumes however those individuals have the ability to apply this understanding, which will in turn lead to changes in behaviour. It doesn't take into account the structural forces that play a significant role in determining individual lifestyle choices. Examples identified by some of the GPs included the built environment, multiple responsibilities and time pressures, affordability of some healthy foods and leisure pursuits and the influence of media and advertising. Whilst the men interviewed often positioned themselves as holding responsibility for their lifestyle behaviours and made only fleeting reference to wider socioeconomic influences, the common pattern described by many of the men interviewed was of a

successful period of weight loss followed by subsequent weight regain. Underlying reasons for this relapse were often due to social and structural factors such as the ease of availability of high calorific foods. This was described by Patrick in chapter 4 who recalled successfully managing to lose weight in the past but then attributed his later weight re-gain to becoming *"bored"* with his diet. In this example Patrick put the onus of responsibility on himself, despite him describing how the allure of high calorific foods was triggered by him walking past a chip shop indicating that the trigger may in fact have been structural, in this instance the constant ease of access to such foods;

> "*..just walk past the chippy where it's all bad for you and that but it's like, oh well get a bag of chips even though I don't eat a lot of chips…"*
> [Patrick, 51, BMI 37.8]

6.5. Summary

The qualitative comparison of data from chapter 4 and chapter 5 has provided an additional depth and richness to the findings of this research by identifying where the findings from interviews with men are contradictory or complimentary to the findings from interviews with GPs and public health strategists.

Disparity is evident between the narratives provided by men and GPs in a number of areas. GPs exhibit high levels of cognitive bias when describing their approaches to addressing, or indeed not addressing weight

management with men. Their belief is that men are not overtly concerned about body weight, that they are not motivated to lose weight because of concerns about their appearance and that being overweight or obese for a man is socially acceptable. These findings are at significant odds with the findings from interviews with men themselves.

Men interviewed showed a high level of body consciousness and concern about their personal appearance which led to weight management attempts and was driven by the view that being overweight or obese is perceived negatively within society and could lead to public humiliation and ridicule. Men also provided examples of how they had raised concern about their body weight with a GP proactively. None of the GPs interviewed provided an example of this, but most stated that it was routine for women to do so.

Further disparity is also evident between the perceived influence that GPs had over men and initiation of lifestyle change. GPs often felt their influence was low, whereas men identified the GP as an expert who could influence their behaviours.

Findings began to complement each other when analysing preferred approaches to weight management described by men. Men exhibited high levels of agency, perceiving body weight as something within their control attributing it largely to personal choice, food habits and physical activity levels. GPs had a greater appreciation and understanding of how a number socioeconomic factors and cultural influences impacted population

prevalence of obesity and how these factors posed challenge to individual healthy lifestyle choices. GPs also articulated the view that men were able to act independently in relation to weight management and that men demonstrated higher levels of personal responsibility toward their body weight than they often experienced with women. GPs were often frustrated with what they viewed as a lack of local support services available to help patients manage a healthy body weight, but this was less of a concern for men who were less inclined to seek weight management support due to the feminised perception of such services and the desire to adhere to socially constructed forms of masculinity.

CHAPTER 7. DISCUSSION

7.1 Introduction

The phenomenon of interest which inspired this research was the observable low representation of adult men participating in weight management programmes. This is of public health importance as the prevalence of overweight and obesity amongst men is higher than women, as is the prevalence of lifestyle related disease such as CHD, IHD, stroke, type II diabetes and hypertension (HSE, 2017). There is therefore a gender inequality in provision and access to existing healthcare services that help reduce the risk factors for these conditions where women regularly seek and receive help in these areas, but men do not. I argue that existing weight management provision is contributing to this gender health inequality divide and the voice and opinion of men most vulnerable to weight related disease such as those from lower socioeconomic classes and those who have not attended any form of weight management programmes for weight loss support is currently unheard. My research is the first to explicitly explore the views of this group and how their view compares to those involved in addressing obesity such as General Practitioners and Public Health Strategists.

This chapter examines the relationship of the findings described in chapters 4, 5 and 6 and situates them amongst existing literature and theory. I will also critically reflect on the research process itself, its limitations and what, if anything could have been done differently to improve this research.

7.2 Primary Care Influence, Structure and Capability

GPs spoke of their perceived lack of influence over the lifestyle of patients with regards to diet, physical activity and weight management, with the findings of my research supported by previous studies reporting that health care professionals can often become frustrated and disillusioned with their patients lack of progress with weight management (Blackburn *et al*, 2015; Dewhurst *et al*, 2017; Epstein and Ogden, 2005; Gunther *et al*, 2012). They provided accounts of patients who struggled to achieve changes in lifestyle and perceived their professional influence as minimal in many cases. GPs felt that their personal influence was limited and that social structures such as the environment, food availability, cost and culture are likely to overpower recommendations they make to patients regarding changes to lifestyle that can be made at an individual level which supports previous research findings (Lawlor *et al*, 2000).

Conversely, the sub-theme “Doctor knows best” constructed from data derived from my interviews with men shows that men valued the opinion of their GP and viewed them as a sources of influence which could result in changes in behaviour. Men gave several accounts of either proactively seeking advice from GPs about weight management or identified GPs as experts whose advice would be considered. Men explained how they were likely to act upon the advice of their GP in relation to weight management and lifestyle factors, and that a medical professional’s advice was far more likely to be acted upon in comparison to the advice of family members. This

finding compares favourably to previous research which has demonstrated that adults classified as overweight or obese were more likely to report wanting to weigh less (89% vs 61%) and attempting to lose weight (68% vs 37%) if they recalled being provided with advice on weight management by a healthcare professional at any point in their history (Jackson *et al*, 2013). Qualitative research conducted by Calderton *et al* (2011) found that patients both expected and valued lifestyle advice from their GP, whilst survey data analysed by Evans *et al* (2018) from 1309 patients registered at 15 different GP practices in the North East of England reported advice from a primary care professional (GP or Practice Nurse) as a motivational factor. It is important to note however that the research by Jackson *et al* (2013), Calderon *et al* (2011) and Evans *et al* (2018) was not performed on such homogenous samples as I recruited and included men, women and participants from across a range of demographic and socioeconomic profiles. Evans *et al* (2018) also report how a number of patients reflected on their primary care experiences regarding weight management and were largely negative, highlighting an absence of encouragement and advice although this was from only a small number of cases (n=20). This negativity was evident within my research where some patients felt that GPs needed to be more proactive and offer advice and help with regards to weight management more readily.

On closer analysis of the data, a number of barriers facing GPs in raising weight management are evident. The confidence of GPs themselves to raise body weight with patients is an important area. The current outcomes

frameworks for medical graduates states Doctors are expected to communicate with empathy on lifestyle related issues such as smoking, alcohol, body weight and sexual health (General Medical Council, 2018), however it does not stipulate that graduates will be trained to provide any form of evidence based behavioural counselling or brief intervention. Within my research a number of GPs spoke of how they had not received training on how to raise lifestyle issues with patients and therefore felt unequipped to deal with this matter, something which has been identified within previous qualitative research with GPs (Ampt *et al*, 2009; Lawlor *at el*, 2000).

Many felt that GPs had an important role to play regarding weight management but did not feel appropriately skilled or trained at addressing it. One GP talked about recently attending a training course in motivational interviewing (MI) which they found particularly useful and gave them greater confidence to address lifestyle issues with patients and felt that more GPs should be encouraged to access such training. This finding is comparable to that of Ampt *et al* (2009) who also reported that GPs interviewed as part of their research had reported MI training as useful to their clinical practice. However existing research investigating the effectiveness of MI shows mixed outcomes. Following a clinical review, Christie and Channon (2014) concluded that MI had the *"potential"* to facilitate behaviour change and that MI could be delivered by a wide range of healthcare professionals. Similarly, Soderlund's (2018) review of current research into the effectiveness of MI for improving physical activity self-management for adults with type 2 diabetes concluded that that MI showed *"promise"* within the context of physical

activity behaviour for this particular population. However the efficacy of delivering effective MI in a healthcare setting is still being debated due to research designs not isolating the outcomes of the intervention (Morton *et al*, 2015), resulting in calls for a greater amount of higher quality research to be conducted (Morton *et al*, 2015; Frost *et al*, 2018).

The notion of what constitutes weight management intervention amongst the GPs interviewed is worthy of further consideration. In sub-theme "We have nowhere to go – utilisation of local services", GPs described their reliance on referral pathways to services specialising in providing weight management support, all of which had recently been decommissioned by the Local Authority. GPs did not however describe the use of brief intervention or using opportunistic approaches within consultation to prompt patients into considering behaviour change. It would be beneficial for GPs to appreciate the influence that my research has found they possess on this particular population and be empowered to apply behaviour change techniques in the knowledge that whilst this may not lead to successful behaviour change in every instance, it is likely to have a positive outcome in some. This is supported by Aveyard *et al* (2016) who investigated how acceptable it was to patients to receive brief intervention for weight management from a GP. Findings from their study demonstrate that weight loss was achieved by patients who received opportunistic brief intervention advice only and that GPs do poses influence to initiate weight management even within a very short intervention time period.

Over the past decade the embedding of brief advice and intervention for a variety of lifestyle behaviours including diet, physical activity, smoking and alcohol has been attempted through national public health programmes such as Making Every Contact Count (MECC). MECC is a project designed to increase the capacity of the NHS workforce to deliver health promotion messages to the public for minimal investment, providing them with the skills and confidence to raise lifestyle behaviours with patients opportunistically (Ion, 2011). Despite this being a national programme to support healthcare professionals embed brief lifestyle advice into routine consultation it was not referred to or mentioned by the GPs interviewed within my study. This suggests that the MECC programme may not be reaching GPs who have significant potential to influence lifestyle behaviours.

Mixed opinion existed amongst GPs in the approach to raising the issue of weight management with men. Many saw benefits in developing a relationship with men in the first instance and felt that raising issues about body weight too early would prevent men from engaging with them further. Only when a relationship was established did some GPs feel it appropriate to engage in dialogue with men about body weight and weight management, a finding consistent with Blackburn *et al* (2015) who reported that GPs were concerned about negative consequences such as damaging the relationship with their patient when raising weight loss, especially if patients had presented for consultation about a non-weight related issue. Similarly, Dewhurst *et al* (2017) described how healthcare professionals often felt uncomfortable about raising body weight with patients until they had

established strong rapport for fear of offending the patient. Concerns about preserving the relationship with patients has also been reported in research investigating discussion of other lifestyle related health risks such as childhood obesity with parents (Redsell *et al*, 2011; Walker *et al*, 2007) and smoking cessation with adults (Coleman *et al*, 2000; 2004).

However, the need to develop a relationship with their patient before discussing weight management was pragmatically challenging for those GPs interviewed due to the current structure of primary care. Some GPs drew attention to the fact that current GP workforce shortages resulted in a reliance on locum GPs who, by their very nature, were a transient group and had less affinity with the practice population and less knowledge about local care pathways. Others described a primary care system that did not allow for such relationships to be developed over a period of time due to the number of GPs opting to work part-time and therefore not always being available to provide continuity of care to individual patients. Some went on to challenge the view that today's GP was able to provide the family doctor role as is traditionally associated with General Practitioners in the United Kingdom. This led to difficulties in developing relationships with patients, especially men who were described as infrequent attenders to primary care services, and was therefore a barrier to GPs feeling able to raise the issue of weight management with men unless there was an overwhelmingly strong medical rationale for doing so. Whilst there is consistency between these findings and that of previous research showing that continuity of care improves patient satisfaction, decreases visits to emergency department, reduces rates

of hospital admission and improves acceptance of preventive services, especially for those with chronic conditions such as diabetes (Cabana and Jee, 2004), the changing landscape of primary care is an important additional consideration and a significant barrier to GPs raising the issue of weight management with men. The current pressure within General Practice is a national concern, with many GPs feeling that workloads are unsustainable, that the workforce is diminishing, continuity of care for patients had been eroded and job satisfaction is low (Sansom *et al*, 2016; Croxson *et al*, 2017).

Where GPs did describe raising weight management issues with patients' two main approaches were evident within my research. Firstly, GPs often sought to introduce a discussion about weight management by de-personalising the issue through application of a variety of clinical measures. Use of BMI charts, the Q-Risk tool and other physiological indictors such as blood pressure measurements were used by GPs to initiate a conversation about weight management with their patient. Dewhurst *et al* (2017) report very similar findings, referring to this approach as the *"hooks"* used by health care professionals to initiate a discussion about weight management, avoid causing offense and to preserve their relationship. Speer and McPhillips (2018) also deduced that raising issues of body weight with patients following the calculation of BMI was likely to result in greater acceptance to the patient than patients being told that they are overweight by their healthcare professional without firstly calculating their BMI.

Alternatively, some GPs applied a more directive approach and felt that their role was to identify health problems and address this with the patient even though they acknowledged that the patient may be offended. This approach was described far less frequently than other more person-centred and relationship-centred approaches, but was driven primarily by the fact that opportunities to address issues in primary care with men are often scarce and that as a GP they had a duty to address such concerns in the interest of their patients' health. One GP stated how they felt they would not be *"doing their job properly"* if they did not directly address such issues which pose risk to their patients' health over a fear of causing offense. Qualitative research has however reported mixed outcomes to GPs using direct approaches to initiate behaviour change. Some patients are accepting of this approach and report that such direct styles provided the *"shock"* they needed to move to an action stage of change, whereas others reported negative attitudes to such approaches (Queen *et al*, 2015). Previous research suggests however that healthcare professionals, including GPs, prefer to develop relationships with patients before raising weight management for fear of stigmatising obesity and damaging their patient relationship (Blackburn *et al*, 2015; Epstein and Ogden, 2005; Gunther *et al*, 2012).

Whilst GPs saw a benefit in weight management, this was always framed within a secondary prevention approach. By this, I refer to the fact that GPs described raising weight management with patients as a direct result of an existing medical condition or recent diagnosis and deployed weight management strategies to prevent further exacerbation of the condition and

for long term condition management. GPs did not deploy weight management strategies in a primary preventative approach as a way of managing risks to patient health and ultimately preventing the onset of disease, a finding which is supported by Noordman *et al* (2010) who analysed video recorded GP consultations between 1975 and 2008 to investigate how and when discussions took place in relation to nutrition, physical activity, smoking and alcohol. When questioned during interviews, GPs explained how they felt it would be ineffective to raise the issue of body weight with a patient who had no weight related presenting medical condition and that patients would only see the benefits of weight management and lifestyle change when they could make direct causal linkage with presenting health conditions. Previous research findings do support the notion that men are likely to change certain lifestyle factors that contribute to obesity when health complications arise (Epstein and Ogden, 2005; Gough and Conner 2006; Morgan *et al*, 2011). Lawlor *et al* (2000) also described how GPs were reluctant to raise lifestyle modification with patients unless there was a presenting medical rationale for doing so, reporting that GPs were not in favour of a population based approach to health promotion such as offering lifestyle modification advice to otherwise healthy patients in a preventative health model of delivery, feeling that this sought to medicalise a social phenomenon and had the potential for them to be accused of victim blaming. Findings within my research challenge this view however, as some of the men I interviewed described how they were open to GP initiated dialogue about weight management in a primary preventative health approach and on

occasions frustrated at their perceived lack of proactive support from their GP.

GPs I interviewed reported the recent decommissioning of locally available community services designed to support dietary change, increase physical activity levels and weight management, holding negative views towards this and feeling they no longer had appropriate services to offer patients even if they did initiate discussions about weight management. It is possible that a lack of available options for health care professionals to offer patients and clearly defined pathways to support weight management is dissuading GPs from raising the issue in the first instance, a barrier also reported by Gunther *et al*, (2012) and Dewhurst *et al* (2017). This point has particular significance in relation to the accessibility of weight management services for men. GPs interviewed as part of my research held a view that men are unlikely to be motivated by the offer of referral to a weight management programme that was previously available to them (WeightWatchers) due to the stigma of such programmes being female dominated and unappealing to most men. Because of a lack of alternative options that were more likely to be acceptable to men, GPs refrained from opening dialogue about weight management in the first instance. Developing this point further, it may be feasible that if GPs had access to a gender sensitised weight management offer specifically for men, they would be more willing to initiate conversation about weight management with men in the comfort of being able to follow this up with an offer of referral to a more acceptable form of weight management support for the needs of men specifically.

My research did not fully explore the views of men themselves about how they would prefer to have the issue of body weight addressed by their GP, however there was some insight into the views of men towards how they would feel about the issue of weight management being raised during medical consultation. Firstly, my findings suggest that the GP is a trusted professional whose advice is held in high regard by the men interviewed, listened to and more likely to be acted upon than advice from other sources such as family members. Men described how advice from their GP was likely to influence their behaviour with examples provided, such as one participant attending a health educational programme at the advice of his GP due to being recently diagnosed with type II diabetes which he openly admitted he would not have attended had it not been for the recommendation by his GP. There are also examples within my research findings of men proactively raising the issue of weight management with their GP, or being frustrated by the GPs perceived lack of proactive approaches to offering advice, support and onward referral to specialist services for nutrition and weight management help indicating that they were both concerned about their body weight and open to discussing body weight with their GP. These findings indicate that men may be likely to accept GP initiated dialogue about weight management more readily than healthcare professionals interviewed within this study perceived and that men are less likely to be offended by a GP raising the issue of body weight than expected. This is supported by existing research which shows that men identify healthcare professionals as a group possessing influence over their decision to change lifestyle in relation to body

weight (Wolfe and Smith, 2002) yet despite this, research has shown that men are still less likely to receive advice about weight management in primary care than women (Halbert *et al*, 2017).

Whilst frustrated about poor patient adherence to advice, lack of consultation time and lack of onward support services and pathways resulting in GPs being unlikely to attempt to address weight management with men, education and training about the ways in which brief behaviour change counselling can be provided within very short periods of time would be beneficial. GP expectations in terms of patient weight loss outcomes should be tempered with the view that whilst raising issues of body weight with a patient may not instantly or routinely result in successful weight management or lifestyle change outcomes, it is the cumulative effect of their effort, public health campaigns and population education that in combination will have success at certain moments in time with certain patients and that men are particularly likely to be motivated into lifestyle modification as a result. The potential benefits of GP provided brief intervention for weight management was endorsed by the senior public health leader interviewed, who also described how weight management intervention need not be time consuming or overly complicated in order be effective. The implementation of the MECC programme provides training for healthcare professionals on this very approach, however this was not mentioned within my interviews with GPs as described earlier.

Despite the challenges they faced, GPs interviewed during this research were largely positive about the role that primary care can play in addressing obesity, with a number describing how they would like to dedicate more time to health promotion activity but were often prevented from doing so due to time restrictions and the complexity of patients presenting with multiple morbidities, a finding also reported by Ampt *et al* (2009). GPs did however raise a question about the commissioning and funding of weight management with some seeing it as a non-contracted activity outside of the current GP contract, whereas others perceived it as an integrated part of standard practice when adopting a holistic, personalised approach to care.

7.3 Preserving Masculinity

The concepts of managing a healthy body weight, eating a healthy diet and participating in regular physical activity were acceptable to the men interviewed; however the processes by which to achieve this are contentious and must preserve or enhance men's masculinity in order to be appealing and acceptable. Men I interviewed reconstructed hegemonic masculinities (Connell and Messerschmidt, 2005; Courtney, 2000) and it was clear that requiring them to adopt lifestyle behaviours or participate in activities that compromised this was highly unlikely to be successful.

Men interviewed perceived attendance at existing weight management programmes as a pursuit which was female dominated and unappealing. This concurs with previous research into chronic disease prevention and management programmes (Gavarkovs *et al*, 2016). They characterised

attending a weight management programme through humour, with one referring to a popular UK comedy TV show (Little Britain) which staged a weight loss group for comedy purposes and depicted many of the pre-conceptions that men described within interviews. Weight management programmes were described as something attended by groups of women, where men are in the minority or altogether absent and they were sceptical of the effectiveness of such programmes, viewing them as a *"talk shop"* rather than something of practical value. There was nervousness about having body weight measurements taken in front of other people, and concerns about being the only man in the group. They also perceived weight management programmes as inflexible and held at specific days or times of the week which were often inconvenient for many who had families and children to care for outside working hours.

These finding concurred with data derived from interviews with GPs who often described how men were not enthused when offered referral to a weight management programme, instead preferring alternative options such as referral to local leisure facilities for a period of access to exercise opportunities and is consistent with findings from previous studies that report physical activity as acceptable to men in relation to weight management and health improvement (Wolfe and Smith, 2002; Robertson *et al*, 2014).

The negative perception of weight management programmes may be due to a number of factors. We know that women are much more likely than men to attend existing commercial weight management programmes (Bye *et al*,

2005; James *et al*, 2016). The commercial weight management business is a global industry and has expanded rapidly over the past 30 years, largely in response to increasing demand from women who readily attend commercial weight management programmes (Wilkins, 2001). Therefore, women are targeted through the marketing strategies of these companies and ultimately feel greater affinity and comfort at becoming a paying consumer of the goods and services available. This has significance as the work by Courtney (2000) describes how men exhibiting hegemonic masculinity wish to avoid what they perceive as female activities. In addition, previous work linking hegemonic masculinity to the willingness of men to help-seek in relation to health shows that men wish to be perceived as indestructible and are reluctant to seek professional help unless there is perceived serious risk (potentially life threatening) to health (Courtney, 2000; Moller-Leimkuler, 2002; O'Brien, 2005; Seidler *et al*, 2016). Hegemonic masculinity was highly evident throughout my interviews with men, therefore it is not surprising that adherence to this masculine social norm, coupled with this perception of weight management programmes results in men being unlikely to participate in such programmes.

The concept of hegemonic masculinity is central to recent developments of gender sensitised weight management programmes, where programme designers have sought to masculinise the environments in which such programmes are held in attempts to make them more appealing to men and subsequently increase participation. One of the largest and most well researched gender sensitised programmes, the FFIT programme (Grey *et al*,

2011; Gray *et al*, 2013; Gray *et al*, 2018; Hunt *et al*, 2014) has utilised football to increase the appeal of such services to men. The FFIT programme has been successful in recruiting adult men with positive weight loss results achieved during randomised control trials up to three and a half years following attendance of the initial programme (Gray *et al*, 2018).

This recent research into the gender sensitisation of weight management has focussed on the application of group-based weight management programmes. This may be because the traditional model for weight management programmes developed within the private sector has been around group-based support and because group-based programmes have been shown to be as effective as individually provided weight management support programmes and are therefore more economical and cost effective (Robertson *et al*, 2014). Whilst the recent research into gender sensitisation of weight management programmes in the United Kingdom has largely focussed on group-based initiatives (Grey *et al*, 2011; Gray *et al*, 2013; Gray *et al*, 2018; Hunt *et al*, 2014), findings from my research lead me to challenge this approach and suggest that men are more likely to engage in self-directed and self-management approaches for a number of reasons.

Firstly, self-directed approaches are often more flexible and can therefore be followed at times that suit the individual, rather than having rigid days or times of the week that have to be attended which is often not feasible amongst daily work, family and home life responsibilities. Evident within my research was the complexity of life for the men interviewed who were

typically employed in full-time occupations, often working additional shifts to maximise their income and had family commitments including children or other relatives whose needs they prioritised before their own, leaving little or no time for personal pursuits or leisure. When discussing attendance at weight management programmes, men would often refer to a lack of spare time to attend and assumed such programmes would be held on a specific day of the week at a specific time which if inconvenient, prohibited attendance. This is a practical implication that provides a barrier to all programmes that are provided through a delivery model requiring a fixed meeting which takes place each week. Previous research has shown that practical barriers prohibit access to healthcare services and achieving lifestyle change for men, for instance Gibbs (2007) reported that work was a barrier to men attending self-management programmes for chronic illness management (arthritis) and that men of retirement age were more likely to attend such programmes. Caperchione *et al* (2012) reported that work commitments and family responsibilities were barriers to regular physical activity participation in men; Gough and Conner (2006) found that time constraints were barriers to healthy eating in men; Ashton *et al* (2015) found lack of time was a barrier to healthy eating and physical activity in young adult men; whilst Coles *et al* (2010) identified that men found accessing health services challenging due to work commitments with some men having to work extra hours in order to increase income in order to support their family, leaving little time to access health care.

Whilst the barriers identified undoubtedly pose difficulties for men to access services, I also hypothesise that men are identifying barriers such as the need to work overtime and the requirement to care for family members and relatives because this increases their masculine capital and reinforces their importance within their family unit. In turn this enables them to legitimise their inability to participate in regular physical activity or other health related pursuits. I propose that this is again underpinned by the need for men to maintain their masculinity which they do by legitimately denying themselves the time and opportunity to invest in their own health. In doing so they are able to avoid potential failure, for example by committing to lose weight and failing to do so which they may find embarrassing and by reinforcing their position as the family provider or breadwinner which enhances their sense of masculinity.

Secondly, self-directed approaches can protect men's self-esteem and masculinity whilst maximising their perceived high levels of agency. My findings show that men are willing to take personal responsibility for their body weight, therefore it is appropriate to develop appealing self-directed approaches rather than assume that all men benefit from group-based programmes which emphasise the therapeutic impact of social support. Whilst such social support is reported to be beneficial to some men (Gavarkovos *et al*, 2016), the findings of my research lead me to advocate self-directed approaches for men due to their preferences for autonomy and perceived agency. Such approaches preserve men's masculinity as they are not subject to potential competition or social comparison found within a group

environment which people with low self-esteem and high levels of body consciousness may wish to avoid. This has been found in other clinical disciplines such as outpatient psychiatry where it has been demonstrated that men prefer individual therapy over group therapy (Hernandez *et al*, 2014).

The SHED-IT programme is modelled on self-directed approach supported by an internet-based product (Morgan *et al*, 2009; 2011). Weight loss outcomes were positive (mean -4.2kg at six month follow-up) and demonstrated that Australian men were able to reduce body weight with little face-to-face input from a trained professional. The findings within my research endorse such an approach which maximises the high levels of independence expressed as desirable by the men interviewed and perhaps most importantly preserves their masculinity as they are empowered to take control of their involvement and provides them with an accessible programme that is flexible around daily work and family commitments. Interestingly, the process evaluation conducted as part of the SHED-IT programme showed that men requested a greater level of face-to-face contact. From this I hypothesise that self-directed weight management programmes which are gender sensitised in their design to be appealing to men may have the potential to act as a gateway for some participants who engage with these programmes in the first instance due to their ability to preserve masculinity in a 'safe' environment, with some then deciding to pursue additional support mechanisms as they aim for long term weight management and their

perceived views and attitudes to weight management support programmes change or their confidence increases.

A criticism of my recommendation for weight management programmes to preserve and adhere to current social norms around masculinity may be that this approach merely reconstructs the cycle of hegemonic masculinity within society and in doing so, further exacerbates the cycle of behaviours often associated with this concept. De Visser and McDonnell (2013) warn that failure to challenge existing socially constructed stereotypes of health behaviours relating to masculinity can result in their continued reproduction. My proposal seeking to engage men in the topic of weight management through preservation of such masculinity rather than seeking to alter it is however consistent with other proponents of gender sensitised weight management programmes who have sought to work with rather than fight against existing masculinity and its constructs (Gray *et al*, 2013, Hunt *et al*, 2014). But I do argue that group-based programmes, even when gender sensitised, are still challenging for many men to access for the reasons already discussed and that offering self-directed approaches will provide a gateway to engaging more men in this important public health issue and initiate a possible shift in hegemonic masculinity which has the potential to alter over time (Connell and Messerschmidt, 2005). Once that engagement has commenced and men become comfortable with accessing and utilising weight management programmes that preserve their masculinity, previous research shows that they are more likely to desire further advice, information and support on this subject matter (Morgan *et al*, 2011). Over a period of

time this will support wider discussions about weight management and associated health issues amongst men and begin to facilitate change in the current social norms around masculinity that are highly evident within this research.

Enhancing the health literacy of men provides an opportunity to preserve men's masculinity and contribute to behaviour change contemplation, preparation and action. Men I interviewed articulated some understanding of the factors commonly associated with managing a healthy weight. For example, increasing fruit and vegetable consumption, reducing saturated fats, reduction of sugar intake and reducing dietary salt intake were commonly described and linked to health benefits, most commonly the reduction in risk of developing coronary heart disease. Men also articulated the health benefits of regular physical activity both in terms of its application to weight management and prevention of disease. Men viewed diet and physical activity as equally important factors in relation to health and body weight, however they often pursued changes to physical activity levels more readily than changes to diet due to the requirement to maximise their masculinity, a finding reported previously (Gavarkovs *et al*, 2016). Only one participant interviewed disregarded the view that personal lifestyle choices were important determinants for health, with most participants describing ways in which they were either actively attempting to modify lifestyle behaviours to improve their health and wellbeing, or describing how they have attempted to do so in the past.

Findings from my research are supported by previous research studies, although often with groups of differing socioeconomic profiles. Hankey *et al* (2002) concluded that men who were overweight but otherwise healthy had accepted health education messages that weight loss can improve health, however it is worth understanding that those recruited to their qualitative study were men who had already volunteered to participate in a work-site-based weight loss study. It is not surprising that this cohort of men reported acceptance of health education messages as their behaviour (volunteering to participate in a weight loss study) strongly implies that they wished to lose weight and had motivation for doing so. Caperchione *et al* (2012) concluded that middle aged Australian men had a good understanding of the benefits of nutrition and physical activity on body weight and health. The reported educational attainment level of the participants however was that 70% (*n*=21) had a university education suggesting that the sample recruited contained a number of participants in managerial or skilled technical positions and few were employed in lower paid occupations. Research by Emadian *et al* (2017) also reported that South-Asian men living in the United Kingdom who were overweight were able to articulate the relationship between diet and physical activity as risk factors for the development of type II diabetes and were aware of general dietary guidelines such as the benefits of reducing sugar and fat content, benefits of increased fruit and vegetable consumption and that modification of individual lifestyle factors can prevent the onset of this condition. Again however, like the study by Caperchione *et al* (2012) the study sample was skewed to academic achievers with 81% of participants having a university education.

Another finding from my research was the ways in which men often reported attempting to make lifestyle changes through small and achievable dietary modifications, rather than large scale modification. Men identified and described small changes that they had made to their diet with such changes perceived as acceptable to those interviewed. This was described as a preferable approach to lifestyle modification as opposed to what men described as *"strict diets"* which they perceived as overly restrictive, had the potential for them to become unsatisfied with food and associated dieting as more regularly adopted by women. This finding supports a similar discovery by Sharp *et al* (2018) who identified that men who participated in the HAT-TRICK gender sensitised weight management programme described the encouragement they received to consider small and manageable changes to lifestyle an acceptable and positive aspect of the programme.

Recent public health campaigns such as the national Change4Life programme have emphasised the *'small changes'* approach to health behaviour change, based on previous research into the effectiveness and sustainability of lifestyle modification aiming to reduce body weight (Hill, 2009; Hills *et al*, 2013). Previous research has highlighted the perception that men often have towards the concept of dieting which they associate with women and something that they wish to avoid in the interests of adhering to masculine norms (Gough and Conner, 2006; Gough, 2007, Sabinsky *et al*, 2007). The research conducted by Gough and Conner (2006) found how men sought to *"reclaim eating as a personal choice"* with their reported

findings closely matching the findings of my research with similar language used by men in both studies to describe the desire for moderation rather than strict diets.

Whilst men I interviewed saw the practice of making smaller changes to their diet acceptable and preferable to larger scale modification, there was the risk that the changes became so small and irregular that there would be negligible or no health benefit at all. Whilst men clearly articulated a preference for self-directed lifestyle modification which was informed by their own knowledge and decision making, none of the men interviewed reported successful long term adherence or successful long term weight management. This is consistent with research findings demonstrating the difficulties both men and women face when attempting to maintain weight loss over the long term (Hassan *et al*, 2016; Loveman *et al*, 2011 Paul-Ebhohimhen and Avenell, 2009). It is plausible that men were expressing their desire to follow the approach of making small, simple changes in response to campaigns endorsing this approach such as the Change4Life campaign for a number of reasons which are more deeply rooted in underlying psychology and sociology, such as the wish to avoid failure, be in control of decision making, avoid perceived feminine activities and ultimately preserve their masculinity.

Large scale population based approaches to health improvement have been criticised in the past. Adams *et al* (2016) articulated the potential challenges of this approach to health improvement referring to the fact that such approaches rely heavily on individual agency. Adams *et al* (2016) are critical

of such high agency approaches which assume that all population sub-groups have the required levels of agency to be able to act on education and messaging provided through mass media campaigns and mainstream education. They argue that such approaches are more likely to result in adherence amongst affluent groups who possess higher levels of education and health literacy allowing them to access, interpret and implement new knowledge and understanding, which can reinforce socioeconomic inequalities. Whilst Adams *et al* (2016: 4) endorse low-agency population interventions as the *"backbone of public health strategy"* they do see benefit in both high and low-agency interventions working synergistically and propose that interventions should also be considered on a continuum of both population targeting (whole population versus targeting of high-risk populations) and agency.

Within this context the Local Authority approach described by the public health leader interviewed as part of my research could be defined as high-agency and targeting the whole population. Despite the concerns raised by Adams *et al* (2016) the findings from my research suggest that such an approach is suited to men who perceive themselves as having high levels of agency. Despite men who participated in my research articulating high agency they did not reflect upon the various barriers they encountered when attempting to take action and make lifestyle change. Therefore, it is appropriate to suggest that men in this study may not have the true levels of agency that they perceived especially as none of those interviewed described successful adherence to lifestyle change regarding diet and physical activity

in the long term. In addition, it is likely that men were simply expressing their cultural identity through their expressed desire for agency by wishing to be independent and self-determining (Gough and Conner, 2006).

The findings from my research show that men are aware of the relationship between body weight and health and widely promoted suggestions for weight loss such as making small changes to diet and physical activity levels. They were able to apply this awareness and identify relevant lifestyle changes required in order to achieve weight management and health improvements most commonly the benefits of regular physical activity and reduction of certain food groups. This finding is important because it contradicts suggestion that lack of knowledge is a major barrier to successful weight management (Dewhurst *et al*, 2017). I cannot therefore conclude from these findings that this group of men did not participate in weight management programmes because they are not aware of the link between weight management and health, or because they do not value the health benefits that managing a healthy body weight can deliver. In fact, several previous studies exploring the reason for wanting to lose weight in adult men show that the desire to improve health features strongly (Ashton *et al*, 2015; Caperchione *et al*, 2012; Hankey *et al*, 2002; Walsh *et al*, 2009). Furthermore, comparison can be drawn between other health related lifestyle modifications that have been studied, most noticeably that of smoking cessation, where previous research concluded that men are more likely to stop smoking for improved physical fitness and health improvement than women (Grotvedt and Stavem, 2005; McKee *et al*, 2003; Villanti *et al*, 2016),

and that men were more likely to stop smoking unaided than women (Mikkelson *et al*, 2014). The prevailing masculinity constructs however are impossible to ignore in this area of study. Whilst gender sensitised programmes provided through both groups and individual interaction have reported success at attracting men and initiating weight loss my findings endorse self-directed approaches which maximise individual independence and therefore masculinity of men.

7.4 Physical Appearance and Body Consciousness

Throughout this chapter I have referred to the concept of hegemonic masculinity and I have argued that this is a phenomenon which runs through much of the findings of my research and can largely be attributed to the observable low participation of men participating in weight management programmes. I have argued that weight management programmes need to be conscious of masculinity and programmes need to be designed, located and delivered in ways that preserve the masculinity of men in order to make participation socially acceptable. I have discussed how other weight management programmes have successfully achieved this through gender sensitisation with positive results across age and socioeconomic profiles. The point I am about to make therefore is perhaps the most controversial as it challenges many of the existing notions around men and body weight.

Findings from my research highlight that men are body conscious and desire to achieve weight loss for the benefit of physical appearance across the sample age range. Previous research findings in this area are mixed and

wide ranging. For instance, De Souza (2005) concludes that men will justify weight loss for health benefits but not for personal appearance, which is far more widely associated and accepted as being the primary reason for weight loss amongst women, whereas others describe how appearance is often provided as a motivator for weight loss in men (Gavarkovs *et al*, 2016; Hankey *et al*, 2002). Authors of previous research have also claimed that the desire to lose weight in men for aesthetic reasons is stronger amongst younger men (Ashton *et al*, 2015; Morgan *et al*, 2011; O'Brien *et al*, 2005), which was not the case in my research.

Despite the findings from my research and those reported in previous studies, GPs described men as being disinterested in physical appearance as a reason for weight management. Research itself has played a part in constructing this perception, for example findings reported by De Souza (2005) about why men choose to diet specifically describe how men sought to legitimise the reasons for dieting by claiming the need to lose weight for health benefits and distancing themselves from the need to lose weight for appearance reasons which they related as a female trait. GPs interviewed within my research reinforced this viewpoint and did not view men as being motivated to consider weight management because of body image, instead preserving this motivation for women. In light of the findings reported within my research and that of previously reported findings (Hankey *et al*, 2002; Morgan *et al*, 2011; Wolfe *and* Smith, 2002) I challenge these existing views and claim that some men are motivated to manage body weight due to body consciousness and physical appearance and that weight management

programmes seeking to engage men should utilise this understanding, rather than avoid it altogether on the presumption that men are disinterested in weight loss for body image purposes.

This needs to be done with caution however. A weight management programme targeting men that focuses purely on the benefit of body shape and changing physical appearance runs the risk of being perceived by men as overly feminine and may not be appealing. The fact that men desire to change their body weight and body shape in order to look more attractive should not be ignored and if phrased in the correct manner is likely to be a motivating factor for some men. There are also additional complexities and intricacies with men, body size and masculinity that need to be carefully considered. Findings within my research show how some men can be fearful of being too thin and how body size is regarded as a sign of physical strength. I refer to one particular participant interviewed within my research who made specific reference to his concerns about advice he received from a GP about his ideal BMI which he felt would render him *"too skinny".* He associated being too thin to loss of physical strength and endurance, describing how he did not feel that he wouldn't be able to successfully meet the needs of his physically demanding occupation if he lost too much weight. Again, there is consistency with this and previous studies which have identified the negative connotation some men have towards being thin, as opposed to a larger body size which is associated with masculinity and attractiveness (Gough and Flanders, 2009; Quidley-Rodriguez and Santis, 2017).

The high levels of body consciousness evident within interviews often resulted in social comparison and applying negative and derogatory terms to describe their own body shape. This low level of self-esteem was a barrier to participation in some activities such as exercise within a leisure centre or gym environment. Men often described being fearful of using these facilities as they felt they would be ridiculed by others due to their body shape. Whilst physical activity within such facilities was described by men as an acceptable approach to weight management in terms of masculinity and social acceptance, men often described being anxious, nervous and fearful of entering such environments which were depicted as intimidating. The stigma associated around such facilities provided a significant barrier to men participating in regular physical activity and has also been highlighted as a barrier accessing leisure facilities by men and women classified as clinically obese previously (Thomas *et al,* 2010).

Body consciousness was also provided as a reason that men do not wish to attend weight management programmes where they held a fearful view of being weighed and measured in front of other people. The FFIT programme sought to address the nervousness that some men have at joining a group programme by positioning itself as a place for *'like-minded'* people of similar physical ability (Bunn *et al*, 2016). I explored the concept of men-only group weight management or exercise classes with men interviewed within my research, but their response was non-committal. Whilst they agreed that such an approach was more appealing than their current perception of weight

management programmes, there was no strong enthusiasm for a man-friendly version with many still referring to other practical difficulties with attending such programmes, for example lack of spare time amongst other existing commitments.

The FFIT programme makes several assumptions in its programme design. Firstly, it assumes that men are interested in football, which is not always the case. Secondly, it assumes that men enjoy group dynamics which naturally lead to male banter, competition and social bonding, and this is not always the case. Finally, it assumes that men have the confidence to join such groups, which findings from my research strongly suggest is not the case. Whilst the research conducted into the FFIT programme cannot and should not be ignored as it has been instrumental in the topic of addressing the same issues used as the starting point for this research, caution must be taken so that this programme model is not viewed as a silver bullet to supporting men with weight management. The FFIT programme has been successful in recruiting men so there is clearly a benefit for weight management programmes to be gender sensitised through their location, content, design and inclusion criteria. However, my findings lead me to argue that it should not be assumed that all men have the confidence to join a group-based programme, even if it is with men of similar interests and similar physical attributes (body weight) and abilities.

The findings of my research demonstrate that GPs over generalise in their assumptions about men and body weight, perceiving men as uninterested in

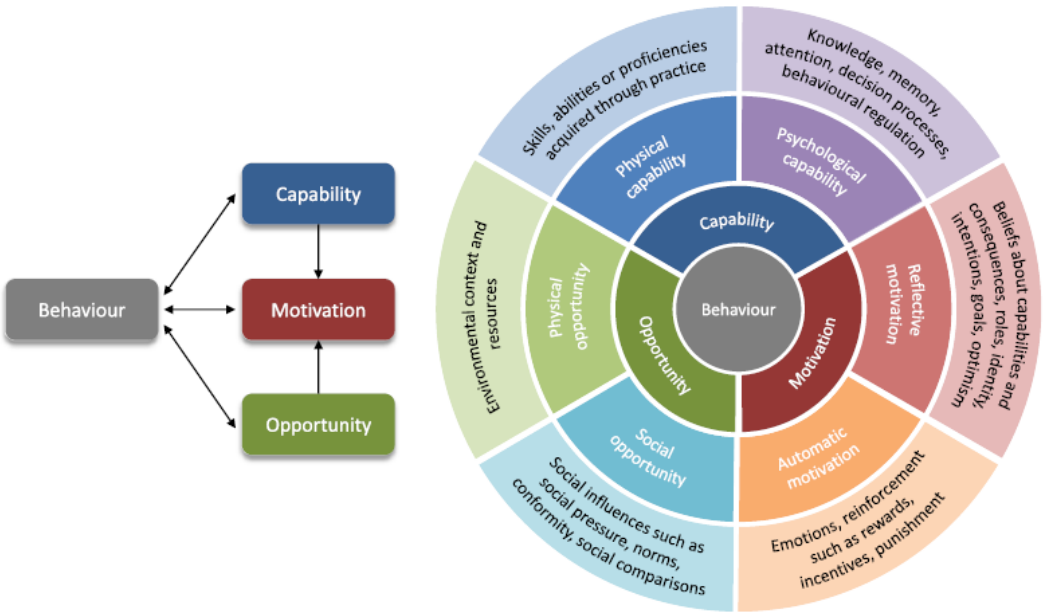
weight management for body image purposes. In contrast, my research illustrates that GPs are missing opportunities to initiate conversation and support men in respect of weight management and do not appreciate the levels of body consciousness I identified in men of all ages and low levels of self-esteem which prevented them from pursuing certain activities, or receiving support. Themes of body consciousness ("the body conscious man") were constructed from my interviews and showed that men of all ages were conscious of their body weight, shape and physical appearance. They were fearful of ridicule due to their body shape and often described previous weight loss attempts being driven by the desire to change physical appearance. Some disregarded that men were interested in weight management at all for body image purposes due to social acceptance of men being *"big",* however this did not concur with what men themselves articulated, with their accounts showing high levels of body consciousness and low self-esteem.

7.5 Why are men unlikely to participate in weight management programmes?

The main research question which this study set out to answer was: why are men unlikely to participate in weight management programmes? Having collected, analysed and discussed data from a variety of stakeholders relevant to this question, this chapter will now draw together the findings from this research and answer this question.

In order to do this systematically I will apply the findings of my research to the widely utilised behavioural framework known as the COM-B model. The COM-B model (Michie *et al*, 2011) is founded on the concept of human behaviour being determined by the interaction of three components: capability, opportunity and motivation. These three components are further subcategorised whereby capability can be either physical or psychological, opportunity can be social or physical and motivation can be either autonomic or reflective (Figure 11).

Figure 11. The COM-B behavioural system



Source: Michie et al, 2011

The COM-B model forms the central structure of the Behaviour Change Wheel which has become increasing utilised as a tool for designing behaviour change intervention and has been effectively applied to a number of health behaviours at individual and organisational levels (Alexander *et al*,

2014; Barker *et al*, 2016; Jackson *et al*, 2014). Its use has recently been applied as a synthesis framework for systematic reviews seeking to identify barriers and facilitators to certain behaviours at both a patient and healthcare professional level (Heslehurst *et al*, 2014; McDonagh *et al,* 2018; Moore *et al*, 2019). I will apply the COM-B model in a similar fashion and use its constructs as a framework to situate the findings of my research from the perspectives of men, GPs and public health strategists in order to describe the principle barriers and facilitators to men accessing weight management programmes. Finally, I will make practical recommendations of how representation of men in such programmes can be increased.

Table 8 provides a summary of my findings mapped against the three constructs of the COM-B model and how these findings constitute current barriers to men accessing weight management services and also facilitators that have the potential to increase participation. The analysis within table 9 begins to draw together the findings of my research to start and answer the main research question.

Table 8. Application of COM-B framework to research findings

Task: what needs to happen for men to participate in weight management programmes?		
COM-B components	**Barriers - what needs to happen for the target behaviour to occur?**	**Is there a need for change?**
Capability (physical)	Men: men need to have the physical ability to attend weight management programmes.	Men: no change needed. Physical capability to attend weight management programmes was not found to be a barrier to attendance within this research.
	GPs: GPs need sufficient consultation time to address multiple co-morbidities with patients, including weight management.	GPs: change needed so that GPs have sufficient consultation time to address weight management with men or, the skills to be able to address weight management with men quickly and sensitively within existing consultation time constraints.
Capability (psychological)	Men: men need understanding of nutritional and health guidelines and appreciation of health impact.	Men: some change needed. Data from this research shows current population level health promotion/education campaigns have had impact on men.
	GPs: GPs need skills in raising the issue of weight management with men and how to address related lifestyle factors. GPs also need to understand what motivates men to lose weight and what support mechanisms are desirable to men.	GPs: change needed. GPs do not always feel they have the right skills to address weight management. GPs did not appreciate some of the motivational factors for weight management in men and held stigmatised views.
Motivation (autonomic)	Men: men need to be motivated to attend weight management programmes Men to be informed of available weight management programmes by their GP	Strategists: change needed. Weight management programmes for men need to be designed to be appealing and highlight both the physical and mental benefits they can help achieve. GPs: change needed. GPs must have greater

	GPs: GP beliefs about men and their desire to manage body weight needs to change.	understanding of the emotional needs of men towards body weight and body consciousness so that existing stereo-typical beliefs and stigma are challenged.
Motivation (reflective)	Men: weight management programme design needs to be considerate to the high levels of body consciousness and low self-esteem in this particular group of men. Physical appearance change achievable through weight management should be promoted as a benefit to attending weight management programmes.	Strategists: change needed. Offering of weight management programmes which do not rely on group participation, such as self-directed approaches, or one-to-one support. GPs: change needed. Achievement of weight loss and physical appearance benefits to be promoted by GPs and as a benefit in the promotion of weight management programmes seeking to engage men.
	GPs: GPs need to feel confident at raising weight management with men appropriately and sensitively so they do not compromise the relationship with their patients. GP belief that they have little or no influence over the behaviour of men regarding weight management requires addressing.	Alter GPs beliefs about the level of influence they poses over men and lifestyle behaviours. Use findings from this research to provide optimism that men are willing to receive advice from a GP and act upon their advice. GPs need training to ensure they can raise weight management sensitively to ensure it does not impact on men's identity.
Opportunity (physical)	Men: need to have the ability to access weight management programmes flexibly and not have to commit to attendance at restricted time/days of the week.	Strategists: Change needed. Programmes must offer flexibility of access to fit into daily living routines. Various modes of delivery need to be available e.g internet, self-help, face-to-face.
	GPs: need to have the ability to signpost and refer men to gender sensitised weight management programmes as part of clearly defined local pathways.	Locally commissioned gender sensitised weight management services are required for men and GPs to have ability to refer and signpost men to these services.
Opportunity (social)	Men: weight management programmes need to be perceived as social acceptable by men and preserve masculinity.	Strategists: change needed. Programme design to be gender sensitised to preserve masculinity by offering programmes that can be followed in privacy and be

		self-directed. Provide opportunities for weight management social support from peers as an option form men, but not as a mandatory component.
	GPs: need to encourage men to access suitable weight management programmes and promote the benefits of doing so.	GP: change needed. GPs need empowering to actively promote weight management programmes to men with the understanding that men hold the GPs advice in high regard and has the potential to instigate change of behaviour.

GPs faced physical capability restrictions in the form of limited consultation time and increasingly complex patient presentation of co-morbidities, which resulted in prioritisation of the immediate health need resulting in discussion about weight management only being initiated as a secondary prevention strategy. GP capability was compromised however due to a lack of suitable training in raising weight management with patients which resulted in hesitancy at addressing obesity, or adoption of ad-hoc approaches.

Whilst men demonstrated awareness of body weight and the potential implications for health, high level of body consciousness and low self-esteem made the concept of attending group weight management programmes unappealing to the men interviewed for fear of being embarrassed. GP motivation to raise body weight with men was limited because of beliefs about the men's lack of concern about their body weight and that men would be uninterested in discussing weight management. GPs also believed that their influence on patient's lifestyle behavioural choices was minimal.

Opportunities to physically access and attend weight management programmes were not described as a barrier by men. In fact, many of the men interviewed knew of relatives or friends who had attended such programmes showing that access is widely available. Access would have to be self-funded, but again this did not seem to be a particular barrier. The social opportunity however for men to access weight management programmes was a significant barrier to access of weight management

programmes, with such activity highly stigmatised and perceived as a socially unacceptable activity for men to participate in, depicting such action as typically female and un-masculine. GPs were also significantly compromised in the opportunity to support men engage in weight management programmes as local referral pathways to weight management and physical activity programmes had been recently decommissioned and GPs did not feel it socially acceptable to initiate discussion about body weight with patients until they had developed a strong relationship, or unless there was strong clinical rationally for doing so. When local referral pathways were available they were more likely to offer men the opportunity of access to physical activity schemes which they felt were more desirable to men than referral to traditional weight management programme. Social opportunity for GPs was reduced due to fear of stigmatising their patient, causing offense and damaging their patient relationship especially if they were to adopt a primary preventative strategy and raise weight management with men presenting for consultation with health concerns unrelated to their body weight.

7.6 Practical Application

Applying the findings of this research to practice will enhance the understanding of men and their views, beliefs and needs towards weight management ultimately supporting greater levels of participation amongst men.

Having identified what needs to happen for the target behaviour to be achieved in table 8, I will now recommend a number of interventions that need to take place in order for change to occur and to increase the number of men accessing weight management programmes.

Following the guidance for developing interventions using the behaviour change wheel (Michie *et al*, 2014), table 9 builds on the identified areas of change required presented in table 8 and proposes a number of approaches that are capable of achieving the desired behavioural outcome. Each intervention has been developed in line with the described intervention functions within the behaviour change wheel (education, persuasion, incentivisation, training, restriction, environmental restructuring, modelling and enablement).

Table 9. Intervention functions required to initiate desired change

What needs to change?	COM-B Component	Intervention Function	Changing Behaviour
GPs do not have the time to address weight management within primary care consultation	Capability	Training	It is unlikely that GPs will be given additional consultation time to be able to address weight issues with men, therefore training is required for GPs to develop the capability to address weight management with men quickly and sensitively.
Current health education campaigns are either generic or target women	Capability	Education	National/local health education programmes and campaigns need to be gender sensitised to men in order to have the greatest impact.
GPs have stigmatised views about men and their concern of body weight	Capability	Education & Training	GP education and training should aim to increase understanding of the needs of men regarding weight management, improve awareness of men's body consciousness and concerns about body weight, and reduce stigmatised views that GPs have towards men and body weight.
GPs believe they have little influence on men regarding weight management	Motivation	Education	Education is required to alter GPs beliefs that they have no influence over the lifestyle behaviours and choices of men in relation to weight management.
Commissioning and design of weight management programmes relies on group based delivery models and promote social interaction and support	Motivation	Enablement	Commissioning and design of weight management services should offer self-directed delivery options, or one-to-one support, rather than relying on group based delivery models. Social support should be made available but not be a mandatory or compulsory component of programmes when attempting to appeal to men.
Psychosocial benefits of weight management to be promoted to men	Motivation	Persuasion	Promotion of weight management and weight management service availability for men should highlight the benefits of weight loss such as improved confidence, body image and mental health in addition to physical health benefits such as reduced risk of heart disease.

Current weight management programmes are perceived as inflexible and held at inappropriate times of the day for men	Opportunity	Enablement	Weight management programme design needs to be flexible and self-directed for men, enabling them to access resources at times suitable to them that fit in with their daily routines and lifestyles.
GPs do not have clearly defined local care pathways for men and weight management	Opportunity	Enablement & Persuasion	Clearly defined local weight management pathways for men should be available and communicated to GPs so they are able to support men with weight management issues.
Weight management programmes are not viewed as masculine by men	Opportunity	Environmental restructuring	Weight management programmes should be gender sensitised in their design and delivery and be separate from existing weight management programmes which are perceived as female dominated.

Table 9 provides a practical guide of how representation of men can be increased within weight management programmes, developed from the findings of this research and should be considered by public health strategists and health service commissioners when developing local obesity plans.

7.7 Limits of this Research and Future Research Considerations

This research recruited 16 men who were a homogenous sample all from the same occupational classification and the same ethnicity (White British). Whilst the study was designed purposively to recruit men from this specific occupational grouping because of the reasons described in chapters 2 and 3, caution should be taken when attempting to generalise the findings to a wider population.

The sample size was small and homogenous with the aim of the research being to develop a rich understanding of those interviewed rather than to recruit a broadly representative sample of men. Consideration was given to the recruitment of a more representative sample of men when designing this research, however the concern that men who are known to be difficult to recruit to research on this subject was seen as a practical risk to completion of the study and therefore I decided to follow a more pragmatic approach.

This research only recruited from a single demographic profile in relation to the occupational classification and employment status of individuals. Whilst men from routine and manual occupations are often employed in lower paid roles, they are not the most economically disadvantaged in society and therefore this research should be interpreted with caution to those who are unemployed. Similarly, all men recruited were employed on a substantive contractual basis. Again, the findings should be interpreted with caution when considering the needs of men employed on different contracts of employment such as casual workers, piece-workers and the self-employed. Research has shown that those with the lowest disposable income are often those in greatest health need and whilst this research is focussed on one particular socioeconomic grouping which has been defined for the purpose of this research by occupational classification, there are those highlighted above whose needs should also be considered and researched further.

Conversely, this research must also be interpreted cautiously with men from other occupational groupings such as skilled professionals and higher

management occupations, whose needs and beliefs are likely to be different to that of routine and manual workers.

Whilst I have justified earlier in the thesis the focus of this research on routine and manual workers, this research would have benefited from collecting other socioeconomic information from participants. Few existing studies collect or report occupational classification of participants with the majority using either educational attainment or household income to indicate socioeconomic status. Whilst focusing this research on this particular occupational group of men provides novelty to this research, collecting additional information such as educational attainment and household income from participants would have allowed for a better understanding of the socioeconomic position of participants and better comparison with existing research.

Interview questions for GPs and Public Health Strategists were informed by the findings from interviews with men who were overweight or obese and employed within the occupational classification of routine and manual workers. It was a challenge during interviews however to maintain specific focus on this population group, with GPs in particular providing answers from a more general population viewpoint. In a number of interviews I had to reinforce that the focus of the research was about men working in this particular occupational group. This research is limited in that GPs were often providing response about a broader population rather than this very specific demographic although my unscripted follow-up questions and probing attempted to keep the focus on men working in routine and manual

occupations. The research would have benefited from exploring with GPs and Public Health Strategists in greater depth how their views and experiences may be different if considering the needs of men from other occupational groups to enable distinguishing features of the diffing groups to be clarified more clearly.

Whilst this research focused on recruitment of men who were obese or overweight from routine and manual occupations, and has been useful in enhancing understanding of this group in respect to the barriers and facilitators to accessing tier two weight management programmes, it has been conducted from a binary gender perspective and does not consider non-binary views of those who do not identify with these gender categories such as transgender individuals, or those not falling exclusively in to the man/male or woman/female normative category (Scandurra *et al*, 2019). As a relatively new area for health promotion and health improvement to understand, further research will need to be undertaken to better understand the needs of those with non-binary gender identify in order to discover how healthcare services can serve these groups effectively (Lykens *et al*, 2018) including in the areas of health promotion. This research also did not collect the sexual orientation of participants so it is unknown whether the sample recruited provided a homogenous sample in this regard or did recruit participants from a diverse sexual orientation range including gay and bi-sexual.

The sample was homogenous in terms of the ethnicity of men recruited. This is a limitation of this study as findings from differing ethnicities may vary due to differing culture and beliefs. Recruitment of GPs was however more ethnically diverse although sample size was small.

A further limitation of this study is that the sample exclusively recruited men who reported never previously attending a structured weight management programme. This was in direct response to the gap within existing research which to the best of my knowledge has never sampled from this group meaning that their particular views, beliefs, attitudes and needs are currently unrepresented within research and not understood. The needs of men who have never participated in a weight management programme may however be different to those who have accessed such programmes and either completed them or withdrawn mid-way through. The views and experiences of men who have commenced weight management programmes and withdrawn has been the focus of previous research and it would be useful for further research to distinguish whether the needs of men who have participated, participated and subsequently withdrawn and never participated at all are similar or different so that further tailoring of programme design can take place.

Further research is recommended however that samples from a wider population to include differing socioeconomic groups and ethnicity. Whilst the sample did contain a broad age range of participants, the number of

participants from each age grouping was low and more research is required to determine whether weight management programmes should be further tailored for age, ethnicity and socioeconomic groups.

As the research evolved inductively following interviews with men, the importance of the relationship with their GP became evident and I decided to explore this in greater depth by recruiting 10 GPs to the study. Again, this was a small sample although I deliberately and successfully managed to recruit a range of GPs from differing ethnicities, ages, genders, years of experience, practice geography (rural and urban practices) and employment status (salaried, locum and partner GPs). GPs however are only one frontline healthcare professional that men are likely to encounter. In practice, there are many other healthcare professionals who men will come into contact within the healthcare system such as Practice Nurses, Healthcare Support Workers, Physiotherapists and Pharmacists to name only a few. Future research should be conducted which investigates the views and experiences of a broader range of healthcare professionals and this will be helpful in developing greater understanding of the barriers and facilitators to achieving a healthcare professional workforce that is knowledgeable and capable at delivering the main recommendations derived from this study.

A potential missed opportunity within this research was to explore the views that men themselves hold in relation to how they feel about having the issue of body weight raised in consultation with a healthcare professional. The inductive nature of this research led me to interviewing GPs and identifying

some of their concerns and insecurities about addressing weight management during consultation with men. This research would have been strengthened however by exploring this in greater depth with men themselves, but time scales for completion of the thesis within the permitted deadlines became a limiting factor. I recommend that further research should be conducted to develop understanding of how men wish for this to be broached, which healthcare professionals are likely to have the greatest impact, whether the gender of clinician raising body weight with men is relevant, whether there are appropriate or inappropriate times for doing so and how effectiveness of brief intervention within the confines of limited consultation times can be maximised.

The research presented in this thesis samples men from only one socioeconomic group and one ethnicity, further research should be conducted to investigate where my findings are substantiated in different socioeconomic and ethnic groups. Findings from such research are important to shape the development of training for front line healthcare professionals, help address the insecurities that they have in relation to damaging their relationship with patients and empower them to initiate conversations about weight management with men in a constructive manner.

I have described how my research highlights that men wish to be independent in their weight management endeavours. Existing programmes, even when gender sensitised are still configured largely on traditional group based weekly or bi-weekly meetings. I found no appetite amongst the men I

interviewed for new variations on this model. I recommend therefore that approaches that maximise men's desire for independence with regard to weight management are researched further. This should involve greater research into technological applications, internal based resources and mobile phone Apps. Trials of such weight management opportunities should test how the endorsement of healthcare professionals such as GPs influences uptake amongst men, and whether regular follow-up appointments impact adherence and weight loss outcomes. In addition, further research should investigate the optimum dose-response for weight management advice for men. Traditional programmes assume that 'more is better' particularly in weight maintenance stages, but with men's desire to be self-managed and self-directed research should investigate whether an optimum dose-response can be found in order to make service delivery cost effective and efficient.

Men interviewed often spoke about their desire to be physically active and gave descriptions of using local gym facilities. However, they also gave a stigmatised view of such facilities which dissuaded them from accessing these services. Research should investigate this 'gym-stigma' further and seek to recommend how the leisure and fitness industry can make access more achievable for men who are overweight or obese. Research should also seek to investigate which other methods of physical activity are acceptable and of interest to overweight and obese men and ensure that public health programmes and front-line healthcare professionals are able to promote such activities.

Finally, it is important for qualitative researchers to be reflexive in their role as a research instrument and the interaction they have with study participants themselves in order to consider the validity of the research and its reported findings. As a man within a healthy BMI category, participants interviewed may have felt inclined to respond in ways which they believed depicted the "correct" answer. Blinding of the study was not possible as participants received written information about the study prior to consenting to participate, therefore participants were aware of the focus of research. As the study findings suggest, men were aware of the benefits of managing a healthy body weight and articulated many desired behaviours which have been promoted in recent years through mass media campaigns and education programmes. There is a chance therefore that those interviewed were simply reciting what they felt were the desirable responses to questions rather than their true opinions, experiences and views (Shadish *et al*, 2002). In spite of this potential risk to qualitative research of this nature, I feel that my style and approach to interviewing did gain access to a depth of understanding of participants that would not have been obtained if other types of research methods had been employed, for example through surveys. Interviews with men often started simplistically in terms of the responses to questions, but throughout the interview I consciously attempted to develop rapport with each individual, make them feel at ease which in turn enabled greater levels of disclosure. As discussed throughout this chapter, men are notoriously difficult to engage in health matters, particularly in relation to body weight and weight management therefore to have discussed these issues with men who

eventually disclosed often highly personal information and vulnerability was an achievement of this research.

As recruitment commenced it became apparent how difficult recruitment of participants was going to be. On reflection I feel that one of the issues in recruiting was the fact that I was a part-time PhD student, who was working in a demanding full time role Monday to Friday. This meant that building relationships with workplaces in order to gain access for recruitment was challenging. Previous research has demonstrated that recruitment of workplaces for research purposes can be time consuming and that developing relationships is key to success (Coole *et al*, 2018), so it is not surprising that this became a challenge. Lindsay (2005) also highlight the important of researcher flexibility when performing research within workplaces and whilst I always attempted to be as flexible of possible my daytime working commitments together with the needs of their business often made it difficult to find suitable dates and times for me to visit. Whilst suitable dates were eventually identified, this was a practical challenge which often incurred time delays and slowed progress of recruitment and the research project.

7.8 Summary

This discussion chapter has drawn all the key findings of this research together in order to answer the main research questions.

Whilst some of the findings of this research align to previously reported discovery, there are significant new areas of understanding that are not featured within existing literature such as the caution I have expressed about many existing weight management programmes relying on a group based delivery model, the levels of body consciousness that were identified within my interviews with men which provide a barrier to participation in physical activity and the influence that GPs can play in encouraging men from routine manual occupations to consider weight management.

Using the COM-B framework it has been possible for me to synthesise these findings into a list of areas that public health strategists can apply to the future development of weight management programmes when seeking to increase representation of men (table 9). My suggestions address the three constructs of the COM-B model (capability, opportunities, motivation) from the perspectives of both men themselves who have never attended any form of weight management programme, but also with GPs who have been identified throughout this research as having an important role to play in the promotion of weight management in men.

Chapter 8. CONCLUSION

The aim of this research was to develop better understanding of the observable low participation of men within weight management programmes. This is an important area for exploration as more men are now at elevated health risk due to their BMI, yet few access support for weight management guidance, whereas women will routinely seek help and engage with weight management programmes. Public health strategists and commissioners are in danger of failing to provide equitable service provision if they continue to deploy existing approaches.

My research has been successful at achieving this aim and has highlighted a number of areas that result in men choosing not to attend such programmes as discussed within chapter 7, some of which have resulted in my critique of current gender sensitisation approaches, but has also developed greater understanding of a number of new areas not currently evident within existing literature.

In turn I have synthesised this data with the COM-B framework to develop a list of practical approaches that can be applied in order to increase participation of men in weight management programmes. Whilst table 9 provides specific interventions designed to increase weight management programme participation I will draw these suggestions together and conclude by proposing three guiding principles that should be considered by public health strategists, commissioners and service providers when developing

weight management services aiming to increase participation in men. The three principles are: preserve masculinity; empower and prompt (Figure 12)

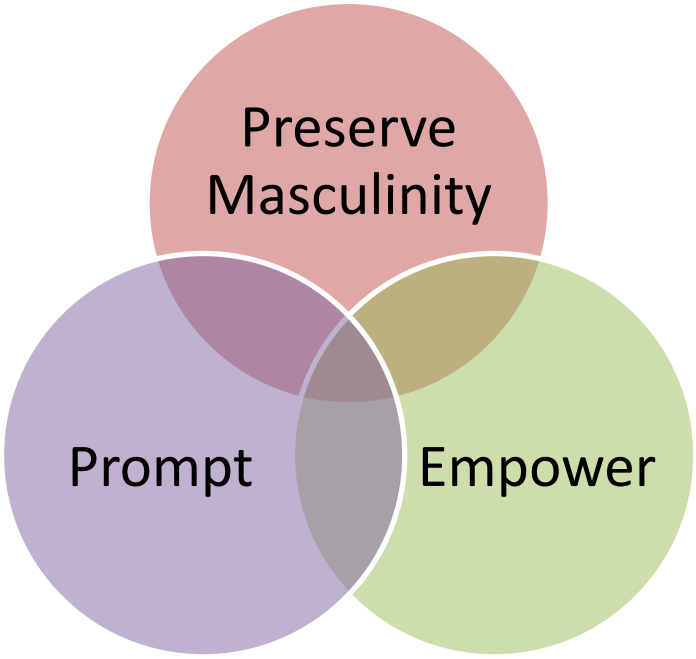


Figure 12. Guiding principles for increasing representation of men in weight management programmes.

These three guiding principles, which I will now refer to as the PEP principles, encompass the findings of my research. To conclude I will describe each of these principles in the context of this research.

8.1 Preserve Masculinity

Men seek to preserve their masculinity and will prioritise this even over their own health status. Weight management programmes attempting to be appealing to men should be designed to be self-directed in nature rather than follow the traditional model of attendance at a group-based programme. Group environments pose potential risk to a man's masculinity as there is opportunity for social comparison and embarrassment if they are unable to

achieve weight loss. Previous unsuccessful weight loss attempts are likely to limit the individual's perceived behavioural control and therefore failure to achieve the desired outcome (weight loss) in a group environment is deemed too high risk and deter men from engaging. Programmes that can be followed in private through self-directed methods will be more appealing to men as they avoid social comparison and protect the individual from any form of public embarrassment. Opportunities for wider socialisation amongst peers who are also attempting to manage a healthy weight should be provided as an option for those who wish to engage such social support, but should not be assumed to be desired by all men. This could be provided through a traditional face-to-face approach, or further research should be conducted into the acceptability and effectiveness of other forms of social support, such as through internet based forums and chat rooms.

Programmes should emphasise the benefits of increased physical activity levels in relation to health and weight management which men find particularly acceptable within the context of masculinity. Men interviewed in my research often identified attendance at a gym as a desired method of increasing physical activity, however they reported a negatively stigmatised view of such facilities which dissuaded them from attending. As physical activity is a socially acceptable way for men to improve their health and manage body weight, I propose two important factors that need to be considered. Firstly, the views of men towards physical activity choice was rather narrow in the interviews I conducted. Greater emphasis should be placed on encouraging men to consider increasing physical activity through a

wider variety of methods such as regular walking, and active transport. Secondly and perhaps most importantly is the need for the fitness and leisure industry to do more to change the stigma attached to such facilities. Men were willing to attend gyms but expressed several insecurities in doing so. This industry should recognise these insecurities and develop strategies that address the concerns held by this group of men in order to become more appealing and support men participate regularly. My research highlights the gym as a place that men find acceptable for them to be associated with far more than the traditional weight management programmes, therefore this industry needs to evolve to cater for men with the insecurities described in this thesis with regards to their confidence and body consciousness. The industry could have a significant impact on the health of men if it manages to address the barriers highlighted by this research.

8.2 Empower

Programmes should give men the opportunity to make choices on how they change lifestyle behaviours, rather than being overly prescriptive and seek to empower men to use their high levels of independence and agency. In addition, men are often busy, with multiple draws and pressures on their available time therefore programmes should be flexible in the ways they can be accessed and followed. The education system, public health campaigns, social marketing and mass media advertising should be used to continue health education and specifically tailor messages to men. Findings from this research show that men are utilising information from national public health campaigns and applying some of the knowledge they have taken into their

everyday lives. This should continue as it is an approach which empowers men to apply their understanding and make behaviour change decisions.

In addition, GPs should be empowered to confidently address weight management with men through training and professional development opportunities. They should also be empowered through greater understanding of the potential influence on men's lifestyle choices that they possess but seem to be unaware of currently. GPs should be empowered to raise issues of weight management with men and be supported to do so by having locally available pathways and suitable resources or services to offer men specifically.

8.3 Prompt

Men should be prompted to consider weight management and available services available to them by their GP. Men are more likely to make changes to behaviour in response to a recent medical problem, diagnosis or deterioration in health and therefore front-line healthcare professionals should be appropriately trained and skilled at identifying such opportunities and making timely intervention. GPs should be equipped with the skills to identify and address the issue of weight management in men using brief interventions which can be weaved into routine consultation, rather than perceiving weight management as a lengthy and time-consuming additional pressure on already overstretched time resources. Measures should also be taken to reduce stigmatised opinions and behaviours amongst GPs that are currently providing barriers to addressing weight management in men such

as the perception that men are not interested in weight management in order to improve their physical appearance and that men do not have levels of body consciousness. Expectations of healthcare professionals should also be tempered so that their frustration at not observing adherence to weight management advice amongst patients does not become a barrier to them raising the issue in the future. The threat to men's ability to perform their perceived family role should be used to motivate behaviour change as this highlights a risk not only to themselves but to people who they strive to provide and care for.

Mass media campaigns should also be gender sensitised to appeal to more men. Data collected during my research shows that men are absorbing public health messages on diet, physical activity and body weight, however campaigns would be more impactful within this group if they were tailored to men specifically. Existing campaigns are underway for physical activity promotion for women such as the Sport England 'This Girl Can' scheme, but as yet no scheme has been launched targeting men.

The PEP principles provide a useful and pragmatic guiding framework that should be applied when developing weight management approaches aiming to increase participation in men.

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Appendix A. Interview topic guide – men (version 1)

The University of Nottingham

Interview Topic Guide

The following is a list of questions that will form the topic guide during the semi-structured interviews. As the interview shall be semi-structured this topic guide provides a basic outline of questioning however the final interview may involve additional questioning/probing dependent on the development of discussion within the interview itself.

1. Tell me about your health.
2. What do you think are the main things that contribute to your health?
3. Tell me about your current diet and exercise/activity levels.
4. How much do you think body weight has to do with your health?
5. Tell me what you would do if you wanted to lose weight?
6. Tell me what you think about weight loss clubs?
7. Why do you think very few men go to weight loss groups?
8. Tell me how you think men could be encouraged to manage their weight?
9. What type of information, help or guidance do you think would help men who want to lose weight?

Appendix B. Interview topic guide – men (final version)



The University of Nottingham

Interview Topic Guide

The following is a list of questions that will form the topic guide during the semi-structured interviews. As the interview shall be semi-structured this topic guide provides a basic outline of questioning however the final interview may involve additional questioning/probing dependent on the development of discussion within the interview itself.

1. Tell me about your job and a typical day
2. Tell me about your health at the moment
3. What do you think are the main things that contribute to your health?
4. Do you think you can do anything to improve or look after your health?
5. Tell me about your current diet and exercise/activity levels.
6. Do you think about or plan your meals in advance?
7. How much do you think body weight has to do with your health?
8. Tell me what you would do if you wanted to lose weight?
9. Tell me what you think about weight loss clubs?
10. Why do you think very few men go to weight loss groups?
11. Tell me how you think men could be encouraged to manage their weight?
12. What type of information, help or guidance do you think would help men who want to lose weight?
13. What are the most important things in your life
14. What is your role within your household?

Appendix C. Interview topic guide - GPs

The University of Nottingham

Interview Topic Guide

The following is a list of questions that will form the topic guide during the semi-structured interviews. As the interview shall be semi-structured this topic guide provides a basic outline of questioning however the final interview may involve additional questioning/probing dependent on the development of discussion within the interview itself.

1. Tell me about your experiences of working with overweight/obese adult men?

2. How much of a problem do you feel obesity if for men?

3. Do you think that men are conscious of the links between weight and health?

4. Do men approach you for help with their weight? Does this differ to how women seek help with their weight?

5. Have you ever raised the issue of body weight with a man/men and tell me how did that go? How comfortable and confident are you at doing this?

6. How do you help men who want to lose weight? What approaches do you take? Has anything been particularly successful or unsuccessful?

7. How much influence do you feel you have on an obese man's weight?

8. What more could be done to support men with weight loss?

Appendix D. Interview topic guide – Public Health Strategists

Interview Topic Guide

The following is a list of questions that will form the topic guide during the semi-structured interviews. As the interview shall be semi-structured this topic guide provides a basic outline of questioning however the final interview may involve additional questioning/probing dependent on the development of discussion within the interview itself.

1. Where does obesity feature within current public health priorities?
2. What is your understanding of the national/local approaches and strategy to reducing obesity?
3. What are the challenges you face to addressing obesity in primary care?
4. How do you engage with different populations when designing strategy to address obesity?
5. Research shows that men are less likely to engage with weight management support services than women, yet men have higher prevalence of obesity related disease. How is this being addressed?
6. Latest research has used gender sensitised weight management programmes to try and appeal more to men, but my research has shown that some men have low levels of self-esteem and confidence so are unlikely to engage with such groups. How is this group being supported to manage a healthy body weight
7. What do you see is the role of the GP in addressing obesity?

Appendix E. Ethics approval

Direct line/e-mail
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18th March 2014

Matthew Broughton
PhD Student
c/o Dr Joanne Lymn
Associate Professor
School of Health Sciences
QMC Campus
Nottingham University Hospitals
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Faculty of Medicine and Health Sciences

Research Ethics Committee
Division of Respiratory Medicine
D Floor, South Block
Queen's Medical Centre
Nottingham University Hospitals
Nottingham
NG7 2UH

Dear Matthew

Ethics Reference No: A13032014 SoHS
Study Title: A male perspective: a qualitative exploration of overweight and obese adult men's perception of body weight, health and weight management programmes.
Lead Investigator/Student: Matthew Broughton, PhD Student, School of Health Sciences
Chief Investigators/supervisors: Dr Joanne Lymn, Associate Professor, School of Health Sciences, Professor Sarah Redsell, Professor Sarah Redsell, Professor of Public Health, Anglia Ruskin University.
Duration of Study: 1/5/2014-1/5/2016 2yrs **No of Subjects** 30+

Thank you for your recent application which was considered by the Committee at its meeting on 13th March 2014 and the following documents were received:

1. FHMS Research Ethics Application Form, 4/3/2014
2. Project Proposal, student Number 4146290 March 2014
3. Appendix A Research Timetable, student Number 4146290 March 2014
4. 4146290 Participant Information Sheet, Final Version 1.0, 28/02/14
5. 4146290 Consent Form Final version 1.0 22/02/2014
6. 4146290 Recruitment Poster, Final version 1.0 22/02/2014
7. Letter of permission from West Lindsey District Council, Chris Allen, Head of Service, Public Protection dated 26/02/2014
8. 4146290 Interview Topic Guide Final version 1.0, 22/02/2014

These have been reviewed and are satisfactory and the study is approved.

The Committee made the following suggestions for advice only:

- If you separate the Eating and exercise questions you may be able to tease out more information.
- Recommend you take into account that these participants are manual workers who do physically demanding work and are likely to have a BMI of 25+ but are not in fact overweight because of muscle.
- Please proof read your documents as there were a few typos especially in the information sheet.

The University of Nottingham

Approval is given on the understanding that the Conditions of Approval set out below are followed.

1. You must follow the protocol agreed and inform the Committee of any changes using a notification of amendment form (please request a form).
2. You must notify the Chair of any serious or unexpected event.
3. This study is approved for the period of active recruitment requested. The Committee also provides a further 5 year approval for any necessary work to be performed on the study which may arise in the process of publication and peer review.
4. An End of Project Progress Report is completed and returned when the study has finished (Please request a form).

Yours sincerely

pp Lamiggadri

Dr Richard Knox
Acting Chair, Faculty of Medicine & Health Sciences Research Ethics Committee

Appendix F. Revised ethics approval

E-mail: FMHS-ResearchEthics@nottingham.ac.uk

Faculty of Medicine and Health Sciences

Research Ethics Committee
C/o Faculty PVC Office
School of Medicine Education Centre
B Floor, Medical School
Queen's Medical Centre Campus
Nottingham University Hospitals
Nottingham
NG7 2UH

29th March 2017

Matthew Broughton
PhD Student
c/o Dr Joanne Lymn
Associate Professor
School of Health Sciences
QMC Campus
Nottingham University Hospitals
NG7 2UH

Dear Matthew

Ethics Reference No: A13032014 – **please always quote**	
Study Title: A male perspective: a qualitative exploration of overweight and obese adult men's perception of body weight, health and weight management programmes.	
Chief Investigator/Supervisor: Professor Joanne Lymn, Head of School, School of Health Sciences.	
Lead Investigators/student: Matthew Broughton, PhD Student, School of Health Sciences	
Other Key Investigators: Professor Sarah Redsell, Professor Sarah Redsell, Professor of Public Health, Anglia Ruskin University.	
Type of Study: PhD project,	
Proposed Start Date: 1/5/14	**Proposed End Date:** 30/3/18 24mths
No of Subjects: 30+	**Age:** 18+years
School: Health Sciences	

Thank you for notifying the Committee of amendment no 1: 22 January 2017 and the following revised documents were received:

- Notice of amendment form no 1: 22 January 2017
- Participant Information Sheet V1.1 22/01/17
- Interview Schedule v1.1 22/01/17

Summary of changes:

- Time extension of 12 months with a new end date of 30/3/18 to accommodate unexpected suspension of study.
- Continue to recruit male volunteers to add to rich data already collected.
- Inclusion of views of healthcare professionals (GPs) , Key stakeholders (from Public Health England and the Men's Health Forum).

These have been reviewed and the study amendment no 1: 22 January 2017 is noted and approved.

Approval is given on the understanding that the conditions set out below are followed:

1. You must follow the protocol agreed and inform the Committee of any changes using a notification of amendment form (please request a form).

2. You must notify the Chair of any serious or unexpected event.

3. This study is approved for the period of active recruitment requested. The Committee also provides a further 5 year approval for any necessary work to be performed on the study which may arise in the process of publication and peer review.

4. An End of Project Progress Report is completed and returned when the study has finished (Please request a form).

Yours sincerely

pp Lamaggioni

Professor Ravi Mahajan
Chair, Faculty of Medicine & Health Sciences Research Ethics Committee

Appendix G. Research participant written consent form



CONSENT FORM
Final version 1.0: 22/02/14

Title of Study: A male perspective: a qualitative exploration of overweight and obese adult men's perception of body weight, health and weight management programmes

REC ref: A13032014 SoHS

Name of Researcher: Matthew Broughton

Name of Participant:	**Please initial box**
1. I confirm that I have read and understand the information sheet version number 1.0 dated 22/02/14 for the above study and have had the opportunity to ask questions.	☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.	☐
3. I understand that relevant sections of my data collected in the study may be looked at by the research group and regulatory authorities where it is relevant to my taking part in this study. I give permission for these individuals to have access to these records and to collect, store, analyse and publish information obtained from my participation in this study. I understand that my personal details will be kept confidential.	☐
4. I understand that the interview will be recorded and that anonymous direct quotes from the interview may be used in the study reports.	☐
5. I understand that information about me recorded during the study will be kept in a secure database. If the data is transferred is will be made anonymous. Data will be kept for 7 years after the study has ended.	☐
6. I agree to take part in the above study.	☐

_____	_____	_____
Name of Participant	Date	Signature
_Matthew Broughton__	_____	_____
Name of Person taking consent	Date	Signature

2 copies: 1 for participant, 1 for the project notes.

Appendix H. Workplace information & consent form

Workplace Consent

Title of Study: A male perspective: a qualitative exploration of overweight and obese adult men's perception of body weight, health and weight management programmes.

Study ID – 4146290

Name of Researcher(s): Matthew Broughton

We would like to invite your organisation/company/workplace to take part in our research study. Before you decide we would like you to understand why the research is being done and what it would involve for you. One of our team will go through the information sheet with you and answer any questions you have. Talk to others about the study if you wish. Ask us if there is anything that is not clear.

What is the purpose of the study?

The aim of this research is to explore the views that men have towards their body weight and health and their views and perspectives of weight loss programmes. It is hoped that the findings from the research can then help encourage more men to get help and support to lose weight and become healthier.

Do we have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign the form to provide consent on behalf of your organisation/company/workplace. If you decide to take part you are still free to withdraw at any time and without giving a reason.

What will happen if we take part?

We will then look to recruit volunteers (your employee's) who are happy to spend time being interviewed. The interview will involve a researcher asking some questions and listening to people's views. This is not a formal interview in terms of there being 'right'; and 'wrong' answers as we are interested in people's personal opinions, views, perspectives and ideas. The interview is expected to last between 30 and 60 minutes. The researcher will be male and arrange the interview at a time and place

that is convenient to those who volunteer. Volunteers will only need to be interviewed once, although sometimes we may need to contact people again if there is something we would like to clarify or find out more detail.

The interview will be relaxed and like a discussion with the researcher. No other person will be involved in the interview. The interview will be tape recorded so that we can listen to it afterwards and analyse what has been discussed. All of the answers and the discussion will be strictly confidential and the researcher will not discuss them with anyone else, including workplace management. The tape recordings and any other information that is collected during this research will be kept confidential and always locked in a secure cabinet when not in use.

Expenses and inconvenience allowance

Participants will not be paid to participate in the study, neither will organisations/companies/workplaces who help with recruitment.

What are the possible disadvantages and risks of taking part?

People will be asked about their views about their current health and body weight. People are sometimes sensitive about their body weight and may become upset or distressed about discussing this with another person.

What are the possible benefits of taking part?

The information we get from your organisational participation in this study may help provide new information that could help with the future design of health promotion programmes that are more appealing to men.

What if there is a problem?

If you have a concern about any aspect of this study, you should ask to speak to the researchers who will do their best to answer your questions. The researchers contact details are given at the end of this information sheet. If you remain unhappy and wish to complain formally, you should then contact the Ethics Committee Secretary, Mrs Louise Sabir, Division of Therapeutics and Molecular Medicine, D Floor, South Block, Queen's Medical Centre, Nottingham, NG7 2UH. E-mail louise.sabir@nottingham.ac.uk."

Will my taking part in the study be kept confidential?

Yes all information will be kept confidential.

Interviews will be tape recorded and then written up word for word afterwards by the researcher for analysis. Both the tape recordings and written transcripts will be confidential. All identities will be kept

confidential throughout the process and any responses given during interview will be anonymised in the final research report.

All information collected during this research will be handled, processed and stored in accordance with the Data Protection Act 1998. This data will not be used for any other research or any other purpose than that stated on this information sheet. We will follow ethical and legal practice and all information about you will be handled in confidence.

All information which is collected during the course of the research will be kept **strictly confidential**, stored in a secure and locked office, and on a password protected database. Any information which leaves the institution will have names and address removed (anonymised) and a unique code will be used so that individuals cannot be recognised from it.

Personal data (address, telephone number, but also your organisation/company/workplace name) will be kept for 3 months after the end of the study so that we are able to contact you about the findings of the study *and possible follow-up studies* (unless you advise us that you do not wish to be contacted). All other data (research data) will be kept securely for 7 years. After this time your data will be disposed of securely. During this time all precautions will be taken by all those involved to maintain your confidentiality.

What will happen if I don't want to carry on with the study?

Participation is voluntary and you are free to withdraw your organisation at any time, without giving any reason.

What will happen to the results of the research study

The results will be written up within a PhD research thesis that is anticipated to be completed by March 2018. No subjects or organisations participating in the research will be identifiable in the final thesis.

Anyone wishing to obtain a copy of the final thesis should contact Matthew Broughton or the University of Nottingham School of Health Sciences.

Who is organising and funding the research?

This research is being organised by the University of Nottingham and is being funded by Matthew Broughton

Who has reviewed the study?

All research in the University of Nottingham is looked at by independent group of people, called a Research Ethics Committee, to protect your

interests. This study has been reviewed and given favourable opinion by Medical School Research Ethics Committee.

Further information and contact details

Matthew Broughton
Email mattbroughton@fsmail.net
Tel 07963155266

Chief Investigator
Dr. Joanne Lymn, (BSc, PhD, FHEA, NTF)
Associate Professor (Director of PGR, Director of Learning & Teaching)
School of Health Sciences
University of Nottingham
Email joanne.lymn@nottingham.ac.uk

Organisational Consent

I understand the research being proposed and agree that my organisation/company/workplace will support recruitment of men to the study.

Organisation/company/workplace name:_____

Signed on behalf of the organisation:_____

Print name:_____

Job title/position:_____

Date:_____

Appendix I. Recruitment Poster

The University of Nottingham
UNITED KINGDOM · CHINA · MALAYSIA

MALE VOLUNTEERS REQUIRED

We are looking for male volunteers to be interviewed as part of a PhD research study that aims to understand adult men's views of health, body weight and weight loss programmes.

Volunteers will take part in an interview with a male researcher lasting approximately 30-60 minutes. All interviews will be done in private and what you say will be completely confidential.



We require men who:

- Are aged 18 and above
- Have never attended a weight loss group or programme before
- Have a body mass index of at least 25 (we will help work this out for you)

If you are willing to volunteer or want more information please contact Matthew Broughton Tel 07963 155 266 email mattbroughton@fsmail.net